



**CITY OF BURLINGTON
DEPARTMENT OF PUBLIC WORKS**

645 Pine Street, Suite A
Post Office Box 849
Burlington, VT 05402-0849
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www.burlingtonvt.gov/dpw

Chapin Spencer
DIRECTOR OF PUBLIC WORKS

M E M O R A N D U M

To: Hannah Cormier, Clerks Office
From: Chapin Spencer, Director
Date: April 13, 2017
Re: Public Works Commission Agenda

Please find information below regarding the next Commission Meeting.

Date: **April 19, 2017**
Time: 6:30 – 9:00 p.m.
Place: **645 Pine St – Main Conference Room**

A G E N D A

ITEM

- 1 Call to Order – Welcome – Chair Comments
- 2 Agenda
- 3 10 Min Public Forum (3 minute per person time limit)
- 4 5 Min Consent Agenda
 - A Traffic Status Report
 - B Remove Existing Parking Prohibition on College St
 - C Driveway Encroachment at 35 Brookes Ave

Non-Discrimination

The City of Burlington will not tolerate unlawful harassment or discrimination on the basis of political or religious affiliation, race, color, national origin, place of birth, ancestry, age, sex, sexual orientation, gender identity, marital status, veteran status, disability, HIV positive status or genetic information. The City is also committed to providing proper access to services, facilities, and employment opportunities. For accessibility information or alternative formats, please contact Human Resources Department at 865-7145.

- 5 20 Min Approval of Water System Revenue Bond, Series 2017
A Communication, M. Moir, R. McCracken, T. Melloni
B Commissioner Discussion
C Public Comment
D Action Requested – Approve Water Revenue Bond Resolution and recommend City Council Approval.
- 6 45 Min Draft Permit Reform Recommendations
A Communication , N. Baldwin, C. Spencer, B. Anderson (**Sent Separately**)
B Commissioner Discussion
C Public Comment
D Action Requested –None
- 7 15 Min Curb Cut Specifications
A Communication , N. Baldwin
B Commissioner Discussion
C Public Comment
D Action Requested –Approval of Specifications
- 8 5 Min Approval of Draft Minutes of 1-18-17 & 3-15-17
- 9 10 Min Director's Report
- 10 10 Min Commissioner Communications
- 11 Executive Session: Director & City Engineer Annual Reviews
- 12 **Adjournment & Next Meeting Date – May 17, 2017**



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Chapin Spencer
DIRECTOR OF PUBLIC WORKS

MEMORANDUM

TO: PUBLIC WORKS COMMISSION
FM: CHAPIN SPENCER, DIRECTOR
DATE: APRIL 13, 2017
RE: PUBLIC WORKS COMMISSION MEETING

Enclosed is the following information for the meeting on April 19, 2017 at 6:30 PM at **645 Pine St – Main Conference Room**

1. Agenda
2. Consent Agenda
3. Approval of Water System Revenue Bond, Series 2017
4. Draft Permit Reform Recommendations
5. Curb Cut Specifications
6. Approval of Draft Minutes of 1-18-17 & 3-15-17

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- 11 Executive Session: Director & City Engineer Annual Reviews
- 12 **Adjournment & Next Meeting Date – May 17, 2017**



MEMORANDUM

April 13, 2017

TO: Public Works Commission

FROM: Phillip Peterson, DPW Engineering Technician *PWP 4/14/17*

CC: Norman Baldwin, City Engineer
Dave Allerton, Public Works Engineer

RE: Traffic Request Status Report

Number of Requests 03/02/17 =	76
New Requests since 03/02/17 =	5
Requests closed since 03/02/17 =	4
Number of Requests 04/06/17 =	77

RFS BREAKDOWN BY TYPE*

Accessible Space:	3
Resident Only Parking:	12
Crosswalks:	17
Driveway Encroachments:	1
Signage:	13
Loading Zone:	6
Area/Intersection Study:	6
Parking Prohibition:	10
Bus Stop:	0
Geometric Issues:	5
Parking Meters:	4
Other:	0

TOTAL:	77
--------	----

1/10 1/15/17



MEMORANDUM

April 06, 2017

TO: Public Works Commission

FROM: Phillip Peterson, DPW Engineer Technician *PWP 4/06/17*

CC: Norm Baldwin, City Engineer

RE: Remove Existing Parking Prohibition on College Street

Background:

Staff received a request in January 2017 from Debbie Paradis, a resident at 40 College Street, asking for the removal of the existing parking prohibition on College Street from South Champlain Street west to Battery Street, from 11:00 p.m. to 6:00 a.m.

Observations:

- **Street Characteristics:** College Street is a 40-foot-wide mixed-use street with metered on-street parking on the north side and south side of the street between Battery Street and South Champlain Street. There are thirteen existing No Time Limit Metered parking spaces on the north side of College Street, one 15-minute metered space on the south side of College Street and eleven 3-hour metered spaces on the south side of College Street. Parking is prohibited on both the north and south sides of College Street from South Champlain Street west to Battery Street, between the hours of 11:00 p.m. to 6:00 a.m.
- **Public Outreach:** Staff distributed flyers to the apartment buildings, homes, and businesses on College Street and Main Street on February 20th, 2017. Of the ninety-seven flyers distributed nineteen responses were received. Of the nineteen responses from local residents, fourteen supported the removal of the prohibition and five would like the prohibition to remain in place. All of the responses were residents of the 40 College Street condominium complex.

Conclusions:

With no reasonable technical reason for the overnight parking prohibition, and the majority of feedback from residents supporting the removal of the prohibition; staff is recommending the removal of the existing parking prohibition on College Street from South Champlain Street west to Battery Street, 11:00 p.m. to 6:00 a.m.

Recommendations:

Staff recommends that the Commission adopt:

- The removal of the existing parking prohibition on College Street from South Champlain Street west to Battery Street, 11:00 p.m. to 6:00 a.m.



Battery Street

College Street

S Champlain Street

Existing Parking Prohibition on Both Sides of the Street:
College Street from South Champlain Street west to Battery Street, 11:00 p.m. to 6:00 a.m.



SCALE: 1" = 30'



COLLEGE STREET
EXISTING PARKING PROHIBITION



**BURLINGTON
PUBLIC WORKS
ENGINEERING DIV.**
645 PINE STREET
BURLINGTON, VT 05401
(802) 863-8084

DESIGNED PMP	RFS 1241
DRAWN PMP	SCALE 1"=30'
CHECKED DKA	DRAWING
DATE	



MEMORANDUM

April 13, 2017

TO: Public Works Commission

FROM: Phillip Peterson, DPW Engineer Technician *PMP 4/14/17*

CC: Norm Baldwin, City Engineer

RE: Driveway Encroachment Issues at 35 Brookes Ave

Background:

Staff received communication in April 2015 from Jen Adrian, a resident at 35 Brookes Ave. Ms. Adrian has concerns about driveway encroachment issues. Since our first conversations with Ms. Adrian, staff advanced and got approved a proposal to prohibit driveway encroachment within the City of Burlington. DPW Commission approved the new driveway encroachment policy and it became effective on October 19, 2016. DPW staff delivered flyers to UVM, UVM Medical Center, Champlain College, Burlington Police Department, and social media. Since the new ordinance has been in effect, Ms. Adrian continues to have driveway encroachment issues.

Observations:

- **Street Characteristics:** Brookes Ave is an approximately 22-foot-wide low volume residential roadway with resident only on-street parking on the south side and no parking allowed on the north side of the street.
- Ms. Adrian contacted DPW staff in November of 2016 and was still having issues with people encroaching on her driveway.
- On February 17, 2017, Ms. Adrian emailed DPW staff a picture of a parked car encroaching on her driveway. DPW staff forwarded Ms. Adrian's email to Parking Enforcement Manager John King and apprised him of the situation. Based on the photographs provided, Mr. King was able to issue a \$75 citation to the owner of the vehicle in the picture. The ticket has been paid.
- Based on the amount of complaints at this location, DPW staff conducted a field investigation at 35 Brookes Ave. Staff measured the distance between Ms. Adrian's

driveway and adjacent driveways and found that only one car can fit where two vehicles have attempted to park.

- Public Outreach: Staff distributed flyers on April 4, 2017 to 35 Brookes Ave, 33 Brookes Ave and 39 Brookes Ave.

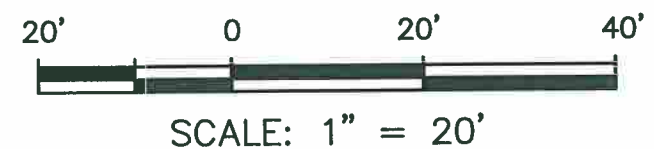
Conclusions:

An average parking stall has a length of 20-feet. After conducting a field investigation, staff determined there is only 32-feet available in front of 35 Brookes Ave. Additionally, there is only 28-feet of parking space available in front of 33 Brookes Ave., directly to the west of 35 Brookes Ave.

Recommendations:

Staff recommends the DPW Commission adopt:

1. The placement of a “PARKING FOR SINGLE VEHICLE ONLY” sign in the space in front of 35 Brookes Ave.
2. The placement of a “PARKING FOR SINGLE VEHICLE ONLY” sign in the space in front of 33 Brookes Ave.



35 BROOKES AVENUE
DRIVEWAY ENCROACHMENT
ISSUES



**BURLINGTON
PUBLIC WORKS
ENGINEERING DIV.**
645 PINE STREET
BURLINGTON, VT 05401
(802) 863-8084
(802) 863-8084 (Fax)

DESIGNED PWP	RF's NA
DRAWN PWP	SCALE 1"=20'
CHECKED MLD	DRAWING
DATE	

MEMORANDUM

To: City of Burlington Public Works Commission

From: Thomas Melloni
Russ McCracken

Re: Authorization and approval of 2017 Waterworks System Revenue Bond

Date: April 13, 2017

The City of Burlington (the “City”) plans to issue a Waterworks System Revenue Bond, Series 2017 (the “Bonds”) in the approximate amount of \$3,250,000 secured by a pledge on the revenue of the City’s Waterworks System. The Bond constitutes a portion of the \$8,344,000 of revenue bonds approved by the voters of the City at a special meeting in November, 2016.

Paul Frank + Collins P.C. is Bond Counsel for the transaction, and is providing this memorandum to address (i) what authorization and approval the Public Works Commission (the “Commission”) is considering with respect to the issuance of the Bonds and (ii) the provisions of the City’s Charter that provide the authority to the Commission to take such actions. We look forward to the opportunity to discuss the authorization and approval and any questions you may have at the Commission’s April 19, 2017 meeting.

I. Authorization and Approval of the Bonds.

The Commission has been provided three resolutions for its consideration: (i) Authorization of the Public Works Commission (the “Commission Resolution”), (ii) Waterworks System General Bond Resolution (the “General Resolution”) and (iii) Supplemental Waterworks System Bond Resolution (the “Supplemental Resolution”).

The Commission Resolution takes the following actions: (i) approves the issuance of the Bond, (ii) approves the General Resolution, with a recommendation to the City Council to adopt the same, and (iii) approves the creation of the funds and accounts pursuant to the General Resolution and Supplemental Resolution.

II. Authority for Authorization and Approval of the Bonds.

The authority for the Commission to approve the issuance of the Bond is §507 of the City’s Charter, which provides that:

The [waterworks or wastewater revenue] bonds may be authorized by resolutions of the Board of Public Works Commissioners. Notwithstanding the foregoing sentence, no bonds other than refunding bonds shall be authorized or issued under this article unless and until more than 50 percent of the legal voters of the City present and voting thereon at any annual or special City meeting duly warned for that purpose shall have first voted to authorize the project or improvement for which the bonds are to be issued.

The authority for the Commission to approve the creation of the reserve funds created under the General Resolution and the Supplemental Resolution is §65(a)(2) of the City's Charter, which provides that:

The City Council, with the prior approval of the Board of Light Commissioners or the Board of Public Works Commissioners, as applicable, shall have authority to create and establish, maintain, build up, and increase from year to year from the earnings of such Department and Divisions, special reserve funds for such Department and Divisions, to be kept by the City Treasurer in a separate bank deposit and in a separate account for each Department and Division and to be used only to pay for such expenses as the Electric Light or Public Works Departments may recommend and the City Council may approve and authorize.

The Debt Service Reserve Fund and the Renewal and Replacement Fund created and funded under the General Bond Resolution and the Supplemental Bond Resolution could be considered special reserve funds under §65(a)(2), and therefore require the prior approval of the Commission before the City Council may create the same.

Debt service reserve funds are customarily established for revenue bond financing. A debt service reserve provides a back-up source of funding to make debt service payments in the event that revenues are not sufficient to make timely payment of principal and interest due. It provides additional security to bondholders as a potential source of payment for debt service in the event the municipality experiences a challenge of lower revenue collections or increased and unplanned operating expenses.

For the City's Water Revenue Bonds, the Debt Service Reserve Fund will be funded in part with the proceeds of the Bonds. The minimum balance of the Debt Service Reserve Fund is an amount to be determined prior to issuance of the Bonds. It will not exceed 10% of the bonds or maximum annual debt service on the Bonds.

The Renewal and Replacement Fund is a separate fund to provide a source of funding for unplanned or extraordinary costs or to replace facilities or equipment. The Renewal and Replacement Fund will not be funded by proceeds of the Bonds; such fund is expected to be funded over time by cash contributions from revenues of the waterworks system. Such fund provides a source of payment for restoring or replacing facilities of the waterworks system.

The authority for the Commission to approve the General Resolution and recommend that the City Council adopt the General Resolution is a combination of §507 and §65(a)(2). The

General Resolution includes authority to issue the Bonds, so approval of the Commission is appropriate under §507. The General Resolution also creates a reserve and a replacement fund, so approval is appropriate under §65(a)(2).

The City Council will act to approve the General Resolution and the Supplemental Resolution under its general authority to provide for water supply, establish and maintain the water works system (City Charter, §48-(21)), to establish and set rates for the water supply (City Charter §114), and to approve the creation of the funds and accounts under the General Resolution and Supplemental Resolution.

The final terms of the bonds, such as the dates, maturities, principal amounts, interest rates, interest payment dates, principal payment dates, redemption provisions, the amounts of proceeds of the Series 2017 Bonds and Revenues to be deposited in the Debt Service Reserve Fund, inclusion of provisions for bond insurance, if beneficial to the City, will be approved by Bob Rusten, as Chief Administrative Officer, or Rich Goodwin, as Director of Financial Operations. If the average true interest cost of the Bonds is greater than 4.5%, the City's Board of Finance will be required to approve the final terms of the Bonds.

CITY OF BURLINGTON, VERMONT

Public Works Commission

RESOLUTION

Be it Resolved, as of April [], 2017, by the Board of Public Works Commissioners of the City of Burlington, Vermont (the “City”) as follows:

Section 1
Authorization

The Board of Public Works Commissioners (the “Board”) hereby authorizes the issuance of revenue bonds in a principal amount not to exceed **\$[3,250,000]** to provide for the financing of capital additions and improvements to the waterworks system (the “Water System”), including (i) capital improvements to the City’s underground pipe and water distribution system, water mains, services, valves and hydrants, (ii) to fund a debt service reserve fund, and (iii) pay costs of issuance of such revenue bonds. The Board deems the issuance of revenue bonds as hereby authorized to be in the public interest.

At the Special City Meeting of the City, held November 8, 2016, the voters of the City authorized the issuance of Revenue Bonds in one or more series in a combined aggregate amount not to exceed \$8,344,000 to finance and carry out such capital improvements to the Water System (collectively, the “Project”).

Pursuant to such vote, and the City Charter, the Board desires to approve a General Bond Resolution in the form attached hereto as Exhibit A (as amended and supplemented, the “General Bond Resolution”) and recommend that the City Council adopt the General Bond Resolution.

The City has not issued any revenue bonds to date pursuant to the General Bond Resolution.

The Series 2017 Bonds (the “Series 2017 Bonds”) are to be issued pursuant to a Supplemental Resolution, to be adopted by the City Council. It is estimated that the Series 2017 Bonds will be payable, by serial maturities or sinking fund installments or a combination of both, in the years 2018-2038, both dates being approximate, as may be approved by the City Council.

Section 2
Authorization of Series 2017 Bonds

The Board hereby approves to be issued a Series of Bonds designated “Waterworks System Revenue Bonds, Series 2017” in the total principal amount not to exceed **[\$3,250,000]**. The Series 2017 Bonds shall be issued for the financing of capital additions and improvements to the waterworks system, including (i) capital improvements to the City’s underground pipe and water distribution system, water mains, services, valves and hydrants, (ii) to fund a debt service reserve fund, and (iii) pay costs of issuance of such revenue bonds. The Series 2017 Bonds shall bear interest at the rates per annum and shall mature on such dates as specified in the Supplemental Resolution adopted by the City Council.

The Board hereby approves the General Bond Resolution in substantially the form presented to the Board, and recommends that the City Council adopt the General Bond Resolution, and the Board hereby approves the issuance of the Series 2017 Bonds.

The Board hereby further approves the creation of the Renewal and Replacement Fund, and the funding of such Renewal and Replacement Fund as determined in connection with the issuance of the Series 2017 Bonds.

Section 3

Certain Findings and Determinations

The Commissioners of the Department of Public Works hereby finds and determines as follows:

- (a) No bonds have heretofore been issued under the General Bond Resolution.
- (b) there are no outstanding bonds, notes or other evidence of indebtedness payable from and secured by a lien or charge upon the Net Revenues pledged under the Resolution other than the prior obligations consisting of a note issued by the City to the Vermont Department of Environmental Conservation Clean Water State Revolving Fund in the original principal amount of \$228,006, which is payable from the Net Revenues pledged under the Resolution.

Section 4

Award of Bonds; Official Statement; Further Action

The City's Chief Administrative Officer, the City's Director of Financial Operations, and the Director of Public Works are, and each of them hereby is, authorized either singly or together:

- (a) to execute and deliver an underwriting agreement, bond purchase agreement, or contract of purchase negotiated with the Underwriter with respect to the Series 2017 Bonds, in such form as the signing officer shall approve;
- (b) to prepare, make public, execute and deliver to and authorize distribution by the Underwriter to prospective purchasers and investors of a Preliminary Official Statement with respect to the Series 2017 Bonds, in substantially the form presented to the Board;
- (c) to prepare, make public, execute and deliver to and authorize distribution by the Underwriter to prospective purchasers and investors of an Official Statement substantially in the form of the Preliminary Official Statement after the same has been completed by the insertion of the interest rate and other data with respect to the Series 2017 Bonds and by making such other changes or corrections as the signing officer or officers may approve, such officer's or officers' execution to be conclusive evidence of such approval;
- (d) to execute and deliver a Continuing Disclosure Undertaking substantially in the form attached to the Official Statement, with such changes or corrections as the signing officer or

officers may approve, such officer's or officers' execution to be conclusive evidence of such approval; and

(e) to execute such other documents, enter into such covenants and take such other actions as are necessary or advisable to effect the issuance and delivery of the Series 2017 Bonds and the application of the proceeds thereof in accordance with the provisions of this Resolution.

6973971_4:12576-00004

Exhibit A

CITY OF BURLINGTON,

VERMONT

CITY COUNCIL

WATER SYSTEM REVENUE
GENERAL BOND RESOLUTION

Adopted April __, 2017

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**Water System Revenue
GENERAL BOND RESOLUTION**

Be It Resolved by the City Council of the City of Burlington, Vermont as follows:

**ARTICLE I
DEFINITIONS**

Section 1.1. Special Terms.

Unless the context clearly indicates some other meaning, the terms defined in this Section, when used in this Resolution or any supplemental Resolution, have the following meanings:

“Act” means City Charter Section 64b and Sections 506-508, as amended from time to time.

“Additional Bonds” means Bonds other than the Series 2017 Bonds, and any prior Series of Bonds issued under the Resolution.

“Additional Security” with respect to a Series of Bonds, is defined in Section 2.11 of this Resolution.

“Authorized Officer” means the Director of the City’s Public Works department, the Mayor, the Chief Administrative Officer of the City, or any other person designated by the Council.

“Bonds” means the Waterworks System Revenue Bonds issued from time to time under Sections 2.1, 2.2 and 2.3.

“Bondowner” means a registered owner of a Bond or Bonds.

“Bond Register” means the Bond Register as defined in Section 3.5.

"Capital Appreciation Bond" means any Bond issued under this Resolution as to which interest is (i) compounded on each Compounding Date and (ii) payable only at the maturity, earlier redemption or other payment date of such Bonds pursuant to this Resolution or the Series Resolution authorizing such Bonds.

“City” means the City of Burlington, Vermont.

"Compounding Date" means, with respect to any Capital Appreciation Bond, each date specified in the Series Resolution authorizing such Bond on which interest on such Bond is to be compounded.

“Compounded Amount” means, as of any date of computation, the principal amount of any Capital Appreciation Bond plus the interest accrued on such Bond compounded semiannually at the rate provided in the applicable Supplemental Resolution to such Compounding Date.

“Council” means the City Council of the City or an officer or board succeeding to its powers.

“Code” means the Internal Revenue Code of 1986, as amended, and the regulations and rulings promulgated thereunder.

“Construction Fund” means the Water System Revenue Bond Construction Fund created by Section 5.6.

“Consulting Engineer” means the engineer or engineers or engineering firm or firms retained by the City pursuant to Section 7.3.

“Renewal and Replacement Fund” means the Water Revenue Bond Renewal and Replacement Fund created by Section 5.5.

“Renewal and Replacement Fund Requirement” means that amount specified in the Supplemental Resolution authorizing a Series of Bonds, if any.

“Credit Facility” means any letter or line of credit, policy of bond insurance, indemnity or surety bond, guarantee or similar instrument issued by a financial, insurance or other institution and which provides security and/or liquidity in respect of Bonds.

“Date of Commercial Operation” means the date on which a Project is first ready for normal continuous operation as determined pursuant to an applicable ownership agreement in the case of a jointly-owned facility, or by the City in the case of a facility solely owned by the City. If a Project consists of more than one undertaking, the Date of Commercial Operation of the Project is the latest Date of Commercial Operation of the Project of any undertaking included in the Project.

“Debt Service” means with respect to each Fiscal Year or other period the aggregate of the amounts to be set aside (or estimated to be required to be set aside) in the Debt Service Fund pursuant to Section 5.3(A), (B) and (C) in the Fiscal Year for the payment of the principal or redemption price of Bonds and Unissued Bonds, less debt service paid or to be paid from Bond proceeds or from earnings thereon, plus principal and sinking fund payments due on any other obligations of the City which are secured by Revenues or Net Revenues.

“Debt Service Fund” means the Water System Revenue Bond Debt Service Fund created by Section 5.3.

“Debt Service Reserve Fund” means the Water System Revenue Bond Debt Service Reserve Fund created by Section 5.4.

“Debt Service Reserve Fund Requirement” means that amount specified in the Supplemental Resolution authorizing a Series of Bonds, if any.

“Event of Default” means an Event of Default as defined in Section 8.1.

“Fiscal Year” means the fiscal year of the City with respect to the Water System as established from time to time. The Fiscal Year is now the twelve-month period ending June 30.

“Government Obligations” means direct general obligations of, or obligations the timely payment of principal and interest on which are unconditionally guaranteed by, the United States of America.

“Improvements” shall mean such improvements, renewals, replacements, construction and remodeling of the Water System or any part thereof and such extensions and additions thereto as may be necessary or prudent, in the judgment of the City, to keep the same in proper condition for the safe, efficient and economic operation thereof and to integrate into the Water System any unit or part thereof, and shall include such land, structures and facilities as may be authorized to be acquired or constructed by the City under the provisions of Vermont law and such improvements, renewals, replacements, construction and remodeling of such land, structures facilities and such extensions and additions thereto as may be necessary or prudent for continuous and efficient service to the public, and shall include the City’s share of the joint acquisition of property or participation in the output, capacity or usage of any private or public corporation or individual. Improvements shall include all of the foregoing whether financed from the proceeds of Bonds issued under the provisions of this Resolution or from moneys deposited to the credit of the Construction Fund, the Renewal and Replacement Fund or from any other source.

“Interest Account” means the Interest Account created in the Debt Service Fund by Section 5.3.

“Investment Securities” means any of the following, if and to the extent that they are legal for the investment of funds of the City:

- (a) Direct obligations of the United States of America for the payment of money, or obligations for the payment of money which are guaranteed or insured as to payment of principal and interest by the United States of America, and direct obligations for the payment of money, issued by an agency or instrumentality of the United States of America, or obligations for the payment of money which are guaranteed or insured as to payment of principal and interest by an agency or instrumentality of the United States of America;
- (b) Bonds and other legally created direct, general obligations of any state of the United States of America, including the Commonwealth of Puerto Rico, and any political subdivision of any state of the United States of America for the payment of money, provided that such obligations are rated in one of the top three rating categories by Moody’s and S&P;

- (c) Direct obligations for the payment of money, issued by an agency or instrumentality of any state of the United States of America or of the Commonwealth of Puerto Rico for the payment of money which are guaranteed or insured as to payment of principal and interest by the state or commonwealth of which the issuer is an instrumentality, provided that such obligations are rated in one of the top three rating categories by Moody's and S&P;
- (d) Bonds and other evidences of indebtedness of the United States of America, or any state thereof, or of any political subdivision thereof, or of any public authority or instrumentality of one or more of the foregoing, which are payable as to both principal and interest from adequate special revenues pledged or otherwise appropriated or by law required to be provided for the purposes of that payment, but not including any obligations payable solely out of special assessments on properties benefitted by local improvements; except that bonds or evidences or indebtedness of issuers outside the state of Vermont must be, at the time the investment is made, rated "A" or higher by S&P and Moody's with respect to long term indebtedness and "P-1" or "A-1" or higher by S&P and Moody's, respectively, with respect to short term indebtedness (in every case without reference to gradations of such categories such as "plus" or "minus");
- (e) Interest bearing obligations issued, assumed or guaranteed by any solvent institution created or existing under the laws of the United States of America or of any state, whether or not secured, which are not in default as to interest or principal, if those obligations at the time of investment are rated "A" or higher by S&P and Moody's with respect to long term indebtedness and P-1 or A-1 or higher by S&P and Moody's, respectively, with respect to short term indebtedness (in every case without reference to gradations of such categories such as "plus" or "minus"), including, among others, (A) certificates of deposit or time deposits of any bank, any branch of any bank, trust company or national banking association that has a combined capital surplus and undivided profits not less than \$25,000,000, (B) any repurchase agreement with a maturity of not more than 30 days that is with a bank or trust company (including the Trustee and its affiliates) that has a combined capital, surplus and undivided profits not less than \$100,000,000 or with primary government dealers (any such government dealer must be a member of Securities Investor Protection Corporation), for obligations described in (a) hereof having on the date of the repurchase agreement and on the first day of every month thereafter a fair market value equal to at least 102% of the amount of the repurchase obligation of the bank, trust company or government dealer; provided, however, that (i) the repurchase obligation of the bank, trust company or government dealer is collateralized by such obligations themselves, (ii) such obligations purchased must be transferred to the Trustee (unless the purchase agreement is with the bank serving as Trustee or any related party) or a third party agent by physical delivery or by an entry made on the records of the issuer of such obligations and such trustee or third party agent and segregated from securities owned generally by the bank, trust company or government

dealer, or the Trustee is furnished with an opinion of counsel stating that a perfected security interest under the Uniform Commercial Code of the state in which the securities are located or book entry procedures present at 31 C.F.R. §306.1 et seq. or 31 C.F.R. §350.0 et seq. in such investments has been created for the benefit of the Holders of the Bonds, and (iii) if the repurchase agreement is with the bank serving as Trustee or any related party, the third party holding such investments holds them as agent for the beneficial owners of the Bonds rather than as agent for the bank serving as Trustee or any other party and the investments be evaluated no less frequently than weekly to determine if their fair market value equals or exceeds the required 102% level and, if upon such valuation, the fair market value is found to be deficient, then the bank, trust company or government dealer shall have no more than five business days to pledge additional obligations authorized hereunder for such repurchase agreement so as to satisfy such requirement or the third party holding the investments must be required to liquidate the collateral and disburse the proceeds to the Trustee;

(f) Units of a tax-exempt or taxable government money market portfolio composed solely of obligations listed in (a), (b), (c) or (d) above with a yield adjusted so as to maintain the value of such units at par; and

(g) Such other investments as may from time to time be permitted by applicable law and approved in writing by S&P and Moody's.

“Maximum Annual Debt Service” means with respect to each Fiscal Year the aggregate Debt Service as computed for any such period in which such sum is the largest. In computing Maximum Annual Debt Service, Debt Service on Partially Amortized Bonds shall be determined as set forth in Section 2.6. In computing Maximum Annual Debt Service, Debt Service on Variable Rate Bonds shall be determined as set forth in Section 2.9.

“Moody's” means Moody's Investors Service, Inc., a corporation organized and existing under the laws of the State of Delaware, its successors and assigns.

“Net Revenues” means the Revenues, excluding (i) proceeds of Bonds and notes issued in anticipation of Bonds or of Revenues, (ii) the proceeds of the sale or other disposition of all or any part of the Water System, (iii) proceeds of insurance, except business interruption insurance which is included, and condemnation awards received with respect to the Water System, (iv) other items of an extraordinary and non-recurrent nature, (v) contributions in aid of construction, and (vi) customer deposits), after deducting the Operating Expenses (exclusive of expenses of a capital nature paid from or offset by sources other than Revenues included in Net Revenues).

“Operating Expenses” means the expenses of the City for the operation, maintenance, repair and ordinary replacements properly and directly attributable to the operation or ordinary maintenance of the Water System. Operating Expenses also includes costs and expenses paid from the proceeds of insurance, condemnation or the disposition of property to repair or replace the property from which the proceeds are derived. Operating Expenses do not include (i) the principal of and interest on bonds, notes or other evidences of indebtedness issued by the City for

the purposes of its Water System, (ii) payments into the Renewal and Replacement Fund, (iii) depreciation and amortization, (iv) unfunded pension or other post-employment benefit liabilities or similar accounting determinations that do not result in the actual disposition of cash, and (v) any financing expenses, underwriting discounts, call premiums, gains or losses on the extinguishment of debt due to the refinancing of the same, and other related or incidental non-recurring expenses resulting from the issuance or refinancing of Bonds. Operating Expenses include taxes, if any, payable on the Water System to municipalities other than the City, or payments in lieu thereof, but do not include payments to the City of or in lieu of taxes on the Water System.

“Opinion of Bond Counsel” means an opinion of an attorney at law or firm of attorneys of nationally recognized standing in matters pertaining to the federal tax exemption of interest on bonds issued by states and political subdivisions, and duly admitted to practice law before the highest court of any state of the United States.

“Outstanding” has the meaning set forth in Section 11.1, i.e. a Bond shall not be Outstanding under the Resolution if the Bond is at the time not deemed to be Outstanding under the Resolution pursuant to Section 11.1.

“Partially Amortized Bonds” means Bonds of a Series of which twenty-five percent (25%) or more of the principal on which comes due in a single year and for which no sinking fund installments have been established.

“Paying Agent” means the Trustee as to all the Bonds and, as to Bonds of a particular Series, the alternate Paying Agent or Agents (if any) designated for the payment of the principal of, premium, if any, and interest on the Series of Bonds in the Supplemental Resolution providing for their issuance.

“Principal Account” means the Principal Account created in the Debt Service Fund by Section 5.3.

“Project” means any acquisition, improvement, extension, enlargement, betterment, addition, alteration, construction, reconstruction, extraordinary repair, equipping or reequipping, financing of or the Water System, or any one or more of the foregoing. To the extent permitted by law, a Project may also consist of or include (i) prepayment for purchased capacity or output of a water treatment plant or water collection facilities or (ii) decommissioning of facilities.

“Project Costs” means all costs of carrying out a Project or refinancing a Project and, without limiting the generality of the foregoing, may include (i) all preliminary expenses, (ii) the cost of acquiring all property, franchises, easements and rights necessary or convenient for the project, (iii) engineering and legal expenses, (iv) expenses for estimates of costs and revenues, (v) expenses for plans, specifications and surveys, (vi) other expenses incident or necessary to determining the feasibility or practicability of the enterprise, (vii) administrative expense, (viii) construction costs, (ix) interest prior to the Date of Commercial Operation of any Project and for a reasonable period thereafter, (x) the establishment of or contribution to such reserves as may be required by the Resolution, and (xi) such other expenses as may be incurred in the financing or

refinancing of the Project (including the costs of various forms of credit enhancement) or in carrying it out, placing it in operation (including the provision of working capital) and in the performance of things required or permitted by the Act in connection with the Project.

“Prudent Utility Practice” means either (i) any of the practices, methods and acts engaged in or approved by a significant portion of the waterworks industry prior thereto, or (ii) any of the practices, methods or acts, which in the exercise of reasonable judgment in the light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at the lowest reasonable cost consistent with reliability, safety and expeditious action. Prudent Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be a spectrum of possible practices, methods or acts. Prudent Utility Practice is intended to take into account that the Water System is municipally owned and operated. Prudent Utility Practice shall include those practices, methods and acts that are required by applicable laws and final orders of regulatory agencies having jurisdiction over the subject action.

“Qualified Financial Institution” means and includes: (1) any U.S. domestic institution which is a bank, trust company, national banking association or a corporation, including the Trustee and any of its affiliates, subject to registration with the Board of Governors of the Federal Reserve System under the Bank Holding Company Act of 1956, or a member of the Financial Industry Regulatory Authority (FINRA), in each case whose unsecured obligations or uncollateralized long-term debt obligations have been assigned a rating within one of the two highest rating categories by Standard & Poor’s Corporation, Moody’s Investor’s Service, Inc. or Fitch Investors Service, Inc., or which has issued a letter of credit, contract, agreement or surety bond in support of debt obligations which have been so rated; (2) an insurance company with a claims-paying ability or a corporation whose obligations are guaranteed by an insurance company (in the form of an insurance policy) or by an insurance holding company rated within one of the two highest rating categories by Standard & Poor’s Corporation, Moody’s Investor’s Service, Inc. or Fitch Investors Service, Inc.; or (3) any banking institution whose unsecured obligations or uncollateralized long-term debt obligations have been assigned a rating within one of the two highest rating categories by Standard & Poor’s Corporation, Moody’s Investor’s Service, Inc. or Fitch Investors Service, Inc.

"Rebate Fund" means the Water System Revenue Bond Rebate Fund created by Section 5.7

The “Resolution” or this “Resolution” means this Water System Revenue General Bond Resolution as amended or supplemented from time to time by Supplemental Resolutions.

“Revenue Fund” means the Water System Revenue Fund created by Section 5.2.

“Revenues” means all revenues, rates, fees, charges, rents or other income derived and receipts received by the City from any source to the City, or any department, board or agency

thereof, in connection with the ownership, management and operation of the Water System. Without limiting the generality of the foregoing, Revenues include rentals, proceeds of insurance or condemnation or other disposition of plant assets (except as provided below), federal or state grants-in-aid with respect to such Water System, proceeds of Bonds issued under the Act for the Water System, proceeds of notes issued in anticipation of operating Revenues (unless set aside to pay notes of the same character) and earnings from the investment of Revenues which are pledged to the payment of the City's bonds. Unless otherwise provided by Supplemental Resolution, Revenues do not include the proceeds of other borrowing by the City or the proceeds of grants for limited purposes or of the disposition of property financed by such grants, or payments or reimbursement of capital costs by other owners pursuant to joint ownership agreements relating to jointly owned facilities.

"S&P" means Standard & Poor's Corporation, a corporation organized and existing under the laws of the State of New York, its successors and assigns.

"Serial Bonds" means Bonds other than Term Bonds. Payment of principal is provided from the Principal Account.

"Series 2017 Bonds" means the first series of Water System Revenue Bonds issued, or to be issued, pursuant to Supplemental Resolution No. 1.

"Series" or "Series of Bonds" or "Bonds of a Series" means a series of Bonds authorized by the Resolution.

"Sinking Fund Account" means the Sinking Fund Account created in the Debt Service Fund by Section 3.2.

"Special Redemption Fund" means the Water System Revenue Bond Special Redemption Fund created by Section 5.11.

"Supplemental Resolution" means a resolution adopted by the City under Article IX providing for the issuance of Bonds, and shall also mean a resolution adopted by the City under Article IX amending or supplementing the Resolution.

"Term Bonds" means Bonds with respect to which payments are required to be made into the Sinking Fund Account as specified in the Supplemental Resolution providing for their issuance. A Series of Bonds may include both Serial and Term Bonds and may include more than one set of Term Bonds, each of which has its own maturity date. Payment of principal on Term Bonds is provided from the Sinking Fund Account.

"Trustee" means the appointed Trustee pursuant to Section 6.1 and its successor.

"Unissued Bonds" means at any particular time Bonds not yet issued and not then being issued which the Consulting Engineer estimates will be required to be issued to complete the payment of the Project Costs of a Project for which Bonds have been issued or are then being issued.

"Variable Rate Bonds" shall mean, for any period of time, any Bonds which during such period bear interest at a variable rate; provided that Bonds, the interest rate on which has been fixed for the remainder of the term thereof, shall no longer be Variable Rate Bonds.

"Water System" means the complete municipal waterworks system now owned, operated and managed by the City, together with any Improvement constructed or acquired after the adoption of this Resolution, and all other facilities, equipment and appurtenances necessary or appropriate to the complete water supply, treatment, and distribution system, together with any improvements constructed or acquired for such system. The Water System includes the ownership share of the City in jointly-owned facilities for water supply, treatment and distribution. The Water System does not include the City's wastewater treatment facilities, water pollution control or stormwater management facilities.

ARTICLE II AUTHORIZATION AND ISSUANCE OF BONDS

Section 2.1. Authorization of Bonds.

The City may issue Bonds under this Resolution to be known as "Waterworks System Revenue Bonds". The Bonds shall be issued from time to time in series as the Council may deem necessary or prudent for the purposes of (a) the payment of Project Costs and (b) the refunding (directly or indirectly) of Bonds or other obligations issued for the purpose of paying Project Costs.

Section 2.2. Supplemental Resolutions.

Each Series of Bonds shall be issued under a Supplemental Resolution adopted by the Council pursuant to this Article and Article IX. The Supplemental Resolution shall designate the Bonds by an appropriate series designation in addition to the title "Waterworks System Revenue Bonds," and shall also specify: (a) the authorized principal amount of the Series of Bonds; (b) the purpose or purposes for which the Series of Bonds is being issued, and, if the Bonds are being issued to pay Project Costs, the Project or Projects for which the Bonds are being issued, and, if the Bonds are being issued for more than one purpose or Project, the principal amount being issued for each purpose or Project; (c) the date of the initially issued Bonds of the Series; (d) the maturity dates and sinking fund installment amounts and dates of the Bonds; (e) the redemption prices of the Bonds; (f) the place or places of payment of the Bonds and the Paying Agents for the Bonds; (g) the provisions for the sale of the Bonds; (h) the Debt Service Reserve Fund Requirement, if any, and the details relating thereto including among other things the funding, use and investment; (i) any other provisions which may be required to be inserted by other provisions of the Resolution; and (j) any other necessary or prudent provisions not in conflict with the provisions of the Resolution. Notwithstanding anything to the contrary, the foregoing matters may be covered for a Series of Bonds by either one or more than one Supplemental Resolution.

Section 2.3. Conditions for the Issuance of Additional Bonds.

(A) Except as otherwise provided in this Section, each Series of Additional Bonds shall be issued only upon filing of the following with the Trustee:

1. (a) A certificate of the City, executed on its behalf by an Authorized Officer, that to the best of the knowledge and belief of the Authorized Officer no Event of Default exists and (b) a certificate of the Trustee that there is no Event of Default of which it has knowledge;

2. If Additional Bonds are being issued to pay Project Costs of a Project, a certificate of the Consulting Engineer stating: (a) the then estimated Date of Commercial Operation of the Project; (b) the then current estimate of the Project Costs of the Project; (c) that the Project is consistent with Prudent Utility Practice; and (d) that the Net Revenues for each of the three Bond Years, beginning with the first Bond Year in which a portion of the principal on the Additional Bonds is not paid from the proceeds of the Additional Bonds, will be at least equal to (i) one hundred per cent (100%) of the maximum annual debt service on any general obligations of the City then outstanding which have been or are intended to be paid from Revenues and (ii) one hundred twenty-five percent (125%) of the Maximum Annual Debt Service on all other Bonds then outstanding, on the Additional Bonds then being issued, on Unissued Bonds and any other revenue obligations of the City which are or will be payable from Revenues in the Bond Year in which the Bonds are being issued or in any subsequent Bond Year;

3. A certified copy of the Supplemental Resolution providing for the issuance of the Additional Bonds; and

4. An opinion of counsel to the City that the conditions precedent to the issuance of the Additional Bonds have been satisfied;

(B) The certification required by clauses (c) and (d) of paragraph (2) of paragraph (A) of this Section shall not be required if:

1. Bonds shall have previously been issued for the Project (except pursuant to paragraph (C) of this Section);

2. Bonds have been authorized, and bond anticipation notes issued, for the Project prior to the adoption of this Resolution; or

3. The Consulting Engineer certifies to the Trustee (a) that the Project is necessary to maintain the operational status of any facilities of the Water System, whether it is necessitated by casualty, regulatory or licensing requirements or other cause, or (b), in the case of jointly-owned facilities not controlled by the City, that the Bonds are being issued to finance the City's share of the Project Costs of improvements which the lead participants are empowered to make, provided that the amount to be issued for a

Project under this subparagraph shall not exceed the Project Costs as certified by the Consulting Engineer less any available insurance proceeds as certified by an Authorized Officer.

(C) The certificate required by subparagraph (2) of paragraph (A) of this Section shall not be required in connection with the issuance of Bonds to pay preliminary Project Costs of a Project, which for this purpose shall mean Project Costs not exceeding ten percent (10%) of the total estimated Project Costs of the Project as certified by the Consulting Engineer to the Trustee, provided that Additional Bonds shall not be issued under this paragraph which, upon the issuance of the same, would cause the amount of Additional Bonds outstanding under this paragraph for Projects not certified under subparagraph (2) of paragraph (A) to exceed five per cent (5%) of the total amount of Bonds outstanding under the Resolution.

