

 COMMUNITY & ECONOMIC DEVELOPMENT OFFICE 149 CHURCH STREET • ROOM 32 • CITY HALL • BURLINGTON, VT 05401 (802) 865-7144 • (802) 865-7024 (FAX) www.burlingtonvt.gov/cedo		
Noelle MacKay Director Community & Economic Development Office	Chapin Spencer Director, Public Works Norman J