(D) The certificate required by subparagraph (2) of paragraph (A) shall not be required in connection with the issuance of Bonds to refund Bonds so long as there is no increase in the Maximum Annual Debt Service for any Bond Year during which Bonds not being refunded will be Outstanding but shall be required in the case of Bonds issued to refund other obligations (including the issuance of Bonds to retire notes issued in anticipation of Bonds) as if the Bonds were being issued for the Projects financed by the prior obligations.

(E) In certifying under subparagraph (2) of paragraph (A) of this Section, the Consulting Engineer may make such assumptions and projections as it deems reasonable with respect to the issuance of Unissued Bonds, general obligation bonds or other revenue obligations, rate, costs, and commencement or termination of operation of facilities and other matters.

(F) If Bonds are being issued to pay Project Costs of a Project which has been discontinued, references in this Section to the Date of Commercial Operation shall be deemed to refer to the date of issuance of the Bonds and, in lieu of the certification required by clause (c) (if applicable) of subparagraph (2) of paragraph (A), the Consulting Engineer shall certify that the discontinuance is consistent with Prudent Utility Practice. Such certification shall not be required, however, in the case of the discontinuance of a jointly-owned Project pursuant to the applicable ownership agreement.

(G) For the issuance of any Series of Bonds in the aggregate principal amount of \$1,000,000 or less, the calculation and certification required by Section 2.3(A)(2) may, unless provided to the contrary in any Series Resolution, be made by an Authorized Officer instead of a Consulting Engineer.

Section 2.4. Disposition of Bond Proceeds.

Upon the delivery of a Series of Bonds the proceeds shall be paid to the Trustee and be dealt with as follows:

(A) There shall be deposited into a separate account in the Debt Service Reserve Fund the amount required, if any, by the Supplemental Resolution authorizing such Series of Bonds.

(B) There shall be deposited into the Renewal and Replacement Fund the amount, if any, required by Supplemental Resolution pursuant to Section 5.5.

(C) Where Bonds are issued to refund prior obligations, the proceeds required to pay the principal of the prior obligations, together with any redemption premium on the same, any interest and commitment or facility fee accrued or to accrue to the date of payment of the prior obligations, the expenses of issue of the Bonds and the expenses of redeeming the prior obligations shall be used for those purposes and may be deposited in trust for these purposes free and clear of the lien of this Resolution or may be dealt with pursuant to paragraphs (F) and (G) as if the Bonds were being issued for the Projects financed by the prior obligations.

(D) The Trustee may pay expenses of the issue not provided for above directly.

(E) The balance of the proceeds shall be deposited in the Construction Fund.

Section 2.5. Subordinate Lien Obligations.

Notwithstanding anything to the contrary in the Resolution, the City may issue bonds, notes or other evidences of indebtedness for the purposes of the Water System payable from the Revenue Fund and the revenues, subordinate to the deposits and credits required to be made from the Revenue Fund to other funds and accounts under the Resolution and to the payments required for Operating Expenses, and may secure the bonds, notes or other evidences of indebtedness by a pledge of the net revenues (as defined in the Act) inferior to the pledge of the net revenues created by the Resolution. The proceeds of the inferior obligations may be pledged as security for the inferior obligations free and clear of the lien of the Resolution. The City shall notify the Trustee of the proposed issuance of inferior obligations.

Section 2.6. Partially Amortized Bonds.

In the case of Partially Amortized Bonds, the Supplemental Resolution providing for their issuance may provide that the unamortized portion shall not be treated as principal for the purpose of calculating payments into the Debt Service Fund pursuant to Section 5.3C although the obligation to pay the same shall be treated as principal for the purposes of Section 8.1(1), Section 8.4 and Section 11.1. The City shall finance the unamortized portion by the issuance of refunding Bonds in accordance with this Article, by using moneys in the Special Redemption Fund in accordance with Section 5.11 (treating payment as redemption), by using moneys in the Revenue Fund in accordance with clause Fifth of Section 5.2, by other lawful means, or by a combination of the foregoing. If partially Amortized Bonds are issued the Supplemental Resolution shall set forth the estimated date of expiration of the useful life of the Project (not to exceed twenty-five (25) years) to which the Bonds are attributable. If a Series of Bonds is attributable to more than one Project, it may be subdivided for the purposes of this Section. Until payment of the unamortized portion (or provision for payment pursuant to Section 11.1) Maximum Annual Debt Service shall be calculated by treating the useful life of the Project, on a level annual Debt Service basis, with interest payable semiannually at a rate equal to the net interest cost of the Series.

Section 2.7. Lease Financing Agreements.

The City shall have at all times the right to enter into capital leases or other lease financing agreements secured by a lien on the property, plant and equipment comprising a part of the Water System; provided, however, that: (i) the aggregate principal amount of such obligations outstanding at any time shall not exceed ten percent (10%) of the value of the property, plant and equipment of the Water System, less accumulated depreciation, as shown on the audited balance sheet of the City for the most recent Fiscal Year for which audited financial statements are available; and (ii) the loss of the property secured by the lien will not materially adversely affect the ability of the City to meet its financial obligations under this Resolution.

Section 2.8. Option Bonds.

A Supplemental Resolution providing for the issuance of a Series of Bonds may provide for their repurchase, at the option of the Owners, by the City or by the Trustee, on any date or dates prior to the date of maturity of the Bonds. The Supplemental Resolution may provide for the terms of any such option and the remarketing of Bonds with respect to which such option is exercised. The Supplemental Resolution may also provide for the use of a Credit Facility for purposes of liquidity or security relating to the Bonds and for the issuance by the City of Credit Facility Obligations or other arrangements in connection therewith. Nothing in this paragraph shall be deemed to preclude any repurchase or redemption of Bonds otherwise required or permitted by the terms of this Resolution.

Section 2.9 Variable Rate Bonds.

A Supplemental Resolution providing for the issuance of a Series of Bonds may provide for the Bonds to bear interest at a variable rate or rates so long as it specifies (1) the manner of determining the interest rate or rates and (2) a maximum rate or rates at which the Bonds may bear interest. If Bonds of a Series bear interest at a variable rate, the Debt Service Reserve Fund Requirement shall be calculated for such Variable Rate Bonds by using the maximum rate or rates so specified. For purposes of calculating the payments into the Interest Account in the Debt Service Fund pursuant to Section 5.3, the interest accrued or estimated to accrue during the calendar month in which the payment is to be made shall be the amount of the required payment, subject in the case of an estimate to an adjustment at the end of the month. The Supplemental Resolution providing for the issuance of Variable Rate Bonds may also provide for the use of a Credit Facility for purposes of liquidity or security relating to the Bonds and for the issuance by the City of Credit Facility Obligations or other arrangements in connection therewith.

Section 2.10. Capital Appreciation Bonds.

A Supplemental Resolution providing for the issuance of a Series of Bonds may provide that the payment of interest on any specified Bond of the Series shall only be made at maturity or upon earlier redemption, by sinking fund installment or otherwise. Any such Supplemental Resolution shall specify the Compounded Amount and the Compounding Date of such Series of Bonds. The principal of any such Capital Appreciation Bonds shall be deemed to be their

Compounded Amount for all purposes under the Resolution, including Sections 2.3, 5.1, 5.4, 8.1 and 11.1.

Section 2.11. Additional Security.

To the extent permitted by law, a Supplemental Resolution providing for the issuance of a Series of Bonds may provide that the City obtain or cause to be obtained a letter of credit, line of credit, insurance policy, standby purchase agreement or similar obligation or instrument or any combination of the foregoing (“Additional Security”) providing for payment of all or a portion of the principal premium if any or interest due or to become due on specified Bonds of such Series or providing for the purchase of such Bonds or a portion thereof by the issuer of the Additional Security. In connection therewith the City may enter into agreements with the issuer of the Additional Security to provide the terms and conditions thereof, including the security, if any, to be provided to the issuer. The City may secure the Additional Security by an agreement providing for the purchase of the Bonds secured thereby with such adjustments to the rate of interest method of determining interest maturity or redemption provisions as specified in the Supplemental Resolution. Maximum Annual Debt Service with respect to any Bonds so secured shall be calculated for purposes of Sections 1.1 and 9.3(A) by using the rate of interest on the Bonds prior to adjustment under such agreement. The City may also agree to reimburse directly the issuer of the Additional Security for any amounts paid thereunder together with interest thereon.

ARTICLE III GENERAL TERMS AND PROVISIONS

Section 3.1. Form of Bonds Generally.

The definitive Bonds of each Series hereunder are issuable as fully registered Bonds and shall be substantially in the forms set forth in the Supplemental Resolution authorizing the issuance of such Bonds. All such Bonds may have endorsed thereon such legends or text as may be necessary or appropriate to conform to any applicable rules and regulations of any governmental authority or of any securities exchange on which the Bonds may be listed or traded or any usage or requirement of law with respect thereto or as may be authorized by the Council and approved by the Trustee.

Section 3.2. Details of Bonds.

The Bonds of each Series issued under the provisions of this Resolution shall be dated, shall be stated to mature (subject to any right of prior redemption) at such times, shall be made redeemable (subject to the provisions of Article IV of this Resolution), shall be in such authorized denominations, designated and numbered and shall have such further details as may be provided in the Supplemental Resolution adopted by the Council with respect to such Series of Bonds.

The Bonds issued under this Resolution shall be limited obligations of the City payable solely and only from and secured by the Net Revenues specifically pledged thereto pursuant to

the Supplemental Resolution authorizing the issuance of such Series of Bonds. Each such Bond shall contain the following legend:

THE BONDS SHALL NOT CONSTITUTE A GENERAL OBLIGATION OF THE CITY WITHIN THE MEANING OF ANY CONSTITUTIONAL OR STATUTORY PROVISION OR LIMITATION, BUT SHALL BE LIMITED OBLIGATIONS OF THE CITY PAYABLE SOLELY FROM, AND SECURED SOLELY BY, THE PLEDGE AND LIEN ON THE NET REVENUES SPECIFICALLY PLEDGED THERETO PURSUANT TO THE SUPPLEMENTAL RESOLUTION. NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE CITY, THE STATE OF VERMONT OR ANY OTHER POLITICAL SUBDIVISION THEREOF IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL OR PREMIUM (IF ANY) ON THE BONDS AND NEITHER THE STATE OF VERMONT NOR ANY POLITICAL SUBDIVISION THEREOF, OTHER THAN THE CITY, SHALL BE OBLIGATED TO PAY THE PRINCIPAL OR PREMIUM (IF ANY) THEREON.

Unless otherwise provided in the Supplemental Resolution with respect to a particular Series of Bonds, the principal amount of any Bond shall be payable upon surrender thereof at the principal corporate trust office of the Paying Agent. Such payments shall be made to the registered owner of the Bond so surrendered, as shown on the Bond Register on the date of payment, or such registered owner's legal representative.

Section 3.3. Authentication of Bonds.

Only such of the Bonds as shall have endorsed thereon a certificate of authentication, duly executed by the Trustee, shall be entitled to any benefit or security under this Resolution. No Bond shall be valid or obligatory for any purpose unless and until such certificate of authentication shall have been duly executed by the Trustee, and such certificate of the Trustee upon any such Bond shall be conclusive evidence that such Bond has been duly authenticated and delivered under this Resolution. The Trustee's certificate of authentication on any Bond shall be deemed to have been duly executed if signed by an authorized officer of the Trustee, but it shall not be necessary that the same officer sign the certificate of authentication on all of the Bonds that may be issued hereunder at any time.

Section 3.4. Execution and Form of Bonds.

The Bonds shall be signed by or bear the facsimile signature of, an Authorized Officer of the Council and the treasurer of the City and shall be signed by, or bear the facsimile signature of, the clerk, and the official seal of the Council or a facsimile thereof shall be imprinted on the Bonds and each Bond shall be manually authenticated by the Trustee. In case any officer whose signature or a facsimile of whose signature shall appear on any Bonds shall cease to be such officer before the delivery of such Bonds, such signature or such facsimile shall nevertheless be valid and sufficient for all purposes the same as if he had remained in office until such delivery and also any Bond may bear the facsimile signature of, or may be signed by, such persons as at the actual time of the execution of such Bond shall be the proper officers to execute such Bond although at the date of such Bond such persons may not have been such officers. The Bonds issued under the provisions of this Article, the statement and the Trustee's certificate of

authentication to be endorsed on all Bonds, shall be, respectively, substantially in the forms provided in the Supplemental Resolution authorizing such Bonds, with such appropriate variations, omissions and insertions as may be required or permitted by such Supplemental Resolution.

Section 3.5. Negotiability, Registration and Transfer of Bonds.

The Bond shall cause books (the “Bond Register”) for the registration and for the registration of transfer of the Bonds as provided in this Resolution to be kept by the Trustee. The transfer of any Bond may be registered only upon the Bond Register kept by the Trustee for the registration of or registration of transfer of Bonds upon surrender thereof to the Trustee, together with an assignment duly executed by the registered owner or his legal representative in such form as shall be satisfactory to the Trustee.

The Bond Register held by the treasurer of the City or other designated register shall be confidential and the information contained therein shall not be available to the public.

Upon any registration of transfer of any Bond, an Authorized Officer, if necessary, shall manually execute and the Trustee shall authenticate and deliver in exchange for such Bond a new Bond or Bonds registered in the name of the transferee, for an equal aggregate principal amount of Bonds of the same Series, type and maturity of any authorized denomination. No charge shall be made to any Bondowner for the privilege of registration and registrations of transfer hereinafter granted or for exchange of Bonds, but any Bondowner requesting any such registration or registration of transfer exchange shall pay any tax or other governmental charge required to be paid with respect thereto. The Trustee shall not be required to make any exchange or registration of transfer during the period commencing on the Regular Record Date with respect to each interest payment date of such Bond or after such Bond has been selected for redemption.

Section 3.6. Ownership of Bonds.

The person in whose name any Bond shall be registered shall be deemed and regarded as the absolute owner thereof for all purposes, and payment of or on account of the principal amount of any such Bond shall be made only to or upon the order of the registered owner thereof or his legal representative, but such registration may be changed as herein provided. All such payments shall be valid and effectual to satisfy and discharge the liability upon such Bond to the extent of the sum or sums so paid.

Section 3.7. Exchange of Bonds.

Bonds, upon surrender thereof at the principal office of the Trustee, together with an assignment duly executed by the registered owner or his attorney or legal representative in such form as shall be satisfactory to the Trustee may, at the option of the registered owner thereof, be exchanged for an equal aggregate principal amount of Bonds of the same Series, type and maturity, of any authorized denomination.

The City shall make provision for the exchange of the Bonds at the principal office of the Trustee.

Section 3.8. Provisions for Book Entry System.

The Bonds may be subject to a book-entry only system of ownership as provided for in the Supplemental Resolution authorizing the issuance of a Series of Bonds.

Section 3.9. Temporary Bonds.

Until the definitive Bonds of any Series are ready for delivery, there may be executed, and the Trustee may authenticate and deliver, in lieu of definitive Bonds and subject to the same limitations and conditions except as to identifying numbers, temporary printed, engraved, lithographed or typewritten Bonds in authorized denominations, substantially of the tenor hereinabove set forth, and with appropriate omissions, insertions and variations as may be required. The Council shall cause the definitive Bonds to be prepared and to be executed, endorsed, authenticated and delivered to the Trustee, and the Trustee, upon presentation to him of any temporary Bond shall cancel the same and authenticate and deliver, in exchange therefore, at the place designated by the owner, without expense to the owner, a definitive Bond or Bonds of the same Series and in the same aggregate principal amount, maturing on the same date as the temporary Bond surrendered. Until so exchanged, the temporary Bonds shall in all respects be entitled to the same benefit of this Resolution as the definitive Bonds to be issued and authenticated hereunder.

Section 3.10. Mutilated, Destroyed or Lost Bonds.

In case any Bonds secured hereby shall become mutilated or destroyed or lost, the Council may cause to be executed, and the Trustee may authenticate and deliver, a new Bond of like date, number and tenor in exchange and substitution for and upon the cancellation of such mutilated Bond or in lieu of and in substitution for such Bond destroyed or lost, upon owner's paying the reasonable expenses and charges of the City in connection therewith and, in the case of a Bond destroyed or lost, his filing with Trustee evidence satisfactory to the Trustee that such Bond was destroyed or lost, and of such owner's ownership thereof, and furnishing the City with indemnity satisfactory to it.

ARTICLE IV REDEMPTION OF BONDS

Section 4.1. Redemption Generally.

The Bonds of each Series or portion thereof issued under the provisions of this Resolution shall be subject to redemption, either in whole or in part and at such times and Redemption Prices, as may be provided by in the Supplemental Resolution authorizing the issuance of such Bonds.

If less than all of the Bonds of any type and maturity of a Series or portion thereof shall be called for redemption, the particular Bonds of such type, maturity and Series to be redeemed shall be selected in such manner as the Council in its discretion may determine at the time such Bonds are to be selected or as determined by the Council in the Supplemental Resolution authorizing the issuance of such Bonds; provided, however, that the purchase or redemption of the Bonds of any Series with insurance proceeds shall be in inverse order of maturity.

Section 4.2. Redemption Notice.

At least thirty (30) days before the redemption date, or at such time or times the Council may establish in the Supplemental Resolution authorizing the issuance of any Series of Bonds or portion thereof hereunder, a notice of any such redemption, either in whole or in part, signed by the Trustee shall be mailed, postage prepaid, to all registered owners of Bonds to be redeemed at their addresses as they appear on the Bond Register but failure to mail any such notice or any defect therein as to any such Bond shall not affect the validity of the proceedings for such redemption as to any other Bond. Each such notice shall set forth the date fixed for redemption, the redemption price to be paid, and, if less than all of the Bonds of a Series then Outstanding shall be called for redemption, the number of such Bonds.

Any notice of redemption may state that the redemption to be effected is conditioned upon the receipt by the Trustee on or prior to the redemption date of moneys sufficient to pay the principal of and premium, if any, and interest on such Series of Bonds to be redeemed and that if such moneys are not so received, such notice shall be of no force or effect and such Series of Bonds shall not be required to be redeemed. In the event that such notice contains such a condition and moneys sufficient to pay the principal of and premium, if any and interest on such Series of Bonds are not received by the Trustee on or prior to the purported redemption date, the redemption shall not be made, and the Trustee shall within a reasonable time thereafter give notice, in the manner in which the notice of redemption was given, that such moneys were not so received.

Section 4.3. Effect of Calling for Redemption.

On the date so designated for redemption, notice having been mailed in the manner and under the conditions hereinabove provided, the Bonds so called for redemption shall become and be due and payable at the redemption price provided for redemption of such Bonds on such date, and, moneys for payment of the redemption price being held in separate accounts by the Trustee or by the Paying Agents in trust for the owners of the Bonds to be redeemed, all as provided in the Supplemental Resolution, such Bonds shall cease to be entitled to any lien, benefit or security under this Resolution, and the registered owners of such Bonds shall have no rights in respect thereof except to receive payment of the redemption price thereof.

Section 4.4. Cancellation.

Bonds so called for redemption shall be cancelled upon the surrender thereof.

Section 4.5. Bonds Called for Redemption Not Outstanding.

Bonds which have been duly called for redemption under the provisions of this Article, or with respect to which irrevocable instructions to call for redemption at a selected redemption date have been given to the Trustee, in form satisfactory to him, and for the payment of the redemption price of which sufficient moneys, or Government Obligations in such amounts, bearing interest at such rates and maturity (without option of prior payments) at such dates that the proceeds thereof and the interest therein will provide sufficient moneys, shall be held in separate accounts by a bank or other financial institution with trust powers or by the Trustee or Paying Agents in trust for the owners of the Bonds to be redeemed, all as provided in this Resolution, shall not be deemed to be Outstanding under the provisions of this Resolution and shall cease to be entitled to any benefit or security under this Resolution other than to receive payment of the Redemption Price from such moneys.

Section 4.6. Partial Redemption of Bonds.

Upon surrender of any Bond redeemed in part only, the City shall execute and the Bond Registrar shall authenticate and deliver to the owner thereof, at the expense of the City, a new Bond or Bonds of the same Series and maturity and of authorized denominations equal in aggregate principal amount to the unredeemed portion of the Bond surrendered.

ARTICLE V PLEDGE OF NET REVENUES; SPECIAL FUNDS AND ACCOUNTS

Section 5.1. Pledge of Net Revenues.

The Net Revenues are hereby pledged to secure the payment of the principal or redemption price of the Bonds and the performance of the undertakings of the City in the Resolution. All moneys held in the Accounts and Funds established hereunder (other than the Rebate Fund) shall be held in trust by the Trustee for the benefit of the owners of the Bonds until applied as provided herein. The Bonds are equally and ratably secured by the pledge, and the undertakings of the City in the Resolution are for the equal and proportionate benefit of the owners, except as otherwise expressly provided in the Resolution.

Section 5.2. Revenue Fund.

There is hereby established a special trust fund of the City to be held and administered by the City and to be known as the "Water System Revenue Fund." On and after the issuance of the initial Series of Bonds the City shall pay all of the Revenues into the Revenue Fund as promptly as practicable after receipt (other than the Revenues expressly required or permitted by the Resolution to be credited to or deposited in any other account or fund). All moneys in the Revenue Fund shall be held in trust and applied only as provided in this Resolution.

The moneys in the Revenue Fund shall be applied in the following order of priority:

First, to the payment of the Operating Expenses of the Water System;

Second, to payment of the amounts required to be paid from the Revenue Fund into the Debt Service Fund, Debt Service Reserve Fund, if any, and Special Redemption Fund;

Third, to payment of the amounts (if any) required to be paid from the Revenue Fund into the Renewal and Replacement Fund;

Fourth, to payment of the amounts (if any) required to be paid from the Revenue Fund into the Rebate Fund;

Fifth, for the purpose of making such extraordinary repairs and improvements as are necessary to the operation of the Water System in accordance with Prudent Utility Practice; for the payment of obligations (other than Bonds) issued by the City for the purposes of its Water System; and for payments and to the City of or in lieu of taxes on the Water System; the priority of payments within this clause to be in such order as is consistent with the rights of the persons entitled thereto;

Sixth, to payment of the amounts required to be paid from the Revenue Fund to the General Fund; provided, however, that before applying moneys in the Revenue Fund as provided above in clauses second through fourth, the City may retain in the Revenue Fund as an operating reserve an amount not exceeding one-fourth of the Operating Expenses budgeted by the City for the Fiscal Year as shown in the annual budget delivered to the Bond Trustee in accordance with Section 7. 2.

Section 5.3. Debt Service Fund.

There is hereby established a special fund of the City to be known as the “Water System Revenue Bond Debt Service Fund.” The moneys in the Debt Service Fund shall be held by the Trustee in trust and applied as hereinafter provided and, pending such application, shall be subject to a lien and charge in favor of the owners of the Bonds issued and Outstanding under this Resolution until paid out or transferred as herein provided.

A. The Trustee shall create a separate account in the Debt Service Fund to be known as the “Interest Account”, which shall be used to pay the interest on the Bonds. Not later than the twenty-fifth day of the sixth calendar month before the date upon which an installment of interest on the Bonds of a Series falls due, and on or before the twenty-fifth day of each calendar month thereafter until the installment falls due, the City shall pay from the Revenue Fund into the Interest Account an amount equal to one-sixth of the installment of interest coming due. The City shall also transfer from the Revenue Fund to the Interest Account any amount required to pay interest on overdue principal.

B. The Trustee shall create a separate account in the Debt Service Fund to be known as the “Principal Account”, which shall be used to pay the principal of Serial Bonds. Not later than the twenty-fifth day of each month the City shall transfer from the Revenue Fund to the Principal Account an amount equal to the principal amount of the Bonds of such Series payable on the next succeeding principal payment date (less any amounts previously paid or provided to

pay the principal amount of such Serial Bonds) divided by the number of months intervening between the first day of the month in which such calculation is made and the next succeeding principal payment date. The City shall also transfer from the Revenue Fund to the Principal Account any amount required to pay principal of Serial Bonds which has been accelerated pursuant to Section 8.2.

C. The Trustee shall create a separate account in the Debt Service Fund to be known as the "Sinking Fund Account" which shall be used to pay the principal or sinking fund installments on Term Bonds. Not later than the twenty-fifth day of each month the City shall transfer from the Revenue Fund to the Sinking Fund Account an amount which for each Series shall be equal to the principal amount of the Term Bonds of each Series then Outstanding required to be retired in satisfaction of the sinking fund installment, if any, on the next succeeding principal payment date (less, unless otherwise provided herein, any amounts previously paid or provided to pay the principal amount of such Term Bonds) divided by the number of months intervening between the first day of the month in which such calculation is made and the next succeeding principal payment date. The City shall also transfer from the Revenue Fund to the Sinking Fund Account any amount required to pay principal of Term Bonds which has been accelerated pursuant to Section 8.2. The Trustee shall call Term Bonds for redemption on the sinking fund installment date to the extent of the sinking fund installments coming due.

The City may apply moneys on deposit in the Sinking Fund Account for a sinking fund installment on Term Bonds of a particular Series and maturity to the purchase of the Term Bonds of such Series and maturity, at a price not exceeding the applicable sinking fund redemption price, at least sixty (60) days before the sinking fund installment date, and these purchase shall be credited against the sinking fund installment at the applicable sinking fund redemption price.

The City may also increase Term Bonds then subject to sinking fund redemption with other available funds at any price and credit term against a sinking fund installment applicable to them at the applicable sinking fund redemption price by delivering them to the Trustee for cancellation at least sixty (60) days before the sinking fund installment date.

Section 5.4. Debt Service Reserve Fund.

There is hereby established a special reserve fund of the City to be held in trust and administered by the Trustee and to be known as the "Water System Revenue Bond Debt Service Reserve Fund." The purpose of the Debt Service Reserve Fund is to provide a reserve for the payment of the principal or redemption price on any Series of Bonds as may be deemed appropriate at the time of issuance of such Series of Bonds.

The Supplemental Resolution providing for the issuance of a Series of Bonds may provide for the establishment of a separate account to be maintained in the Debt Service Reserve Fund. If the Supplemental Resolution provides for the establishment of such an account, it shall also provide for the manner in which it shall be funded, which may be from proceeds of the sale of the Series of Bonds, a Credit Facility, an equity contribution or any other method as set forth in the Supplemental Resolution. It shall provide for the replenishment of any deficiencies in

such account, the valuation of such account, the application of any investment earnings in such account and any other particular of such account as the City deems appropriate. Amounts in any account in the Debt Service Reserve Fund shall be used only for the benefit of the holders of the Series of Bonds which were issued pursuant to the Supplemental Resolution establishing such account and not for the benefit of the holders of any other Series of Bonds.

In lieu of the deposit of moneys in the Debt Service Reserve Fund, or in substitution of moneys previously deposited therein, the City at any time may cause to be credited to the Debt Service Reserve Fund, from a Qualified Financial Institution, a Credit Facility for the benefit of the Owners of the Bonds equal to the difference between the Debt Service Reserve Fund Requirement and all other amounts then on deposit (or, in the case of substitution of moneys previously on deposit therein, the amount remaining on deposit) in the Debt Service Reserve Fund. Any funds in the Debt Service Reserve Fund that are subsequently replaced by a Credit Facility shall be transferred by the Trustee to the Renewal and Replacement Fund, the Special Redemption Fund or the Construction Fund, as the City shall direct; provided that the City may direct the Trustee to transfer such funds to any other Fund or Account under this Resolution or otherwise upon advice from bond counsel to the effect that such transfer will not adversely affect the tax-exempt nature of the interest on any series of Bonds Outstanding. The Credit Facility shall be payable (upon the giving of notice as required thereunder) on any date on which moneys will be required to be withdrawn from the Debt Service Reserve Fund and applied to the payment of the principal of or interest on any Bonds of such Series and such withdrawals cannot be made by amounts credited to the Debt Service Reserve Fund. Any Credit Facility shall be provided by a Qualified Financial Institution. If a disbursement is made pursuant to a Credit Facility provided pursuant to this paragraph the City shall be obligated either (i) to reinstate the maximum limits of such Credit Facility or (ii) to deposit funds into the Debt Service Reserve Fund in accordance with this Section 5.4, or a combination of such alternatives, as shall provide that the amount credited to the Debt Service Reserve Fund equals the Debt Service Reserve Fund Requirement. In the event that the City elects to substitute a Credit Facility for moneys deposited in the Debt Service Reserve Fund, the City shall give notice of such substitution to all rating agencies then rating the Bonds.

ANY CREDIT FACILITY DEPOSITED IN THE DEBT SERVICE RESERVE FUND WITH RESPECT TO AN OUTSTANDING SERIES OF BONDS AND THAT RELATED SERIES OF BONDS SHALL BE DISREGARDED IN DETERMINING THE DEBT SERVICE RESERVE FUND REQUIREMENT FOR OTHER BONDS OUTSTANDING UNDER THE RESOLUTION.

Section 5.5. Renewal and Replacement Fund.

There is hereby established a special reserve fund of the City to be held in trust and administered by the Trustee and to be known as the "Water System Revenue Bond Renewal and Replacement Fund." Any Supplemental Resolution providing for the issuance of a Series of Bonds may provide for a deposit from Revenues or from the proceeds of the Bonds into the Renewal and Replacement Fund in an amount to be specified in such Supplemental Resolution.

Unless otherwise specified in a Supplemental Resolution for the funding of the Renewal and Replacement Fund, on or before the twenty-fifth day of each month the City shall pay from

the Revenue Fund to the Renewal and Replacement Fund an amount equal to the lesser of (i) one-twelfth of the Renewal and Replacement Fund Requirement or (ii) the amount necessary so that the balance in the fund is not less than the Renewal and Replacement Fund Requirement.

The City, upon submission of a requisition to the Trustee, may direct the Trustee to transfer moneys from the Renewal and Replacement Fund to the City to pay for land, replacement of depreciable property, Operating Expenses or to the payment of extraordinary expenses of the Water System, or to the costs of repairs to the Water System or to decommissioning or termination of facilities. In addition, if there is a deficiency in the Interest Account, Principal Account or Sinking Fund Account, after first taking account of any transfer from the Debt Service Reserve Fund, the Trustee shall make up the deficiency by transfer from the Renewal and Replacement Fund.

If the amount in the Renewal and Replacement Fund is greater than the Renewal and Replacement Fund Requirement on the last day of any Fiscal Year, the excess shall be dealt with in the manner provided for earnings from investment of the Renewal and Replacement Fund.

Section 5.6. Construction Fund.

There is hereby established a special trust fund of the City to be held and administered by the Trustee and to be known as the "Water System Revenue Bond Construction Fund." Moneys in the Construction Fund shall be applied to the payment of the Project Costs of the respective Projects for which the Bonds are issued. Before any payment is made for this purpose from the Construction Fund, the City shall file with the Trustee a written order, signed by an Authorized Officer identifying the Project and (i) the name and address of the person to whom the payment is due, (ii) the item or items to be paid, (iii) the amount to be paid for each item, (iv) that the items to be paid have been incurred by the City (or is an amount required to be paid by the City under a joint ownership agreement as a deposit or as its share of the costs to be paid for a period pursuant to periodic estimates), that each item is a proper item for payment from the Construction Fund and that the amount to be paid has not already been paid from any fund or account maintained by a Trustee under the Resolution, and (v) if payment is to be made to the City, that the City has advanced payment for the item from other funds.

Section 5.7 Rebate Fund.

There is hereby established a special trust fund of the City to be held and administered by the Trustee and to be known as the "Water System Revenue Bond Rebate Fund." The Rebate Fund is established for the purpose of complying with Section 148(f) of the Internal Revenue Code of 1986, as amended, and amounts shall be deposited in the Rebate Fund and applied as provided in each Supplemental Resolution providing for the issuance of a Series of Bonds other than Taxable Bonds. Any such Supplemental Resolution may provide for the establishment of separate accounts within the Rebate Fund for one or more particular Series of Bonds.

Section 5.8 General Fund.

There is hereby established a special trust fund of the City to be held and administered by the City and to be known as the "Water System Revenue Bond General Fund". Not later than the fifth business day after the twenty-fifth day of each month, the City shall pay from the Revenue Fund into the General Fund an amount equal to the balance remaining in the Revenue Fund (exclusive of the permitted operating reserve) at the close of business on such twenty-fifth day. Notwithstanding anything in this Resolution to the contrary, the moneys in the General Fund shall be applied in the following order of priority:

First, to the extent that moneys in the Revenue Fund (exclusive of the permitted operating reserve) are insufficient to make a payment described in Clause First, Second, Third, Fourth of Section 5.2, moneys in the General Fund shall be paid to the Bond Trustee and applied by the Bond Trustee to such payment, or, in the case of a payment described in Clause First of Section 5.2, deposited by the City in the Revenue Fund; the priority of payments within this clause shall be the same as the priority of such payments under Section 5.2;

Second, to pay, to the Construction Fund, as needed, the amounts (if any) required to complete any Project financed in whole or in part by the issuance of Bonds which has not been discontinued pursuant to Section 7 .12; and

Third, (a) for the purpose of making such extraordinary repairs and improvements as are necessary to the operation of the Water System in accordance with Prudent Utility Practice; (b) for the payment of obligations (other than Bonds) heretofore or hereafter issued by the City for the purposes of its Water System; and (c) for any other lawful purpose of the Water System, including (i) the pledging of the same free and clear of the lien of the Resolution to secure other obligations of the City with respect to the Water System. The priority of payments within this clause shall be in such order as is consistent with the rights of the persons entitled thereto.

Section 5.9. Working Capital.

Where Bond proceeds are to be used to provide working capital, they may be transferred from the Construction Fund to the Revenue Fund upon receipt by the Trustee of a certificate of the Consulting Engineer that they are not needed for other Project Costs and a certificate of the City, executed on its behalf by an Authorized Officer, that they are needed for expenditure within six months to pay costs payable from the Revenue Fund and attributable to the Project and not otherwise provided by Bond proceeds.

Section 5.10 Project Completion.

As soon as practicable after the Date of Commercial Operation of a Project financed by Bonds, the City shall file a certificate with the Trustee stating that the Project has been completed, giving its Date of Commercial Operation, and setting forth any remaining Project Costs of the Project (including contingencies and disputed items) to be paid from the Construction Fund. Any balance of moneys for the Project in Construction Fund not needed to pay the remaining Project Costs shall be deposited in the account for such Series, if any, in the

Debt Service Reserve Fund to the extent necessary to cause the amount on deposit therein to equal the Debt Service Reserve Fund requirement, if any, for such Series of Bonds, and the balance shall be transferred to the Renewal and Replacement Fund or to the Special Redemption Fund or retained in the Construction Fund for the purpose of paying Project Costs of other Projects, as the City shall determine.

As soon as practicable after final payment of the Project Costs of a Project financed by Bonds, the City shall file a certificate with the Trustee stating that no Project Costs of the Project remain to be paid from the Construction Fund and any balance of moneys for the Project then in the Construction Fund shall be transferred or retained in the foregoing order of priority.

Section 5.11. Special Redemption Fund.

There is hereby established a special trust fund of the City to be held and administered by the Trustee and to be known as the “Water System Revenue Bond Special Redemption Fund”. Moneys in the Special Redemption Fund shall be applied by the Trustee as soon as practicable to the purchase or redemption of Bonds. The purchase price shall not exceed the earliest available redemption price.

Except as otherwise provided in the Supplemental Resolution providing for the issuance of a Series of Bonds for a Project, moneys in the Special Redemption Fund borrowed for or attributable to the Project shall be used to purchase or redeem Bonds of that Series (to the extent issued for that Project), and, if more than one Series of Bonds has been issued for the Project, the Trustee shall select the Series to be redeemed as directed by the City (or in its own discretion if no direction is received).

Moneys in the Special Redemption Fund not borrowed for a Project or attributable to a Project financed by Bonds shall be used to purchase or redeem Bonds of such one or more Series as may be directed by the City (or selected by the Trustee in its own discretion if no direction is received).

Nothing in this Section shall be deemed to authorize redemption of any Series of Bonds otherwise than in accordance with their terms.

Section 5.12. Investment of Funds.

(A) Moneys in the Revenue Fund not needed for immediate disbursement may be invested by the City as permitted by law.

(B) Other moneys held by the City or by the Trustee which are not needed for immediate disbursement shall, to the extent practicable and reasonable, be invested in Investment Securities by the City, or by the Trustee as directed by the City (or in the discretion of the Trustee if no direction is received from the City), as the case may be, subject to the following:

(1) Moneys in the Debt Service Fund shall be invested in Investment Securities maturing or subject to redemption at the option of the City on or prior to the dates when the moneys will be required for expenditure.

(2) Moneys in the Debt Service Reserve Fund, if any, shall be invested in Investment Securities maturing or subject to redemption at the option of the owner within ten years from the date of investment.

(3) Moneys in the Renewal and Replacement Fund shall be invested in Investment Securities maturing or subject to redemption at the option of the owner within five years from the date of investment.

(4) Moneys in the Construction Fund shall be invested in Investment Securities maturing or subject to redemption at the option of the owner on or prior to the dates when the moneys are expected to be required for expenditure. Any investment made by the Trustee shall be made with due regard to the latest estimates with respect to the amounts needed from time to time to pay Project Costs from the Constitution Fund.

(5) Moneys in the Special Redemption Fund shall be invested in Investment Securities maturing or subject to redemption at the option of the owner on or before the dates when the moneys are expected to be required for expenditure.

(6) Moneys in several funds or accounts may be invested in undivided interests in the same Investment Securities if they are otherwise eligible for each of the several funds or accounts. Investment Securities may be transferred in kind at fair market value when deposits or transfers are required if they are eligible for the transferee or depository fund or account.

(7) In the event that invested moneys in a fund or account are required for expenditure or transfer, Investment Securities shall be sold or redeemed to the extent necessary. Investment Securities may be sold by one fund or account to another if eligible for investment by the latter.

(C) Except as otherwise provided below, all income from the investment of any fund or account established under the Resolution (including net profit from the sale of any investment) shall be deposited in the Revenue Fund. Unless otherwise provided by Supplemental Resolution, income from investment of the Rebate Fund shall be retained in the Rebate Fund. Income from investment of the Special Redemption Fund shall accrue to it except that any income not needed to pay or redeem Bonds shall be subject to the provisions of the preceding sentence. For the period until the Date of Commercial Operation of a Project financed by Bonds (or until the Project is discontinued pursuant to Section 7.12), income accruing from investment of the proceeds of Bonds issued to finance or refinance the Project which have been deposited in the Interest Account, the Construction Fund, the account in the Debt Service Reserve Fund for such series of Bonds, and the Renewal and Replacement Fund, including income on the income, shall when received, be deposited in the Construction Fund, or, if so directed by the City, in the Interest Account, or as otherwise provided by the Supplemental Resolution under which the

Bonds are issued for the Project. Any loss from investment of a fund or account shall be charged to the fund or account, but unless otherwise made up, shall be set off against income from investment of the funds or account which would otherwise be deposited in another fund or account. In addition, any loss from investment of the Debt Service Fund, the Debt Service Reserve Fund, the Renewal and Replacement Fund, and the Construction Fund (in that order) shall, unless otherwise made up, be made up by the transfer of income from investment of any fund or account other than the Revenue Fund.

(D) Investments shall be valued at the lower of market or cost (plus amortized discount of minus amortized premium but excluding accrued interest to the date of purchase) plus accrued interest to the date as of which they are valued.

ARTICLE VI TRUSTEE AND PAYING AGENTS

Section 6.1. Qualifications and Appointment of Trustee; Resignation or Removal.

The Trustee shall be a trust company or bank having the powers of trust companies within or outside of the State of Vermont. The Trustee shall have a combined capital and surplus of not less than Twenty Million Dollars.

The initial Trustee shall be appointed by the City by Supplemental Resolution.

The Trustee may resign upon not less than (60) days notice given in writing to the City and published in accordance with Section 13.6.

If a Trustee ceases to be eligible, or becomes incapable of acting, or is adjudged a bankrupt or insolvent, or a receiver of the Trustee or of its property is appointed, or a public officer takes the control of the Trustee or of its property or affairs, (a) the City may remove the Trustee by written notice to the Trustee and the Bondowners or (b) any Bondowner, on behalf of himself and all others similarly situated, may petition a court of competent jurisdiction for the removal of the Trustee. The court may thereupon remove the Trustee after such notice, if any, as it may deem proper or as may be required by law.

A Trustee may also be removed at any time by the written direction of the owners of a majority in principal amount of the outstanding Bonds.

In the event of the resignation or removal of a Trustee or a vacancy from any other cause, a successor may be appointed by written direction of the owners of not less than a majority in principal amount of the outstanding Bonds. The City may appoint a successor to fill the vacancy until a new Trustee is appointed by the Bondowners and shall do so if the vacancy occurs before a successor has been appointed by the Bondowners.

If no successor is appointed within fifty (50) days after publication of a notice of resignation, the remaining Trustee, or any Bondowner on behalf of himself and all others similarly situated, may petition a court of competent jurisdiction for the appointment of a

successor Trustee. The court may thereupon appoint a successor Trustee after such notice, if any, as it may deem proper or as may be required by law.

A successor Trustee shall execute and deliver to its predecessor and to the City a written instrument accepting appointment and thereupon the successor Trustee shall become fully vested with all the rights, powers, duties and obligations of its predecessor in trust without any further act or conveyance; but the predecessor shall from time to time execute, deliver, record and file such instruments as the successor may reasonably require to confirm or perfect succession.

Upon acceptance of appointment the successor Trustee shall publish notice of the succession in accordance with Section 13.6.

Any corporation into which a Trustee may be merged or with which it may be consolidated, or any corporation resulting from a merger or consolidation to which a Trustee is a party, or any corporation to which a Trustee may sell or transfer all or substantially all of its corporate trust business, shall be a successor Trustee under the Resolution without further action under this Section.

Notwithstanding anything to the contrary in this Section, an entity shall not become successor Trustee pursuant to this Section unless it meets the qualifications of the first paragraph of this Section.

Section 6.2. Responsibility of Trustee; Reliance on Certificates and Opinions.

Prior to an Event of Default of which a Trustee has actual knowledge, and after the curing or waiving of all Events of Default actually known to the Trustee, the Trustee shall not be liable except for the performance of the duties specifically set out in the Resolution. In case of an Event of Default of which the Trustee has actual knowledge, the Trustee shall use the same degree of care and skill in the exercise of the rights and powers vested in it by the Resolution as a prudent man would use in the conduct of his own affairs.

A Trustee shall not be liable for an error of judgment made in good faith by a responsible officer or officers unless the Trustee was negligent in ascertaining the pertinent facts; or for any action taken or omitted to be taken by it in good faith, in accordance with the direction of the owners of not less than a majority in principal amount of the Outstanding Bonds, relating to the time, method and place of pursuing any remedy or exercising any trust or power under the Resolution. A Trustee shall be protected when acting in good faith upon advice of counsel, who may be counsel to the City.

Section 6.3. Evidencing of Compliance with Conditions Precedent.

When any action by a trustee is called for by the Resolution, the Trustee may conclusively rely upon certificates or opinions conforming to the requirements of the Resolution with respect to satisfying any conditions precedent for the action to be taken or it may defer action pending receipt of such additional evidence (if any) as the Trustee may require for the purpose.

Section 6.4. Statements of Funds and Accounts.

Not more than ninety (90) days after the close of each Fiscal Year, each Trustee shall furnish to the City and to any Bondowner filing with the Trustee a written request for the same, a statement (a) the receipts and disbursements of moneys by the Trustee during the Fiscal Year under the Resolution, (b) the amount held by the Trustee at the end of the Fiscal Year in each fund or account under the Resolution, (c) the investments held by the Trustee in each fund or account as of the end of the Fiscal Year, (d) the principal amount of Bonds purchased by the Trustee during the Fiscal Year from moneys in any fund or account under the Resolution and the purchase prices of the bonds, (e) the principal amount of Bonds redeemed by the Trustee during the Fiscal Year from each fund or account and the redemption prices, and (f) any other information which the City may reasonably request.

Section 6.5. Access to Bondowner List.

At reasonable times and under reasonable regulations established by the Trustee, the Bond Register may be inspected and copied by the City or by the owners (or a designated representative thereof) of ten per cent (10%) or more in principal amount of the outstanding Bonds, the ownership of the Bonds and the authority of a designated representative to be evidenced to the satisfaction of the Trustee.

Section 6.6. Trustee May File Proofs of Claims.

The Trustee may file such proofs of claim and other papers or documents as may be necessary or advisable in order to have claims of the Trustee and of the Bondowners allowed in judicial proceedings relative to the City, its creditors or its properties.

Section 6.7. Trustee Not Responsible for Acts of the City; No Representations by Trustee.

The Trustee shall not be responsible or have any liability for any act of the City. The Trustee shall not be responsible for the correctness of any recitals or representations in the Resolution or in the bonds, all of which are made solely by the City. The Trustee makes no representation as to, or has any responsibility for, the validity of the Resolution or of the Bonds.

Section 6.8. Trustee and Paying Agents May Deal in Bonds and Other Indebtedness of the City.

The Trustee and its directors, officers, employees and agents, and each Paying Agent and its directors, officers, employees and agents, may buy, sell, hold and deal in any of the Bonds, may join in any action which any Bondowner may be entitled or take, and may enter into other commercial or financial relationships with the City, as if the Trustee or Paying Agent were not a Trustee or Paying Agent.

Section 6.9. Fees and Expenses of Trustee and Paying Agents.

The Trustee shall be entitled to reasonable fees and reimbursement by the City for all expenses reasonably incurred by it in the performance of its duties and powers under the Resolution including reasonable attorney's fees. The Trustee shall have a lien for these fees and reimbursement on the moneys pledged to secure the Bonds and held by it under the Resolution, prior to the lien of the Bondowners. Each Paying Agent shall also be entitled to reasonable fees and to reimbursement by the City for all expenses reasonably incurred by it in the performance of its duties.

ARTICLE VII COVENANTS TO SECURE BONDS

Section 7.1. Rate Covenant.

(A) The City shall establish and collect rates and charges for water supply and distribution and all other services supplied by the Water System adequate at all times, with other available funds, to provide for the proper operation and maintenance of the Water System and for the timely payment of the principal of all bonds, notes or other evidences of indebtedness payable from the Revenues and all other required payments in connection with the Water System.

(B) Without limiting the generality of the foregoing, the City shall establish and collect rates and charges sufficient so that in each Fiscal Year its Net Revenues will be at least equal to the sum of one hundred twenty-five per cent (125%) of Debt Service.

(C) Promptly upon any material change in the circumstances which were contemplated at the time such rates and charges were most recently reviewed, but not less frequently than once in each Fiscal Year, the City shall review the rates and charges for its services and shall promptly revise such rates and charges as necessary to comply with the foregoing requirements.

The City further covenants that, if at any time the Net Revenues shall not be sufficient to provide such amounts, it will revise the rates and charges for the services and facilities furnished by the Water System and, if necessary, it will revise its regulations in relation to the collection of bills for such services and facilities, so that the rates and charges collected in the current and each subsequent twelve-month period will result in Net Revenues sufficient to provide such amounts.

The City covenants that if, in any twelve-month period, the Net Revenues shall not have been sufficient to provide the amounts set forth in paragraph (B) of this Section, it will, before the 1st day of the third month following the determination of such insufficiency, request the Consulting Engineers to make their recommendations as to a revision of the rates and charges for the use of the services and facilities furnished by the Water System. So long as the City uses its commercially reasonable efforts to comply with such recommendations, failure to comply with the rate covenant shall not constitute an Event of Default under Article XIII hereof; provided however, a failure to comply with the rate covenant for a period of two consecutive Fiscal Years shall constitute an Event of Default.

The Trustee has no duty or obligation to monitor the City's compliance with any recommendations of the Consulting Engineer and shall be entitled to rely on a certification of the City that it is using its efforts to comply with any such recommendations.

In the event that the City shall fail to adjust the schedule of rates and charges in accordance with the provisions of this Section, or fails to pursue the corrective action described above, the Trustee and the owners of not less than ten per centum (10%) in principal amount of all Bonds then outstanding may institute and prosecute in a court of competent jurisdiction an appropriate suit, action or proceeding to compel the City to adjust such schedule in accordance with the requirements of this Section, and the City covenants that it will adopt and charge rates and charges in compliance with any judgment, order to decree entered in any such suit, action or proceeding.

Section 7.2. Annual Budget.

At least thirty (30) days before the beginning of each Fiscal Year, the City shall file a preliminary annual operating budget with the Trustee. At least one (1) day before the beginning of each Fiscal Year, the City shall adopt and file with the Trustee the annual operating budget for the Fiscal Year then in progress. The budget shall show projected Operating Expenses, Debt Service and other payments from the Revenue Fund and the Revenues to be available to pay the same. The City shall not incur aggregate Operating Expenses in any Fiscal Year in excess of the aggregate amount shown in the annual budget as amended and supplemented except in case of emergency and shall promptly file a written report of any such excess expenditure with the Trustee. The Trustee shall have no duty with respect to matters filed pursuant to this Section except to send copies to Bondowners upon request.

Section 7.3. Consulting Engineer.

The City shall retain one or more independent consulting engineers or engineering firms or corporations, having a national reputation for knowledge and experience in analyzing the operations of water systems, to perform the duties of the Consulting Engineer under the Resolution. The duties of the Consulting Engineer may be performed solely by one or cumulatively by several persons or firms qualifying as Consulting Engineer. One person or firm serving as Consulting Engineer may rely on a certificate or opinion of another person or firm serving as Consulting Engineer.

Section 7.4. Operation, Maintenance and Improvement of the Water System.

The City shall operate and maintain the Water System and make improvements to the same in accordance with Prudent Utility Practice.

Section 7.5. Insurance.

The City shall carry insurance, to the extent reasonably available, with a responsible insurance company or companies selected by the City to assume the risk thereof, covering the

portion of the Water System as are customarily insured, and against loss (including loss of revenues) or damage from such causes as are customarily insured against, by companies engaged in similar business.

All such policies shall be for the benefit of the City and the Trustee as their interests may appear. The proceeds of any and all such insurance received by the City shall be deposited with the Trustee and shall be subject to the lien and pledge of this Resolution in favor of the owners of the Bonds. No policy naming the Trustee as an insured shall be cancelled without thirty (30) days' notice to the Trustee.

The City covenants that, except as hereinafter provided in this Section 7.5, immediately after any loss or damage to any portion of the Water System resulting from any cause, whether or not such loss or damage shall be covered by insurance, it will proceed with, and diligently prosecute, the repairing, replacing or reconstructing (either in accordance with the original or a different design) of the damaged or destroyed property or it shall acquire Improvements, unless it shall determine that the repair, replacement or reconstruction of such property is not essential to the efficient operation of the Water System; provided however, that should the amount of such loss or damage exceed one percent (1%) of the book value as reported in the most recent audited financial statements of the Water System, the City shall receive an opinion of the Consulting Engineers that such repair, replacement or reconstruction or acquisition of such Improvements is not essential to the efficient operating of the Water System or to the City's ability to meet the rate covenant contained in Section 7.1 hereof.

Except as hereinafter provided the proceeds of all insurance referred to in this Section shall be available for and shall, to the extent necessary, be applied to the repair, replacement or reconstruction of the damaged or destroyed property or the acquisition of new Improvements, and shall be paid out and invested in the manner hereinabove provided for payments and investments held for the credit of the Construction Fund. If such proceeds are more than sufficient for such purpose, the balance remaining shall be devoted to the credit of the Renewal and Replacement Fund. If such proceeds shall be insufficient for such purpose, the deficiency may be supplied out of any moneys in the Renewal and Replacement Fund.

If the amount of insurance proceeds exceeds five percent (5%) of the Water System, the City, after depositing to the credit of the Renewal and Replacement Fund such amounts as are necessary to make up any deficiencies therein, may at its option elect to apply all or a portion of any insurance proceeds to the purchase or redemption of Bonds Outstanding in whole at any time, or in part on any interest payment date, in such amounts and of such maturities as directed by the City and by lot within a maturity; provided, however, that if less than all of the Bonds shall be redeemed, the City shall first receive and file with the Trustee an opinion from the Consulting Engineers that the repair, replacement or reconstruction of the lost or damaged property is not essential to the efficient operation of the Water System and that the Net Revenues for each of the five Fiscal Years following such redemption will be sufficient to meet the rate covenant contained in Section 7.1 hereof. In the event the City elects to redeem bonds, it shall deposit such insurance proceeds in accordance with Section 5.9. The amount paid at the purchase or redemption of any Bond pursuant to this Section shall not exceed the redemption

price of such Bond. The purchase or redemption of the Bonds of any Series with insurance proceeds shall reduce the sinking fund requirements, if any, for such Series on a pro rata basis.

All insurance policies shall be open to the inspection of the Bondowners and their representatives at all reasonable times.

Notwithstanding the foregoing provisions of this Section, the City may institute and maintain self-insurance programs with regard to such risks as shall be consistent with the recommendations of a qualified and recognized insurance consultant.

Within sixty days after the close of each Fiscal Year, the City shall file with the Trustee a certificate describing the insurance then in effect. The Trustee shall have no duty with respect to the certificate except to send copies to Bondowners upon request.

Section 7.6. Not to Encumber or Dispose of the Revenues or Properties of the Water System.

The City shall not sell, mortgage, lease or otherwise dispose of or encumber the Revenues or any properties of the Water System, except that:

(A) The City may sell, lease, or otherwise dispose of any portion of the properties of the Water System which in the reasonable judgment of the City has become unserviceable, obsolete or worn out, or no longer necessary in the operation of the Water System or which is to be or have been replaced by other property. Proceeds of a sale, lease or other disposition pursuant to this paragraph shall be paid into the Revenue Fund if the balance in any year is not in excess of \$250,000 or one per cent of the principal amount of the outstanding Bonds, whichever is greater. If the proceeds in any year exceeds that sum, it shall be deposited, as the City shall determine, in the Renewal and Replacement Fund, the Construction Fund (for the purpose of paying Project Costs or Projects designated by the City) or the Special Redemption Fund; provided, however, that if the moneys are not deposited in the Special Redemption Fund, the City shall obtain a certificate of a Consulting Engineer that the disposition is in accordance with Prudent Utility Practice and containing the statements required by Section 2.3 (A) (2) (d) as if the date of sale, lease or other disposition were a date of issuance of Bonds.

(B) The City may sell, lease, or otherwise dispose of any portion of the properties of the Water System upon filing with the Trustee a certificate of the Consulting Engineer stating that the sale, lease or other disposition is in accordance with Prudent Utility Practice and containing the statements required by Section 2.3 (A) (2) (d) as if the date of the sale, lease or other disposition were a date of issuance of Bonds. Proceeds of a sale, lease or other disposition pursuant to this paragraph shall be paid into the Revenue Fund if it is not in excess of \$250,000 or one per cent of the principal amount of the outstanding Bonds, whichever is greater. If the proceeds exceed that sum, they shall be deposited, as the City shall determine, in the Renewal and Replacement Fund, the Construction Fund (for the purpose of paying Project Costs of Projects designated by the City) or the Special Redemption Fund.

(C) If any portion of the properties of the Water System is taken by eminent domain, or if a jointly-owned facility is terminated or permanently shut down as provided in the applicable ownership agreement, except as otherwise provided in the ownership agreement, any moneys received by the City as a result shall be paid into the Revenue Fund if they are not in excess of \$250,000 or one per cent of the principal amount of the Outstanding Bonds, whichever is greater. If the moneys exceed that sum, they shall be deposited, as the City shall determine, in the Renewal and Replacement Fund, the Construction Fund (for purposes of paying Project Costs of Projects designated by the City) or the Special Redemption Fund; provided, however, that if the moneys are not deposited in the Special Redemption Fund, the City shall obtain a certificate of a Consulting Engineer containing the statements required by Section 2.3 (A) (2) (d) as if that date of taking or shut down were a date of issuance of Bonds.

(D) The City may make such transfers of interests in any jointly-owned Project as may be required by an applicable ownership agreement and, except as otherwise provided in the ownership agreement, any moneys received by the City as a result shall be applied as provided in the immediately preceding paragraph.

(E) The City may apply the Revenues as provided in this Resolution, may encumber the Revenues for the benefit of the Bondowners to the extent and in the manner provided in this Resolution and may otherwise encumber the Revenues to the extent and in the manner provided in Section 2.5.

(F) The City may encumber the properties of the Water System in connection with bond secured by a subordinate pledge of Net Revenues as set forth in Section 2.5, or may pledge, encumber or enter into agreements secured by a lien on the property, plant and equipment of the Water System for Lease Financing Agreements as set forth in Section 2.7.

(G) The City is not obligated to pay or cause to be discharged or to make provision for release of any lien or charge so long as the validity thereof is being contested in good faith by appropriate legal proceedings.

Section 7.7. Books of Account; Annual Report.

The City shall keep proper books and accounts relating to the Water System in which complete and correct entries shall be made of its transactions relating to the Water System and the Funds established by the Resolution. Within two hundred and seventy (270) days after the end of each Fiscal Year, the City shall file with the Trustee (i) an annual financial statement for the Water System, certified by an Authorized Officer as being true and correct in all material respects, and (ii) the audited financial statements of the City, to include the financial information of the City's Water Enterprise Fund. In addition to other matters required by law or sound accounting or auditing practice, the financial statements provided by the City shall cover the transactions in the funds and accounts held by the City and the Trustee under this Resolution. A copy of the financial statements and the City's audited financial statements shall be made available to any Bondowner filing a written request with the Trustee.

Section 7.8. Payment of Taxes and Other Claims.

The City shall make timely payments of all taxes, assessments and other governmental charges lawfully imposed upon the properties constituting the Water System or upon the Revenues, as well as all lawful claims for labor, materials and supplies which, if not paid, might become a lien or charge upon any part of the Water System, or upon any of the Revenues; but the failure to do so will not be considered a violation of the Section so long as the City is in good faith contesting the validity of the tax, assessment, charge or claim and so long as the City deposits a bond or establishes an escrow sufficient to insure that the Water System, or any part thereof, will not be lost for such nonpayment of taxes or other claims.

Section 7.9. To Maintain Franchises and Other Rights.

The City shall not allow franchises or permits to lapse so long as the same are necessary for the operation of the Water System.

Section 7.10. Employees' Fidelity Bonds.

The City shall require employees or agents of the City collecting or handling money in connection with the operation of the properties of the Water System to obtain fidelity bonds with responsible surety companies as surety in accordance with Prudent Utility Practice.

Section 7.11. Not to Furnish Free Service.

The City shall not provide Water collection and treatment and related services or other commodities or services from the Water System free of charge to any person, firm or corporation, public or private. The City may, however, provide services or reduced rates to itself in lieu of taxes. The City shall duly enforce the payment of delinquent accounts by filing suits, actions or proceedings or by exercising other remedies, to the extent permitted by law.

Section 7.12. To Carry Out Projects.

The City shall proceed with due diligence to carry out and complete the Projects financed by the issuance of Bonds or, in the case of Bonds issued under Section 2.3 (C), to complete the work financed by the Bonds. Notwithstanding the foregoing, the City may discontinue a Project (or work financed under Section 2.3 (C)) by written notice to the Trustee with a certificate of the Consulting Engineer stating that, by reason of change of circumstance not reasonably expected at the time of issuance of the Bonds, completion of the Project (or work) is no longer consistent with Prudent Utility Practice or, in the case of a jointly-owned Project, the Project may be discontinued as provided in the applicable ownership agreement. The moneys for the Project in the Construction Fund not needed to pay Project Costs of the Project (as determined by a certificate of the Consulting Engineer) shall be deposited, as the City shall determine, in the Renewal and Replacement Fund, the Construction Fund (for the purpose of paying Project Costs or Projects designated by the City) or the Special Redemption Fund; provided, however, that if the moneys are not deposited in the Special Redemption Fund, the City shall obtain an Opinion

of Bond Counsel that such application will not adversely affect the tax status of any outstanding Bonds.

ARTICLE VIII DEFAULTS AND REMEDIES

Section 8.1. Events of Default.

There shall be an “Event of Default” if any of the following occurs:

(1) If there is a default in the payment of the principal of or redemption of premium, if any, on any of the Bonds when due, whether at maturity or by proceedings for redemption or otherwise.

(2) If the City defaults in any payment to be made into the Debt Service Fund or Debt Service Reserve Fund and the default continues for ten (10) days.

(3) If the City sells, mortgages, leases, or otherwise disposes of or encumbers the Revenues or any properties of the Water System in violation of this Resolution, or makes an agreement to do so or allows any of its franchises or permits necessary for the operation of the Water System to lapse.

(4) If the City defaults in the performance of any other covenant or agreement contained in the Resolution and the default continues for sixty (60) days after written notice to the City by the Trustee or to the City and the Trustee by the owners of not less than twenty-five per cent (25%) in principal amount of the outstanding Bonds.

(5) If an order, judgment or decree is entered by a court of competent jurisdiction (a) appointing a receiver, trustee, or liquidator for the City or the whole or any substantial part of the Water System, (b) granting relief in involuntary proceedings with respect to the City under the federal Bankruptcy Code, or (c) assuming custody or control of the City or of the whole or any substantial part of the Water System under the provision of any law for the relief of debtors, and the order, judgment or decree is not set aside or stayed within sixty (60) days from the date of the entry of the order, judgment or decree.

(6) If the City (a) admits in writing its inability to pay its debts generally as they become due, (b) commences voluntary proceedings in bankruptcy or seeking a composition of indebtedness, (c) makes an assignment for the benefit of its creditors, (d) consents to the appointment of a receiver of the whole or any substantial part of the Water System, or (e) consents to the assumption by any court of competent jurisdiction under any law for the relief of debtors of custody or control of the City or of the whole or any substantial part of the Water System.

Section 8.2. Acceleration of Maturities.

If an Event of Default occurs and has not been cured, either the Trustee (by notice in writing to the City) or the owners of not less than twenty-five per cent (25%) in principal amount of the outstanding Bonds (by notice in writing to the City and the Trustee) may declare the principal of all outstanding Bonds and the accrued interest to be due and payable immediately.

Upon the curing of all outstanding Events of Default (other than the payment of principal or interest coming due by reason of the acceleration), unless a final judgment has been obtained for any principal or interest coming due by reason of acceleration, the owners of a majority in principal amount of the outstanding Bonds, by written notice to the City and to the Trustee, may annul the acceleration, or, if the Trustee has acted without a direction from the Bondowners, and, if there has not been delivered to the Trustee a written direction to the contrary by the owners of a majority in principal amount of the outstanding Bonds, the acceleration shall be deemed annulled.

Section 8.3. Inspection of Books and Records.

If an Event of Default happens and has not been remedied, the books of record and account of the City relating to the Water System shall at all times be subject to the inspection and use of the Trustee, the owners of at least five per cent (5%) in principal amount of the outstanding Bonds and their agents and attorneys.

Section 8.4. Payment of Funds to Trustee; Application of Funds.

If an Event of Default happens and has not been remedied, the City upon demand of the Trustee shall pay over and transfer to the Trustee (i) all funds and investments then held by the City in the funds and accounts held by it under this Resolution and (ii) as promptly as practicable all other or subsequent Revenues. After a transfer of a fund or account under this paragraph, the Trustee shall administer the fund or account until all Events of Default have been cured.

If at any time the available funds are insufficient for the payment of the principal or redemption price and interest then due on the Bonds, the following funds and accounts (other than funds held in trust for the payment or redemption of particular Bonds) shall be used in the order named:

- Interest Account
- Principal Account
- Sinking Fund Account
- Debt Service Reserve Fund
- Renewal and Replacement Fund
- Construction Fund
- Special Redemption Fund

and the City shall promptly restore from the Revenue Fund pursuant to paragraph Second of Section 5.2 any amount taken for this purpose from any fund or account other than the Interest Account, Principal Account or Sinking Fund Account. The moneys shall be applied in the following order of priority:

First, to the payment of all unpaid interest then due (including any interest on overdue principal and, to the extent permitted by law, interest on overdue interest at the same rate) in the order in which the same became due, and, if the amount available is sufficient to pay the unpaid interest which became due on any date in part but not in full, then to the payment of that interest ratably.

Second, to the payment ratably of the unpaid principal or redemption price then due.

Whenever moneys are to be so applied, they shall be applied by the Trustee at such times as it shall determine, having due regard to the amount available and the likelihood of additional moneys becoming available. The Trustee shall give such notice of the date as it may deem appropriate and shall not be required to make payment to the owner of any unpaid Bond unless the Bond is presented for appropriate endorsement.

Interest on overdue principal (to the extent permitted by law) shall accrue and be payable daily but, for the purpose of applying the order of priority prescribed by this Section, it shall be treated as if it became due on the regular payment dates.

Section 8.5. Suits at Law or in Equity.

(A) As provided in the Act, any owner or owners of the Bonds and the Trustee shall have the right in addition to all other rights:

(1) By mandamus or other suit, action or proceedings in any court of competent jurisdiction, to enforce their rights against the City, the Council and any other proper officer, agent or employee of any of them, including the right to require the City, the Council, and any proper officer, agent or employee of any of them, to fix and collect rates and charges adequate to carry out any agreement made in the Resolution as to rates and charges, or to carry out the pledge of Revenues made by the Resolution, and to require the City, Council, and any officer, agent or employee of any of them to carry out any other covenants or agreements made in the Resolution or in the Bonds and to perform their duties under the Act.

(2) By action or suit in equity, to enjoin any acts or things which may be unlawful or a violation of the rights of the owner or owners of the Bonds.

(B) As authorized by the Act, the City confers upon the owners of not less than twenty-five per cent (25%) of the principal amount of the outstanding Bonds and the Trustee the right in case of an Event of Default:

(1) By suit, action or proceedings in any court of competent jurisdiction to obtain the appointment of a receiver of the whole or any part or parts of the Water System. If a receiver is appointed, he may enter and take possession of the same, operate and maintain it, and collect and receive all Revenues arising from it in the same manner as the City itself might do and shall deposit the Revenues in a separate account or accounts and apply the same in accordance with the obligations of the City.

(2) By suit, action or proceeding in any court of competent jurisdiction to require the City to account as if it were the trustee of an express trust.

(C) All rights of action under the Resolution may be enforced by the Trustee without the possession of any of the Bonds and without producing them at the trial of other proceedings.

(D) The owners of not less than a majority in principal amount of the outstanding Bonds may direct the time, method, and place of conducting any remedial proceeding available to the Trustee, provided that the Trustee is provided with adequate security and indemnity and shall have the right to decline to follow the direction (i) if the Trustee is advised by counsel that the action or proceeding may not lawfully be taken or (ii) if the Trustee determines in good faith that the action or proceeding would involve the Trustee in personal liability or that the action or proceeding would be unjustly prejudicial to the owners of Bonds not parties to the direction.

Section 8.6. Remedies Not Exclusive.

No remedy conferred by the Resolution upon the Trustee or the owners of the Bonds is intended to be exclusive of any other remedy, but each shall be in addition to every other remedy given under the Resolution or provided at law or in equity or by statute.

Section 8.7. Waivers of Default.

No delay or omission of the Trustee or of any owner of Bonds to exercise any right or power arising upon the happening of an Event of Default shall impair any right or power or be construed to be a waiver of the Event of Default.

The owners of not less than fifty percent (50%) in principal amount of the outstanding Bonds may, on behalf of the owners of all of the Bonds, waive any past default under the Resolution and its consequences, except a default in the payment of the principal or redemption price of and interest on any of the Bonds. No such waiver shall extend to any subsequent or other default.

Section 8.8. Notice of Events of Defaults.

Within sixty (60) days after the occurrence of an Event of Default becomes known to the Trustee, the Trustee shall mail notice of the Event of Default to the the Bondowners, in the manner provided in Section 13.3, unless the Event of Default has been cured before the giving of the notice; provided that the Trustee shall give the notice as promptly as the interests of the Bondowners appear to require and shall be protected in withholding notice if the board of directors, the executive committee, or a trust committee of the Trustee determines in good faith that the withholding of the notice is in the interests of the Bondowners.

ARTICLE IX AMENDING AND SUPPLEMENTING THE RESOLUTION

Section 9.1. Without Consent of Bondowners.

The City may from time to time, with the written concurrence of the Trustee but without the consent of any Bondowner, adopt Supplemental Resolutions, (i) to provide for the issuance of additional Bonds pursuant to Article II; (ii) to make changes in the Resolution which may be required to permit the Resolution to be qualified under the Trust Indenture Act of 1939 as amended; (iii) to make provisions relating to the Renewal and Replacement Fund as permitted by the Resolution; and (iv) for any one or more of the following purposes:

- (1) To cure or correct any ambiguity, defect or inconsistency in the Resolution;
- (2) To add additional covenants and agreements of the City for the purpose of further securing the payment of the Bonds;
- (3) To limit or surrender any right, power or privilege reserved to or conferred upon the City by the Resolution;
- (4) To confirm any lien or pledge created or intended to be created by the Resolution;
- (5) To confer upon the owners of the Bonds additional rights or remedies or to confer upon the Trustee for the benefit of the owner of the Bonds additional rights, duties, remedies or powers; and
- (6) To modify the Resolution in any other respects; provided that the modification shall not be effective until after the Outstanding Bonds cease to be Outstanding or until the Bondowners consent pursuant to Section 9.2.

The provisions of Section 9.2 relating to notice of Supplemental Resolutions do not apply to a Supplemental Resolution adopted under this Section except as expressly made applicable by the foregoing clause 6.

Section 9.2. With Consent of Bondowners.

With the written concurrence of the Trustee, and the consent of the owners of not less than sixty-six and two-thirds per cent (66-2/3%) in principal amount of the Outstanding Bonds, the City may from time to time adopt Supplemental Resolutions for the purpose of making other changes in the Resolution; provided, however, that, without the consent of the owner of each Bond which would be affected, no Supplemental Resolution shall (1) change the maturity date for the payment of the principal of any Bond or the terms of the redemption of the Bond, or reduce the principal amount of any Bond or the redemption price, (2) reduce the percentage of consents required under this proviso for a Supplemental Resolution, or (3) give to any Bond any preference over any other Bond; and provided further that, without consent of the owners of not less than sixty-six and two-thirds per cent (66-2/3%) in principal amount of the outstanding Term Bonds of each Series and maturity which would be affected, no Supplemental Resolution shall (a) change the amount of any sinking fund installments for the retirement of Term Bonds or the due dates of the installments or the terms for the purchase or redemption of Bonds from the

installments, or (b) reduce the percentage of consents required under this proviso for a Supplemental Resolution.

It shall not be necessary that the consents of the owners of the Bonds approve the particular wording of the proposed Supplemental Resolution if the consents approve the substance. After the owners of the required percentage of Bonds have filed their consents with the Trustee, the Trustee shall mail notice to the Bondowners in the manner provided in Section 13.3. No action or proceeding to invalidate the Supplemental Resolution or any of the proceedings for its adoption shall be instituted or maintained unless it is commenced within sixty (60) days after the mailing of the notice.

Section 9.3. Notation upon Bonds; New Bonds Issued Upon Amendments.

Bonds delivered after the effective date of a Supplemental Resolution may bear a notation as to the Supplemental Resolution, by endorsement or otherwise. In that case, upon demand of the owner of any outstanding Bond and the presentation of his Bond to the Trustee or to another Paying Agent, or at such additional office, if any, as the City may select for the purpose, a suitable notation shall be made on the Bond. If the City so determines, new Bonds modified to conform to the amendments made by the Supplemental Resolution shall be prepared and executed. Upon demand of the owner of any Outstanding Bond, the new Bond shall be exchanged, without cost to the owner, for the outstanding Bond at the corporate trust office of the Trustee.

Section 9.4. Effective Date of Supplemental Resolution.

Upon the adoption of a Supplemental Resolution pursuant to this Article, and the delivery to the Trustee of an Opinion of Counsel that the Supplemental Resolution has been duly adopted and is permitted by the Resolution, or upon such later date as may be specified in the Supplemental Resolution, the Supplemental Resolution shall take effect and shall be a part of the Resolution.

Section 9.5. Supplemental Resolution Affecting Trustee and Paying Agents.

No Supplemental Resolution reducing the rights or enlarging the duties and obligations of the Trustee or any Paying Agent shall take effect without the written consent of the affected Trustee or Paying Agent.

ARTICLE X EXECUTION OF INSTRUMENTS BY BONDHOLDERS; OWNERSHIP OF BONDS; EXCLUSION OF BONDS OWNED BY THE CITY

Section 10.1. Execution of Instruments by Bondowners and Proof of Same.

Any action which may be taken under the Resolution by one or more Bondowners may be taken or authorized by an instrument or instruments signed by the owners in person or by agents duly appointed by written instrument. Proof of the signing of an instrument (including an instrument appointing an agent), and of the holding of Bonds, shall be sufficient if made in the following manner:

(a) The fact and date of the signing may be proved by the certificate of a notary public or other officer empowered by law to take acknowledgement of deeds (in the state where acknowledgement occurs), to the effect that the person signing the instrument acknowledged to him its execution, or may be proved by an affidavit of a witness to the signing.

(b) The ownership of bonds shall be proved by the books of registry.

Nothing contained in this Section shall be construed as limiting the City or the Trustee, in their separate discretion to the proof specified above. The City and the Trustee in their separate discretion may accept other evidence which to them may seem sufficient.

Any action by the Bondowner under the Resolution shall bind the owner taking the action and every future owner of the same Bond, whether or not the future owner has knowledge of the action; provided that any action by the Bondowner under the Resolution may be revoked by the owner taking the action or by a subsequent owner of the same Bond by a written instrument filed with the City and the Trustee prior to the time when the required percentage of the Bondowners have concurred in the action.

Section 10.2. Exclusion of Bonds Held by City and of Bonds No Longer Deemed Outstanding.

In determining whether the owners of the requisite principal amount of Bonds have concurred in any action under the Resolution, any Bonds which are owned by or for the City and, except for the purpose of Section 11.1, any Bonds which are deemed no longer Outstanding pursuant to Section 11.1, shall be disregarded, but the Trustee shall be protected in relying on the action as to Bonds owned by or for the City unless the Trustee knows them to be so owned.

ARTICLE XI DEFEASANCE; MONEYS HELD FOR PAYMENT OF PARTICULAR BONDS

Section 11.1. Discharge of Pledge; Bonds No Longer Deemed Outstanding.

The obligations of the City under the Resolution and the pledge, covenants and agreements of the City made in the Resolution shall be discharged and satisfied as to any Bond, and the Bond shall no longer be deemed to be Outstanding under the Resolution:

(i) when the Bond has been cancelled or surrendered for cancellation, or has been purchased by the Trustee for moneys held by it under the Resolution (other than under Section 2.6); or

(ii) when payment of the principal or the redemption price of the Bond, whether at maturity or upon redemption or otherwise, or to the date set for payment under Section 8.4 in the case of an overdue Bond, either (a) has been made or (b) has been provided for by irrevocably setting aside with the Trustee for the purpose of (1) moneys sufficient to pay the principal or redemption price or (2) Government Obligations maturing as to principal and interest in such amounts and at such times as will insure the availability of sufficient moneys to pay the principal or redemption price when due, and when all proper fees and expenses of the Trustee and Paying Agents pertaining to the Bond have been paid or provided for to the satisfaction of the Trustee and Paying Agents.

When a Bond is deemed to be no longer Outstanding under the Resolution pursuant to either clause (i) or clause (ii) of this Section, it shall no longer be secured by the Resolution except for the purpose of payment from the moneys or Government Obligations set aside for its payment pursuant to clause (ii) (b).

Notwithstanding the foregoing, in the case of Bonds which are to be redeemed prior to their stated maturities, no deposit under clause (b) of subparagraph (ii) shall operate as a discharge and satisfaction until the Bonds have been irrevocably called or designated for redemption and proper notice of the redemption have been given or provisions satisfactory to the Trustee have been irrevocably made for giving notice.

Any moneys deposited with the Trustee as provided in this Section may be invested and reinvested in Government Obligations maturing in the amounts and times as required and any income from the investment not required for the payment of the principal or redemption price on the Bonds shall be paid to the City and credited to the Revenue Fund.

In the event that the Resolution is defeased with respect to Bonds pursuant to this Section, the Trustee shall mail notice of the defeasance.

Notwithstanding any provision of any other Section of the Resolution, all moneys or Government Obligations set aside pursuant to this Section for the payment of the principal or redemption price of Bonds shall be held in trust and used solely for the payment of the particular Bonds with respect to which the moneys or Investment Securities have been set aside.

Notwithstanding Article IX, if moneys or Government Obligations have been set aside with the Trustee pursuant to this Section for the payment of Bonds, and the Bonds are deemed to be no longer Outstanding under the Resolution, but the Bonds have not in fact been paid, no amendment of this Article shall be made without the consent of the owner of each Bond affected by the amendment.

The City may at any time surrender to the Trustee for cancellation Bonds which the City has acquired for the sinking fund or otherwise and the Bonds shall thereupon be deemed paid and no longer Outstanding.

Section 11.2. Bonds Not Presented for Payment When Due.

If a Bond is not presented for payment when the principal becomes due, and if sufficient funds are held by the Trustee or a Paying Agent for the purpose, liability of the City for the payment shall cease, and the Trustee or Paying Agent shall hold the funds without liability to the owner of the Bond for earnings on the funds, in trust for the benefit of the owner of the Bond. The owner shall thereafter be restricted exclusively to the funds so held for any claim for the payment. Any funds held by the Trustee or any Paying Agent remaining unclaimed for six years after the payment became due shall be paid to the City, and the owner of the Bonds shall thereafter be entitled to look only to the City for payment. Before making a payment to the City under this Section, the Trustee or Paying Agents may publish a notice pursuant to Section 13.6 listing the Bonds not presented and stating that the funds remain unclaimed, and that after a specified date any balance then remaining will be returned to the City.

ARTICLE XII FORM OF BONDS

Section 12.1. Form of Bonds.

The form of the Bonds shall be set forth in the Supplemental Resolution.

ARTICLE XIII MISCELLANEOUS

Section 13.1. Benefits of Resolution Limited to the City, Trustees, and Bondowners.

Nothing in the Resolution or the Bonds is intended to confer upon any person other than the City, the Trustee, any Paying Agent, and the owners of the Bonds any legal or equitable right, remedy, or claim.

Section 13.2. Resolution Binding Upon Successors or Assigns of the City.

The Resolution shall be binding upon the successors and assigns of the City, and shall inure to the benefit of the Trustee, their successors in trust, and the owners of the Bonds.

Section 13.3. Notices to Bondowners.

Except as is otherwise provided in the Resolution, a provision in the Resolution for the mailing of a notice to owners of the Bonds shall be complied with by mailing (a) to each registered owner at their address appearing on the Bond Register.

Section 13.4. Notices to City and Trustee.

Wherever provision is made in the Resolution for a notice, direction, or request to the City or the Trustee, the same shall be complied with by a letter or instrument in writing (i) delivered at or (ii) mailed by registered mail, return receipt requested, to:

(a) in the case of the City, the office of the Chief Administrative Officer with a copy to the principal office of its Public Works Department, attention of the Director (Re: Water System Revenue Bonds); and

(b) in the case of a Trustee, the corporate trust office of the Trustee, attention of Corporate Trust Officer (re: City of Burlington, Vermont, Water System Revenue Bonds) or in either case, at such other office or addressed in such other manner as the part to whom the notice is given has designated by written notice to the other parties mentioned in this Section.

Section 13.5. Waiver of Notice.

Notice under the Resolution may be waived by the person entitled to receive it.

Section 13.6. Publication of Notice.

Except as otherwise provided in the Resolution, any provision in the Resolution for giving notice by publication shall be complied with by publication in a daily newspaper of general circulation in the City of Boston, Massachusetts or Burlington, Vermont, and in a daily newspaper of general circulation or a financial journal of substantial circulation in the City of New York, New York, or in either case, if the required publication cannot be accomplished by reason of suspension of publication or otherwise, in a substitute newspaper approved by the Trustee, or, if there is a vacancy in the office of Trustee, by the City.

Section 13.7. Partial Invalidity.

If any provision of the Resolution is held invalid in any circumstance, that invalidity shall not affect any other provisions or circumstances.

Section 13.8. Law and Place of Enforcement of the Resolution; Supersedes prior bond resolutions.

The Resolution shall be construed and governed in accordance with the laws of the State of Vermont, and all suits and actions arising out of the Resolution shall be instituted in a court of competent jurisdiction in the State of Vermont. This Resolution supersedes and replaces the General Bond Resolution adopted June 9, 1997, and all supplemental resolutions adopted thereunder, for the City's Waterworks System Revenue Bonds.

CITY OF BURLINGTON, VERMONT

City Council

SUPPLEMENTAL RESOLUTION NO. 1

Be it Resolved by the City Council of the City of Burlington, Vermont (the "City") as follows:

Section 1
Authorization

The City Council of the City of Burlington (the "City Council") hereby authorizes the issuance of revenue bonds in a principal amount not to exceed **[\$3,250,000]** to provide for the financing of capital additions and improvements to the waterworks system (the "Water System"), including (i) capital improvements to the City's underground pipe and water distribution system, water mains, services, valves and hydrants, (ii) to fund a debt service reserve fund, and (iii) to pay costs of issuance of such revenue bonds. The City Council deems the issuance of revenue bonds as hereby authorized to be in the public interest.

At the Special City Meeting of the City, held November 8, 2016, the voters of the City authorized the issuance of Revenue Bonds in one or more series in a combined aggregate amount not to exceed \$8,344,000 to finance and carry out such capital improvements to the Water System (collectively, the "Project").

Pursuant to such vote, and the City Charter, the City adopted, or is adopting concurrently with this Supplemental Resolution, a General Bond Resolution dated April [____], 2017 (as amended and supplemented, the "General Bond Resolution").

The City has not issued any revenue bonds to date pursuant to the General Bond Resolution.

The Series 2017 Bonds (the "Series 2017 Bonds") are to be issued pursuant to this Supplemental Resolution. It is estimated that the Series 2017 Bonds will be payable, by serial maturities or sinking fund installments or a combination of both, in the years _____ through _____.

By further resolution at the time of and in connection with the sale of the Series 2017 Bonds, the City's Chief Administrative Officer or the City's Director of Financial Operations shall approve the issuance and sale of the Series 2017 Bonds to KeyBanc Capital Markets (the "Underwriter") and shall complete this supplemental resolution by insertion of the dates, maturities, principal amounts, interest rates, interest payment dates, principal payment dates, redemption provisions, the amounts of proceeds of the Series 2017 Bonds and Revenues to be deposited in the Debt Service Reserve Fund, if any, and the Renewal and Replacement Fund, if any, the inclusion of provisions for bond insurance, and any other terms and provisions that do not materially alter the substance of the transaction authorized hereby, all of which are to be determined in the discretion of the City's Chief Administrative Officer or the City's Director of Financial Operations; provided, however, that if the average true interest cost rate on the Series

2017 Bonds is to exceed **[4.75]%**, the issuance and sale of the Series 2017 Bonds shall be subject to the approval of the City's Board of Finance.

Section 2 **Definitions**

Unless the context clearly indicates some other meaning, the terms used in this Supplemental Resolution that are defined in the General Bond Resolution, have the same meaning in this Supplemental Resolution as in the General Bond Resolution. The General Bond Resolution as amended or supplemented from time to time by Supplemental Resolutions is hereinafter referred to as the "Resolution."

Section 3 **Authorization of Series 2017 Bonds**

There is hereby authorized to be issued a Series of Bonds designated "Water System Revenue Bonds, Series 2017" in the total principal amount of **[\$3,250,000.00]**. The Series 2017 Bonds shall be issued to provide for the financing of capital additions and improvements to the Water System, including (i) capital improvements to the City's underground pipe and water distribution system, water mains, services, valves and hydrants, (ii) to fund a debt service reserve fund, and (iii) to pay costs of issuance of such revenue bonds. The Series 2017 Bonds shall bear interest at the rates per annum and shall be payable in principal installments on [DATE] in each of the years and in the principal amounts as shown below:

<u>Maturity Date</u> [DATE]	<u>Amount</u>	<u>Interest Rate</u>
[2017	\$	%
2018		
2019		
2020		
2021		
2022		
2023		
2024		
2025		
2026		
2027		
2028		
2029		
2030		
2031		
2032		
2033		
2034		
2035		
2036		
2037		

Maturity Date
[DATE]
2038]

Amount

Interest Rate

The Series 2017 Bonds shall be issued only as one single fully-registered bond in the principal amount of \$5,000 and in any whole multiple thereof. The Series 2017 Bonds shall be dated the date of issuance, and shall be numbered in numerical order from R-1 upwards in chronological order as issued.

The Series 2017 Bonds shall bear interest from the date of issuance, payable on [DATE], _____, and semiannually thereafter on each [DATE] and [DATE]. Interest shall be paid by the Trustee by check or draft mailed to the registered owner at the owner's address as it appears on the registration books kept pursuant to the Resolution. The principal of and premium, if any, on the Series 2017 Bonds shall be payable at the corporate trust office of the Trustee.

The Series 2017 Bonds, registration provisions and forms of authentication and assignment pertaining thereto shall be in substantially the form set forth in Section 6 hereof, with necessary or appropriate variations, omissions and insertions which are incidental to their numbers, denominations, maturities, interest rates, paying agencies, registration provisions, redemption provisions and other details.

Section 4

Redemption of Series 2017 Bonds

The Series 2017 Bonds shall be subject to redemption, either in whole or in part, from moneys held in the Special Redemption Fund or from redemption at the option of the City; provided that the Series 2017 Bonds may be subject to such limitations and restrictions on redemption as the Chief Administrative Officer or the Director of Financial Operations of the City determine in their discretion.

Section 5

Notice of Redemption of Series 2017 Bonds

Notice of intention to redeem shall be given by the Trustee at least 30 days but not more than 60 days before the redemption date by mail, postage prepaid, to the owners of any Series 2017 Bonds which are to be redeemed. Failure to mail any such notice or any defect in such notice shall not affect the validity of the proceedings for such redemption with respect to the owners to whom such notice was so given. If any Series 2017 Bond is to be redeemed in part only, the notice of redemption shall state also that on or after the redemption date, upon surrender of such Bond, a new Series 2017 Bond or Bonds in principal amount equal to the unredeemed portion of such Bond and of the same series and maturity and bearing interest at the same rate will be issued.

Any notice of redemption may state that the redemption to be effected is conditioned upon the receipt by the Trustee on or prior to the redemption date of moneys sufficient to pay the principal of and premium, if any, and interest on such Series 2017 Bonds to be redeemed and that if such moneys are not so received, such notice shall be of no force or effect and such Series 2017 Bonds shall not be required to be redeemed. In the event that such notice contains such a

condition and moneys sufficient to pay the principal of and premium, if any and interest on such Series 2017 Bonds are not received by the Trustee on or prior to the purported redemption date, the redemption shall not be made, and the Trustee shall within a reasonable time thereafter give notice, in the manner in which the notice of redemption was given, that such moneys were not so received.

If less than all of the Series 2017 Bonds of any one maturity shall be called for redemption, the particular Series 2017 Bonds or portions thereof to be redeemed shall be selected by the Trustee in such manner as the City in its discretion may determine; provided, however, that the portion of any Series 2017 Bond to be redeemed shall be in the principal amount of \$5,000 or some multiple thereof and that, in selecting Series 2017 Bonds for redemption, each Series 2017 Bond shall be considered as representing that number of Series 2017 Bonds which is obtained by dividing the principal amount of such Bond by \$5,000.

Section 6

Form of Series 2017 Bonds

The Series 2017 Bonds, registration, exchange and transfer provisions and forms of authentication and assignment pertaining thereto shall be in substantially the form set forth below, with necessary or appropriate variations, omissions and insertions which are incidental to their numbers, denominations, maturities, payment dates, interest rate and other details:

**THIS BOND DOES NOT CONSTITUTE AN INDEBTEDNESS OF THE CITY OF
BURLINGTON, VERMONT BUT IS PAYABLE SOLELY FROM THE NET
REVENUES OF ITS WATERWORKS SYSTEM.**

No. R-

\$

UNITED STATES OF AMERICA
STATE OF VERMONT
CITY OF BURLINGTON WATER SYSTEM REVENUE BONDS
SERIES 2017

Maturity Date: _____
Interest Rate: _____ % Per annum
Bond Date: [_____]_____
Registered Owner: Cede & Co.
Principal Amount: _____ Dollars

The City of Burlington, Vermont (the “City”), for value received, promises to pay to the Registered Owner of this bond, or registered assigns, but solely from the Net Revenues provided under the Resolution mentioned in this bond, on the Maturity Date, the Principal Amount, upon presentation and surrender hereof, and to pay interest, but solely out of the Net Revenues, at the Interest Rate on such Principal Amount from the most recent _____ or _____ to which interest has been paid or duly provided for or, if no interest has been paid, from the Bond Date, payable on _____, 201_ and semi-annually on the first day of _____ and _____ in each year thereafter until payment of such Principal Amount, and, to the extent permitted by law, interest on overdue interest at the same rate. Interest shall be calculated on the basis of a 360-day year consisting of twelve 30-day months.

The principal or redemption price of and interest on this bond are payable in any coin or currency of the United States of America which at the time of payment is legal tender for public and private debts. The principal or redemption price of this bond shall be payable at the corporate trust office of People’s United Bank, N.A., in the City of Burlington, Vermont, the Trustee under the Resolution, or its successor in trust. Interest on this bond shall be payable by check or draft mailed to the Registered Owner at its address appearing on the registration books of the City kept for that purpose at the corporate trust office of the Trustee, determined as of the close of business on the applicable record date. The record date for payment of interest shall be the _____ day of the month next preceding the date on which the interest is to be paid or, if such _____ day is not a business day, the next preceding business day, provided that, with respect to overdue interest or interest payable on redemption of this bond other than on an interest payment date or interest on any overdue amount, the Trustee may establish a special record date. The special record date may not be more than 20 days before the date set for payment. The Trustee will give notice of a special record date by mailing a copy of such notice to the registered owners of all the Bonds outstanding at least 10 days before the special record date or in such other time and manner as the Trustee may deem appropriate.

This bond is one of a series of bonds aggregating [_____ Dollars (\$____)] in principal amount, issued by the City for the purposes of its Water System pursuant to City Charter, Part I, Title III, Section 507, and a Resolution duly adopted by the City Council of the City on April , 2017 (as supplemented and amended by one or more supplemental resolutions including a supplemental resolution duly adopted by the City Council) (the “Resolution”). Bonds may be issued under the Resolution in one or more series from time to time.

This bond is issued pursuant to Section 507 of the City Charter and does not constitute general indebtedness of the City nor an obligation or liability upon the City to pay from any funds of the City other than the Net Revenues of the City’s Water System.

THE BONDS SHALL NOT CONSTITUTE A GENERAL OBLIGATION OF THE CITY WITHIN THE MEANING OF ANY CONSTITUTIONAL OR STATUTORY PROVISION OR LIMITATION, BUT SHALL BE LIMITED OBLIGATIONS OF THE CITY PAYABLE SOLELY FROM, AND SECURED SOLELY BY, THE PLEDGE AND LIEN ON THE NET REVENUES SPECIFICALLY PLEDGED THERETO PURSUANT TO THE RESOLUTION. NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE CITY, THE STATE OF VERMONT OR ANY OTHER POLITICAL SUBDIVISION THEREOF IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL OR PREMIUM (IF ANY) ON THE BONDS AND NEITHER THE STATE OF VERMONT NOR ANY POLITICAL SUBDIVISION THEREOF, OTHER THAN THE CITY, SHALL BE OBLIGATED TO PAY THE PRINCIPAL OR PREMIUM (IF ANY) THEREON.

Reference is made to the Resolution (as supplemented and amended) for, among other things, definitions of terms; the nature and extent of the security for the Bonds; the covenants securing the Bonds; the properties constituting the Water System of the City; the manner of enforcement of the pledge; the terms and conditions upon which additional Bonds may be issued; the conditions upon which the Resolution may be amended or supplemented with and without the consent of the holders of the Bonds; acceleration of principal in the event of default; remedies and limitations of remedies; and the terms upon which Bonds may no longer be secured by the Resolution if sufficient moneys or specified securities are deposited with the Trustee in trust for their payment. Copies of the Resolution (including any supplemental resolutions) may be inspected at the office of the Chief Administrative Officer of the City and in the corporate trust office of the Trustee.

In the event this bond is called for redemption, notice shall be mailed not less than thirty (30) days prior to the redemption date, to the Registered Owner at the owner’s address as shown on the books of registry. If this bond is of a denomination in excess of \$5,000, portions of the Principal Amount in the amount of \$5,000 or any multiple of \$5,000 may be redeemed. If less than all of the Principal Amount is to be redeemed, upon the surrender of this bond to the Trustee there shall be issued to the Registered Owner hereof at the corporate trust office of the Trustee, without charge, registered Bonds for the unredeemed balance of the Principal Amount. If this bond (or any portion) is duly called for redemption and notice is duly given, and if on or before the redemption date there are on deposit with the Trustee or any paying agent for this bond sufficient funds to pay the redemption price and the interest on the principal amount redeemed to

the date of redemption, this bond (or the portion to be redeemed) shall become due and payable upon the redemption date and interest shall cease to accrue from and after the redemption date on the principal amount to be redeemed.

Any notice of redemption may state that the redemption to be effected is conditioned upon the receipt by the Trustee on or prior to the redemption date of moneys sufficient to pay the principal of and premium, if any, and interest on such Bonds to be redeemed and that if such moneys are not so received, such notice shall be of no force or effect and such Bonds shall not be required to be redeemed. In the event that such notice contains such a condition and moneys sufficient to pay the principal of and premium, if any and interest on such Bonds are not received by the Trustee on or prior to the purported redemption date, the redemption shall not be made, and the Trustee shall within a reasonable time thereafter give notice, in the manner in which the notice of redemption was given, that such moneys were not so received.

The Bonds of this series are issuable as fully registered bonds in denominations of \$5,000 or any integral multiple in excess thereof.

This Bond is transferable, subject to the limitations and upon the payment of the charges, if any, provided in the Resolution, at the corporate trust office of the Trustee by the Registered Owner hereof in person or by the owner's attorney duly authorized in writing, upon surrender hereof together with a written instrument of transfer satisfactory to the Trustee duly executed by the Registered Owner or the owner's duly authorized attorney, and thereupon the City shall issue in the name of the transferee a new registered bond or bonds of the same aggregate principal amount and series, interest rate and maturity as the surrendered bond. This bond may also be exchanged, alone or with other Bonds of the same series, interest rate and maturity, at the corporate trust office of the Trustee, for a new Bond or Bonds of the same aggregate principal amount, series, interest rate and maturity, without transfer to a new registered owner, subject to the limitations and upon the payment of the charges, if any, provided in the Resolution.

The Bonds issued under the Resolution do not constitute an indebtedness of the City but are payable solely from and are equally and ratably secured by a pledge of the Net Revenues derived by the City from the ownership and operation of its Water System.

The terms and provisions of this Bond and definitions of certain terms used herein are continued on the reverse side hereof and such continued terms and provisions and definitions shall for all purposes have the same effect as though fully set forth at this place.

This Bond shall not be valid unless the Certificate of Authentication hereon is signed by the Trustee.

CITY OF BURLINGTON, VERMONT

By: _____
Chief Administrative Officer

(SEAL)

CERTIFICATE OF AUTHENTICATION

This Bond is one of the Bonds described in the Resolution mentioned in the Bond.

People's United Bank, N.A.,
as Trustee

Date of Authentication:

_____, 2017

By: _____

Authorized Signature

For value received the undersigned sells, assigns and transfers this bond to

(Name and Address of Assignee)

Social Security or Other Identifying Number of Assignee

and irrevocably appoints _____ attorney-in-fact to transfer it on the
books kept for registration of the bond, with full power of substitution.

NOTE: The signature of this assignment
must correspond with the name as written on
the face of the bond without alteration or
enlargement or other change.

Dated:

Signature Guaranteed:

Participant in a Recognized
Signature Guarantee Medallion Program

By: _____

Authorized Signature

Section 7
Disposition of Proceeds of Series 2017 Bonds

From the proceeds derived from the sale of the Series 2017 Bonds, there shall be deposited:

- (a) in the Debt Service Reserve Fund, the sum of \$___;
- (b) with the City, the amount estimated by the City to be required to pay expenses of issue related to the Series 2017 Bonds; and
- (c) the balance, if any, in the Construction Fund.

The amounts provided under clause (c) may be invested in securities eligible for investment in the Construction Fund. Any earnings thereon shall be added thereto. Any unused amount shall be transferred to the City and any remaining expenses of issue shall be paid by the City.

Section 8
Debt Service Reserve Fund

The Resolution requires that, at the time of issuance of each Series of Bonds, there shall be deposited, from the proceeds of such Series of Bonds or from other available funds, an amount necessary so that the total amount in the Debt Service Reserve Fund is not less than the Debt Service Reserve Fund Requirement (taking into account the issuance of the Additional Bonds). A deposit of cash into the Debt Service Reserve Fund will occur upon the issuance of the Series 2017 Bonds, to the extent necessary to comply with the Debt Service Reserve Fund Requirement (taking into account the issuance of the Series 2017 Bonds).

Section 9
Renewal and Replacement Fund

The Renewal and Replacement Fund Requirement for the Series 2017 Bonds shall be established at \$_____. The City shall, upon the issuance of the Series 2017 Bonds, deposit, from Revenues, and not from proceeds of the Series 2017 Bonds, the sum of \$_____ into the Renewal and Replacement Fund. The City shall make, from Revenues, additional deposits of \$_____ into the Renewal and Replacement Fund on June 1, and, December 1 of the years 2017 through December 1, 20__, until the amount on deposit equals the Renewal and Replacement Fund Requirement. Such payments shall be due in lieu of monthly deposits as otherwise set forth in Section 5.5 of the General Bond Resolution. In the event that, after the forgoing deposits have been made, there is a draw on the Renewal and Replacement Fund such that the amount on deposit is less than the Renewal and Replacement Fund Requirement, the City shall make the monthly deposits from Revenues as set forth in Section 5.5 of the General Bond Resolution.

Section 10

Tax Exemption

The City hereby covenants and agrees to take all lawful action necessary to ensure that interest on the Series 2017 Bonds will remain excluded from gross income for federal income tax purposes under the Internal Revenue Code of 1986, as amended (the “Code”) and to refrain from taking any action which would cause such interest to become includable in gross income under the Code. Without limiting the foregoing, to the extent required to maintain the exclusion of interest on the Series 2017 Bonds from gross income under the Code, the City will file any information report and pay any rebate due to the United States in connection with the issuance of the Series 2017 Bonds and will restrict yield on investments of the proceeds of the Series 2017 Bonds and of moneys held in funds and accounts under the Resolution and allocable to the Series 2017 Bonds, all in accordance with the directions of Bond Counsel to the City which may be given from time to time. The City’s Chief Administrative Officer, Director of Financial Operations, and the Director of the Department of Public Works is hereby authorized and directed to execute and deliver from time to time, on behalf of the City, such certificates, instruments and documents as shall be deemed necessary or advisable to evidence compliance by the City with the Internal Revenue Code and the applicable regulations of the United States Treasury promulgated under the Internal Revenue Code, with respect to the investment and use of the proceeds of the Series 2017 Bonds.

Section 11

Certain Findings and Determinations

The City Council hereby finds and determines as follows:

- (a) No bonds have heretofore been issued under the Resolution.
- (b) there are no outstanding bonds, notes or other evidence of indebtedness payable from and secured by a lien or charge upon the Net Revenues pledged under the Resolution other than the prior obligations consisting of a note issued by the City to the Vermont Department of Environmental Conservation Clean Water State Revolving Fund in the original principal amount of \$228,006, which is payable from the Net Revenues pledged under the Resolution.

Section 12

Special Covenants

The City hereby covenants and agrees that the following provisions shall be in effect so long as the Series 2017 Bonds are Outstanding under the Resolution, provided that any or all of such provisions may be waived in accordance with the terms of Sections 9.1 and 9.2 of the General Bond Resolution:

- (a) The City shall notify the Trustee of the proposed issuance of obligations supported by any inferior or subordinate pledge of Revenues; and
- (b) The City shall proceed with due diligence to carry out and complete the Projects financed by the issuance of Bonds or, in the case of Bonds issued under Section 2.3(C) of the Resolution, to complete the work financed by the Bonds. Notwithstanding the foregoing, the

City may discontinue a Project (or work financed under Section 2.3(C)) of the Resolution by written notice to the Trustee with a certificate of the Consulting Engineer stating that, by reason of change of circumstance not reasonably expected at the time of issuance of the Bonds, completion of the Project (or work) is no longer consistent with Prudent Utility Practice or, in the case of a jointly-owned Project, the Project may be discontinued as provided in the applicable ownership agreement. The moneys for the Project in the Construction Fund not needed to pay Project Costs of the Project (as determined by a certificate of the Consulting Engineer) shall be deposited, as the City shall determine, in the Renewal and Replacement Fund, the Construction Fund (for the purpose of paying Project Costs or Projects designated by the Issuer) or the Special Redemption Fund; provided, however, that if the moneys are not deposited in the Special Redemption Fund, the Issuer shall obtain an Opinion of Bond Counsel that such application will not adversely affect the tax status of any outstanding Bonds.

Section 13

Appointment of Trustee

Pursuant to Section 6.1 of the General Bond Resolution, the City Council shall appoint the initial Trustee pursuant to a Supplemental Resolution. The City Council hereby finds and determines as follows:

(a) Subject to the conditions in the following clause (b), [People's United Bank, N.A.] is hereby appointed to act as Trustee and Paying Agent under the General Bond Resolution, effective as of the date of this Supplemental Resolution, with all rights, powers, trusts, duties, and obligations of the Trustee and Paying Agent under the General Bond Resolution.

(b) The appointment of [People's United Bank, N.A.] as Trustee and Paying Agent is subject to receipt by the City from [People's United Bank, N.A.] a certificate signed by a duly authorized signatory of [People's United Bank, N.A.] that [People's United Bank, N.A.] (i) accepts such appointment to act as Trustee and Paying Agent, and assumes all duties and responsibilities thereof, under the General Bond Resolution and (ii) meets the qualifications under Section 6.1 of the General Bond Resolution to act as Trustee and Paying Agent.

Section 14

Successor Trustee

The Chief Administrative Officer is hereby authorized to appoint a successor trustee to serve as Trustee under the General Bond Resolution. The Chief Administrative Officer is authorized to execute and deliver such further agreements and instruments as may be necessary in order to transfer the duties and responsibilities of the current Trustee to a successor trustee.

Section 15

Award of Bonds; Official Statement; Further Action

The City's Chief Administrative Officer, the City's Director of Financial Operations, and the Director of Public Works are, and each of them hereby is, authorized either singly or together:

(a) to execute and deliver an underwriting agreement, bond purchase agreement, or contract of purchase negotiated with the Underwriter with respect to the Series 2017 Bonds, in such form as the signing officer shall approve;

(b) to prepare, make public, execute and deliver to and authorize distribution by the Underwriter to prospective purchasers and investors of a Preliminary Official Statement with respect to the Series 2017 Bonds, in substantially the form presented to the City Council;

(c) to prepare, make public, execute and deliver to and authorize distribution by the Underwriter to prospective purchasers and investors of an Official Statement substantially in the form of the Preliminary Official Statement after the same has been completed by the insertion of the interest rate and other data with respect to the Series 2017 Bonds and by making such other changes or corrections as the signing officer or officers may approve, such officer's or officers' execution to be conclusive evidence of such approval;

(d) to execute and deliver a Continuing Disclosure Undertaking substantially in the form attached to the Official Statement, with such changes or corrections as the signing officer or officers may approve, such officer's or officers' execution to be conclusive evidence of such approval; and

(e) to execute such other documents, enter into such covenants and take such other actions as are necessary or advisable to effect the issuance and delivery of the Series 2017 Bonds and the application of the proceeds thereof in accordance with the provisions of this Supplemental Resolution.



CITY OF BURLINGTON
DEPARTMENT OF PUBLIC WORKS

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CHAPIN SPENCER
DIRECTOR OF PUBLIC WORKS

NORMAN J. BALDWIN, P.E.
ASSISTANT DIRECTOR OF PUBLIC WORKS

Date: April 14, 2017

To: Public Works Commission

From: Norman J. Baldwin, P.E. 
City Engineer/Ass't Director of Public Works

C.C. Chapin Spencer, Director of Public Works

Subject: Access Management Driveway Standards

The Department is seeking to improve our engineering standards. As the City department responsible for the stewardship of our street network, it is important to have access management standards in place to preserve the safety and flow of traffic on our street network.

These access management standards need to be applied to a wide range of land uses. Each land use generates a predictable volume of traffic and class of vehicle necessary to provide necessary and reasonable access.

- **Single family homes to small apartment complexes:** These properties have a low volume of entering and exiting traffic, typically less than 10 trips during peak hour, (translating this volume of trips from the ITE trip generation tables it is around 16 Unit Apartment complex or smaller) there is not a need for a double wide driveway. Staff would propose for:
 - single family homes - driveway width be limited to 12 feet.
 - small apartment complexes with less than 10 trips during peak hour/16 units or less - driveway width be limited to 16 feet.
- **Commercial properties:** These properties have a greater need for access, generate more than 10 trips during peak hour and routinely require a larger class of vehicle to access the property. Staff would propose:
 - 20 to 30 feet in width shall be used for any two-way commercial access when the single unit vehicle volume does not exceed five in the peak hour.
 - 30 to 40 feet of width shall be used for any two-way commercial access when any one or more of the following apply to the access:
 - Multi-unit vehicles(tractor trailers) are intended to use the access.
 - Single-unit vehicles(Single Axle Delivery Trucks,UPS) in excess of 30 feet in length will use the access.
 - Single-unit vehicle volume exceeds 5 in the peak hour.

The Driveway standards proposed by staff are modeled after VTRANS document entitled "Vermont Agency of Transportation Access Management Program Guidelines", with two exceptions:

An Equal Opportunity Employer

This material is available in alternative formats for persons with disabilities. To request an accommodation, please call 802.863.9094 (voice) or 802.863.0450 (TTY).

- The Department has sought to specify a standard for single family homes and small apartment complexes with less than 10 trips during peak hour. The VTRANS document does not specify dimensional standards for low volume access needs like a single family home or small apartment complexes. The proposed standard for low volume residential access is consistent with the Department's existing guidance, but formalizes it into a standard.
- The Department has sought to allow commercial access widths that are narrower than State standards given Burlington's dense urban environment and lower speed limits. This proposal is consistent with the City's goal of enhanced pedestrian safety and storm-water management.

Department Staff has the opportunity to apply these standards typically through our:

- Excavation Inspector's process of reviewing and issuing curb cut permits.
- Or Engineering staff participating in a Development Review Process, providing technical review.

The Burlington Code of Ordinances(BCO) states:

27-14 Sidewalks, curbs and gutters to conform to specifications.

27-14 Sidewalks, curbs and gutters to conform to specifications.

All sidewalks, curbs and gutters shall conform to current specifications of the board of street commissioners, and shall be set on such grade as shall be adopted by the city council.

It is staff's interpretation the Public Works Commission has the authority and responsibility to adopt sidewalk, curb and gutter specifications. In addition, the Public Works Commission has assumed the duties of the board of street commissioners with the formation of the department of Public Works. Staff's interpretation of BCO 27-14 has been confirmed, supported through conversations with Assistant City Attorney Gene Bergman.

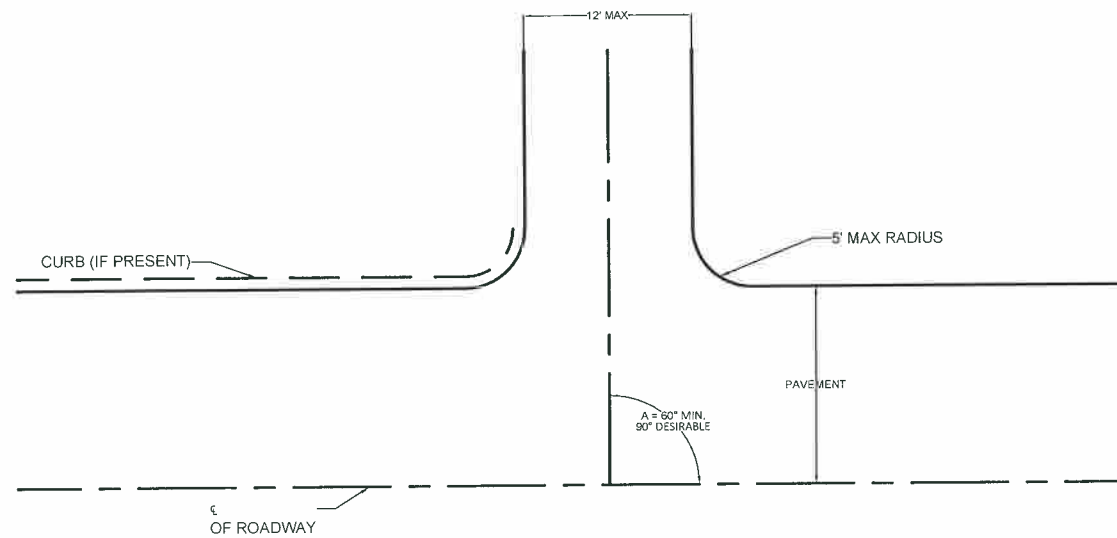
Staff Request:

Given the Public Works Commission's governing authority described in the Burlington Code of Ordinances, staff is seeking the Public Works Commission's approval to adopt the proposed Driveway and Curb Cut Standards. Staff is formally requesting the following Driveway and Curb Cut Standards:

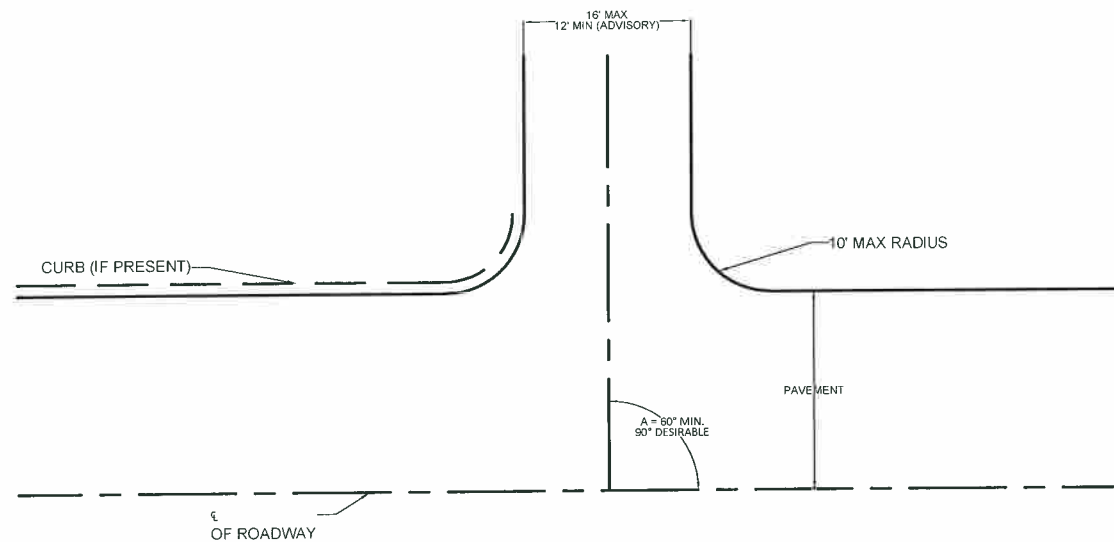
- **Single Family Homes to Small Apartment Complexes (less than 10 trips during peak hour)**
 - **single family homes** - the driveway width be limited to 12 feet.
 - **small apartment complexes** - the driveway width be limited to 16 feet.
- **Commercial Properties (more than 10 trips during peak hour)**
 - 20 to 30 feet in width shall be used for any two-way commercial access when the single unit vehicle volume does not exceed five in the peak hour.
 - 30 to 40 feet of width shall be used for any two-way commercial access when any one of more of the following apply to the access:
 - Multi-unit vehicles (Tractor Trailers) are intended to use the access.
 - Single-unit vehicles (Single Axle Delivery Trucks,UPS) in excess of 30 feet in length will use the access.
 - Single-unit vehicle (Single Axle Delivery Trucks,UPS) volume exceeds 5 in the peak hour
- **Driveway Apron Flare specifications**, see attached CAD specification.

For your reference staff has prepared Driveway Standard in a CAD format for ease and convenience and to further describe driveway flared ramps that cannot easily be explained in written form.

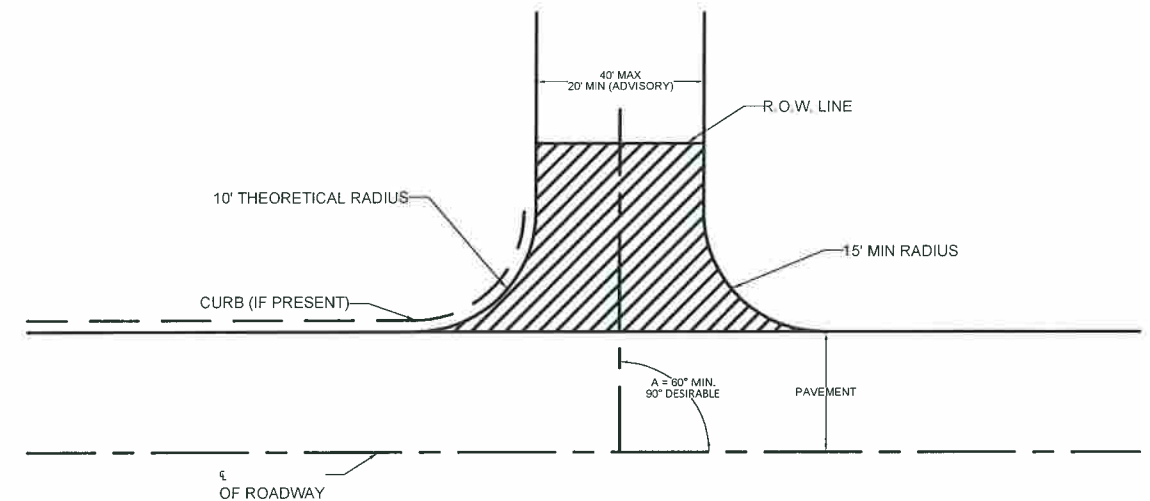
If there are any questions, please feel free to give me a call in advance of the meeting. In addition, I will be at the upcoming meeting to present the proposed driveway standards.



CITY OF BURLINGTON SINGLE
FAMILY HOME RESIDENTIAL
DRIVEWAY STANDARD



CITY OF BURLINGTON SMALL
APARTMENT COMPLEX
RESIDENTIAL DRIVEWAY
STANDARD



CITY OF BURLINGTON
TWO WAY UNDIVIDED
COMMERCIAL DRIVEWAY
STANDARD

NOTES:

1. DRIVEWAY WIDTH RESTRICTIONS SHOWN PERTAIN ONLY TO THE AREA WITHIN THE R.O.W. OR THE END OF THE TURNING RADIUS WHICHEVER IS GREATEST.
2. IF CURB IS PRESENT, SEE APPROPRIATE CURB DETAIL STANDARD OR MATCH CITY STANDARD CURB TREATMENT.
3. 20 TO 30 FEET IN WIDTH SHALL BE USED FOR ANY TWO-WAY COMMERCIAL ACCESS WHEN THE SINGLE UNIT VEHICLE VOLUME DOES NOT EXCEED FIVE IN THE PEAK HOUR.
4. 30 TO 40 FEET OF WIDTH SHALL BE USED FOR ANY TWO-WAY COMMERCIAL ACCESS WHEN ANY ONE OF THE FOLLOWING APPLY TO THE ACCESS: MULTI-UNIT VEHICLES ARE INTENDED TO USE THE ACCESS. SINGLE-UNIT VEHICLES IN EXCESS OF 30 FEET IN LENGTH WILL USE THE ACCESS. SINGLE-UNIT VEHICLE VOLUME EXCEEDS 5 IN THE PEAK HOUR.

CITY OF BURLINGTON
STANDARDS FOR RESIDENTIAL
AND COMMERCIAL DRIVEWAYS



**BURLINGTON
PUBLIC WORKS
ENGINEERING DIV.**

645 PINE STREET
BURLINGTON, VT 05401
(802) 863-8084
(802) 863-0488 (Fax)

DESIGNED PMP	RF
DRAWN PMP	SC
CHECKED MLB	DR
DATE 04/12/17	SHEET 1

Burlington Department of Public Works Commission Meeting
Draft Minutes, 18 January 2017
645 Pine Street

Commissioners Present: Robert Alberry; Jim Barr; Chris Gillman (Clerk) (*arrives at 6:38pm*); Solveig Overby; Jeff Padgett (Chair). **Commissioners Absent:** Tiki Archambeau (Vice Chair); Justine Sears.

Item 1 – Call to Order – Welcome – Chair Comments

Chair Padgett calls meeting to order at 6:32pm and makes opening comments.

Item 2 – Agenda

Chair Padgett requests moving Consent Agenda Item D Agenda to Item 4.5 and is seconded by Commissioner Alberry.

Action taken: motion approved;

“Ayes” are unanimous.

Item 3 – Public Forum (3 minute per person time limit)

Fred Magdoff, Ward 1, speaks on Parking Enforcement issues.

Caryn Long, Ward 1, speaks on Parking Enforcement issues and Lake Champlain cleanup.

Sharon Bushor, Ward 1, speaks on Agenda Item 9.

Clerk Gillman arrives

Item 4 – Consent Agenda

A. UVMMC Parking Agreement

B. Peoples United Bank Parking Agreement

C. Status of Traffic Requests

Commissioner Barr makes motion to accept altered Consent Agenda and is seconded by Commissioner Alberry.

Action taken: motion approved.

“Ayes” are unanimous.

Item 4.1 – Colchester Ave/Centennial Field Crosswalk Improvement Project

A) Staff Communication by DPW Engineer David Allerton who speaks on the city designing a new crosswalk at 278 Colchester Ave.

B) Commission Questions

Chair Padgett and Commissioners Alberry, Barr, and Overby ask questions on Agenda Item 4.1 with Engineer Allerton answering.

C) Public Comment

D) Commissioner Discussion

E) Motion made by Commissioner Overby to accept staff’s recommendation: removal of one parking space at 278 Colchester Ave on the North/East side of the crosswalk.

Seconded by Commissioner Alberry.

Discussion

The Commission, Ms. Bushor, and Engineer Allerton talk on Agenda Item 4.1.

Action taken: motion fails;

Commissioner Alberry: Aye

Vice Chair Archambeau: *not present*

Commissioner Barr: Aye

Clerk Gillman: Nay

Commissioner Overby: Aye

Chair Padgett: Nay

Commissioner Sears: *not present*

F) Motion made by Clerk Gillman to table staff's recommendation: removal of one parking space at 278 Colchester Ave on the North/East side of the crosswalk.

Seconded by Commissioner Alberry.

Discussion

Action taken: motion approved;

"Ayes" are unanimous.

Item 5 – New Staff Introductions – Phillip Peterson & Ashley Toof

A) Staff Communication by Engineer Allerton who speaks on DPW's two new Engineering Technicians.

B) Commission Questions

C) Public Comment

D) Commissioner Discussion

E) Action Requested – None

Item 6 – Online Parking Ticket Payment

A) Staff Communication by Parking Enforcement Manager John King who speaks on the city's new online payment option for parking tickets.

B) Commission Questions

Chair Padgett, Clerk Gillman, and Commissioners Barr and Overby ask questions on Agenda Item 6 with DPW Director Chapin Spencer, City Engineer and Assistant Director for Technical Services Norm Baldwin, and Manager King answering.

C) Public Comment

D) Commissioner Discussion

E) Motion made by Commissioner Barr to accept staff's recommendation: adoption of changes to BCO Ordinance 20-67 to allow City of Burlington Parking Tickets be paid online or with a credit card.

Seconded by Clerk Gillman.

Discussion

Action taken: motion approved;

"Ayes" are unanimous.

Item 7 – King St & St. Paul St. Meter Adjustments – Changes to Traffic Regulations in Appendix C of the City Ordinance

A) Staff Communication by Director Spencer who speaks on the city's adjustment of meter heads on King St & St Paul St after the closure of the Brown's Ct parking lot earlier this month, introducing "City of Burlington Traffic Regulations" document for the record.

B) Commission Questions

Chair Padgett, Clerk Gillman, and Commissioners Barr and Overby ask questions on Agenda Item 7 with Director Spencer and DPW Engineer Laura Wheelock answering.

C) Public Comment

D) Commissioner Discussion

E) Motion made by Commissioner Barr to accept changes in ordinance and staff's recommendation: authorize the meter adjustments related and adjacent to the Eagle's Landing Project so that the changes can continue beyond the 30-day demonstration period.

Seconded by Clerk Gillman.

Discussion

Action taken: motion approved;

"Ayes" are unanimous.

Item 8 – 194 St. Paul Street – Parking Meter Rates for Encumbrance Application

A) Staff Communication by Engineer Wheelock who speaks on city's revised rates for the encumbrance permits for the 194 St. Paul St. "Eagles Landing" project.

B) Commission Questions

Chair Padgett and Commissioner Overby ask questions on Agenda Item 8 with Engineer Wheelock answering.

C) Public Comment

D) Commissioner Discussion

E) Motion made by Commissioner Barr to approve staff's recommendation: support the use of the ROW under the terms of the License Agreement between the City of Burlington and HPC, and their application for encumbrances – at revised rates – on St. Paul Street/King Street/Maple Street.

Seconded by Clerk Gillman.

Discussion

Action taken: motion approved;

"Ayes" are unanimous.

Item 9 – Intersection Scoping Update: Colchester Ave/Riverside Ave/Barrett St

A) Oral Communication by Senior Transportation Planner Nicole Losch and Chittenden County Regional Planning Commission (CCRPC) Senior Transportation Planning Engineer Jason Charest who speak on the city's scoping study of the Colchester Ave/Riverside Ave/Barrett St intersection.

B) Commission Questions

The Commission asks questions on Agenda Item 9 (Commissioner Overby introducing "PAC Meeting #3" and "Historic Resources Identification" documents for record) with Senior Planner Losch and Engineer Charest answering. For the record Commissioner Overby asked that Alternative 3, a roundabout design, not be eliminated from consideration for improving this intersection. She expressed concern that Alternative 3, the roundabout design, had been recommended to be eliminated from consideration by the Advisory Committee despite having the best safety and functional ratings as presented during the Sept. 22nd, 2016 Advisory Committee Meeting. She asked that city and CCRPC wait for additional information from the Winooski Bridge scoping study which is under way. She expressed concern that the CCRPC Advisory Committee may have eliminated Alternative 3 partially due to a misunderstanding about the risk element for Alternative 3, relating to possible future expanded historic district status of a property that would be impacted by construction of the roundabout. She introduced extract from CCRPC "Colchester/Riverside/Barrett/Mill Intersection Study, PAC Meeting #3, Sept. 22, 2016" and extract from Hartgen Archeological Associates, "Historic Resources Identification, Riverside Ave - Colchester Ave Intersection Scoping Study" documents for record.

C) Public Comment

Ms. Bushor speaks on Agenda Item 9.

D) Commissioner Discussion

E) Action Requested – None

****Item 10 – 6 Month Check in on Annual Work Plan – moved to 2-15-17 Commission Meeting****

Item 11 – Approval of Draft Minutes of 12-21-16

Commissioner Alberry makes motion to approve draft minutes of 12-21-16 and is seconded by Clerk Gillman.

Action take: motion approved;

"Ayes" are unanimous.

Item 12 – Director's Report

Director Spencer reports on Assistant Director for Parking & Traffic Patrick Cashman's resignation and DPW bringing on an Interim Assistant Director – Paul Bohne – for next 3-6 months; the

Parking & Transportation Agreement; thanking staff for reviewing the many incoming development projects; and the ongoing water main breaks in south end along Pine St. City Engineer Baldwin reports on the hiring of a new DPW Engineer Mike Weide and the new DPW Associate Planner Neil Milcarek-Burke.

Item 13 – Commissioner Communications

Commissioner Barr comments on an intersection change at North Prospect St & Loomis St; Chair Padgett comments the powers of the Commission; Commissioner Overby comments on the binder commissioners receive upon joining the Commission with Director Spencer responding.

Item 14 – Adjournment & Next Meeting Date – February 16, 2017

Motion to adjourn made by Commissioner Barr and seconded by Clerk Gillman.

Action taken: motion approved;

“Ayes” are unanimous.

Meeting adjourned at 8:40pm.

Burlington Department of Public Works Commission Meeting
Draft Minutes, 15 March 2017
645 Pine Street

Commissioners Present: Robert Alberry (*via phone*); Tiki Archambeau (Vice Chair) (*arrives at 6:34pm*); Jim Barr; Chris Gillman (Clerk); Solveig Overby; Jeff Padgett (Chair); Justine Sears. **Commissioners Absent:** None.

Item 1 – Call to Order – Welcome – Chair Comments

Chair Padgett calls meeting to order at 6:30pm and makes opening comments.

Item 2 – Agenda

Commissioner Barr makes motion to approve agenda and is seconded by Clerk Gillman.

Action taken: motion approved;

Commissioner Alberry: Aye

Vice Chair Archambeau: *not present*

Commissioner Barr: Aye

Clerk Gillman: Aye

Commissioner Overby: Aye

Chair Padgett: Aye

Commissioner Sears: Aye

Item 3 – Public Forum (3 minute per person time limit)

No member of the public speaks.

Item 4 – Consent Agenda

A. Traffic Status Report

B. Certify an Existing Stop Sign at The Intersection of Lake St & Penny Ln

Clerk Gillman makes motion to approve Consent Agenda and is seconded by Commissioner Barr.

Action taken: motion approved.

Commissioner Alberry: Aye

Vice Chair Archambeau: *not present*

Commissioner Barr: Aye

Clerk Gillman: Aye

Commissioner Overby: Aye

Chair Padgett: Aye

Commissioner Sears: Aye

Vice Chair Archambeau arrives

Item 5 – Request for Towing Fee Change

A) Communication by Parking Enforcement Manager John King who speaks on the city's request to alter towing fees for large vehicles.

B) Commission Questions

C) Public Comment

D) Commissioner Discussion

E) Motion made by Commissioner Barr to approve staff's recommendation: approve changes to BCO 20-74.

Seconded by Clerk Gillman.

Discussion

Action taken: motion approved;

Commissioner Alberry: Aye
Vice Chair Archambeau: Aye
Commissioner Barr: Aye
Clerk Gillman: Aye
Commissioner Overby: Aye
Chair Padgett: Aye
Commissioner Sears: Aye

Item 6 – Maintenance Division Report

A) Presentation introduction by DPW Director Chapin Spencer and presented by DPW Assistant Director for Right of Way Rob Green who reports on the city's Maintenance Division.

B) Commission Questions

Chair Padgett, Vice Chair Archambeau, Clerk Gillman, and Commissioner Sears ask questions on Item 6 with Assistant Director Green answering.

C) Public Comment

D) Commissioner Discussion

E) Action Requested – None.

Item 7 – FY17 Workplan Mid-Year Progress Report

A) Presentation by Director Spencer and Assistant Director Green who speak on the city's FY17 Workplan and its progress.

B) Commission Questions

Chair Padgett, Vice Chair Archambeau, and Commissioners Overby and Sears ask questions on Item 7 with Director Spencer and Assistant Director Green answering.

C) Public Comment

D) Commissioner Discussion

E) Action Requested – None.

Item 8 – Approval of Draft Minutes of 2-15-17

Commissioner Barr makes motion to approve the draft minutes of 2-15-17 with staff's additions and is seconded by Vice Chair Archambeau.

Action take: motion approved;

Commissioner Alberry: *abstains*

Vice Chair Archambeau: Aye

Commissioner Barr: Aye

Clerk Gillman: Aye

Commissioner Overby: Aye

Chair Padgett: Aye

Commissioner Sears: *abstains*

Item 9 – Director's Report

Director Spencer reports on the passing blizzard, thanking all staff who worked through the storm for their work and the public for their patience.

Item 10 – Commissioner Communications

Commissioner Barr comments on potholes on Colchester Ave with Director Spencer and Assistant Director Green responding; Vice Chair Archambeau comments on a pothole at Green St & Pearl St with Assistant Director Green responding and on what Inspection Services needs to do to prepare for the Burlington Town Center project with Director Spencer responding; Commissioner Overby comments on the Amtrak Transportation Project extension with Director Spencer responding; Chair Padgett comments on appeals from 2-15-17 Commission meeting, the new Commission email system, the Public

Works Commission Manual, and the placement of Charlotte St on the paving list with Director Spencer responding

Commission swaps Items 11 and 12 on the agenda

Item 12 – Adjournment & Next Meeting Date – April 19, 2017

Motion to adjourn made by Commissioner Barr and seconded by Clerk Gillman.

Action taken: motion approved;

Commissioner Alberry: Aye

Vice Chair Archambeau: Aye

Commissioner Barr: Aye

Clerk Gillman: Aye

Commissioner Overby: Aye

Chair Padgett: Aye

Commissioner Sears: Aye

Item 11 – Tour of Maintenance Division Facility

Meeting adjourned at 7:41pm.



**CITY OF BURLINGTON
DEPARTMENT OF PUBLIC WORKS**

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Burlington, VT 05401
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www.burlingtonvt.gov/dpw

To: DPW Commissioners
Fr: Chapin Spencer, Director
Re: **Director's Report**
Date: April 12, 2017

GEARING UP FOR A BIG CONSTRUCTION SEASON:

Following up on last month's update on this construction season's large number of capital projects, DPW is proposing to hire a Public Information Manager to coordinate public outreach and education related to these projects. We will be bringing this proposal to the Board of Finance on May 24. A key component of the outreach will be a map highlighting the location of activity this season. The draft interactive map can be viewed here:

<http://burlingtonvt.maps.arcgis.com/apps/webappviewer/index.html?id=18809ddffefd49cdbf42725a22741d23>

COLLEGE STREET GARAGE REPAIRS

On or around April 20, a \$2M capital repair project will commence at the College Street Garage. Work includes structural repairs, entirely new efficient lighting, upgraded HVAC system and an emergency generator. The work will last approximately 4 months. Initially, the lower three of four levels will be closed, then level 3 will be re-opened, then level 2, and finally level 1 will re-open in late August or September. Lakeview Garage is adjacent to the College St Garage and will accommodate displaced parkers.

MAIN WWTP RELEASE OF PARTIALLY DISINFECTED OUTFLOW

Heavy rains on March 31/April 1 combined with atypical wastewater entering the City's main Wastewater treatment plant and stressed its biological and chemical systems. As a result, approximately 3.5 million gallons of treated but not fully disinfected outflow left the plant. A large component of this outflow was stormwater as the plant serves a portion of the City which has combined sewers that capture both sewage and stormwater runoff. We have developed a full update so that the public is well informed on the incident, what action steps have been taken, and the Department's ongoing commitment to stewarding the City's treasured water resources. The update is attached.

URBAN SOILS

DEC has drafted proposed new rules for managing lightly contaminated urban soils. The draft Investigation and Remediation of Contaminated Properties Rule (I-Rule) is posted on DEC Waste Management & Prevention Division's website for public comment (<http://dec.vermont.gov/waste-management>). The comment period is open through April 19, and the City is preparing comments. Act 52 called for DEC to promulgate rules to manage excavated soils that require management "in a manner that ensures protection of human health and the environment and promotes Vermont's traditional settlement patterns in compact village or city centers." 10 V.S.A. §6604c. Vermont's current thresholds for regulating soils with PAHs, a common contaminant in urban areas from decades of combustion and industrial activities, are substantially lower than surrounding states – making development within Vermont's town and city centers more complex and more expensive.

STELLA

Thank you to the multiple City departments (Parks, Police, Fire) and DPW divisions (Water, Wastewater, Traffic, Equipment Maintenance) that helped Street Maintenance during the Stella blizzard – the second largest snowstorm in Burlington’s history. It was a great team effort. DPW has conducted an After Action Report to further improve our efforts in future storms.

FY’18 BUDGET

We are in the final phase of putting together the Department’s many budgets for the coming fiscal year. We will have more of an update for the Commission next month.

Don’t hesitate to contact me with any questions prior to Wednesday’s meeting.



**CITY OF BURLINGTON
DEPARTMENT OF PUBLIC WORKS**

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www.burlingtonvt.gov/dpw

Chapin Spencer
DIRECTOR OF PUBLIC WORKS

INFORMATIONAL RELEASE

APRIL 6, 2017

Main Wastewater Treatment Plant Release of Partially Disinfected Outflow

We are providing this update on the recent release of partially disinfected outflow from Burlington's Main Wastewater Treatment Plant so that the public is well informed on the incident, what action steps have been taken, and the Department's ongoing commitment to stewarding the City's treasured water resources.

Heavy rains last weekend combined with atypical wastewater entering the plant stressed its biological and chemical systems. As a result, approximately 3.5 million gallons of treated but not fully disinfected outflow left the plant. A large component of this outflow was stormwater as the plant serves a portion of the City which has combined sewers that capture both sewage and stormwater runoff. While it is hard to prove definitively, we believe that our biological system may have been impacted by an expected and authorized discharge of chemical cleaning compounds from a large customer within our collection system. Based on our understanding, the customer complied with all required procedures. We have suspended discharges from that source and any other non-wastewater sources while we investigate the relationship of that discharge to this incident.

Given that the plant's outfall is nearly a half-mile out in the lake (well beyond the breakwater) and the limited recreational use of the lake this time of year, the potential risk to human health for this incident is small. Nonetheless, nearby public access points to the lake were posted in accordance with the State's new public notification law.

Public Works staff takes these incidents very seriously and we have already taken the following actions: 1) suspended any authorization of non-traditional discharges into the wastewater collection system, 2) adjusted our chemical approach and 3) supplemented the plant's biological agents. The plant operated well within compliance during the storm earlier this week and staff are preparing for the storm forecast for today. The City's increased investment in our stormwater and wastewater systems will continue to reduce these types of events.

Residents and businesses can also help our Wastewater Treatment Plants operate effectively by disconnecting sump pumps and gutters from the City sewer, not pouring hazardous substances, medicines or grease down the drain, and not flushing baby wipes or hygiene products.

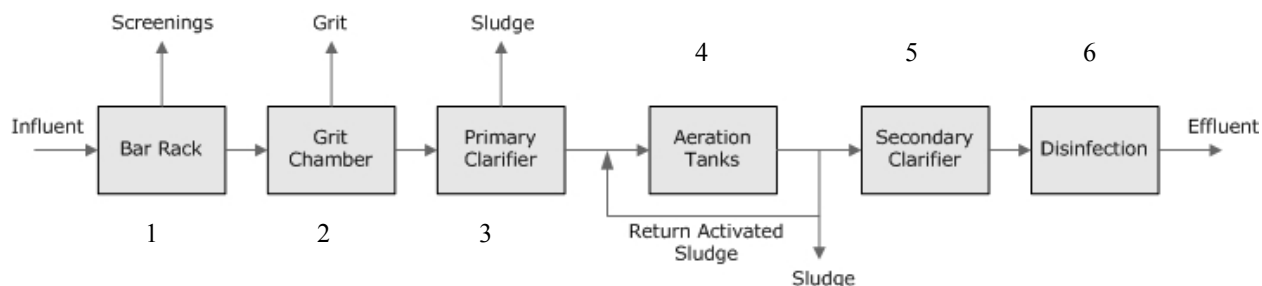
For more information about our wastewater treatment plant, technical details of what occurred over the weekend, and what measures we have been taking to mitigate the risk of this occurring again, please see the detailed explanation below or at www.burlingtonvt.gov/dpw.

Detailed Explanation:

Wastewater treatment plants are complex systems which, on most days, work very efficiently to take very polluted influent/inflow (the sewage that comes from homes, business, and in Burlington's case, stormwater runoff from roadways) and produce clear effluent/outflow with little to no bacteria or other contaminants. For example, our average bacteria concentrations are 2-4 colonies/100 mL, which is less than typical stormwater runoff. We are able to do this using a variety of wastewater treatment processes including physical, chemical and biological treatment.

What happened to the sewage plant over the weekend?

Unfortunately, because of the complexities of these wastewater systems, they can be sensitive to changes in the influent/inflow and sensitivities within the various treatment processes. While Burlington Main Plant is usually able to maintain high quality effluent throughout the year, even during storm events such as that this weekend, the combination of settling challenges in our secondary clarifiers (see location 5 in the diagram below) and the elevated flows unfortunately resulted in the discharge of effluent or outflow that was treated but not fully disinfected. Specifically, changes in the settling ability of our solids (due in part to acute die-off of some of our biological system) together with the high flows allowed some portion of the treated solids that are usually retained in the secondary clarifier to be discharged with the outflow. The additional amount of solids meant that the amount of chlorine disinfectant that we add was not sufficient to kill all of the bacteria and so we discharged effluent with a higher bacteria count than acceptable (800 col/100 mL vs. the 235 col/100 mL standard). While it is hard to prove definitively, we believe that our biological system may have been impacted by an expected and authorized discharge of chemical cleaning compounds from a large customer within our collection system. Based on our understanding, the customer complied with all required procedures. We have suspended discharges from that source and any other non-wastewater sources while we investigate the relationship of that discharge to this incident.



This event was certainly undesirable and we are doing everything we can to prevent it happening in the future (see Actions taken). It is important to note that this type of incident is quite different from a spill of raw, completely untreated sewage that has not gone through any of earlier processes of the wastewater treatment process. Additionally, a large component of this outflow was stormwater as the plant serves a portion of the City which has combined sewers that capture both sewage and stormwater runoff. The location and design of the diffuser outfall for the treatment plant (2400' off shore and 1000' outside the breakwater) as well as the timing of this incident does reduce the risk to human health in this particular incident. However, nearby public access points to the lake were posted in accordance with the State's new public notification law.

Actions taken:

-) Upon realizing that there were settling issues in the secondary clarification tanks last week, wastewater staff immediately began the application of additional polymer to assist with the settling. Unfortunately, our cationic (positively charged) polymer did not function as needed due to a change in the charges on the particles.
-) Staff switched to an anionic (negatively charged) polymer which yielded better results but did not have enough polymer on hand to get us through the storm event on Friday/Saturday. Since anionic polymer is not as commonly used as cationic polymer, securing additional polymer has been difficult despite reaching out to other municipal wastewater plants. As of Wednesday night (4/5) staff have secured a small amount of anionic polymer and a delivery of a large amount is scheduled for late Thursday (earliest available).
-) As necessary, dosages of disinfection chemicals are being adjusted to ensure maximum disinfection of the outflow and minimal bacteria levels.
-) Until further notice, a moratorium on previously permitted non-wastewater discharges has been put into effect to support regrowth of our biological system.
-) We have been boosting our biological system using “seed” that comes from the biological systems of other nearby wastewater treatment plants since Tuesday.
-) As always with this type of incident, Burlington Water Resource staff are looking at any and all methods by which this and other types of process related incidents can be mitigated in the future.
 - o This includes our city wide Integrated Water Quality Planning effort which has kicked off this year and which is looking at strategies for improving our plant effluent and reducing stormwater flow to the combined sewer through green stormwater infrastructure.
 - o Prior to this incident, staff had placed orders for sludge blanket level detectors which will help us detect settling ability changes in our sludge blankets earlier. These are due to arrive within the next 4 weeks and are a high priority for immediate installation.

While we still have to weather one more near term storm event Thursday – Friday, results from sampling during the storm event on Tuesday morning showed E. coli at 20 col/ 100 mL which is well below our permit and EPA standards and non-storm event samples since this weekend are trending back at the normal 2 col/100 mL level.

###

****PLEASE MOVE ALL BASKETBALL HOOPS OFF THE SIDE OF THE ROAD FOR SWEEPING****

STREET SWEEPING ZONE A



CLEAN SWEEP

**is coming to North Avenue
East Side Only! *Is that your
neighborhood?***

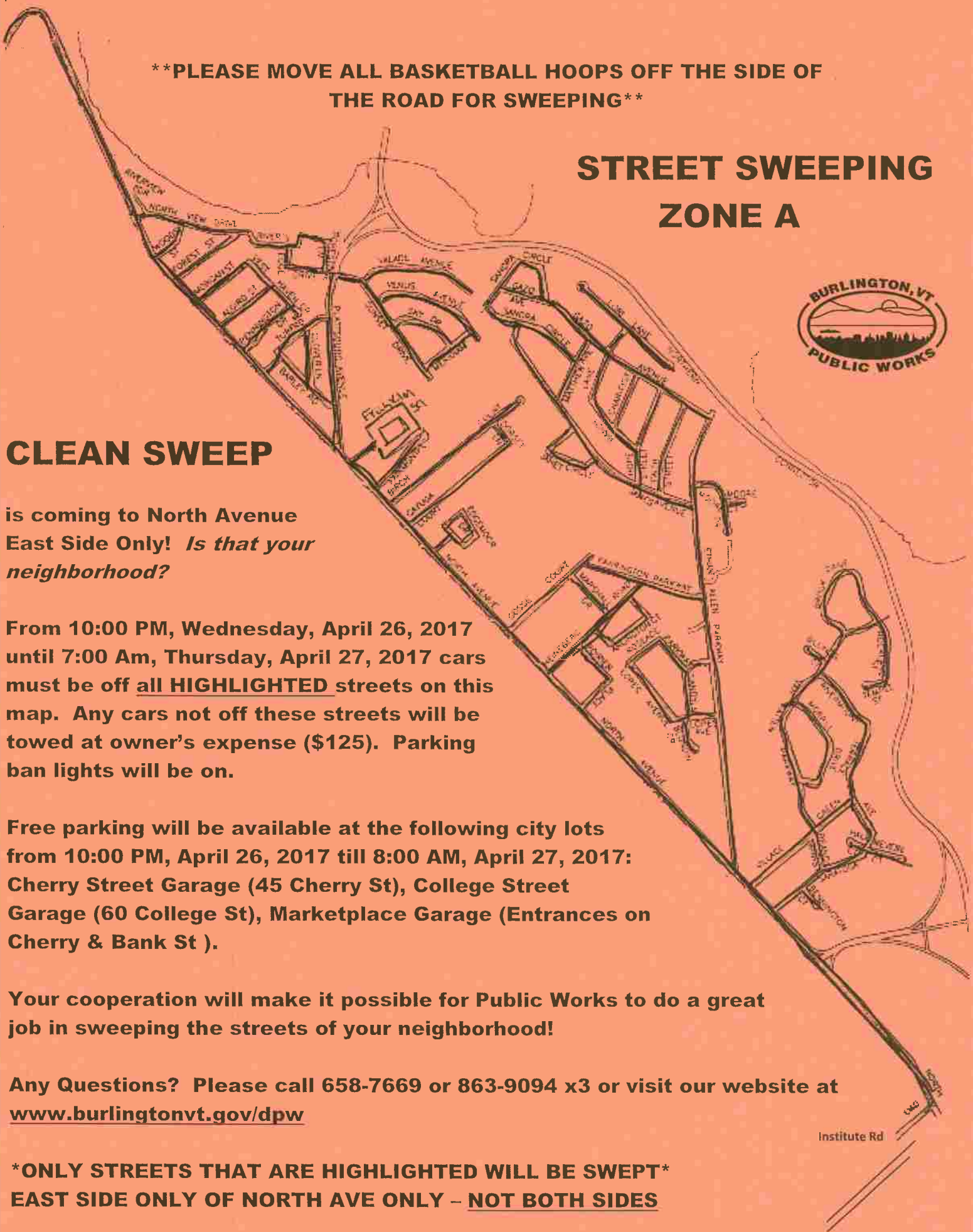
**From 10:00 PM, Wednesday, April 26, 2017
until 7:00 Am, Thursday, April 27, 2017 cars
must be off all HIGHLIGHTED streets on this
map. Any cars not off these streets will be
towed at owner's expense (\$125). Parking
ban lights will be on.**

**Free parking will be available at the following city lots
from 10:00 PM, April 26, 2017 till 8:00 AM, April 27, 2017:
Cherry Street Garage (45 Cherry St), College Street
Garage (60 College St), Marketplace Garage (Entrances on
Cherry & Bank St).**

**Your cooperation will make it possible for Public Works to do a great
job in sweeping the streets of your neighborhood!**

**Any Questions? Please call 658-7669 or 863-9094 x3 or visit our website at
www.burlingtonvt.gov/dpw**

***ONLY STREETS THAT ARE HIGHLIGHTED WILL BE SWEPT*
EAST SIDE ONLY OF NORTH AVE ONLY – NOT BOTH SIDES**



The logo for Burlington, VT Public Works is a circular emblem. The top half of the circle contains the text "BURLINGTON, VT" in a serif font. The bottom half contains the text "PUBLIC WORKS" in the same font. The center of the circle features a stylized landscape with a sun or moon rising over a body of water, with a silhouette of a city skyline in the foreground.

is coming to North Avenue - West Side Only!
Is that your neighborhood?

Free parking will be available at the following city lots from 10:00 PM, April 27, 2017 till 8:00 AM, April 28, 2017: Cherry Street Garage (45 Cherry St), College Street Garage (60 College St), Marketplace Garage (Entrances on Cherry and Bank St).

Your cooperation will make it possible for Public Works to do a great job in sweeping the streets of your neighborhood!

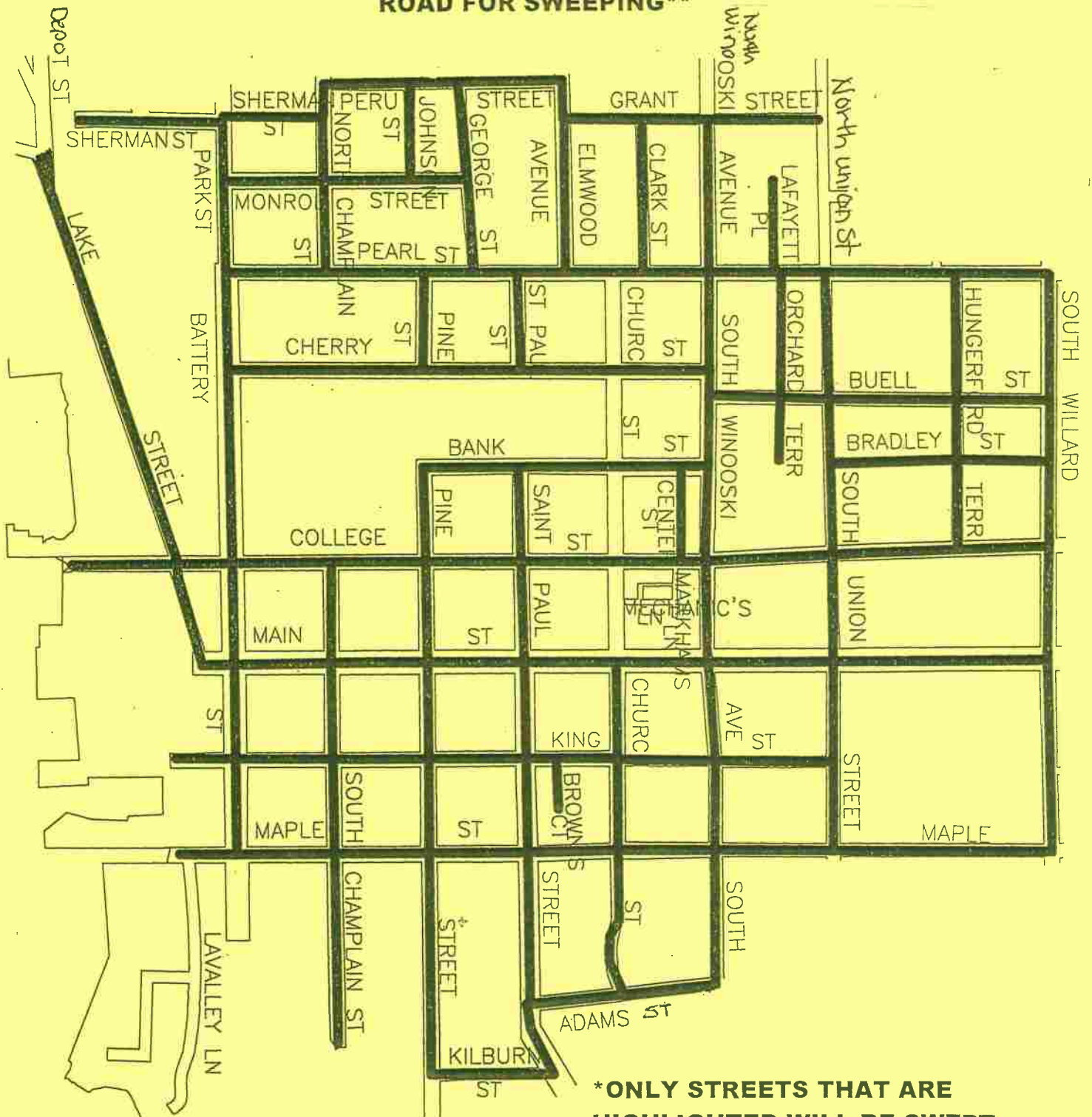
****PLEASE MOVE ALL BASKETBALL HOOPS OFF THE SIDE OF THE ROAD FOR SWEEPING****

WEST SIDE OF NORTH AVE – NOT BOTH SIDES



STREET SWEEPING ZONE F

****PLEASE MOVE ALL BASKETBALL HOOPS OFF THE SIDE OF THE
ROAD FOR SWEEPING****



CLEAN SWEEP

*** ONLY STREETS THAT ARE
HIGHLIGHTED WILL BE SWEEP
(SEE BACK FOR STREET LISTING)**

is coming to The Downtown area! *Is that your neighborhood?*

From 12:00 AM, Monday, May 1, 2017 until 7:00 AM, Monday, May 1, 2017 cars must be off All HIGHLIGHTED streets on this map. Any car not off these streets will be towed at owner's expense (\$125). Parking ban lights will be on.

Free parking will be available at the following city lots from 10:00 PM, April 30, 2017 till 8:00 AM, May 1, 2017: Cherry Street Garage (45 Cherry St), College Street Garage (60 College St), Marketplace Garage (Entrances on Cherry & Bank St).

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Any Questions? Please call 658-7669 or 863-9094 x3 or visit our website at www.burlingtonvt.gov/dpw (See Reverse side for street listings)

Streets	From	To
Adams Street	St Paul Street	South Winooski Ave.
Bank Street	Pine Street	South Winooski Ave
Battery Street	Pearl Street	Maple Street
Bradley Street	South Union	South Willard Street
Browns Court	King Street	End of Street
Buell Street	South Winooski Ave	South Willard Street
Center Street	College Street	Bank Street
Cherry Street	Battery Street	South Winooski Ave
Church Street	Main Street	Adams Street
Clark Street	Pearl Street	Grant Street
College Street	Lake Street	South Willard Street
Elmwood Ave	Pearl Street	Peru Street
George Street	Pearl Street	Peru Street
Grant Street	Elmwood Ave	North Union Street
Hungerford Terr	Pearl Street	College Street
Johnson Street	Monroe Street	Peru Street
Kilburn Street	Pine Street	St Paul St
King Street	King Street Dock	South Union Street
Lafayette Place	Pearl Street	End of Street
Lake Street	Main Street	Depot Street
Maple Street	Lavalley Lane	South Willard Street
Main Street	Battery Street	South Willard Street
Monroe Street	Battery/Park Street	George Street
North Champlain Street	Pearl Street	Peru Street
North Winooski Ave	Grant Street	Pearl Street
Orchard Terr	Pearl Street	End of Street (co-op)
Park Street	Sherman Street	Pearl Street
Pearl Street	Battery Street	South Willard Street
Peru Street	Elmwood Ave	North Champlain Street
Pine Street	Pearl Street	Cherry Street
Pine Street	Bank Street	Kilburn Street
Sherman Street	North Champlain Street	End of Street
South Champlain Street	College Street	End of Street
South Union Street	Pearl Street	Maple Street
South Willard St (both sides)	Pearl Street	Maple Street
South Winooski Ave	Pearl Street	Adams Street
St Paul Street	Pearl Street	Cherry Street
St Paul Street	Bank Street	Adams Street

Zone-F



STREET SWEEPING ZONE G

CLEAN SWEEP

is coming to The Old North End!
Is that your neighborhood?

From 10:00 PM, Monday, May 1, 2017 until
7:00 AM, Tuesday, May 2, 2017 cars must be off
all HIGHLIGHTED streets on this map:

****PLEASE MOVE ALL BASKETBALL HOOPS OFF THE SIDE OF
THE ROAD FOR SWEEPING****



***ONLY STREETS THAT ARE
HIGHLIGHTED WILL BE SWEPT*
(SEE BACK FOR STREET LISTING)**

**Any car not off these streets will be towed at owner's expense (\$125). Parking ban
lights will be on.**

**Free parking will be available at the following city lots from 10:00 PM, May 1, 2017 till
8:00 AM, May 2, 2017: Cherry Street Garage (45 Cherry St), College Street Garage (60
College St), Marketplace Garage (Entrances on Cherry & Bank St).**

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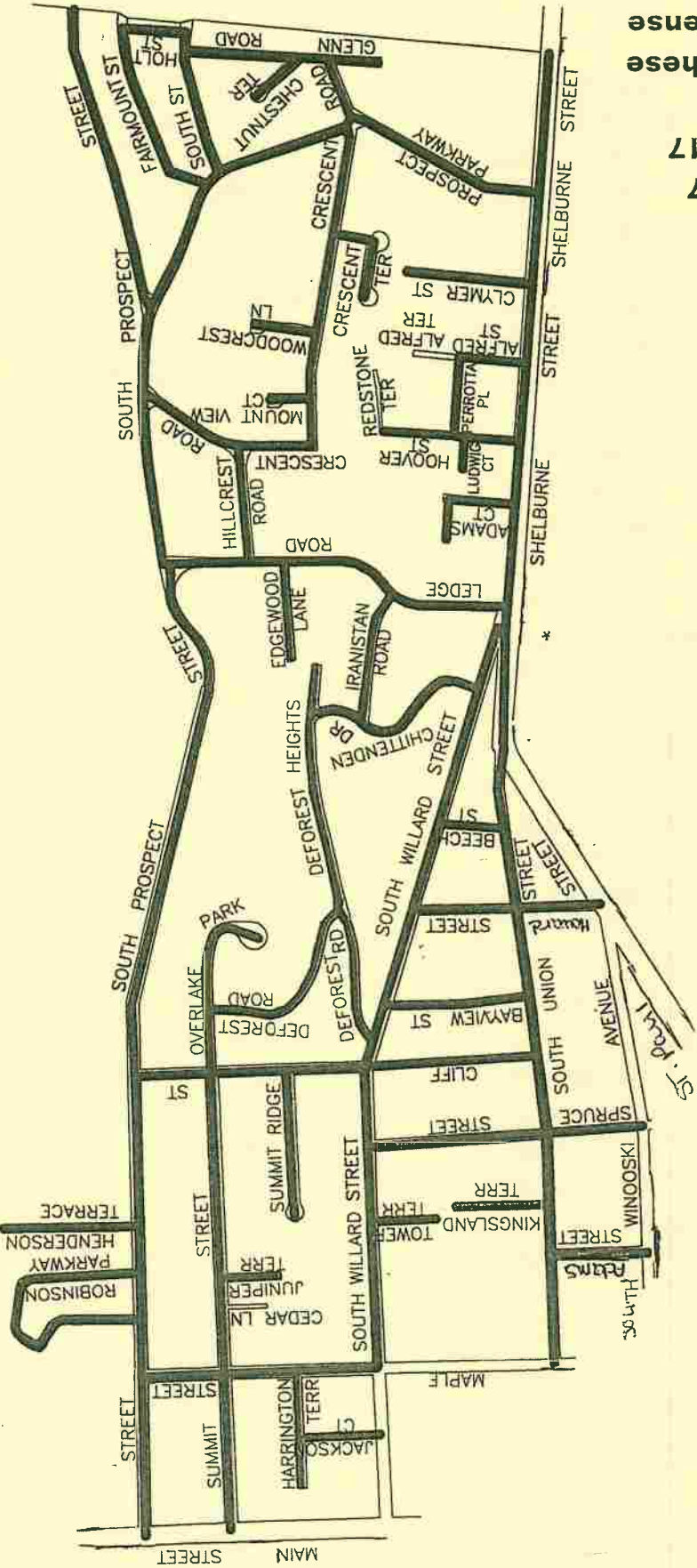
**Any Questions? Please call 658-7669 or 863-9094 x 3 or visit our website at
www.burlingtonvt.gov/dpw (See reverse side for a list of streets to be swept)**

Street	From	To
Allen Street	Elmwood Ave	Murray Street
Archibald Street	North Willard Street	Spring Street
Berry Street	North Ave	Lakeview Terr
Blodgett Street	Ward Street	North Street
Booth Street	North Street	Loomis Street
Bright Street	Riverside Ave	Archibald Street
Canfield Street	North Ave	Lakeview Terr
Cedar Street	Elmwood Ave	North Champlain Street
Charles Street	North Willard Street	Russell Street
Cloarec Court	Intervale Ave	End of Street
Convent Sq.	North Ave	Washington Street
Converse Court	Hickok Place	End of Street
Crombie Street	North Winooski Ave	Intervale Ave
Crowley Street	North Ave	End of Street
Decatur Street	North Winooski Ave	Intervale Ave
Depot Street	Parking Lot	Lake Street
Drew Street	Ward Street	North Street
Elmwood Ave	Spring Street	Grant Street
Front Street	North Street	End of Street
Green Street	Loomis Street	Pearl Street
Haswell Street	North Ave	Lakeview Terr
Hickok Place	North Union Street	Isham Street
Intervale Ave	North Street	Manhattan Drive
Isham Street	Loomis Street	Hickok Place
Lafountain Street	Manhattan Drive	North Street
Lake Street	Depot Street	To Stop Sign
Lakeview Terr	Berry Street	Burlington College Parking Lot
Loomis Street	North Union Street	North Willard Street
Luck Street	Intervale Ave	St Louis Street
Manhattan Drive	Washington Street	Intervale Ave
Murray Street	North Street	Peru Street
Myrtle Street	North Champlain Street	Park Street
North Ave	Sherman Street	Convent Sq
North Champlain Street	Manhattan Drive	Peru Street
North Street	North Willard Street	North Ave
North Union Street	Pearl Street	North Winooski Ave
North Winooski Ave	Riverside Ave	Grant Street
Oak Street	Manhattan Drive	Intervale Ave
Park Street	Manhattan Drive	Sherman Street
Pitkin Street	Manhattan Drive	North Street
Pomeroy Street	North Willard Street	Hyde Street
Poplar Street	North Champlain Street	Park Street
Riverside Ave	Hyde Street	Intervale Ave
Rose Street	Manhattan Drive	North Street
Russell Street	Charles Street	North Street
School Street	Loomis Street	Hyde Street
Spring Street	Intervale Ave	Manhattan Drive
St Louis Street	Manhattan Drive	Oak Street
St Louis Street	Willow Street	Archibald Street
St Mary Street	Willow Street	Manhattan Drive
Strong Street	Pitkin Street	North Ave
Summer Street	Front Street	Park Street
Sunset Court	North Ave	End of Street
Voltz Street	Manhattan Drive	End of Street
Walnut Street	Manhattan Drive	Spring Street
Ward Street	Manhattan Drive	North Ave
Washington Street	Manhattan Drive	North Ave
Willow Street	Walnut Street	Intervale Ave

Zone- G



STREET SWEEPING ZONE D



***ONLY STREETS THAT ARE
HIGHLIGHTED WILL BE SWEEP
(SEE BACK FOR STREET LISTING)
**PLEASE MOVE ALL BASKETBALL
HOOPS OFF THE SIDE OF THE
ROAD FOR SWEEPING****

CLEAN SWEEP

**is coming to The Hill Section!
*Is that your neighborhood?***

**From 10:00 PM, Tuesday, May 2, 2017
until 7:00 AM, Wednesday, May 3, 2017
cars must be off all HIGHLIGHTED
streets on this map. Any car not off these
streets will be towed At owner's expense
(\$125). Parking ban lights will be on.**

**Free parking will be available at the following city lots from 10:00 PM, May 2,
2017 till 8:00AM, May 3, 2017: Cherry Street Garage (45 Cherry St), College
Street Garage (60 College St), Marketplace Garage (Entrances on Cherry &
Bank St).**

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sweeping the streets of your neighborhood!**

**Any Questions? Please call 658-7669 or 863-9094 x3 or visit our website at
www.burlingtonvt.gov/dpw (See reverse side for a list of streets to be swept)**

Street	From	To
Adams Court	Shelburne St	End of Street
Adams St	South Winooksi Ave	South Union St
Alfred Street	Shelburne St	Perotta Place
Bayview Street	South Union Street	South Willard Street
Beech Street	South Union Street	South Willard Street
Chestnut Terrace	Glenn Rd	End of Street
Chittenden Dr	South Willard Street	Deforest Heights
Cliff Street	South Union Street	South Prospect Street
Clymer Street	Shelburne St	End of Street
Crescent Rd	Glenn Rd	South Prospect Street
Crescent Terrace	Crescent Rd	End of Street
Deforest Heights	Deforest Rd	End of Street
Deforest Road	South Willard Street	Overlake Pkwy
Edgewood Lane	Ledge Rd	End of Street
Fairmount Street	Prospect Pkwy	Rice High School
Glenn Rd	South Street	End of Street
Harrington Terrace	Maple Street	End of Street
Henderson Terrace	South Prospect Street	End of Street
Hillcrest Rd	Crescent Rd	Ledge Rd
Holt Street	Fairmount Street	South Street
Hoover Street	Shelburne Rd	Redstone Terr
Howard Street	South Winooksi Ave	South Willard Street
Iranistan Rd	Ledge Rd	Chittenden Dr
Jackson Court	South Willard Street	Harrington Terr
Juniper Terr	Summit Street	End of Street
Kingsland Terr	South Union Street	End of Street
Ledge Rd	Shelburne St	South Prospect Street
Ludwig Court	Hoover Street	End of Street
Maple Street	South Willard Street	South Prospect Street
Mount View Court	Crescent Rd	End of Street
Overlake Park	Cliff Street	End of Street
Perotta Place	Hoover Street	Alfred Street
Prospect Parkway	Shelburne St	South Prospect Street
Robinson Parkway	South Prospect Street	South Prospect Street
Shelburne St	East Side Only	
South Prospect Street	Main Street	End of Street by Rice
South Street	Prospects Pkwy	Holt Street
South Union Street	Shelburne St	Maple Street
South Willard Street	Shelburne St	Maple Street
Spruce Street	South Winooksi Ave	South Willard St.
Summit Ridge	Cliff Street	End of Street
Summit Street	Main Street	Overlake Park
Tower Terrace	South Willard St	End of Street
Woodcrest Lane	Crescent Rd	End of Street

Zone- D

From 10:00 PM, **Wednesday**, May 3, 2017 until 7:00 AM, **Thursday**, May 4, 2017 cars must be off all **HIGHLIGHTED** streets on this map:

intervalele

The map displays the following streets and landmarks:

- Streets:** University Avenue, Main Street, Prospect Street, South Williams Street, North Williams Street, Brookside Avenue, Loomis Street, Henry Street, North Prospect Street, Archibald Street, Hyde Avenue, Riverside Avenue, Hillside Avenue, Mansfield Avenue, Fletcher Avenue, East Avenue, University Road, University Parkway, University Court, University Terrace, University Place, University South, University North, University West, University East, University North West, University South West, University North East, University South East.
- Landmarks:** University Heights High School, University Heights Community Center, University Heights Park, University Heights Cemetery, University Heights Church, University Heights Synagogue, University Heights Mosque, University Heights Temple, University Heights Islamic Center, University Heights Hindu Temple, University Heights Buddhist Temple, University Heights Jain Temple, University Heights Sikh Temple, University Heights Baha'i Temple, University Heights Zoroastrian Temple, University Heights Jewish Synagogue, University Heights Christian Church, University Heights Muslim Mosque, University Heights Hindu Temple, University Heights Buddhist Temple, University Heights Jain Temple, University Heights Sikh Temple, University Heights Baha'i Temple, University Heights Zoroastrian Temple.

At owner's expense (\$125). Parking ban lights will be on.

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sweeping the streets of your neighborhood!

Any Questions? Please call 658-7669 or 863-9094 x3 or visit our website at www.burlingtonvt.gov/dpw (See reverse side for a list of streets to be swept) ****PLEASE MOVE ALL BASKETBALL HOOPS OFF THE SIDE OF THE ROAD FOR SWEEPING****

FOR SWEEPING**

Street	From	To
Adsit Ct.	North Willard Street	End of Street
Archibald Street	North Willard Street	North Prospect Street
Barrett Street	Colchester Ave	Chase Street
Bilodeau Court	East Ave	End of Street
Bilodeau Pkwy	Bilodeau Ct	End of Street
Brookes Ave	North Willard Street	North Prospect Street
Case Pkwy	East Ave	End of Street
Chase Street	Colchester Ave	End of Street
Colchester Ave	North/South Prospect Street	Winooski Bridge
College Street	South Willard Street	South Prospect Street
Colonial Sq	North Prospect Street	North Prospect Street
East Ave	Main Street	Colchester Ave
Fletcher Place	Colchester Ave	End of Street
Germain Street	Pomeroy	Archibald Street
Grove Street	Chase Street	City Line
Henry Street	North Willard Street	North Prospect Street
Highgrove Court	North Street	End of Street
Hildred Drive	Hillside Terr	Hillside Terr
Hillside Terr	Riverside Ave	Riverside Ave
Hyde Street	North Willard St	Riverside Ave
Intervale Rd	Riverside Ave	End of Pavement
Latham Court	Colchester Ave	End of Street
Loomis Street	North Willard Street	Mansfield Ave
Main Street	South Willard Street	Jug Handle
Mansfield Ave	Colchester Ave	North Street
Mill Street	Colchester Ave	Pump Station
Nash Place	Colchester Ave	End of Street
North Prospect St	Pearl Street	Riverside Ave
North Street	North Willard Street	Mansfield Ave
North Willard St	Pearl Street	Hyde Street
North Williams St	Pearl Street	Brookes Ave.
Pearl Street	South Willard Street	South Prospect Street
Pomeroy Street	North Willard Street	Colonial Sq
Prospect Hill	North Prospect Street	End of Street
Riverside Ave	Hyde Street	Winooski Bridge
South Prospect St	Main Street	Pearl Street
South Williams St	Main Street	Pearl Street
Thibault Pkwy	Colchester Ave	End of Street
University Place	Main Street	Colchester Ave
University Terr	Main Street	End of Street
Weston Street	Loomis Street	Henry Street
Wilson Street	North Prospect Street	Mansfield Ave

Zone-E

Street	From	To
Alder Lane	Birchcliff Pkwy	Cherry Lane
Arthur Court	Queen City Park Road	End of Street
Austin Drive	Industrial Pkwy	South Cove Drive
Batchelder	Morse Place	Home Ave
Birchcliff Pkwy	Shelburne Street	Pine Street
Bittersweet Lane	Birchcliff Pkwy	Cherry Lane
Briggs Street	Flynn Ave	Morse Place
Caroline Street	Howard Street	Locust Street
Catherine Street	St Paul Street	Locust Terr
Central Ave	Lakeside Ave	End of Street
Charlotte Street	Catherine Street	Locust Street
Cherry Lane	Birchcliff Pkwy	Linden Terr
Conger Ave	Lakeside Ave	Harrison Ave
Dunder Road	Austin Drive	End of Street
Eastman Way	South Cove	End of the Street
Elm Terr	South Winooksi Ave	End of Street
Ferguson Ave	Shelburne Street	Briggs Street
Flynn Ave	Shelburne Street	Oakledge Park Gate
Foster Street	Flynn Ave	Home Ave
Golden Place	Howard Street	End of Street
Gove Court	Shelburne Street	End of Street
Harrison Ave	Proctor Ave	End of Street
Hayward Street	Marble Ave	Catherine Street
Home Ave	Shelburne Street	Industrial Pkwy
Howard Street	St Paul Street	Pine Street
Industrial Pkwy	Home Ave	Queen City Park Road
Lakeside Ave	Pine Street	Central Ave
Ledgemere Street	Margaret Street	End of Street
Linden Terr	Birchcliff Pkwy	Cherry Lane
Locust Street	Shelburne Road	Pine Street
Locust Terr	Catherine Street	Locust Street
Lyman Ave	Shelburne Street	Briggs Street
Marble Ave	St Paul Street	Pine Street
Margaret Street	Ledgemere Street	Caroline Street
Marian Street	Shelburne Street	Ledgemere Street
Morse Place	Richardson Street	Briggs Street
Oak Beach Drive (Not Including the Loop)	Flynn Ave	Austin Drive
Pine Place	Pine Street	End of Pavement
Pine Street	Kilburn	Queen City Park Road
Proctor Ave	Wright Ave	Harrison Ave
Queen City Park Road	Shelburne Road	Industrial Pkwy
Richardson Street	Flynn Ave	Home Ave
Scarff Ave	Shelburne Street	Richardson Street
Sears Lane	Pine Street	End of Street
Shelburne St	St. Paul Street	Queen City Park Road
South Cove Road	Austin Drive	Austin Drive
South Crest Drive	Home Ave	Pine Street
Southwind Drive	Oak Beach Drive	Oak Beach Drive
South Winooksi Ave	Adams St	St Paul St
Spruce Ct	Spruce St	End of Street
Spruce St	St Paul St	South Winooksi Ave
St. Paul Street	Kilburn	Shelburne Street
Wells Street	Flynn Ave	Home Ave
Wright Ave	Conger Ave	End of Street

Assessment of the Development Process

BURLINGTON, VERMONT

February 10, 2017



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1. INTRODUCTION AND EXECUTIVE SUMMARY

This initial chapter of the report introduces the approaches utilized in this study and provides an executive summary of key findings, conclusions and recommendations to be found in this report.

1. INTRODUCTION

The Matrix Consulting Group was hired to conduct an evaluation of the development permitting process for the City of Burlington, Vermont. This study focused on plan review, permitting, and inspections activities in the City's Planning and Zoning Department, Public Works Department (primarily the Inspection Services division), and Code Enforcement. The purpose of the study was to assess the process for obtaining approvals in the development and construction permitting review process. Concerns had been raised by Burlington residents and industry professionals that the approval process was complicated, inefficient, expensive (for selected permit types) and lengthy.

Mayor Weinberger identified improving the permitting experience for homeowners and encouraging solar installations as key priorities in his campaign. The Administration has taken a number of steps to improve the permitting process, included hiring a new building inspector, exploring implementation of Form Based Code, and taking steps to streamline solar and hot water energy installations, as well as initiating this review. Specifically, in September of 2014, a Council resolution requested that the Mayor "develop a plan to reform our permit system 'from soup to nuts' to make it more fair, efficient and more predictable with a goal of eliminating duplication and combining offices into a 'one stop shop'".

The key focus areas of the study included:

- Identifying public perceptions and expectations,
- Revising the permitting process to address identified issues,
- Ensuring codes and standards are appropriate and reflect the goals of the City, and
- Streamlining the process for solar permitting to enable SolSmart certification.

In addressing these areas, the goals of this study were to improve the permitting process to:

- Provide consistency, efficiency, transparency, and predictability,
- Ensure public health and safety,
- Support energy efficiency, and
- Encourage investment and reinvestment.

Based on this assessment, a set of recommendations were developed for changes in technology, staffing and organizational structure, and processes aimed at improving operations while ensuring that the City's objectives of safe, code compliant, and appropriate development are not compromised.

A separate assessment is being prepared by another consulting firm to look at specific issues related to historic preservation. Historic preservation issues are only addressed in this report to the extent that they relate directly to the permitting process.

2. STUDY METHODOLOGY

As part of this study the consultant conducted the following activities:

- Conducted detailed interviews with staff in Planning and Zoning, Public Works, Fire, Code and Burlington Electric who are directly involved in the permitting process.
- Collected and analyzed data and sample reports regarding the services provided, the volume of work staff has to manage, and the time frames in which the work is completed;

- Conducted a stakeholder survey to collect input from the public regarding their experiences with the permitting process.
- Held a series of stakeholder workshops and public meetings to obtain direct input from various applicant groups regarding the strengths and weaknesses of the permitting process. Stakeholders included both homeowners, and professionals (architects, real estate developers, contractors, etc.) who has been involved in the development review and permitting activities with the City in recent years.
- Completed a best practices comparison that gauged the current practices in the department against a set of “best management practices.” The results of this assessment are attached as an appendix to this report.

These process components provided an in-depth understanding of the City’s permitting operations and served as the foundation for conducting an analysis of the improvement opportunities for the City of Burlington.

3. KEY STRENGTHS

Several aspects of the City’s permitting operations are exemplary. Examples include:

- The public is provided with numerous opportunities to learn about the requirements of the permitting process through available online materials.
- The City web site has extensive information on the permitting process, in particular the steps required to obtain planning approvals. Extensive handouts are available in Planning to provide additional information on those processes. Inspection Services also makes materials available to the public.
- Burlington employees are generally available on a walk-in basis to provide feedback and information to members of the public.
- Many building permits are issued same-day, and few require revisions and resubmissions by applicants. Trades staff assist applicants, many with little experience in the trades, with understanding the code requirements and achieving approval.
- The City makes available online copies of the City’s regulations, codes, and ordinances that impact the development review or permitting functions.
- The trades inspection program provides hard copy reference codes available to

the public at the Library and the City Clerk's Office.

- Informal pre-application meetings with planning staff are encouraged for applicants to discuss their project and gain input from staff.
- The City of Burlington schedules all building trades inspections for a specific time. This is a higher level of service than most communities provide.

These existing strengths provide a foundation for increasingly sound operational practices and future efficiency improvements in the City's development review and inspection processes in particular and the provision of all services in general.

4. KEY THEMES

The overall findings of this assessment can be summarized by the following key themes that emerged from the evaluation:

- **Service levels are generally acceptable** with review times and quality of reviews conducted in alignment with comparable communities. However, there are several notable areas where improvement opportunities exist to streamline efforts and increase customer service including: increasing the use of administrative approvals on planning applications; reducing timeframes from trades inspection request to inspection completion, and reducing the number of permits required.
- **Technology utilization** is not currently meeting the needs of either staff or customers. The existing permitting system lacks many of the functionalities typical in high-performing permitting operations of comparable communities. Expected functionalities that should be available including online permitting, online payments, online permit status inquiries, inspection requests and scheduling, and electronic plan review capabilities. Until recently there have been limited resources (both staff and financial) allocated; there, the existing system has not been appropriately maintained and upgraded to remain current and meet the City's needs. Additionally, the current system or a new system will need new business processes workflows implemented to address new processes outlined in the report.
- **While improvements in inter-departmental cooperation have been made** there remains opportunities to improve in this area by having a centralized one-stop approach to permitting with a single department and/or person responsible for the majority of permitting activities.
- **Staffing levels** are not the most critical issue facing the City. However, some additional staff and changes to existing staffing are recommended to enhance

service levels and ensure an appropriate technical service level to customers where warranted. These positions include a permit technician, planning technician, and planning reviewer / inspector.

- **Communication, training and educational materials** should be enhanced to provide greater information to applicants and the development community regarding application requirements, processing times, and project status. Additionally, the City should focus on providing training opportunities to staff and volunteer boards to increase the effectiveness of processing applications / permits.
- **Current resources are insufficient to implement all recommendations in a timely manner.** In the short-term, there will be a need for additional resources to implement many of the recommendations outlined. This could be accomplished either through contracted services or short-term employees. These resources are most critical for development and update of new public education forms and documents, and the implementation of the new permitting system.
- **A greater focus on customer service should be a City priority.** Processes, technology, and service delivery should be viewed from the impact on applicants rather than the impact on staff to ensure improvements are made that provide a timely, predictable, and consistent outcome for applicants.

The following section summarizes the key recommendations made in these key thematic areas. These should be viewed as approaches to enhance the current level of service, enable the City of Burlington to build upon the strong foundation in place and the progress that has been made in the last year or so, and continue to move forward towards a best in class approach to development review and permitting activities.

5. SUMMARY OF RECOMMENDATIONS.

The following table summarizes the key recommendations contained within the report. These are grouped by the following key areas: Organization and Staffing, Service / Process Improvements, Technology Utilization, and Customer Service. A detailed listing of each specific recommendation is contained within Appendix A at the end of this report. This detailed listing also includes additional information regarding priority and costs associated with specific recommendations.

Focus Area	Key Recommendations
Organization and Staffing	A centralized one-stop permitting department should be established at a single city facility. (1, 2, 3)
	An ICC-certified Permit Technician should staff the permitting counter. (4)
	One administrative position in Planning should be converted to a Planning Technician position. (5)
	Add a position within Planning to enable all Planning and Zoning inspections to be conducted by planning staff rather than Code Enforcement staff. (19, 20)
	Implement additional inspection resources if workload prevents achieving adopted inspection standard. (25)
Service / Process Improvements	Monthly performance reports tracking permitting activities; including timeframes for processing, timeframes for inspections and associated workloads should be developed. (6, 7)
	Eliminate the non-applicability zoning determination process. (11)
	Consider implementation of new codes: the IRC to provide clarity of requirements related to single family residential construction and the Existing Building Codes to provide greater flexibility on review of projects of existing buildings; and periodically review all development codes to maintain them up to date. (53, 29)
	Revise the Planning Review process to increase administrative approvals and enhance the functioning of the Technical Review Committee. (12, 13)
	The City should adopt objective development standards that delineate by-right approvals and utilize the DAB and DRB process only for discretionary approvals. (14)
	Reduce the number of permits required for a single project by eliminating duplicative permits. (15)
	Issue more basic trade permits over the counter. (16)
	Revise the Unified Certificate of Occupancy process. (17, 18)
	Continue the city's efforts to close old outstanding permits and be more proactive in monitoring permit status. (21, 22)
	Adopt a defined inspection standard and automate inspection requests and scheduling. (23, 24)
	Implement expedited permitting process for projects that meet designated City priorities. (38)
	Provide education materials and incentivize universal design. (31, 32)
Customer Service and Training	Additional staff training should be provided to ensure a consistent and customer-focused service approach by all permitting staff. (8, 9)
	Develop additional informational materials, including a development guide, to educate applicants on the process and development / permitting requirements and interpretation documents (10, 34, 35, 36, 37)
	Conduct an annual customer satisfaction survey. (33)
Technology Utilization	Develop an RFP for a replacement permitting system. (39, 40)
	Implement new functionality within the permitting software including: online portal for applications and payments, inspection scheduling, online permit status checking, etc. (26)
	Implement tablet or laptop use for all field inspectors. (27)
	Explore options to increase accuracy of GIS data. (41)

Focus Area	Key Recommendations
Fee Related	Ensure fees are established at a level sufficient to provide necessary revenue stream for needed technology and software. (28, 42, 50)

This table summarizes the major recommendations contained within the report and represent tangible ways for the City to address the key concerns and issues identified during the study. Each of these recommendations are explained in greater detail in the following chapters and a comprehensive listing of each recommendation is provided in Appendix A. Additionally, Appendix B sorts the recommendations in order of priority.

2. ANALYSIS OF MANAGEMENT AND REPORTING

This chapter provides an evaluation of the oversight, management and organization of the permitting process with key recommendations for improvement.

1. THE CITY SHOULD IMPLEMENT A CENTRALIZED DEVELOPMENT REVIEW AND PERMITTING OPERATION.

Burlington's permitting departments and divisions act very much as stand-alone entities located within three separate City departments (Planning, DPW, and Code Enforcement) spread over two different locations (City Hall and Pine Street). This is a function of the City's historic organizational structure, as well as the varying responsibilities and requirements being undertaken within each permitting entity. However, no one unit or individual is accountable for the permitting process as a whole which can make streamlining and higher levels of coordination and collaboration more challenging. Over the last several years, the City has begun to address this through the use of a coordinating committee that meets monthly to focus on the permitting process and efforts. This has resulted in greater communication across departments, increased understanding of the role of each department, and created a culture of commitment to continued improvement with a focus on the overall permitting process, and the impact on customers, rather than individual departments.

In interviews, focus groups, and survey responses, consultants were given dozens of examples describing situations that required permit applicants to shuttle between departments, located in two buildings approximately a mile apart, to obtain signatures, sign documents, pick up permits, make payments, and get questions answered. An issue referenced by some participants was that permit approvals would get held up or delayed

when there were conflicts between the requirements of two different departments. In a few of these cases, city staff did not, or felt they could not, take responsibility for addressing the conflicting requirements and even minor projects could have delays as homeowners, contractors, or builders tried to work out an arrangement that met the requirements of all City departments. Changes to processes and physical structure must be implemented to better enable staff to resolve these conflicts in a timelier manner to eliminate the negative impact on applicants.

In an on-line survey of permitting customers, almost 80% of applicants disagreed with the statement that “Departments do a good job coordinating with each other throughout the process.” Despite the recent efforts of City staff to increase coordination and communication across departmental boundaries, clearly the perception remains from the public that there is room for continued improvement.

While there is benefit to maintaining clear roles regarding subject area (zoning requirements, structural code issues, fire code issues, stormwater standards), high performing permitting organizations strive to act as one city and one organization in terms of process and customer interaction making any internal divisions transparent to the customer. In addition, where conflicts occur between departments, it should be city staff, not the applicant, who work to resolve the internal disagreement on an issue.

Many recommendations provided throughout this report, in particular process changes and more comprehensive public materials, should contribute to a more coherent permitting process. However, these are necessary but not sufficient to address the segmented permitting process currently in place on their own. Ultimately, it will be necessary for the city to create a more centralized permitting function within City

government in order to make the significant and long-lasting improvements to the permitting process that the City desires to achieve.

While there is no one right organizational structure for a city in terms of permitting, cities with fractured processes can greatly benefit from centralization of services. The consultants recommend that the city begin to explore options to create a centralized permitting and development review department, to include, at a minimum, planning and zoning, building permits, and code enforcement. This department would also be expected to coordinate closely with those employees responsible for engineering, fire, stormwater management, right of way, and electric who can still be located within different organizational units.

The establishment of a centralized permitting department may require ordinance changes (and Charter changes related to the Planning and Zoning Department) and would also require re-writing of job descriptions, organizational charts, and re-design of the city's web site and public materials. Given the complexity of this process, the re-organization should be considered a medium to longer term goal. However, this should not prevent the City from moving forward with many of the other recommended changes outlined in the report that will provide an important first step toward improving services overall.

As a best practice, the City should implement an on-going process of routinely reviewing and updating codes and ordinances to keep them current and prevent outdated requirements from remaining on the books. This is an issue that the City has already identified as an important one to address moving forward, and has begun efforts to do so with the current updating of the zoning ordinance a notable example.

Because organizational change cannot be implemented immediately, the City should put in place interim mechanisms to create greater oversight and accountability for the permitting process. This should include an inter-departmental managerial committee, responsible for:

- Implementation of the recommendations in this report related to process, technology, management, customer education, and reporting.
- Tracking and reporting on performance for the overall permitting process.
- Addressing and resolving issues caused by code conflicts between departments.
- Assisting the city in speaking with one voice.

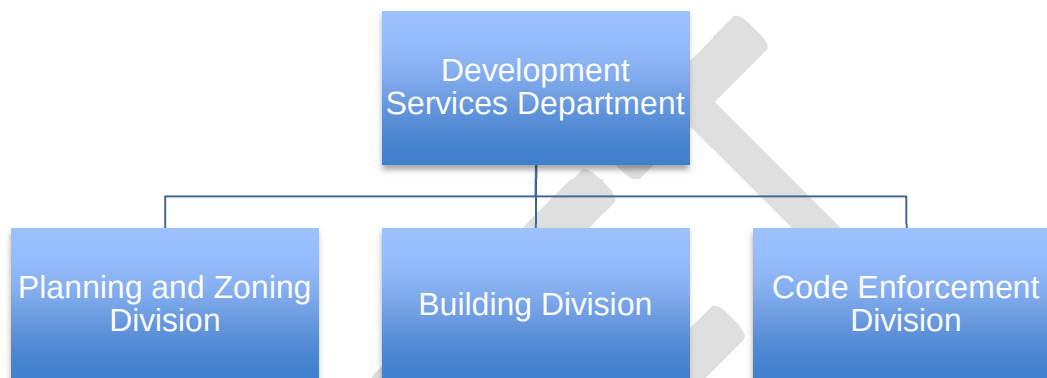
A coordinating Permitting Oversight Committee, consisting of the Planning Director, Inspection Services Official, Director of Code Enforcement, Water Director, Electric Director and Fire Marshall, as well as the Chief Innovation Officer and the City Attorney's Office should be continued for the ongoing oversight of the implementation efforts. One individual should be designated as the coordinating position for this committee for scheduling meetings, developing agendas, and reporting on progress to the Mayor. This committee should function at least through the implementation of the technology solution. The CAO's Office (Finance) and the Mayor's Office (Accountability and Leadership) should be kept updated, and included in decisions and planning as necessary.

In developing a plan for the consolidation of permitting activities, the City should consider a common approach utilized elsewhere— a combined Development Services Department that includes all planning, building, code enforcement, and inspection functions. Fire and Utilities activities related to permitting would remain within their respective departments. This Department should be led by a Director responsible for the

majority of the permitting activities and serve as the primary coordinating entity.

The following functional organizational chart provides a sample organizational structure that would accomplish this.

Proposed Organizational Structure



Even under the current structure, where Planning is not under the Mayor's direct oversight, this approach could be utilized with an informal reporting relationship of Planning to the Development Services Department by having the Development Services Director responsible for setting performance levels, driving implementation of the recommended changes, and resolving process issues.

Recommendation #1: Continue a dedicated Permitting Oversight Committee consisting of the City Attorney's Office, Planning Director, Inspection Services Official, Director of Code Enforcement, Water Director, Electric Director, Fire Marshal, and CIO to oversee implementation of permitting improvements and oversee the permitting process as a whole. The Committee should engage the CAO's office as appropriate. The Committee should report to the Mayor's Office and be accountable for a clear work-plan with specific deadlines and deliverables.

Recommendation #2: Develop a plan for creation of a single Permitting and Land Use department, to encompass Planning and Zoning and Inspection Services. The urgency of this organizational change would depend somewhat on whether the Permitting Oversight Committee is successful in addressing current issues without an organizational change.

Recommendation #53: The City should implement an on-going process of routinely reviewing and updating codes and ordinances to keep them current and prevent outdated requirements from remaining on the books

2. A CENTRALIZED PERMITTING 'ONE STOP SHOP' SHOULD BE ESTABLISHED.

A consistent concern brought up in focus groups, surveys, and meetings with staff was the fact that Planning and Zoning and Inspection Services are in separate buildings and different locations throughout the City. This situation forces permit applicants to travel between (and find parking at) two different locations and inhibits effective communication and coordination between staff. In responding to survey questions about making changes to the permitting process, the desire for a single permitting office was essentially universal:

How helpful would the following changes be to making the permitting process more efficient?	Helpful / Very Helpful	Not Helpful / Very Unhelpful
Co-locate departments or review agencies at a single location	99 %	1 %

Creating the central permitting center would provide an opportunity to consolidate public information, administrative staff, and subject matter experts in a way that can create a “one stop shop” for permit applicants that is focused on providing a high level of coordinated service.

An additional benefit of a permit center is to facilitate greater communication and coordination among different review disciplines (for example, Inspection Services, Fire and Zoning). The location, layout, processes, and customer service standards in the permit center and throughout the permitting function should be focused on promoting collaboration and problem solving.

Best practices elements of a permit center would include the following:

- A single location to access staff and literature so that applicants can get

information, forms to fill out, checklists, and access other materials on a self-service basis.

- A “self-help” kiosk with access to land use information (GIS) so that customers can look up zoning, historic data, and other information. When the city’s on-line services are expanded to include on-line permit applications this should also be available at the kiosk.
- Staffing a cross-trained permit technician who could answer basic questions, take in applications, and provide information regarding the status of a project.
- Utilizing a planning tech to staff the planning counter rather than an administrative professional position.
- Access, if needed, to a planner, building inspector, or other subject matter expert.

Customers appreciate co-location of functions, but will still become frustrated if they need to speak to many different people or if information given is inconsistent or conflicting from staff member to staff member. Where possible, employees should be cross-trained to provide a broad range of information and services, so that “one stop” is not just one building, but as few lines/individuals as possible.

The permit counter for Inspection Services should be staffed by an International Code Council (ICC) certified Permit Tech (a proposed new position, recommendation 4), who could answer process questions and take on some basic functions currently performed by the inspectors. This position would also be responsible for handling routine zoning reviews and outlining permitted versus discretionary activities related to applications. The existing customer service staff at DPW who interact with the public on development review functions, as an ancillary duty, would longer be responsible for these duties and would continue to perform their primary duties related to DPW customer service.

Similarly, the planning counter should be staffed by a Planning Technician. This is

a semi-professional position that has more technical knowledge and authority than the current administrative positions, but not at the same level as a Planner. This position should be responsible for the majority of intake and answering of general questions regarding the planning approval process.

With these changes, the permitting counter would be staffed with one building permit technician and one planning technician who are responsible for all intake, customer service, and scheduling activities. They would handle issuance of approvals and permits (on behalf of and under the direction of inspectors and planners). Given overall space constraints at most City facilities, the City will need to evaluate – perhaps as part of a larger discussion on space allocation - where an appropriate location would be for the consolidated permitting function.

The building Permit Tech and the Planning and Zoning administrative staff (currently a clerk and an administrative assistant) should be cross trained as much as possible so that they can provide back-up to each other and provide as broad an array of services as possible to walk in and telephone customers.

Staff who spend the majority of their time reviewing plans or answering telephones should be located in a quiet place away from the public. However, they should be accessible to staff in the permit center to answer questions, resolve issues, and provide backup support.

Recommendation #3: Create a centralized Permitting Center where all staff whose primary function involves Permitting and Land Use are located. Include desks and office hours for other employees. Implement office hours at the center for all staff involved in review of plans or permitting activities.

Recommendation #4: Add a Permit Technician to staff the Inspection Services counter in the permit center.

Recommendation #5: Convert one of the administrative positions within Planning and Zoning to a Planning Technician position.

3. THE CITY SHOULD DEVELOP AND PUBLISH CLEAR REPORTS TO TRACK WORKLOAD, TURNAROUND TIMES, AND INSPECTION LEAD TIMES FOR ALL DISCIPLINES.

Burlington's software system collects most of the data needed to track workload and turnaround times; however, this information is not typically used to generate management reports or to communicate with the public.

A review of data provided by the city showed that turnaround times for Planning and Zoning permits are generally within acceptable norms, in particular for administrative review.

Burlington Zoning Permits Workload and Turnaround Times	Number Issued (2013-2015)	Average Days (intake to issuance)
Administrative Review (30 days permitted by state statute)		
Awning(s)	24	9
Basic	254	13
Certificate of Appropriateness	1,936	14
Fence	167	10
Lot Line Adjustment	26	45
Non-Applicability	1,243	3
Sign(s)	195	12
DRB Review		
Appeal of Enforcement Decision	10	107
Certificate of Appropriateness	62	94
Certificate of Appropriateness and Conditional Use	46	90
Certificate of Appropriateness and Home Occupation	4	70
Certificate of Appropriateness/Unknown Work Code	1	44
Conditional Use	30	57
Home Occupation	11	41
Lot Line Adjustment Final Plat	2	89
Master Sign Plan	3	30
Planned Unit Development Final Plat	5	57
Planned Unit Development Preliminary and Final Plat	1	28
Planned Unit Development Preliminary Plat	6	92
Sketch Plan Review	24	36
Subdivision Final Plat	1	43
Subdivision Preliminary and Final Plat	9	73
Variance	5	46

Building permits are typically issued the day of application, a very high level of

performance compared to other communities.

While current timeline performance is generally within acceptable levels, the City should systematically produce reports on work-loads and time-lines so that it can identify major trends and take action, if needed, when turnaround / processing times reach an unacceptable level (i.e. – beyond the adopted City standards for plan review and inspection timeframes).

In many cases performance is at an acceptable level; however additional improvement opportunities exist to enhance service. Some important performance metrics are not tracked. In particular, the City does not analyze building trade inspection volumes and the time-frame from inspection requests to actual inspection (by inspection type), and building permit issuance to CO sign-off. Additionally, the City should track the number of failed inspections to identify reasons for failure. This information can be utilized to determine if additional educational materials would be beneficial for applicants to clearly delineate requirements prior to requesting an inspection.

The following is a recommended approach to developing a performance report on the completion of building inspections.

Recommended Report – Building Permits

PERMIT INSPECTIONS				
Month:				
	Total inspections requested	% Next Day	% Next 2 Days	% more than 2 days
Building				
Fire				
Electrical				
Plumbing				
Mechanical				

Recommendation #6: The City should track workload and review times for planning and building permits in greater detail and prepare monthly performance reports, which should be shared with the public and used by managers to make

decisions regarding resource deployment and workload management.

Recommendation #7: The Department should develop more detailed monitoring reports on building permit inspection volumes and scheduling, implement the tracking of those measures in the permitting software, and use this to monitor and address delays.

4. A GREATER FOCUS SHOULD BE PLACED ON CUSTOMER SERVICE AND PROBLEM SOLVING, IN ADDITION TO TECHNICAL ABILITY.

Staff involved in permitting and inspections demonstrated pride in their work. The City of Burlington places a heavy emphasis on ensuring that development is safe, environmentally sensitive, and in keeping with the City's character and long term planning goals. While issues related to development in Burlington tend to be somewhat more complex than other communities due to the very high level of public input / involvement on individual projects, the city received generally good marks for the outcomes of the permitting process.

	Strongly Agree	Agree	Disagree	Strongly Disagree
1. The permitting process is effective at protecting the City's character.	9%	45%	28%	17%
2. The permitting process is effective at protecting public safety.	12%	59%	19%	10%

Interviews, surveys and feedback from stakeholders indicate that there is less emphasis on customer service, problem solving, or providing applicants with a clear path forward for their projects when issues are identified. As described earlier in this report, this is particularly true in those situations where city departments disagree about the appropriate resolution of an issue.

Staff deal with me using a positive approach of "here's how to get your application approved", rather than a punitive approach of "you can't do it that way".	Agree	Disagree
Planning	52 %	48 %
Building (Inspection Services)	48 %	52 %
Inspectors (Building)	52 %	48 %

Stakeholders and community members who participated in stakeholder meetings indicated a mixed perspective on the customer service focus of staff – it was generally viewed as either very good or very poor. The lack of consistency in this area is an important issue to address within the permitting process to provide a consistent level of service.

There are several steps that managers can take to promote a culture of problem solving and facilitation. One key item is to communicate that there need not be a trade-off between acting as a facilitator and maintaining rigorous approval standards. Where possible, staff evaluations should also take into account the ability to demonstrate strong customer service skills. Additionally, the City should consider the implementation of a specific training program, appropriately funded, for all staff involved in the development review and permitting functions, to provide a high level of customer service that is consistently provided by all employees.

Recommendation #8: Department staff should be hired, trained, and rewarded based on a balance of technical and customer service skills. Department managers should model, promote and encourage problem solving and customer service.

Recommendation #9: The City should provide periodic customer service training to all staff involved in the development review and permitting functions to ensure a consistent approach.

5. THE PLANNING AND ZONING DEPARTMENT SHOULD PROVIDE GREATER CONSISTENCY & TRANSPARENCY IN INTERPRETATIONS AND DECISION-MAKING.

Many stakeholders expressed the opinion that planning and zoning interpretations and determinations made by both staff and boards are inconsistent. Some stated that answers to questions varied depending on which planner was involved; others expressed concern that there was inconsistency from project to project.

	Agree	Disagree
Staff are consistent in applying the City's ordinances to my application and plans.	54%	46%
Decisions made by the boards and commissions are consistent from project to project.	20 %	80 %

There is no one change that can address the consistency issue; managers, staff, and board members must enhance their focus on consistency and maintain a strong awareness that consistency in code interpretation and implementation is critical to a fair, predictable permitting process. The City is moving toward the implementation of a form based code. The adoption of this will enhance the ability of the City staff to provide a more consistent review and level of service for reviewed projects.

Planning and zoning staff should develop an interpretation log that records how various provisions of the city's Comprehensive Development Ordinance have been interpreted in cases where the application of certain regulations is not entirely clear; staff should refer to this log when making future determinations. This log should also be used to identify high priority areas for changes in regulations to clarify requirements. Interpretations should be compiled into a document that is posted to the city's website. The interpretations should be developed in a consistent format that provides, at a minimum, the following information:

- Effective date of interpretation.
- Section of the Ordinance referenced.
- Description of the interpretation.
- Legal basis for the interpretation (if applicable).
- Applicability of the interpretation – outline of the circumstances under which the interpretation is applicable and not applicable.

This sharing of information will increase the ability of applicants to prepare submissions that are in line with the policies and procedures being enforced by staff and may eliminate the need for revisions to be made in applications. Only those interpretations that have been fully reviewed and that are intended to be utilized for all future applications should be included.

In addition, Staff reports to the involved Boards should include a discussion of how any issues under consideration have been addressed in the past. In conjunction with a later recommendation, the City should seek to expand the implementation of greater by-right approvals enabling increased staff reviews and limiting the number of discretionary approvals.

Recommendation #10: The City should increase the focus on providing consistent information and feedback to customers, including ensuring that interpretations made by staff and decisions made by boards are consistent over time.

3. ANALYSIS OF BUSINESS PROCESSES AND PRACTICES

This section examines the specific processes used for intake, review, approval, and inspections related to projects and provides recommendations for streamlining the steps involved.

1. PLANNING AND ZONING'S DETERMINATION OF NON-APPLICABILITY PROCESS SHOULD BE ELIMINATED.

The City of Burlington provides an optional process for building permit applicants to obtain, at their discretion, a “determination of non-applicability” from the zoning office for projects that do not require a zoning permit, prior to applying for a building permit. The certificate is obtained for work such as interior remodels and renovations, which do not affect the use, location, or footprint of the building. This process, while optional, once pursued by the applicant subjects the application to the potential for an additional public appeal process that otherwise would not be present.

While the non-applicability process can be relatively brief, it requires any applicant desiring the determination to go to the planning and zoning department for a determination, as well as to post a notice on the property indicating that the applicant is planning to do work and that the zoning office has determined that no zoning permit is required and be subjected to an appeal period prior to being able to receive a building permit. This adds little value to the permitting process and simply represents a bureaucratic step that applicants go through.

Other Vermont communities do not have a similar process – this is unique to the City of Burlington. For example, in Bennington, if there is no required zoning approval, Planning staff are authorized to sign off of the permit application with a NA (not applicable)

designation indicating that no zoning review is needed and the permit application is routed for building review.

In order to maintain the original intent of the non-applicability determination (which was to clearly note which projects do not require zoning approvals), Zoning staff should review the list of items that are currently covered under the non-applicable permit. The list should be updated, if necessary, and officially adopted by ordinance. All staff in Planning and Inspection Services should be jointly trained on the items that do not require zoning review to provide consistent service to the public. Items in this list would include:

- Interior renovations or remodels except where there is a change of use or, for residential buildings, addition of a kitchen.
- Exterior repairs or replacements if the envelope of the building is unchanged, including roofing, windows, siding, steps, porches, etc. (Eligible historic structures would require zoning approval.)
- All electrical, mechanical, plumbing, fire alarm, and fire sprinkler work. (This work typically does not currently require a non-applicability permit but this should be memorialized in code.)

Planning and Zoning staff prepare an SOP and train Inspection Services staff on what permits do and do not require zoning. Inspection Services staff (in particular the permit technician or any other administrative staff working the front counter) should also have access to information to allow them to easily identify whether a structure is historic, so that any exterior changes to a historic structure could be referred to Planning and Zoning.

With the implementation of a new permitting software, the processing of applications should include a notation or sign-off within the system that the permit does not require zoning approval. This notation provides the official documentation that many applicants are seeking without the City having to process a non-applicable determination.

Recommendation #11: Eliminate the “non-applicable” zoning determination process.

2. FOR PLANNING AND ZONING PERMITS, THE REVIEW PROCESS SHOULD INCLUDE A FORMAL FEEDBACK LOOP FOR OTHER DEPARTMENTS.

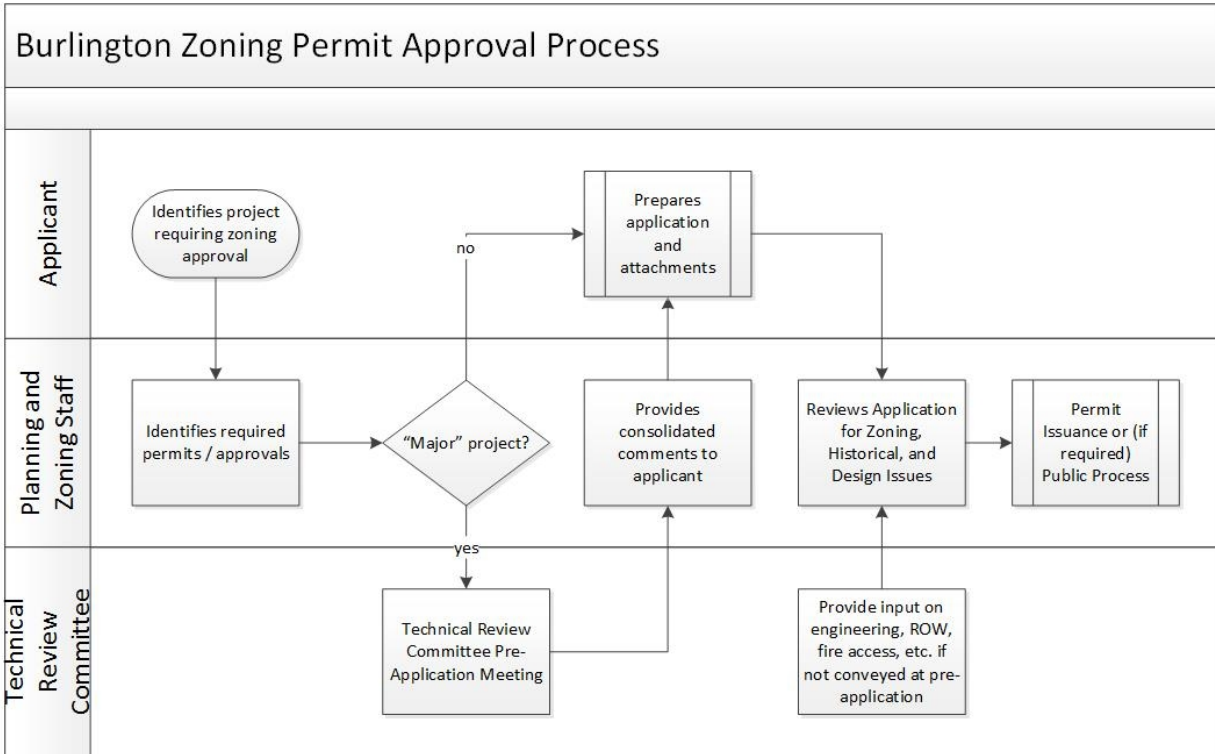
Burlington’s administrative review process for planning permits is very straightforward. The number of administrative reviews, if expanded, could provide a more streamlined review process providing more timely approvals for applicants rather than having to go through the committee review and approval which takes longer than an administrative review.

The following table compares “Best Practices” for planning permits with the process currently in place in Burlington and highlights the change necessary to bring Burlington’s process more in line with best practices.

Step	Best Practices	Burlington
Pre-Application	Pre-application meeting with Planning and other key departments (typically engineering, public works, fire, Inspection Services, parks, and police) to review the project and provide key feedback. Following the meeting a summary of key points and decisions are provided to the applicant in writing.	Currently offers pre-application meeting for any project, but typically required for major projects. Pre-planning TRC meeting with Planning and other key departments (typically engineering, public works, fire, inspection services, parks and police) to review the project and provide key feedback. Following the meeting, a summary of key points and decisions are provided to the applicant in writing.
Intake	Planning staff take in the application, and ensure that it is complete.	Currently using this approach.
Routing and Distribution	Planner acts as a project manager and routes plans to all departments who may have input into the application.	Planner acts as a project manager, and as necessary, plans are sometimes routed to other agencies but no formal feedback is required unless the project qualified as a major impact project.

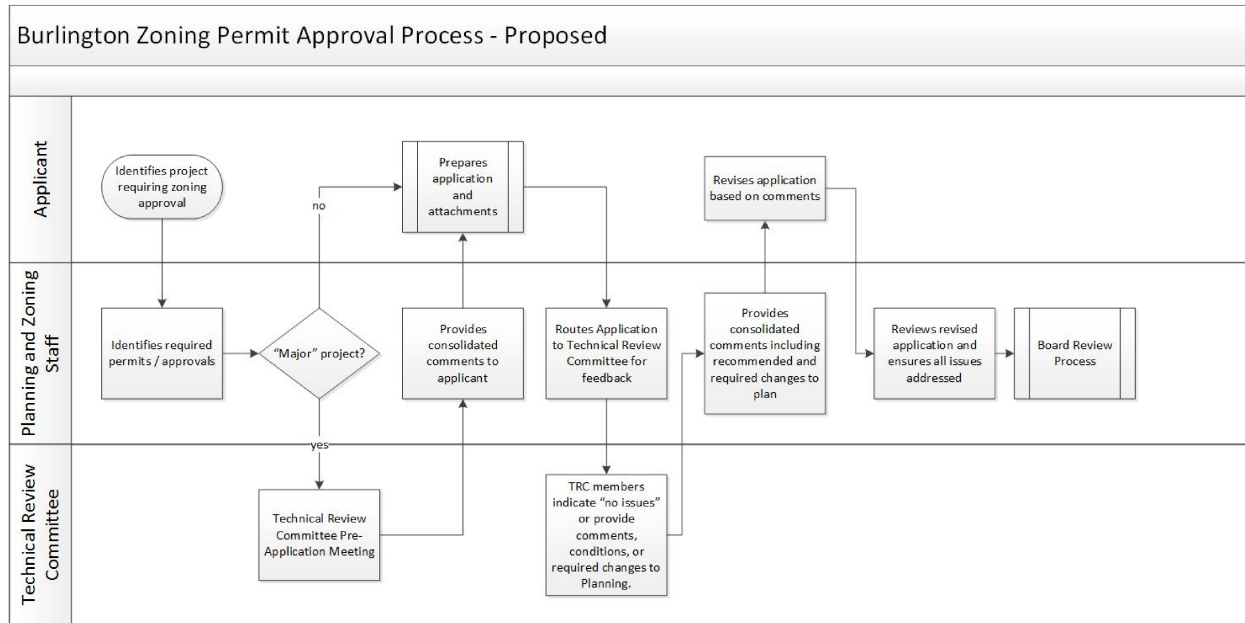
Step	Best Practices	Burlington
Review	Planning reviews for compliance with zoning code while other departments review for specific issues. Examples of issues reviewed by other departments:) Engineering – ROW, erosion control.) Fire reviews - Fire truck access, water availability.) Stormwater – Need for stormwater plans.	Planning reviews for compliance with zoning code and either issues a decision or prepares recommended conditions of approval if going to a review board. Other departments may provide feedback but it is sporadic because they are not required (or do not follow through) on providing the input.
Comments provided to applicant	All reviewing departments provide comments back to planning. Planning consolidates the comments into a single letter for the applicant.	Departments are inconsistent in providing comments back to Planning. All departments should be required to provide formalized feedback to the applicant in advance of a hearing or decision. The City has a 30 day statutory deadline for administrative decisions – making timely responses from reviewing departments difficult at times.
Re-Submission	If necessary, the applicant re-submits the plans, addressing comments from the DRC.	Applicants make necessary adjustments based upon staff and board comments.
Re-Review	The planner ensures that comments have been addressed. If major design changes were made that may affect other departments, the plans are re-routed to them.	Typically uses conditions of approval after the fact to address outstanding issues.
Approval and/or Committee Review	Permit is issued or application referred to appropriate board.	Permit is issued or application referred to appropriate board.

A flow chart of the current process is provided below.



The proposed revised process, below, includes two significant changes: first, instead of other departments providing informal input, they are part of the official review for the project. Second, the applicant is provided comments and given an opportunity to revise the plans, in particular to address any issues that were identified during the review process.

The extent of involvement of other departments, as well as the need for a revision cycle so that plans can be revised, is more critical for larger projects. This approach will add some time to the initial review but should reduce the number of issues that need to be addressed after the fact and be more clear for the applicant.



Critical to the revised process is the expanded role and responsibilities of the Technical Review Committee which is currently composed of representatives from each reviewing department (Planning, Public Works, Fire, Electric, etc.) who provide input regarding compliance with adopted regulations. Currently that group only provides input prior to submission of an application, and only for major projects. Under the new process the committee would be apprised of all planning applications that require review by external departments and have an obligation to provide feedback, even if the feedback is as limited as stating that the department has no concerns. For larger projects, reviewers may be required to attend an in-person meeting with the applicant to discuss feedback. For smaller projects, feedback can be provided in written format only.

The expanded role of the TRC will allow for better coordination of application review between all departments. When implementing this, it is important to incorporate the following elements:

- Ensure that the TRC includes all departments and personnel that are involved in the review, permitting, inspection, or certificate of occupancy issuance.

- Set a standard meeting time and location.
- Develop and distribute TRC meeting agenda at least 3 days in advance of the meeting.
- Place electronic versions of all plans in a shared file accessible to all TRC members. (Routing of paper plans should be avoided unless a detailed review is required.)
- With the meeting agenda, provide links to the application and subsequent related documentation.

Recommendation #12: Enhance the role of the Technical Review Committee to expand departmental review and comments on planning applications once submitted.

Recommendation #13: Revise the Planning review process to include: providing written consolidated TRC comments to the applicant and requiring meetings (on larger projects) to review comments prior to resubmittal.

3. THE CITY SHOULD INCREASE THE USE OF ADMINISTRATIVE APPROVALS.

The criteria for zoning projects that are approved administratively (vs. requiring board review) are set forth in the City of Burlington's Development Ordinance in Section

3.2.2. The application types that are administratively approved are as follow:

- Basic
- Awnings, Fences, and Signs
- Certificate of Appropriateness I (COA I)
- Some Certificate of Appropriateness II (COA II)

The types of applications that are approved administratively in the Development Ordinance are outlined in 3.2.2 of the Code.

The City could also facilitate the permitting process by expanding the application types that are approved administratively. This will have a twofold result: first it will decrease the volume of applications that must go through the public hearing process thus

reducing the burden placed on volunteer boards; and second it will expedite the approval process and reduce the permitting costs for the applicant. Both of these efforts will increase the timeliness of decisions for the applicant.

Currently, any application that has a construction value greater than \$24,000 requires review and approval through the DAB and DRB. The \$24,000 threshold is not based upon a specific factor, is somewhat arbitrary in nature, and may cause applicants to limit the size and scope of improvement projects to avoid having to go through the more costly and lengthier discretionary review process. This level requires relatively small projects to proceed through the DAB and DRB process – the threshold should be significantly increased. In the short-term, the City of Burlington staff, City Council, DAB and DRB members should work with the community to determine and adopt an appropriate threshold that automatically triggers applications necessary for being reviewed through the public hearing process. Given the length of time this standard has been in place, the City should be able to raise to \$50,000 immediately to provide short-term relief. Longer-term, the City should seek to eliminate the threshold requirement entirely and adopt objective development standards that provide for by-right approvals (conducted administratively) with only DAB and DRB approvals required for discretionary approvals. The City's current effort to develop a form based code for the downtown area will address this issue and should provide a more efficient and effective administrative approval process.

Recommendation #14: The City should adopt objective development standards that delineate by-right approvals and utilize the DAB and DRB process only for discretionary approvals.

4. THE CITY SHOULD COMBINE VARIOUS REVIEWS AND APPROVALS CONDUCTED ON A SINGLE PROJECT UNDER A SINGLE COMBINED PERMIT.

The current building permit process involves several separate and distinct processes: a stand-alone zoning permit followed by a stand-alone building permit followed by stand-alone permits for electrical, mechanical, plumbing, and fire suppression as required. If ROW or other engineering permits or stormwater approvals are required these are also separate. While Burlington's permitting software links these permits, the process undertaken by the applicant is different for each, with no one individual responsible for coordinating the process overall.

For projects that require zoning review (e.g., there is a change of footprint, building height, etc.) but not necessarily a traditional "entitlement" permit (those where the use is not permitted by right but rather is a "discretionary" use or where a variance or specific approval is required), the zoning review should be part of the building permit review process, not a separate permit. The zoning review would continue to be conducted by Planning and Zoning staff – the major difference is that it would entail a sign-off on the building permit rather than the issuance of a separate permit. If the zoning review determines that an entitlement is required, the building review would be put on hold until this has been obtained.

Another example would be the currently separate permits for fire sprinklers – permits are issued by both Building and the Fire Department. In the future, a single permit – with a single application fee – should be issued with all departments / divisions that are conducting a review signing off of the same permit.

Planning would continue to process and handle dedicated planning and zoning-

only permits individually as currently exist. However, any permit where zoning is simply a “sign-off” would be eliminated. This same approach should be used for all other departments.

Recommendation #15: Replace separate zoning, inspection services, and fire permits (where currently separate permits are required from each department for the same project) with a single permit on which each department signs off and the applicant is issued a single permit.

5. THE ISSUANCE OF OVER THE COUNTER PERMITS FOR TRADE ACTIVITIES SHOULD BE ENHANCED.

Burlington issues permits and inspects projects under a Municipal Inspection Agreement with the State of Vermont. The State, in lieu of issuing permits for basic electrical, mechanical, and plumbing permits, instead requires the licensed professionals undertaking this work to file a “work notice,” which is essentially an over the counter permit, which is subject to inspection by a qualified, approved inspector. Nationally, many communities offer basic trade permits such as these over the counter or on-line with no review.

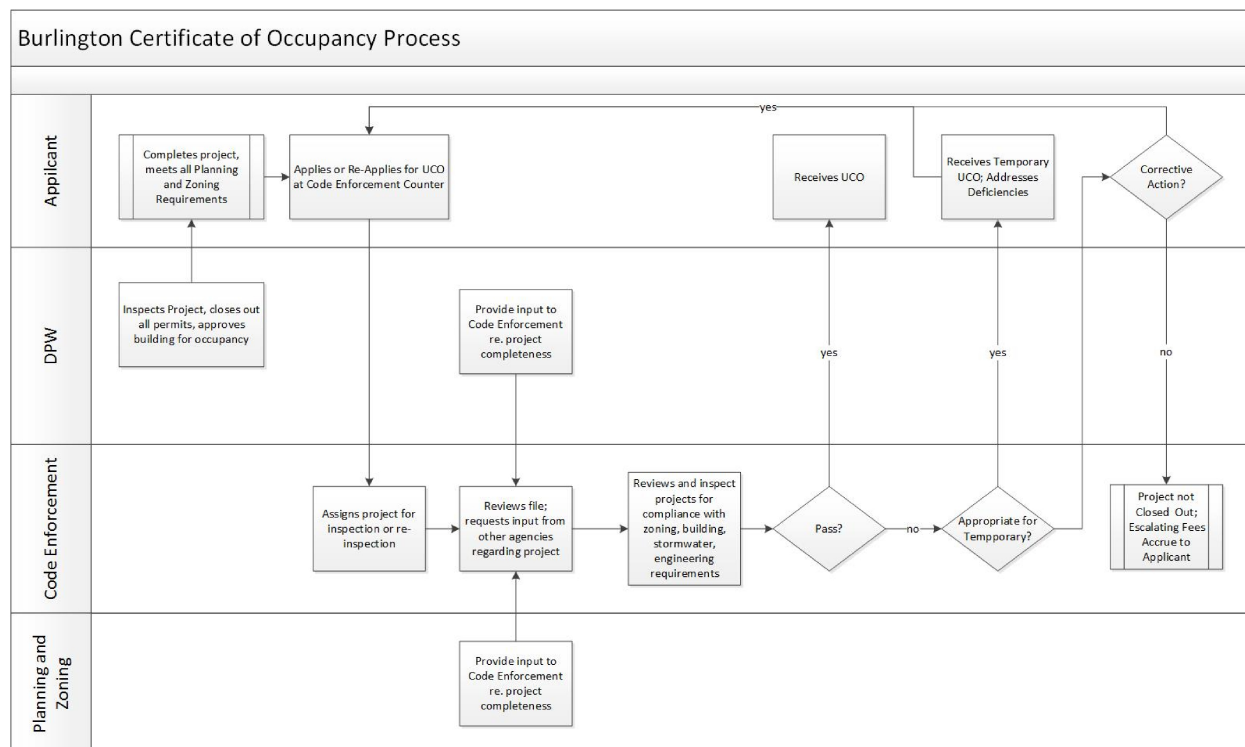
Generally electrical and mechanical systems should be subject to a thorough plan review prior to issuance of a permit to ensure that the systems as designed are safe and code compliant. However, many could be issued as over the counter permits subject to inspection, saving time for inspectors and applicants. The City should designate those permits which are eligible for over-the-counter issuance. This is typically those where no or limited plan review is required. For permits where no plan review is required, the City should seek to enable the technology (both permitting software and online payments) to allow these permits to be issued on-line and over-the-counter. These types of permits can be handled by the permit technician.

Recommendation #16: Identify basic trade permits that could be issued as “over the counter” permits, issued by a permit tech or clerk, or on-line (where no plan review is required) subject to inspection.

6. THE PROCESS FOR ISSUING THE UNIFIED CERTIFICATE OF OCCUPANCY SHOULD BE MODIFIED.

Upon completion of a project, applicants must often obtain signoff by both building (when a building permit is issued) and zoning (for any project that required a zoning permit, including signs and fences) to obtain a unified certificate of occupancy. The certificate of occupancy must be requested in person by the applicant. The request for the CO is made not to Planning and Zoning but to the city’s code enforcement office, and the applicant must bring copies of the approved zoning permit, copies of the approved site plans and elevations, and copies of all conditions of approval even though the city already has all of these documents in its possession. The process also requires an additional fee to be paid, and there is a schedule of escalating fees if the zoning approval is not obtained on a timely basis. An overview of the process is provided below. A staff member from the code enforcement office reviews the project permit and conditions of approval and then inspects the project, on behalf of the Planning and Zoning Department, determining if the project was built as approved and if all conditions have been met. If it is not, the project fails inspection and the applicant is sent a letter detailing required changes. The applicant may receive a temporary CO while making required changes, especially for changes that can’t be made at the time (e.g., landscaping in the winter time.).

A diagram of the process is provided below:



Burlington's process for completing a project is a source of frustration for many in the city. Although they are told about the requirement, some fail to apply for a zoning CO at all. Others abandon efforts to obtain a UCO if their project fails inspection. Often, people do not realize that their property has an outstanding UCO requirement until they attempt to sell, at which point a significant amount of time has passed. In surveys and stakeholder meetings several issues were communicated:

- Builders failed to seek the UCO but did not notify the homeowner; as a result, the homeowner did not realize that there was an outstanding requirement. While processes have changed and this is no longer a major current issue, there remains a large backlog to be addressed.
- If the inspector discovered issues that involved inconsistencies between multiple departments, the applicant had a very difficult time reconciling the different issues. As in other cases, the applicant was required to run interference between multiple departments.
- Applicants would receive approval of their final building inspection, and not realize (or not follow through) on obtaining the separate zoning approval and the issuance of a final unified certificate of occupancy.

- The additional fee may be a deterrent to requesting a CO.

Burlington's CO process appears unique, within the State of Vermont and nationally. A more typical approach is for a municipality to issue a single Certificate of Occupancy which requires sign offs from multiple departments and does not require submittal of additional documentation from the applicant. These sign offs are programmed into the permitting software so that until each entity signs off no CO can be issued. Applicants do not need to provide additional documentation regarding permits when applying for the CO as this information is already possessed by the City. They simply call for a CO inspection and the appropriate inspectors are assigned to conduct the CO inspections.

Typically, the final sign off is from the Building Official, and only occurs once zoning, electrical, plumbing, fire, engineering, stormwater, etc. have confirmed that the project was completed as permitted and that all conditions are satisfied. This would not prevent the issuance of temporary certificates of occupancy – as currently is provided, when minor non-compliance (such as completion of site work / landscaping) is present that does not impact the use or safety of the facility. Significant duplication of effort on the part of both applicants and Burlington staff could be eliminated by adopting a process found elsewhere in Vermont and nationally. Benefits would include:

1. The individual inspecting and signing off on zoning compliance prior to a CO would be the same person who reviewed and approved the application, avoiding the need for a new person in a new department to research and become familiar with the complexities of the project, including conditions of approval.
2. Projects that required a building permit but that have no zoning impact (e.g., no change of use, no change in footprint/location of an existing building, no historic consideration) would only require inspections and sign off from the Building Official instead of from the Building Official and a Code Enforcement Officer.

3. Applicants would not need to submit requests to an additional department upon completion of their projects in order to initiate a separate zoning certificate of occupancy process and would not need to obtain and submit documents that are already available at the Planning and Zoning office.

This approach would entail the removal of the Code Enforcement staff from the processing of COO – these would be handled by the Building Department, with Zoning involved to inspect and sign off on zoning compliance for projects that required a zoning permit. Code Enforcement would become involved only in the case of violations – for example, when an applicant fails to receive a CO, ignores a correction letter from the City (for example, in cases where the project as built is out of compliance with the permit) or neglects to convert a temporary CO to a final.

This approach would reduce the overall staff time required to inspect projects and issue COs within the city, but would also lead to a shift in responsibilities from Code Enforcement to Planning and Zoning. The City should add a position to Planning to enable planning staff to conduct all inspections related to applications and permits approved by that office. This position should be filled with an individual knowledgeable and capable of conducting both planning development review and inspection duties.

Recommendation #17: Issue the Unified Certificate of Occupancy after the completion of the final inspection without requiring additional submittals by applicants.

Recommendation #18: Eliminate the separate zoning CO application fee. If an additional fee is to be charged it should be incorporated into the original permit fee.

Recommendation #19: Planners should inspect and sign off on projects at completion to avoid the need for code enforcement officers to inspect projects with which they have no familiarity.

Recommendation #20: Establish a position in Planning and Zoning to address shifting responsibilities for conducting planning and zoning inspections under the new UCO approach.

7. THE CITY SHOULD CONTINUE THE FOCUS IT HAS RECENTLY PLACED ON ADDRESSING OLD OPEN PERMITS.

The number of old open permits within the City of Burlington is high compared to most communities the consultant team has worked with in recent years. The backlog is a result of decades of noncompliance and poor enforcement by the City due to a variety of factors including lack of staff resources and technology limitations. This led to the creation of a Code Enforcement Office in 1999 to better address concerns. A common concern expressed during focus groups and meetings with stakeholders and residents was that they failed to close permits because of the complexity of the process and/or the time it took to get an inspection. The City has been placing great focus on addressing this issue and is making good progress; however, it will remain a joint effort of permit holders and City staff to reduce and eliminate the old permits that remain open from the historical lack of compliance enforcement. The proposed changes elsewhere in this report should eliminate the likelihood that this backlog would develop in the future.

This should remain a high priority and the City should attempt within the one to three years to address and eliminate all open permits that are no longer active. This can be accomplished by providing trade inspectors with a listing of open permits, where no activity has occurred in the last several months, and their proactive follow-up with homeowners to make arrangements for the necessary inspections to close out the old permit. The extent of proactivity that inspectors can achieve will be dependent on their workload. A letter should be distributed to all individuals with older open permits requesting that they either request an inspection or provide the necessary paperwork to enable closure of the permit. This approach will create a new workload for code enforcement staff; however, with the transfer of some inspections to Planning and Zoning

there may be capacity to take on the work with existing staff. For non-compliant individuals, the permit should be expired – requiring the individual to reapply (and pay a new permit fee) in the future if they desire to close the permit. This approach will be viewed as punitive to the applicants, and should be utilized if voluntary compliance cannot be achieved.

Currently, Planning & Zoning send notices to permit-holders as their permits age to remind them of the existence of the open permits and the need to close them. Inspection Services has been less proactive about sending notices about open building permits. Moving forward, the City should be clearer about the consequences of not closing permits in a timely manner and incorporate a penalty for applicant non-compliance. However, this should only be adopted once the City is able to implement a defined service standard (i.e. – completion of inspection within 2 days of request) for all inspections.

Recommendation #21: The City should continue to focus on closing old open permits by having inspectors conduct follow-up activities.

Recommendation #22: In the future, the City should more proactively inform applicants when no action has occurred on a permit within a specified time period (where not already occurring), should consider issuing permits for shorter time durations, and expire permits when no activity has occurred.

8. THE INSPECTION SCHEDULING PROCESS SHOULD BE STREAMLINED.

Builders and homeowners seeking a construction related inspection are directed to call the appropriate inspector and schedule it directly. Inspectors use their own calendars to track their availability and schedule the trades inspections. The city does not issue any performance goals or guarantee regarding the availability of an inspector within a given timeframe.

Some builders stated anecdotally that there could be a several day or longer delay from when an inspection was requested to when it was conducted. They also indicated problems reaching an inspector and getting a response. Inspectors interviewed for the project affirmed that they frequently scheduled inspections for several days out from the request date and said that next day inspections (a common standard for cities the size of Burlington) were not possible because the inspectors are too busy, especially given that they both review permit applications and conduct inspections.

The consultants requested data on how many inspections were conducted, on average, by each inspector to assess workload. Unfortunately, the way inspections are tracked (on an outlook calendar versus through the permitting system) limited the information available and the ability of the consultants to easily analyze inspection workloads and timeframes.

The centralization of inspection scheduling would allow for better management and tracking of inspection availability, timing, and workload. The city's permit software probably includes an inspections scheduling module; if it does not, another centralized scheduling system should be used. The inspections calendar should indicate how many slots each inspector has per day for inspections and allow an administrative staff member to populate the calendar. Eventually, the city should transition to scheduling inspections using an IVR (interactive voice response) or on-line system.

The centralized management of inspector calendars will allow managers to better track inspection workload and timing and identify what changes may be needed to allow Burlington to guarantee inspections within an adopted time standard. In most communities, next day inspections are the standard. It will also enable staff to more

effectively coordinate the scheduling of inspections when more than one inspector needs to be present (such as a rough inspection where structural, plumbing, and electrical systems are being scrutinized) and provide better service to customers.

In most communities, next day trades inspections are the standard. However, there is not the ability to achieve that in Burlington, at this time, based upon technology and staffing resources. What is most important is that the City define the performance standard they will commit to completing the inspection in following receipt of a request from the customer.

Full time inspectors not responsible for office hours or plan review should be able to conduct approximately 15 inspections per day. If the city adopts over the counter permits for basic trade permits, as recommended, this may reduce the workload for the electrical and mechanical inspectors, making the able to conduct additional inspections. Based on the workload described in interviews, the inspectors should be able to conduct at least ten inspections per day, and potentially 15, while maintaining office hours.

If the inspections workload is too high to support the proposed next day inspections standard, the city should consider adding additional inspectors, ideally those with certifications enabling them to inspect multiple areas (i.e., electrical, mechanical, and plumbing) work as well as structural if suitable candidates can be found. The specific areas addressed will depend upon the qualifications of the individual selected. While this approach is not typical in Vermont it is used elsewhere in the country with great success and the City may wish to discuss options with the State to change regulations in the future. One benefit of the combo approach is that a single inspector can sign off on multiple inspection types (within the limitation of state licensing requirements). The consultants

recognize that a “combo” inspector would need to meet the state’s standards for knowledge and accreditation for all relevant trades, at least for the inspection of commercial construction. For construction on non-public buildings (which is about 40% of the construction permits issued over the last 12 years), Burlington staff will need to work with the state to ensure that there is no state legal barrier to this approach.

Recommendation #23: In the short-term, centralize inspection scheduling by creating an inspections scheduling phone number to be monitored and used by trained administrative staff. Longer-term, implement on-line inspection requests and scheduling.

Recommendation #24: Adopt an inspection performance standard that guarantees inspections within a defined time period following request by the applicant.

Recommendation #25: If the workload level is too high to accomplish inspections within the adopted time frame consider adding additional inspector resources with preference given to those with the ability to inspect in multiple disciplines.

9. A CUSTOMER AND CITIZEN PORTAL INTO THE CITY’S PERMITTING SYSTEM SHOULD BE IMPLEMENTED TO IMPROVE CUSTOMER SERVICE AND REDUCE WORKLOAD FOR EMPLOYEES.

Many communities now provide an on-line portal so that applicants can apply, pay for, and receive permits electronically. Applicants can also go on-line to look up review status, read comments on their plan reviews, and see inspection results. In their simplest versions, the portal allows for electronic applications for very simple building permits and other permits typically considered “over the counter.” More robust systems allow for submission for any type of permit, attachment of CAD or PDF drawings, re-submittal of revised drawings, and payment of additional fees such as bonds.

Recommendation #26: The City should implement an on-line portal for permit applicants allowing them to apply, pay for, and receive permits electronically as well as look up status of plan review and check inspection results.

10. INSPECTOR EFFICIENCY CAN BE ENHANCED THROUGH CREATION OF MOBILE APPLICATIONS AND THE IMPLEMENTATION OF MOBILE DEVICES IN THE FIELD.

The City can enhance the efficiency and effectiveness of field inspections through the creation of mobile apps that allow building and zoning inspectors to perform their duties from the field, and issuing mobile devices for all inspections. The ability to more efficiently enter inspection results, especially if the system is connected through cellular service, will enable the permitting system to be automatically updated and show the result of the inspection as soon as it is entered in the field by the inspector. Their use will also reduce the amount of time required to be in the office for data entry and will increase the number of inspections that each inspector can complete daily.

Recommendation #27: The City of Burlington should implement tablet or laptop use for all field inspections.

11. THE CITY SHOULD REVIEW FEES TO ENSURE ALL DEVELOPMENT REVIEW AND PERMITTING COSTS ARE BEING COVERED.

The City of Burlington should review all fees to ensure that the City is covering all costs of the development review process (including technology and overhead costs) from the fees charged for applications and permits. Most communities have adopted an approach that includes all applicable administrative costs for general City services (technology, administration overhead, etc.) are covered by the permitting fees.

In the consultant's experience across the nation, the standard prevailing practice is that fees are utilized to support the development review and permitting function and the general fund should not need to subsidize this service. The establishment of a formal fee review and rate setting methodology is necessary so that fees can be established and maintained in the future at the appropriate level to cover full processing costs including

technology. Future increases in fees should be considered whenever the existing fees are not covering the cost for providing services. The City should also give consideration to establishing this function as an enterprise fund to dedicate revenues received to the provision of services.

Recommendation #28: The City should review all fees association with development review and permitting activities to ensure that all costs associated with providing these services, including overhead and technology costs, are covered by the fee.

12. THE CITY SHOULD EXPLORE THE ADOPTION AND MODIFICATION OF EXISTING BUILDING CODES.

The primary reason specific codes are adopted related to construction and rehabilitation of structures is twofold: (1) to protect the health and safety of the public, and (2) to provide a consistent and level playing field related to construction activities. The City of Burlington follows adopted codes as required by the State of Vermont as a minimum standard. Single family residential properties are handled uniquely in Vermont compared to many states. The State requirements focus entirely on public buildings. However, the City has chosen to apply these same codes to single family residential construction – which represents about 40% of construction activity in the City over the last 12 years. While the adoption of the International Residential Code would place Burlington in a unique position of requiring different standards than are required in other communities in the State, it is already requiring single family review and this would provide a consistent application of codes for applicants with clear direction and guidelines for achieving approvals. It provides a common and nationally recognized standard for the processing, review and inspection of single family residential properties. The International Residential Code only includes code provisions applicable to residential

construction greatly simplifying the code rather than requiring applicants to only review those aspects of the code that are applicable to them. During adoption, staff will need to ensure that the IRC is harmonized with the existing adopted reference codes.

The City of Burlington could increase the consistent application of codes, to all types of properties and buildings, if the entire ICC set of codes were adopted, specifically the International Residential Code (adopted by both Maine and New Hampshire with state amendments) and the International Existing Building Code. While the IRC is essentially a subset of the IBC, it eliminates all non-relevant code sections and provides a more streamlined, easier to read and understand code for application to residential properties. This would likely reduce many of the concerns that have been raised regarding the application of the adopted codes to single family residential and existing buildings. However, the adoption of the Existing Building Code would represent a deviation from the current codes utilized. While it should make the process easier, outreach to the development community, through public meetings or other similar venues, should be conducted prior to adoption. In communities where these codes are adopted, there is little concern expressed about inconsistent application of the codes across different projects.

The adoption of the International Existing Building Code provides a set of standards that recognize the unique difficulties that often arise in bringing existing buildings into code compliance. These codes provide alternative means to achieving public health and safety through code compliance. Additionally, since the state does not prescribe the code or inspection approaches on single family residential construction, the City has greater flexibility to consider alternative approaches including the use of multi-trade inspectors to handle permitting activities.

While the consultant team believes that the adoption of each of these codes hold many benefits for the City in providing more consistent service to the public, the adoption would run counter to some concerns expressed about enforcing standards in excess of those required throughout the rest of the State.

Recommendation #29: The City should consider the adoption of the International Residential Code and the Existing Building Code.

DRAFT

4. ANALYSIS OF APPLICANT REQUIREMENTS AND RESOURCES

The sections and recommendations below focus on promoting greater information flow between staff and applicants to support and clarify the permitting process as well as demonstrate the City's full desire to implement a "culture of service."

Clear, comprehensive, and accessible public information improves the quality and completeness of permit applications and reduces the amount of time spent by staff explaining the City's requirements and processes. Providing opportunities for applicants and stakeholders to give feedback to the City promotes good will and ensures that City staff are aware of issues of concern.

1. THE CITY SHOULD CONTINUE TO SOLICIT FEEDBACK FROM PERMIT APPLICANTS AND THE PUBLIC.

The on-line survey conducted as part of this project resulted in an extremely high response with a total of 614 individuals providing feedback to the survey. This level of response indicates that permitting is an issue of interest in Burlington among both applicants and the public.

It is recommended that the City should also implement an annual survey so that feedback and attitudes can be tracked over time, and so that managers can become aware of issues of greatest concern. While the baseline survey was extensive, it is recommended that a briefer survey be used in the future to encourage responses and provide succinct feedback to managers.

The City should also develop a brief on-line survey that is e-mailed to applicants at the time of CO issuance. This comment card should ask that the applicant rate the City on several key factors:

- Level of Customer Service Provided (rating each department/division interacted with);
- Accessibility of staff;
- Thoroughness of staff;
- Satisfaction with the process;
- Specific areas / individuals that provided exceptional service;
- Specific areas / individuals where service problems were encountered; and
- An opportunity for the applicant to make general comments about the process.

An annual report should be developed outlining the level of satisfaction provided to applicants. Information gathered from this survey should be utilized for on-going evaluation of staff and improvement of the process.

It is important to note that these educational and outreach efforts will require time on the part of staff to implement. This will obviously slightly reduce their time available for performing other primary duties (such as plan reviews and inspections). This survey should be started in 2017 and conducted annually thereafter.

Recommendation #33: The City should conduct an annual and ongoing customer satisfaction survey.

2. THE CITY SHOULD EXPAND AVAILABLE PUBLIC EDUCATION DOCUMENTS OUTLINING THE PROCESS, SUBMITTAL REQUIREMENTS, AND APPROVAL PROCESSES.

Burlington has some very well-written and clear information on-line regarding how to obtain permits. In particular, the “Permitting Process, Step by Step Guide” is a model for clear, friendly writing explaining what can be a daunting process. This process however focuses primarily on obtaining zoning approvals and zoning COs. The

Inspection Services Division does offer a general flow chart for applicants explaining the permitting process.

A comprehensive development guide document and web page should be created that covers the entire development review process from project concept through the final certificate of occupancy.

This guide needs to be more than a simple recitation of the ordinances and codes, but clearly explain the steps of the process, how to comply and appropriately submit an application, and identify the review that will be conducted by staff. Within this document, it would be appropriate to include copies of checklists for each phase of the process that clearly identify to the applicant the information that must be submitted and why it is required. Also, included within the document should be a section that clearly outlines the review time standards that have been adopted by the City. Links to examples of guides and manuals developed by other communities are included in the technical appendices.

These examples provide alternative approaches that the City can consider for developing its own guide. While many of these communities are not comparable in size to Burlington, the guides present differing perspectives on options that the City can consider for format and layout.

Recommendation #34: The City should develop a comprehensive Development Guide that provides an overview of the development process. This would be used to train new staff in the process and improve the public's understanding of the process.

3. THE CITY SHOULD MAKE AVAILABLE A MATRIX OF KEY STEPS, REQUIREMENTS AND TIMEFRAMES FOR EACH APPLICATION AND PERMIT TYPE.

The review process for the various application types in the City of Burlington differs by application type based on the reviewing departments, the number of meetings or

hearings required, and the complexity of the application. In order to provide clarity to applicants, the consultant recommends that the City develop an application/permit matrix to outline key components of the development review process for each application type.

This matrix would include:

- A list of the major submittal requirements for each application type.
- A list of the review steps for each application type, including the responsible reviewing department and the established timeframe for review.
- A list of the required board/commission hearings and meetings and their frequency.

When complete, the matrix will provide a clear picture of what applicants can expect for each application type, which will help to eliminate confusion for applicants and improve the level of understanding in communication between the department's staff and the customers they serve. The document should be made publicly available on the City's website and updated periodically.

Recommendation #35: The City should develop an Application/Permit Matrix that outlines the timeframes for performance, the parties responsible for review, and major submittal requirements for each type of application or permit.

4. ALL APPLICATION AND PERMITTING FORMS SHOULD BE AVAILABLE AS FILLABLE PDF FORMS AND ONLINE FORMS.

The permitting process in Burlington entails the use of various application types for the various entitlements and permits issued by the department. Physical copies of these applications are available at the various departments. For most application types, applicants must print and fill out these forms by hand before bringing them in.

The consultant recommends that the city upgrade all of the existing application forms from a scanned PDF format to an electronically fillable PDF format so that applicants can fill in the required fields electronically after downloading the form without

having to write their information in by hand. In addition to making the process easier for the applicant, this will help to ensure that all necessary information is captured on the form. The City may desire to contract for these the services of an individual with the necessary skill sets to design and develop these forms to enable faster implementation.

Initially, the City should seek to provide all application forms in fillable pdf format. Longer-term with the implementation of new software, the City should seek to have the forms available online in a format that will link to the permitting system – eliminating the need for staff entry of applications.

Recommendation #36: All application forms should be updated to fillable PDF format and made available online for customers to complete and print out. Longer-term, the City should provide online forms.

5. CODE INTERPRETATIONS SHOULD BE PUBLISHED ON THE CITY'S WEBSITE.

The departments involved in land entitlement and permitting processing should develop an interpretation log that records how various provisions of the zoning code and building codes are interpreted in cases where the application of certain regulations is not entirely clear. Those that have applicability beyond a single case – meaning those that are not entirely site specific – should be formalized and published to the City's website. The use of the interpretation log is especially important given that revisions to the land development regulations and zoning code, while typically done monthly do not cover all interpretations to date, and to provide consistency in application review.

A review of any and all existing interpretations of the Development Codes, Building Codes, Regulations and policies should be undertaken to ensure that they are still accurate and valid. Once completed, these interpretations should be compiled into a

document that is posted to the City's website. The interpretations should be developed in a consistent format that provides, at a minimum, the following information:

- Effective date of interpretation.
- Section of the Code / Regulation referenced.
- Description of the interpretation.
- Legal basis for the interpretation (if applicable).
- Applicability of the interpretation – outline of the circumstances under which the interpretation is applicable and not applicable.

This type of sharing of information will increase the ability of applicants to prepare submissions that are in line with the policies and procedures being enforced by staff and may eliminate the need for revisions to be made in applications. Only those interpretations that have been fully reviewed and that are intended to be utilized for all future applications should be included in this manual.

Recommendation #37: Applicable city staff should document interpretations of the land development code, building code, and internal policies and procedures and make these available to the public on the City's website.

6. THE CITY SHOULD SET CRITERIA FOR AND IMPLEMENT AN EXPEDITED PERMITTING PROCESS FOR SELECTED PROJECT TYPES.

The City's development review and permitting process does not currently offer any expedited permit processing for applicants. Currently, all permits are subjected to the same goals for review and turnaround time without regard to size of project or urgency of need. Increasingly, communities are providing expedited permitting process to incentivize or attract certain types of development within their communities. These are typically done for either (1) economic development projects that will expand the tax base of the community, or (2) projects designed to meet identified community priorities and needs.

In the first case, there are often cases where communities want to encourage or attract a development that will provide desired economic development benefits (increased tax base, employment, etc.) for the community. As part of the incentive to develop, communities will often provide a more streamlined development review process – not relaxing the standards or level of review, but reducing the time to get through the process. While staff may not always be able to accommodate these situations, the City should develop and implement a procedure for accepting applications under an “expedited” review process. Typically, these expedited review process require the payment of an additional fee – above and beyond that required for normal plan review and permit issuance – and is designed to cover the actual costs of providing the review on overtime.

The expedited plan review would be conducted based upon the availability and willingness of staff to work overtime to complete the review. If staff is unable to meet the expedited review (or are unable to work the overtime to conduct the plan review), the fee would not be charged to the applicant and the application would be handled through the normal review process. Alternatively, the City can adopt a listing of qualified external plan reviewers that applicants may utilize. These third-party plan reviewers would be authorized to review the plans on behalf of applicants and against the adopted City codes and regulations. The cost of this expedited plan review would be paid directly by the applicant to cover the City’s contracted cost with the third-party reviewer and any direct administrative costs incurred by the City of Burlington.

In implementing the expedited review, the City should establish reasonable guidelines and conditions for the types of projects that will be eligible for this program. They should be focused on those projects that have a demonstrated economic impact for

the City and the specific criteria should be established in conjunction with economic development programs and staff of the City. The program should be conducted on a pilot basis and reviewed after six months. This program should be available for both land entitlement applications and building permits.

The other case where the City should consider the implementation of an expedited review process is for projects with designated focus areas of high priority for the community such as affordable housing, day care facilities, etc. In these cases, the City is providing support to these projects by again reducing the review time to gain approvals. The City may also wish to consider reduced application fees for projects that fit within these designated focus areas. Similar to the first case, the review standards remain the same – the focus is on providing a quicker approval process, and potentially a reduced fee, if the City chooses to pursue that option.

Recommendation #38: The City should implement an expedited permit processing option for applicants that meet criteria designated by the City. Suggested criteria include project that either support economic development efforts of the City (increasing tax base, employment, etc.) and projects is designated focus areas for the community such as childcare facilities, affordable housing project, etc.

5. ANALYSIS OF TECHNOLOGY

This section examines the use of technology for accepting, reviewing, and issuing permits as well as inspecting projects.

Current, Burlington uses CSDC's Amanda application for permitting. It was implemented approximately 12 years ago, and has not always been appropriately staffed for implementation or maintenance. Burlington is not using the most current version of the software – and it is expected that converting to the most current version would require a significant effort by IT and users.

1. THE CITY SHOULD EXPLORE OPTIONS FOR UPDATING AND EXPANDING PERMITTING TECHNOLOGY.

Burlington relies heavily on the current permitting software to manage and track permit activity. As the City's processes are somewhat unique and suggestions are being made to revise them, the software will need to be adjusted to match that. At the same time, Planning and Zoning and Inspection Services would like to expand the use of electronic site plans, construction plans, and attachments so that information can be easily shared and the excessive use and distribution of paper can be eliminated.

Ideally, permitting software should be used by staff for the following steps (all apply to both Planning permits and Building permits):

Task	Description
Intake	Record intake date in the software. Attach electronic copy of the application and all attachments (site plans and drawings). Plans should be provided to the City in electronic format for attachment to the permit record.
Acceptance	Plan reviewer reviews the application and deems it complete. Notes "acceptance" in software.
Distribution	Plan is distributed electronically to all reviewers with a target date for re-review. Date noted in software.
Review	Reviewers enter review comments into the software. All reviewers should provide comments or indicate "no comment" or "no issues" in comments.

Task	Description
Comment letter	Project manager consolidates comments into a single document, which is noted in the software as the complete initial plan review. Comment letter is sent to applicant electronically, preferably through the software system.
Resubmission	Record intake of resubmission. Plans are resubmitted electronically and attached to the record.
Redistribution	Plan is re-distributed electronically to those reviewers who had comments.
Issuance	If all comments have been addressed, permit is issued and accepted. All conditions of approval are noted in the software.
Project management	Software is used to track key “to do” items such as bonds, child permits, erosion control plans, etc.)
Inspections	Required inspections are listed in the software. Inspection results are entered into the software.
Record drawings	The applicant provides record drawings electronically to the City, which uploads the drawings into GIS and attaches to the final permit record.
CO issuance	All departments / divisions that must sign off prior to CO sign off in the software. CO can't be issued until sign off has been made. Once sign offs have been completed, CO is issued.
Reporting	All departments should have access to standard reports that outline workload, performance in processing permits and related activities, and facilitate the management of the permitting process.

The permitting software business has changed dramatically in the past ten years, with costs declining and capabilities increasing. The applications now available for permitting offer a range of functionality, including: fully cloud-based systems, mobile apps for citizens, residents, businesses, and field staff conducting inspections, broad integration with GIS, assessor and other data, and user-friendly reporting capabilities. Because there are many new providers on the market, it is recommended that Burlington explore both alterations to the current system, by allowing CSDC to participate in the RFP process, and procurement of a new system.

It should be noted that the work associated with development of an RFP including requirements and functionality determinations, writing the RFP and selecting a vendor and implementing a new software solution, will require extensive staff time. Based upon the project teams understanding of existing capacity, the City should consider the allocation of additional resources to provide dedicated staffing, or outside consultant, to

this effort to ensure success during the implementation phase.

Since the City may also be seeking an asset management software solution in the near future, the City should consider the possibility of having a single system that covers both asset management and permitting. There are several systems available in the marketplace that provide this functionality. While there are numerous benefits to having one solution rather than two systems (including cost, data integration, etc.), the overriding decision should be based upon the ability for the selected software to meet the key and critical functionality needs for each program (asset management and permitting). The City should seek the best permitting system possible, and not trade off features that are needed to improve the permitting process, simply for the benefit of an integrated system.

Based upon publicly available data from other permitting system acquisitions for similar communities, the following budget estimates were developed for the technology enhancement effort. This table outlines the major phases and costs, along with an estimated timeframe, for the technology implementation.

Cost Element	Cost Estimate	Timeframe
Consultant to document requirements, develop RFP and assist with selection	\$90,000	FY 18-19
New Software Licensing	\$125,000 - \$200,000	FY19
Implementation and Training Costs	\$100,000 - \$175,000	FY19
Annual Support Costs	\$50,000	FY20+

The City should ensure that sufficient funds are allocated to acquiring a system that will provide the automation and online services needed by staff and requested by applicants. Many of the recommendations contained in this report require enhanced technology. Additionally, the success of the technology improvements will be dependent upon a successful implementation effort and adequate staff training on the new system.

Recommendation #39: The City should prepare an RFP for new permitting software as well as cost estimates for upgrades and alterations to the current system.

2. A COMPREHENSIVE FUNCTIONALITY MATRIX SHOULD BE UTILIZED IN SELECTING A NEW SOFTWARE.

A sample functionality matrix is provided in the technical appendices document. This document outlines a list of functionality requirements that the consultant recommends be considered for inclusion in the selection of a new permitting system. This ensures that key functionalities and integration issues are considered early in the process.

If the City desired to procure a new permitting system, the recommended response categories should be considered for inclusion in the RFP packet for responses by vendors to enable the City to determine actual available features of the software versus planned enhancements or unavailable features. It may be beneficial for the City to evaluate this listing of functionality, prioritize those they wish to include as mandatory features and those that are only desirable functionalities.

For each numbered requirement included in this document, the vendor should indicate the status of the requirement within the vendor's solution by using the following notation codes and/or a short explanation of vendor's capabilities. Each statement must be signed with the original initials of an individual having full authority of the vendor to execute the statement and to execute any resulting contract awarded as the result of, or on the basis of the statement. The detailed functionality criteria are included in the technical appendices.

Recommendation #40: To ensure selection of the most appropriate permitting system, the City should utilize a detailed functionality requirements component in the RFP issued to enable effective comparison of the different systems and responses received.

3. THE EXISTING PARCEL INFORMATION IS NOT SUFFICIENTLY ACCURATE AND IS IMPACTING STAFF'S ABILITY TO EFFECTIVELY PERFORM DUTIES.

The existing data available in GIS related to parcel boundaries is not at the level of accuracy that is necessary to enable staff to either rely on this information, or to utilize it, as a primary data source, when evaluating submittals. This requires many applicants to conduct their own boundary surveys to enable processing of simple submittals (e.g., small storage buildings, stair replacements, decks, etc.). The availability of accurate and usable parcel boundary information, including one line mapping access for the public, is a common functionality provided by many municipalities throughout the nation – it is almost an expectation that this information is available. As long as the City of Burlington's information is unreliable and cannot be utilized by the public and staff to make determinations about compliance with applicable regulations (i.e. – setbacks, property boundary locations), the City will be limited in its ability to fully streamline some processes.

The City should focus efforts, attention and resources towards increasing the accuracy of this information. By incorporating a more accurate and verified parcel layer, that can be overlaid with an aerial photo, it allows staff to make a quick determination if the customer's desire may be easily met or if a more detailed survey will need to be conducted. An example would be when a citizen inquiries about extending an existing deck, staff can quickly determine if this may be a feasible option or that it may require a survey, etc. The level of accuracy of the GIS data will directly impact the cost to the City of Burlington. The greater the accuracy – the more expensive the initial development of the GIS layer will be. However, an accurate GIS layer – that enables City staff to rely on common features such as property lines, utility locations, private and public right-of-ways, will eliminate the need for individual applicants to conduct surveys for many projects.

Applicant surveys would continue to be required when properties are subdivided, proposed development is close to setbacks, easements, utilities, or in cases where accurate data is not available. To rely on GIS for making determinations regarding setbacks and property boundaries, the City would like need to have accuracy at +/- 1 foot.

Recommendation #41: The City should explore options to increase the level of accuracy of the GIS data regarding property boundaries. Until accurate property boundaries are available through GIS, the City will be significantly limited in some efforts to streamline and further automate processes.

4. THE CITY SHOULD ENSURE THAT FUNDS ARE AVAILABLE TO IMPLEMENT AND MAINTAIN THE NECESSARY SOFTWARE AND HARDWARE.

The technology currently in place, and being considered for implementation, by the City of Burlington is critical to the performance of duties by staff and to implementing many of the online and more efficient processes outlined within this evaluation. To ensure that sufficient funds are available to maintain the technology investment, the City should ensure that the revenues received from permitting activities are sufficient to cover not only the personnel costs of the permitting activities but also all required technology. This can be achieved either through the appropriate establishment of permit fees, or through the addition of a designated technology fee that is added to each permit cost. The permit fees should be designed to cover the costs of supporting technology upgrades or new systems to automate the permitting processes. These fees would be directly tied to the cost of purchasing, installing and maintaining the systems and are often placed in a dedicated fund that can only be utilized for technology purchases to benefit the development process.

Recommendation #42: The City of Burlington, when implementing a new fee schedule, should ensure that the fees are established at a level sufficient to cover all costs associated with the permitting process, including the maintenance, upgrade and utilization of effective technology solutions.

6. ADDITIONAL TOPICS

In addition to the overall review of the development and permitting process, several specific topic areas were also identified for review and comment. These are addressed below.

1. INCENTIVIZING CHILDCARE SPACES CAN BEST BE ACCOMPLISHED THROUGH PROVIDING DENSITY, PARKING OR OTHER WAIVERS FOR MIXED USE DEVELOPMENT.

The City of Burlington has indicated an interest in evaluating opportunities to incentivize the development of additional childcare facilities within the community. This is difficult to do through the permitting and development review process as building and zoning codes are inherently important to ensuring the safety of users of these types of facilities. The City has little opportunity to reduce or waive applicable building or life safety codes (and their costs) to incentivize this type of development.

However, the City could further modify zoning and development codes (currently Family Day Care Homes as defined by state statute are exempt from zoning review) to enable consideration of waivers to select code requirements (such as set-backs, density of development, or parking requirements) for selected developments that include childcare facilities if the applicant can demonstrate that this waiver would not impact the safety or health of users. For example, a greater density of development may only be considered if the development includes a childcare facility. The development would have to comply with all other development requirements but would be granted a density waiver (to make the project more financially feasible) if it included child-care. This same approach could be utilized for parking requirements – if sufficient parking is nearby to service the development or the facility is appropriately serviced by public transportation.

This approach should only be utilized if a policy decision is made that incentivizing childcare facility development is a greater policy goal than the parking, density, etc. Mixed use development are the most likely ones that can make this type of effort work both functionally and financially.

Recommendation #30: The City should consider during the next zoning review, appropriate modifications of development criteria for developments that include child-care facilities.

2. THE CITY SHOULD DEVELOP STANDARD CONSTRUCTION PLANS FOR COMMON ADA COMPLIANCE ISSUES.

The cost of converting existing properties to comply with ADA requirements can be significant. For new construction, it is relatively easy to develop ADA compliant facilities, existing structures are much more difficult to address. There is little flexibility in the codes to modify or address deviation from the accessibility codes. However, the City could assist the public by developing, and making available online, a set of standard approaches it has seen (or that it can develop) to address ADA compliance for existing structures by providing example approaches to addressing compliance. This recommendation is not to imply that City staff would design a project for the applicant, however, it would provide alternatives for consideration for common concerns, based upon practices it has approved as compliant.

For example, the City could develop and share approaches to addressing the following items:

- Entranceways and ramps,
- Stairwell modifications,
- Parking lot modifications, and
- Ingress / egress.

From a broader perspective, the City could undertake the development of educational materials and/or public meetings, to explain to homeowners and development professionals the concept of Universal Design which focuses on developments / construction approaches that produce spaces / facilities that are equally accessible to all individuals including seniors, disabled, and non-disabled individuals equally.

For new construction, the City could develop an incentive program, that reduced application costs or provides more timely services (i.e. – reduced review or inspection timeframes), for those projects that are developed and constructed in accordance with universal design guidelines. This would be a somewhat unique approach that has not been utilized widely by municipalities but takes a longer-term perspective on accessibility by encouraging new developments to be universally accessible prior to need. As noted earlier, it is recommended that the City consider adoption of the existing building code which may also enable easier achievement of ADA compliance on existing buildings.

Many of the leading communities in promoting universal design are much larger than the City of Burlington. However, there is much from their work and efforts that can be beneficial to the City of Burlington in developing and promoting this concept locally. Several good resources on this topic can be accessed through the links below:

New York City (guidebook to accessibility and universal design):

<http://www.nyc.gov/html/ddc/downloads/pdf/udny/udny2.pdf>

City of Irvine, CA (resource guide on Home Modifications compliant with universal design):

<http://legacy.cityofirvine.org/civica/filebank/blobdload.asp?BlobID=10045>

City of Sacramento, CA (copy of local Universal Design Ordinance):

<https://www.cityofsacramento.org/Community-Development/Building/Universal-Design-Ordinance>

City of Charlottesville, VA (City website outlining universal design concept and providing information on State tax credits for incorporation of universal design in remodel projects):

<http://www.charlottesville.org/departments-and-services/departments-h-z/neighborhood-development-services/building-permits-inspections/accessible-housing-incentives/the-virginia-livable-home-tax-credit>

We would recommend that the City of Burlington develop a program to incentivize universal design and prepare educational materials to assist applicants in understanding the concept and approaches to implement in new construction and remodeling projects.

Recommendation #31: The City should develop educational materials and training sessions on universal design concepts to provide assistance to applicants.

Recommendation #32: The City should incentivize universal design through the use of reduced application fees or reduced review / inspection timeframes.

Appendix A – Recommendation Listing

The following table provides a detailed summary of the key findings and recommendations contained within this report. The rationale for these recommendations are provided in the preceding chapters.

Recommendations are listed in the order they appear in the report. The suggested timeframe for implementation takes into consideration the relative priority of the item and the ability of the City to implement. Some items, while perhaps higher priority for improvement, can only be implemented after certain other recommendations have been implemented, may require budgeting funds to cover the cost of implementation, or will require City Council approval for implementation.

Each recommendation has been allocated to a timeframe based upon the following criteria:

- Short-term: accomplishable within 18 months;
- Medium-term: implemented between 18 months and 36 months;
- Long-term: completed after 36 months.

Report Section	Recommendation #	Priority	Suggested Timeframe	Cost / Staff Time Impact
2.1	1. Continue a dedicated Permitting Oversight Committee consisting of the City Attorney's Office, Planning Director, Inspection Services Official, Director of Code Enforcement, Water Director, Electric Director, Fire Marshal, and CIO to oversee implementation of permitting improvements and oversee the permitting process as a whole. The Committee should engage the CAO's office as appropriate. The Committee should report to the Mayor's Office and be accountable for a clear work-plan with specific deadlines and deliverables.	High	Immediate	Staff Time

Report Section	Recommendation #	Priority	Suggested Timeframe	Cost / Staff Time Impact
2.1	2. Develop a plan for creation of a single Permitting and Land Use department, to encompass Planning and Zoning and Inspection Services. The urgency of this organizational change would depend somewhat on whether the Permitting Oversight Committee is successful in addressing current issues without an organizational change.	High	Long-term	Staff Time
2.1	53. The City should implement an on-going process of routinely reviewing and updating codes and ordinances to keep them current and prevent outdated requirements from remaining on the books	High	Shor-term (and ongoing)	Staff Time
2.2	3. Create a centralized Permitting Center where all staff whose primary function involves Permitting and Land Use are located. Include desks and office hours for other employees. Implement office hours at the center for all staff involved in review of plans or permitting activities.	High	Medium	Both (funding for relocation and facility modifications likely required)
2.2	4. Add a Permit Technician to staff the Inspection Services counter in the permit center.	High	Short-term	\$50,000 base salary to fund new position
2.2	5. Convert one of the administrative positions within Planning and Zoning to a Planning Technician position.	High	Short-term	Additional \$15,000 base salary to fund modified position
2.3	6. The City should track workload and review times for planning and building permits in greater detail and prepare monthly performance reports, which should be shared with the public and used by managers to make decisions regarding resource deployment and workload management.	Medium	Short-term	Staff time required
2.3	7. The Department should develop more detailed monitoring reports on building permit inspection volumes and scheduling, implement the tracking of those measures in the permitting software, and use this to monitor and address delays.	Medium	Short-term	Staff time required

Report Section	Recommendation #	Priority	Suggested Timeframe	Cost / Staff Time Impact
2.4	8. Department staff should be hired, trained, and rewarded based on a balance of technical and customer service skills. Department managers should model, promote and encourage problem solving and customer service.	High	Short-term	Staff Time Required to Implement
2.4	9. The City should provide periodic customer service training to all staff involved in the development review and permitting functions to ensure a consistent approach.	High	Short-term	Estimated cost of \$5,000 if contracted out.
2.5	10. The City should increase the focus on providing consistent information and feedback to customers, including ensuring that interpretations made by staff and decisions made by boards are consistent over time.	High	Short-term	Staff Time Required to Implement
3.1	11. Eliminate the “non-applicable” zoning determination process.	High	Immediate	Staff Time to modify ordinance / process
3.2	12. Enhance the role of the Technical Review Committee to expand departmental review and comments on planning applications once submitted.	Medium	Immediate	Staff time only
3.2	13. Revise the Planning review process to include: providing written consolidated TRC comments to the applicant and requiring meetings (on larger projects) to review comments prior to resubmittal.	High	Immediate	Staff time and Council Approval
3.3	14. The City should adopt objective development standards that delineate by-right approvals and utilize the DAB and DRB process only for discretionary approvals.	High	Short-term	Staff time and Council Approval
3.4	15. Replace separate zoning, inspection services, and fire permits (where currently separate permits are required from each department for the same project) with a single permit on which each department signs off and the applicant is issued a single permit.	High	Short-term	Staff time to implement (software modifications required)

Report Section	Recommendation #	Priority	Suggested Timeframe	Cost / Staff Time Impact
3.5	16. Identify basic trade permits that could be issued as “over the counter” permits, issued by a permit tech or clerk or on-line subject to inspection.	Medium	Short-term	Staff time to implement (software modifications required)
3.6	17. Issue the Unified Certificate of Occupancy after the completion of the final inspection without requiring additional submittals by applicants.	High	Short-term	Staff time to implement (software modifications required)
3.6	18. Eliminate the separate zoning CO application fee. If an additional fee is to be charged it should be incorporated into the original permit fee.	Medium	Short-term	Staff time to implement (software modifications required)
3.6	19. Planners should inspect and sign off on projects at completion to avoid the need for code enforcement officers to inspect projects with which they have no familiarity.	Medium	Short-term	Staff Time
3.6	20. Establish a position in Planning and Zoning to address shifting responsibilities for conducting planning and zoning inspections under the new UCO approach.	Medium	Short-term	Staff time
3.7	21. The City should continue to focus on closing old open permits by having inspectors conduct follow-up activities.	High	Medium-Term	Staff time
3.7	22. In the future, the City should more proactively inform applicants when no action has occurred on a permit within a specified time period (where not already occurring), should consider issuing permits for shorter time durations, and expire permits when no activity has occurred.	Medium	Medium-term	Staff time to develop process
3.8	23. In the short-term, centralize inspection scheduling by creating a trades inspections scheduling phone number to be monitored and used by trained administrative staff. Longer-term, implement on-line inspection requests and scheduling.	High	Short-term	Software modifications required to implement
3.8	24. Adopt an inspection performance standard that guarantees trades inspections within a defined time period following request by the applicant.	High	Short-term	Staff time to implement new policy

Report Section	Recommendation #	Priority	Suggested Timeframe	Cost / Staff Time Impact
3.8	25. If the workload level is too high to accomplish trades inspections within the adopted time frame consider adding additional inspector resources with preference given to those with the ability to inspect in multiple disciplines.	Medium	Medium-Term	Funding required for new position
3.9	26. The City should implement an on-line portal for permit applicants allowing them to apply, pay for, and receive permits electronically as well as look up status of plan review and check inspection results.	High	Longer-term (following selection of software recommended in recommendation 5.1)	Technology modifications necessary to implement
3.10	27. The City of Burlington should implement tablet or laptop use for all field inspections.	High	Longer-term (following selection of software recommended in recommendation 5.1)	Acquisition costs of hardware and software modifications
3.11	28. The City should review all fees association with development review and permitting activities to ensure that all costs associated with providing these services, including overhead and technology costs, are covered by the fee.	High	Short-term	Staff time to develop and Council Approval of Policy
3.12	29. The City should consider the adoption of the International Residential Code and the Existing Building Code.	Medium	Short-term	Staff time
4.1	33. The City should conduct an annual and ongoing customer satisfaction survey.	Medium	Short-term	Staff time to implement
4.2	34. The City should develop a comprehensive Development Guide that provides an overview of the development process. This would be used to train new staff in the process and improve the public's understanding of the process.	High	Medium-term	\$10,000 if contracted out (staff time if done internally)
4.3	35. The City should develop an Application/Permit Matrix that outlines the timeframes for performance, the parties responsible for review, and major submittal requirements for each type of application or permit.	High	Short-term	Staff time to develop and implement

Report Section	Recommendation #	Priority	Suggested Timeframe	Cost / Staff Time Impact
4.4	36. All application forms should be updated to fillable PDF format and made available online for customers to complete and print out. Longer-term, the City should provide online forms.	Medium	Short-term	Staff time to develop and implement
4.5	37. Applicable city staff should document interpretations that have been made of the land development code, building code, and internal policies and procedures and make these available to the public on the City's website.	High	Short-term	Staff time to develop and implement
4.6	38. The City should implement an expedited permit processing option for applicants that meet criteria designated by the City. Suggested criteria include project that either support economic development efforts of the City (increasing tax base, employment, etc.) and projects is designated focus areas for the community such as childcare facilities, affordable housing project, etc.	Medium	Short-term	Staff time to develop and implement (may require Council approval to adopt)
5.1	39. The City should prepare an RFP for new permitting software as well as cost estimates for upgrades and alterations to the current system.	High	Short-term	Staff time to develop or consultant cost
5.2	40. To ensure selection of the most appropriate permitting system, the City should utilize a detailed functionality requirements component in the RFP issued to enable effective comparison of the different systems and responses received	High	Short-term	Staff time to develop and implement or consultant
5.3	41. The City should explore options to increase the level of accuracy of the GIS data regarding property boundaries. Until accurate property boundaries are available through GIS, the City will be significantly limited in some efforts to streamline and further automate processes.	High	Medium-term	Unknown
5.3	42. The City of Burlington, when implementing a new fee schedule, should ensure that the fees are established at a level sufficient to cover all costs associated with the permitting process, including the maintenance, upgrade and utilization of effective technology solutions.	High	Long-term (timed to coincide with the implementation of new technology)	Staff time to develop and Council Approval of Policy

Report Section	Recommendation #	Priority	Suggested Timeframe	Cost / Staff Time Impact
7.1	30. The City should consider during the next zoning review, appropriate modifications of development criteria for developments that include child-care facilities.	High	Medium-Term	Staff time to develop or consultant hired
7.2	31. The City should develop educational materials and training sessions on universal design concepts to provide assistance to applicants.	Medium	Short-term	Staff time to develop or consultant hire
7.2	32. The City should incentivize universal design through the use of reduced application fees or reduced review / inspection timeframes.	Medium	Medium-Term	Staff time

Discussion and rationale for each of these recommendations is contained in the following chapters.

Appendix B – Recommendation Listing (sorted by priority)

Report Section	Recommendation #	Priority	Suggested Timeframe	Cost / Staff Time Impact
2.1	1. Continue a dedicated Permitting Oversight Committee consisting of the City Attorney's Office, Planning Director, Inspection Services Official, Director of Code Enforcement, Water Director, Electric Director, Fire Marshal, and CIO to oversee implementation of permitting improvements and oversee the permitting process as a whole. The Committee should engage the CAO's office as appropriate. The Committee should report to the Mayor's Office and be accountable for a clear work-plan with specific deadlines and deliverables.	High	Immediate	Staff Time
2.1	2. Develop a plan for creation of a single Permitting and Land Use department, to encompass Planning and Zoning and Inspection Services. The urgency of this organizational change would depend somewhat on whether the Permitting Oversight Committee is successful in addressing current issues without an organizational change.	High	Long-term	Staff Time
2.1	53. The City should implement an on-going process of routinely reviewing and updating codes and ordinances to keep them current and prevent outdated requirements from remaining on the books	High	Shor-term (and ongoing)	Staff Time
2.2	3. Create a centralized Permitting Center where all staff whose primary function involves Permitting and Land Use are located. Include desks and office hours for other employees. Implement office hours at the center for all staff involved in review of plans or permitting activities.	High	Medium	Both (funding for relocation and facility modifications likely required)
2.2	4. Add a Permit Technician to staff the Inspection Services counter in the permit center.	High	Short-term	\$50,000 base salary to fund new position

Report Section	Recommendation #	Priority	Suggested Timeframe	Cost / Staff Time Impact
2.2	5. Convert one of the administrative positions within Planning and Zoning to a Planning Technician position.	High	Short-term	Additional \$15,000 base salary to fund modified position
2.4	8. Department staff should be hired, trained, and rewarded based on a balance of technical and customer service skills. Department managers should model, promote and encourage problem solving and customer service.	High	Short-term	Staff Time Required to Implement
2.4	9. The City should provide periodic customer service training to all staff involved in the development review and permitting functions to ensure a consistent approach.	High	Short-term	Estimated cost of \$5,000 if contracted out.
2.5	10. The City should increase the focus on providing consistent information and feedback to customers, including ensuring that interpretations made by staff and decisions made by boards are consistent over time.	High	Short-term	Staff Time Required to Implement
3.1	11. Eliminate the “non-applicable” zoning determination process.	High	Immediate	Staff Time to modify ordinance / process
3.2	13. Revise the Planning review process to include: providing written consolidated TRC comments to the applicant and requiring meetings (on larger projects) to review comments prior to resubmittal.	High	Immediate	Staff time and Council Approval
3.3	14. The City should adopt objective development standards that delineate by-right approvals and utilize the DAB and DRB process only for discretionary approvals.	High	Short-term	Staff time and Council Approval
3.4	15. Replace separate zoning, inspection services, and fire permits (where currently separate permits are required from each department for the same project) with a single permit on which each department signs off and the applicant is issued a single permit.	High	Short-term	Staff time to implement (software modifications required)

Report Section	Recommendation #	Priority	Suggested Timeframe	Cost / Staff Time Impact
3.6	17. Issue the Unified Certificate of Occupancy after the completion of the final inspection without requiring additional submittals by applicants.	High	Short-term	Staff time to implement (software modifications required)
3.8	23. In the short-term, centralize inspection scheduling by creating a trades inspections scheduling phone number to be monitored and used by trained administrative staff. Longer-term, implement on-line inspection requests and scheduling.	High	Short-term	Software modifications required to implement
3.8	24. Adopt an inspection performance standard that guarantees trades inspections within a defined time period following request by the applicant.	High	Short-term	Staff time to implement new policy
3.7	21. The City should continue to focus on closing old open permits by having inspectors conduct follow-up activities.	High	Medium-Term	Staff time
3.9	26. The City should implement an on-line portal for permit applicants allowing them to apply, pay for, and receive permits electronically as well as look up status of plan review and check inspection results.	High	Longer-term (following selection of software recommended in recommendation 5.1)	Technology modifications necessary to implement
3.10	27. The City of Burlington should implement tablet or laptop use for all field inspections.	High	Longer-term (following selection of software recommended in recommendation 5.1)	Acquisition costs of hardware and software modifications
3.11	28. The City should review all fees association with development review and permitting activities to ensure that all costs associated with providing these services, including overhead and technology costs, are covered by the fee.	High	Short-term	Staff time to develop and Council Approval of Policy
4.2	34. The City should develop a comprehensive Development Guide that provides an overview of the development process. This would be used to train new staff in the process and improve the public's understanding of the process.	High	Medium-term	\$10,000 if contracted out (staff time if done internally)

Report Section	Recommendation #	Priority	Suggested Timeframe	Cost / Staff Time Impact
4.3	35. The City should develop an Application/Permit Matrix that outlines the timeframes for performance, the parties responsible for review, and major submittal requirements for each type of application or permit.	High	Short-term	Staff time to develop and implement
4.5	37. Applicable city staff should document interpretations that have been made of the land development code, building code, and internal policies and procedures and make these available to the public on the City's website.	High	Short-term	Staff time to develop and implement
5.1	39. The City should prepare an RFP for new permitting software as well as cost estimates for upgrades and alterations to the current system.	High	Short-term	Staff time to develop or consultant cost
5.2	40. To ensure selection of the most appropriate permitting system, the City should utilize a detailed functionality requirements component in the RFP issued to enable effective comparison of the different systems and responses received	High	Short-term	Staff time to develop and implement or consultant
5.3	41. The City should explore options to increase the level of accuracy of the GIS data regarding property boundaries. Until accurate property boundaries are available through GIS, the City will be significantly limited in some efforts to streamline and further automate processes.	High	Medium-term	Unknown
5.3	42. The City of Burlington, when implementing a new fee schedule, should ensure that the fees are established at a level sufficient to cover all costs associated with the permitting process, including the maintenance, upgrade and utilization of effective technology solutions.	High	Long-term (timed to coincide with the implementation of new technology)	Staff time to develop and Council Approval of Policy
7.1	30. The City should consider during the next zoning review, appropriate modifications of development criteria for developments that include child-care facilities.	High	Medium-Term	Staff time to develop or consultant hired

Report Section	Recommendation #	Priority	Suggested Timeframe	Cost / Staff Time Impact
2.3	6. The City should track workload and review times for planning and building permits in greater detail and prepare monthly performance reports, which should be shared with the public and used by managers to make decisions regarding resource deployment and workload management.	Medium	Short-term	Staff time required
2.3	7. The Department should develop more detailed monitoring reports on building permit inspection volumes and scheduling, implement the tracking of those measures in the permitting software, and use this to monitor and address delays.	Medium	Short-term	Staff time required
3.2	12. Enhance the role of the Technical Review Committee to expand departmental review and comments on planning applications once submitted.	Medium	Immediate	Staff time only
3.5	16. Identify basic trade permits that could be issued as "over the counter" permits, issued by a permit tech or clerk or on-line subject to inspection.	Medium	Short-term	Staff time to implement (software modifications required)
3.6	18. Eliminate the separate zoning CO application fee. If an additional fee is to be charged it should be incorporated into the original permit fee.	Medium	Short-term	Staff time to implement (software modifications required)
3.6	19. Planners should inspect and sign off on projects at completion to avoid the need for code enforcement officers to inspect projects with which they have no familiarity.	Medium	Short-term	Staff Time
3.6	20. Establish a position in Planning and Zoning to address shifting responsibilities for conducting planning and zoning inspections under the new UCO approach.	Medium	Short-term	Staff time
3.7	22. In the future, the City should more proactively inform applicants when no action has occurred on a permit within a specified time period (where not already occurring), should consider issuing permits for shorter time durations, and expire permits when no activity has occurred.	Medium	Medium-term	Staff time to develop process

Report Section	Recommendation #	Priority	Suggested Timeframe	Cost / Staff Time Impact
3.8	25. If the workload level is too high to accomplish trades inspections within the adopted time frame consider adding additional inspector resources with preference given to those with the ability to inspect in multiple disciplines.	Medium	Medium-Term	Funding required for new position
3.12	29. The City should consider the adoption of the International Residential Code and the Existing Building Code.	Medium	Short-term	Staff time
4.1	33. The City should conduct an annual and ongoing customer satisfaction survey.	Medium	Short-term	Staff time to implement
4.4	36. All application forms should be updated to fillable PDF format and made available online for customers to complete and print out. Longer-term, the City should provide online forms.	Medium	Short-term	Staff time to develop and implement
4.6	38. The City should implement an expedited permit processing option for applicants that meet criteria designated by the City. Suggested criteria include project that either support economic development efforts of the City (increasing tax base, employment, etc.) and projects is designated focus areas for the community such as childcare facilities, affordable housing project, etc.	Medium	Short-term	Staff time to develop and implement (may require Council approval to adopt)
6	43. Establish handout specifically outlining permitting process for solar permits including submittal requirements, review timeframes, and zoning requirements / conditions of approval.	Medium	Short-term	Staff Time
6	52. Where feasible, seek state approval to allow cross-trained inspectors to enable single inspection of solar installations to streamline inspection process. If this is not implemented, or workload prevents completion of solar inspections in a timely manner, the City should consider accepting third party inspections from a pre-qualified list of inspectors (again, state approval or modification of regulations may be required).	Medium	Short-term	Staff time to train or develop program

Report Section	Recommendation #	Priority	Suggested Timeframe	Cost / Staff Time Impact
7.2	31. The City should develop educational materials and training sessions on universal design concepts to provide assistance to applicants.	Medium	Short-term	Staff time to develop or consultant hire
7.2	32. The City should incentivize universal design through the use of reduced application fees or reduced review / inspection timeframes.	Medium	Medium-Term	Staff time

[illegible]

Matrix Consulting Group Recommendation				City of Burlington						Proposed Timeframe							
Category		Rec #	Matrix Recommendation	City Team Response	Priority	Implementation effort	Ongoing Effort	Cost	Dependency	Mar 17	Jun 17	Sept 17	Dec 17	Mar 18	Jun 18	Sept 18	Dec 18
Process	Single Permit	15	Replace separate zoning, inspection services, and fire permits (where currently separate permits are required from each department for the same project) with a single permit on which each department signs off and the applicant is issued a single permit.	We agree there is value to streamlining permits, and recommend this be accomplished in two steps: 1. POC should identify areas where duplicative permits are issued (e.g. fire sprinklers) and work toward consolidating them into a single permit. 2. A working group should be formed to evaluate whether there is additional value and ability to consolidate other activities into one permit and make a recommendation back to the POC.	Medium	Medium	Small					Improve duplicative (1)	X	X	X	X	X Working Group begins (2)
	P&Z Staffing	5	Convert one of the administrative positions within Planning to a Planning Technician position.	This is already underway; modification to change an existing, vacant position to BOF / CC for approval Jan 2017.	High	Easy	-	within current budget			X						
	P&Z	14	The City should adopt objective development standards that delineate by-right approvals and utilize the DAB and DRB process only for discretionary approvals.	P&Z supports this recommendation. Form Based Code is a step toward this goal in the downtown area, which we believe should be expanded to additional areas. To provide short-term relief, P&Z will develop a proposal for an expanded threshold for review by the appropriate boards and Council.	High	Easy						Proposal					
	P&Z	11	Eliminate the “non-applicable” zoning determination process.	The NA decision is not required, but is offered for applicants who want confirmation before starting work. We recommend that P&Z work with the City Attorney to determine if there is a more effective means of achieving the intended outcome that does not require a delay in issuing a building permit due to the 15-day appeal time. Improvements can also be achieved through developing a standard operating procedure that can be followed by ISD staff. Further, moving staff to a single location where staff and applicants can better interact will likely reduce the perceived need for the decision.	High	Easy	Small				Proposal for new process						
	P&Z Inspection	19	Planners should inspect and sign off on projects at completion to avoid the need for code enforcement officers to inspect projects with which they have no familiarity.	We recommend moving responsibility for performing zoning permit inspections to P&Z. This would require at least one additional headcount for that team. A plan for this transition should be developed by the POC, with the goal of moving responsibility at the start of FY19.	High	Medium	Medium	+60k annual +benefits					Plan for transition				
	P&Z Inspection	20	Establish a position in Planning and Zoning to address shifting responsibilities for conducting planning and zoning inspections under the new UCO approach.	See #19. The plan developed in 19 should include exploring whether a position could be transferred from P&Z, or whether a greater focus on closing aged open permits should be followed by Code.	High	Medium	-		19				Plan for transition				
	P&Z Inspection	17	Issue the Unified Certificate of Occupancy after the completion of the final inspection without requiring additional submittals by applicants to Code.	We recommend this change be made with the move of zoning inspection responsibility to P&Z (19). A process will need to be developed to address outstanding permits.	High	Medium	Small		19				Plan for transition				
	ISD Staffing	4	Add a Permit Technician to staff the Inspection Services counter in the permit center.	The team recommends that a more formal evaluation of the need for and appropriate role of a Permit Tech be evaluated, and a formal recommendation with proposed job description be developed in anticipation of FY19 hiring, aligned with creation of a one-stop shop.	Medium	Easy	-	+50k annual +benefits						Proposal complete			

Matrix Consulting Group Recommendation				City of Burlington						Proposed Timeframe							
Category		Rec #	Matrix Recommendation	City Team Response	Priority	Implementation effort	Ongoing Effort	Cost	Dependency	Mar 17	Jun 17	Sept 17	Dec 17	Mar 18	Jun 18	Sept 18	Dec 18
	ISD	16	Identify basic trade permits that could be issued as “over the counter” permits, issued by a permit tech or clerk or on-line subject to inspection.	We recommend that DPW create a task force to identify areas where OTC permits can be issued providing public value without risking safety. The team should develop a formal recommendation for the POC, which will include plans for implementation of any changes recommended. This should be aligned with evaluation of need for a permit tech.	Medium	Medium	tbd		4						Proposal complete		
	ISD Inspection	23	In the short-term, centralize inspection scheduling by creating an inspections scheduling phone number to be monitored and used by trained administrative staff. Longer-term, implement on-line inspection requests and scheduling.	In the near-term, DPW will develop an improved process for scheduling inspections to improve customer experience and reduce staff time required to support scheduling. Exploration of possible automated tools will begin in partnership with IT For the longer term, requirements for new software will include the ability to schedule inspections online.	High	Medium	Small		New software (39)			Identify and begin implement interim tool					
	ISD Inspection	24	Adopt an inspection performance standard that guarantees inspections within a defined time period following request by the applicant.	We recommend this be evaluated and implemented at a later phase of the project. It will require other recommendations be implemented, such as hiring a permit tech and offering online scheduling, and those other steps will have more significant impact on customer satisfaction.	Medium	Medium	tbd	tbd	4, 39								Develop proposal
	ISD Inspection	25	If the workload level is too high to accomplish inspections within the adopted time frame, consider adding a “combo” inspector with cross training to inspect for multiple disciplines.	DPW is in conversations with the State to understand whether they would approve hiring a combination inspector to perform single family inspections DPW has also identified other opportunities to address building inspection volumes and working toward a faster inspection standard. Possible solutions include staff overtime, maintaining a budget for and list of approved contractors, and mutual aid agreements with other communities. Once their research is complete, they will make a formal recommendation about next steps to the POC and Mayor.	Medium	Medium	tbd	tbd	24					Proposal complete			
	ISD Codes	29	The City should consider the adoption of the International Residential Code and Existing Building Code.	IBC anc IEBC are already adopted as part of State Reference Code. We recommend that DPW create a task force to consider the recommendation to adopt the International Residential Code. The team would work with the State to understand our ability to implement the IRC, as well as with the development community to gather their feedback and determine if there is real value in implementing the change.	Medium	Medium	tbd	tbd					Proposal				
	Education	34	The City should develop a comprehensive Development Guide that provides an overview of the development process. This would be used to train new staff in the process and improve the public’s understanding of the process.	We recommend this be undertaken and the City develop a web and print guide to help the public better understand the development process and clearly identify what steps they must take to successfully complete the permitting process. The project should incorporate a guide and a matrix as identified in 35. We recommend this be undertaken after significant process changes have been implemented to ensure the guide is useful and up to date.	High	Medium	-	\$25,000 consultant	Significant changes implemented					X			
	Education	35	The City should develop an Application/Permit Matrix that outlines the timeframes for performance, the parties responsible for review, and major submittal requirements for each type of application or permit.	see 34				\$5k consultant	with 34					X			

Matrix Consulting Group Recommendation				City of Burlington						Proposed Timeframe							
Category		Rec #	Matrix Recommendation	City Team Response	Priority	Implementation effort	Ongoing Effort	Cost	Dependency	Mar 17	Jun 17	Sept 17	Dec 17	Mar 18	Jun 18	Sept 18	Dec 18
Customer Service	Education	10	The City should increase focus on providing consistent information and feedback to customers, including ensuring that interpretations made by staff and decisions made by boards are consistent over time.	Interpretations are currently tracked, however there is no mechanism in place for them to be available online. P&Z will work to post the existing interpretations online. Longer-term P&Z and IT will explore options for making the interpretations available online for staff and public access. (Also see 37)	Medium	Medium	Small	tbd			Posted online						
	Education	37	Applicable city staff should document interpretations of the land development code, building code, and internal policies and procedures and make these available to the public on the City's website.	See 10	Medium	Medium	Small	tbd			Posted online						
	Forms	36	All application forms should be updated to fillable PDF format and made available online for customers to complete and print out. Longer-term, the City should provide online forms.	We recommend quickly identifying an intern or consultant who can complete converting the documents to fillable forms and posting them to the website. Staff from P&Z, ISD and Code will catalog all of the forms to be converted. IT and City Attorney will explore appropriate means for capturing e-signatures.	High	Easy	-	\$4k-\$5k consultant				X					
	Training	8	Department staff should be hired, trained, and rewarded based on a balance of technical and customer service skills. Department managers should model, promote and encourage problem solving and customer service.	Leadership for P&Z, ISD and Code will attend customer service training and will strive to weave a customer service focus into operations and expectations. Leadership will also work to ensure standard operating procedures (SOPs) exist for key activities, and that regular training occurs for all staff to ensure standardized and consistent customer experiences. They will also work do ensure training occurs across teams and departments to ensure all staff have the information they need to provide customer support for all requests they receive.	High	Medium	Small		with 9		X	X	X	X	X	X	X
	Training	9	The City should provide periodic customer service training to all staff involved in the development review and permitting functions to ensure a consistent approach.	We recommend that customer service training be provided to all permitting staff who interface with the public on a regular basis. This effort should be coordinated with other customer service training needs/efforts that exist across the City.	High	Easy	Small	\$7,500 annual	with 8				X				X
	Reporting	6	The City should track workload and review times for planning and building permits in greater detail and prepare monthly performance reports, which should be shared with the public and used by managers to make decisions regarding resource deployment and workload management.	The ability to deliver detailed workload and performance reports will be a requirement for any new software to be selected. An interim solution should be explored for more immediate reporting: 1. P&Z currently reviews regular reports about permit activity. These reports will be used to identify if additional data should be added based on the recommendation. 2. ISD will develop a template for a report to provide data recommended. Once each request is complete, IT will estimate the effort that will be required to deliver the reports, and the POC will determine whether it is worth the effort to implement the changes for interim reporting.	Medium	Medium	Small	tbd	IT availability, 39		Needs identified	IT proposal to POC					
	Reporting	7	The Department should develop more detailed monitoring reports on building permit inspection volumes and scheduling and use this to track and address delays.	See 6					6								
	Survey	33	The City should conduct an annual and ongoing customer satisfaction survey.	We recommend members of the POC evaluate the best means of implementing a survey. The team should also consider how to align this survey with other survey/ public engagement efforts that may be underway.	Medium	Medium	Medium	tbd					Proposal				

Matrix Consulting Group Recommendation				City of Burlington						Proposed Timeframe							
Category		Rec #	Matrix Recommendation	City Team Response	Priority	Implementation effort	Ongoing Effort	Cost	Dependency	Mar 17	Jun 17	Sept 17	Dec 17	Mar 18	Jun 18	Sept 18	Dec 18
Technology	Software	40	To ensure selection of the most appropriate permitting system, the City should utilize a detailed functionality requirements component in the RFP issued to enable effective comparison of the different systems and responses received	see 39	High	Difficult	-	\$70k consultant	39						Consultant selected		
	Software	26	The City should implement an on-line portal for permit applicants allowing them to apply, pay for, and receive permits electronically as well as look up status of plan review and check inspection results.	Any new permitting software selected would be required to provide the ability to apply for, monitor, and receive permits online. Rolling out this functionality would be included in an implementation plan resulting from 39. The POC should be asked to explore if there are interim web site improvements that can be made, and to identify any simple permits that could be issued online and evaluate whether there is value to implementing any interim functionality ahead of the longer term solution.	High	Medium		with 39	39			explore interim solutions					X
	GIS	41	The City should explore options to increase the level of accuracy of the GIS data regarding property boundaries. Until accurate property boundaries are available through GIS, the City will be significantly limited in some efforts to streamline and further automate processes.	The POC should be tasked with researching best practices in other communities and evaluate our current capabilities relative to those practices, as well as to develop procedures for when we require a survey to be provided by an applicant to confirm property lines and protect the public ROW. Our current process is typically based on the customer's representation, without requiring they provide additional surveys in most cases.	High	Medium	Medium	tbd					Proposal				
Fees	Fees	28	The City should review all fees associated with development review and permitting activities to ensure that all costs associated with providing these services, including overhead and technology costs, are covered by the fee.	We recommend that a working group be developed, to include participation and support from the CAO's office, to evaluate current fees to ensure they are fair, appropriate, and recover all direct and indirect permitting costs to the City.	Medium	Medium					Begin evaluation			Proposal			
	Fees	18	Eliminate the zoning CO application fee. If an additional fee is to be charged it should be incorporated into the permit fee.	We recommend this be considered as part of the overall fee structure review, see 28. The POC should evaluate changing the timing of this fee in the short-term. Ultimately, this should be included in the plan to transition responsibility for performing zoning inspections moves to P&Z (19).	Medium	Easy			28					Proposal			
	Fees	42	The City of Burlington, when implementing a new fee schedule, should ensure that the fees are established at a level sufficient to cover all costs associated with the permitting process, including the maintenance, upgrade and utilization of effective technology solutions.	We recommend tech costs be included in overall fee schedule, see 28.	High	Medium			28					Proposal			



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Proposed Implementation Plan: Permit Reform Recommendations

April 18, 2017

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Overview

- Council resolution on Sept 22 2014 initiated the permit reform effort
- Matrix Consulting Group began in February 2016 – recommendations from their work have been presented today
- Project team worked with the consultants to share information and try to ensure the recommendations were based on an understanding of State requirements, local ordinances, and our processes and practices
 - Participation included staff from DPW Inspection Services, Planning and Zoning, City Attorney, Fire Marshal, Water Resources, and Burlington Electric
- Historic Preservation review was preformed by another firm, Calfee. Those recommendations will be presented separately

Project Goal

To develop an improved permitting process that is:

- Consistent, efficient, transparent, and predictable
 - Ensures public health and safety
 - Supports energy efficiency, and
 - Encourages investment and reinvestment
-
- This goal, as outlined in the RFP, guided the team's work and proposed action plan

Public Engagement

- The consultants led an extensive public process through June 2016, which included:
 - Online public survey received 614 responses
 - Three public forums, which attracted over 40 attendees
 - Five focus groups were held, targeted to specific segments of the community (Real Estate Professionals, Architects, Contractors/Developers, Home Owners, and Business Owners)
- In addition, many individuals spoke separately with the consultants or the CIO to share their challenges and ideas

Strengths of Current Process

- Staff are generally available on a walk-in basis to provide feedback and information to members of the public
- Educational materials available online and at offices, including copies of codes and ordinances
- Informal pre-application meetings with planning staff are encouraged for applicants to discuss their project and gain input from staff
- Many building permits are issued same-day, and few require revisions and resubmissions by applicants. Trades staff assist applicants, many with little experience in the trades, with understanding the code requirements and achieving approval
- Trade inspections scheduled for specific times

Key Findings:

- Service levels are generally acceptable but notable opportunities for streamlining
- Separation of functions and locations create challenges
- Technology utilization is not currently meeting the needs
- Further opportunities for improvements in inter-departmental cooperation
- Some additional staff and changes to existing staffing could greatly enhance service levels.
- Communication, training and educational materials needed for all.
- Current resources are insufficient to implement all recommendations in a timely manner.
- A focus on “customer-centered” service should be a priority.

Recommendation Themes

- **Organizational Structure:** Enhancing organizational structure to encourage operational efficiency and accountability, and to improve the customer experience
- **Process:** Improving and streamlining processes to improve efficiency, decision-making, and service delivery
- **Customer Service:** Providing better education and materials and developing a culture focused on customer service to improve the customer experience
- **Technology:** Better utilizing technology to improve internal efficiencies and provide enhanced customer capabilities
- **Fees:** Ensuring fees charged cover all direct and indirect costs associated with permitting operations, allow for the ongoing support and enhancement of operations and technology, and are clear and predictable for applicants

Implementing the Recommendations

- Upon review of the final recommendations presented by Matrix, the City team worked to develop a plan we believe will allow us to successfully address and implement the recommendations
- Our plan was, and future proposals will be, developed with consideration for our need to support two categories of customers through the permitting processes:
 - Individual Property Owners
 - Development and Construction Professionals

Implementation Plan

- The implementation plan details our proposed actions, estimates of difficulty and cost, and projected deliverable dates for each action
- Implementation of all of the recommendations will take a number of years, and many will require additional resources. Many changes that can be implemented over the next year will result in significant improvements to the customer experience
- A number of recommendations require further research and planning, proposals will be developed and presented as work is completed
- Permit Oversight Committee (POC), the current project team, will be held accountable for overseeing implementation and managing to the plan

Key deliverables – Organization & Process

Organizational Structure

- Consider creation of a consolidated department responsible for all Zoning and Inspection Services activities (1, 2)
- *Arrange for P&Z, ISD and Code to offer combined, co-located office hours (3)**

Process

- *Develop a plan to improve the Technical Review Committee's (TRC) process (12, 13)*
- *Begin streamlining duplicative permits (15)*
- *Develop a process for regular review of codes and ordinances to ensure currency (53)*
- Zoning
 - *Hire a planning technician at Planning & Zoning (5)*
 - *Develop a plan to transition responsibility for UCO inspections from Code to P&Z (19, 20)*
 - *Propose changes to increase the threshold for administrative review (14)*
 - *Research and propose an alternative to the N/A determination (11)*

* Note: items in *italics* are anticipated to be delivered by the end of 2017

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Key deliverables - Process

Process (cont'd)

- ISD
 - *Research and implement improvements to trades inspection scheduling (23)*
 - *Explore and make a recommendation about the value of adopting the International Residential (29)*
 - Hire a permit technician to provide improved service to applicants at ISD (4)
- Implement a two-day inspection standard for trades inspections (24) and contract or hire staff to support the additional workload, if necessary (25)
- Identify where ISD can offer over the counter permits to streamline the customer experience (16)
- UCO
 - *Develop a plan for issuing the UCO upon completion of all inspections (17, 18)*

Key deliverables – Customer Service

Customer Service

- *Ensure regular customer service trainings for staff (9) to further enhance customer-focused culture (8)*
- *Develop a plan for performing an annual customer survey (33)*
- *Make all forms available online as fillable PDFs (36)*
- *Catalog and post online all interpretations and determinations (10, 37)*
- *Develop process metrics and a proposal to regularly report performance to the public (6, 7)*
- *More proactively notify customers of open permits to ensure permits are not left for future problems (22) evaluate the benefit of cleaning up aged permits (21)*
- *Create a development guide (34) and process matrix (35) to provide customers with an easy-to-use guide to the permitting process*

Key deliverables – Technology & Fees

Technology

- *Provide the ability for inspectors to complete data input from the field (27)*
- Identify and implement the most appropriate and cost-effective permitting application through a formal RFP, and provide staffing to support ongoing maintenance of the application (39, 40)
- Provide an online portal to allow applicants to submit applications, track progress, and schedule inspections online (26)
- *Explore and develop a proposal to address the need to improve GIS accuracy (41)*

Fees

- Begin an evaluation of fees to ensure they cover all direct and indirect costs (28)
- Ensure fees charged support the procurement and ongoing support of technology necessary to support staff activities and increased customer functionality (42)

Estimated costs

		FY17	FY18	FY19	FY20	FY21	
Staffing							
	Permit Tech			52,000	54,080	56,243	
	Trades Inspections (staff or consultant)			60,000	62,400	64,896	
	UCO Inspector			60,000	62,400	64,896	
	IT to support new app				75,000		
Education							
	Create PDF Forms	5,000					
	Create Development Guide and Matrix			30,000			
	Annual customer service training		7,500	7,500	8,500	8,500	
Software							
	Consulting- Software RFP		20,000	70,000			
	Software licensing			275,000			
	Software annual maintenance				55,000	55,000	
	Software implementation			100,000	100,000		
Renovation							
	Combined office hours		tbd				
	Create one stop shop			50,000			
Total		\$ 5,000	\$ 27,500	\$ 654,500	\$ 417,380	\$ 249,535	
Other potential expenses, to be evaluated as part of proposed plan							
	Regular review of ordinances						
	Interim scheduling software						
	Conducting an annual customer survey						
	Improving GIS accuracy						
	Support office hours at one location						
	Creation of one department						
	Closing old permits						

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Next steps

- DPW and Planning Commissions expected to complete discussions and make final recommendations in May
- Tentative initial Council presentation on May 1st
- Proposed implementation plan will be brought back to Council for approval following the recommendation of the Commissions
- Following approval of City Council, the project team will begin implementation of the plan
- Complete Historic Preservation engagement and prepare implementation plan for recommendations to present at a future meeting (est. June)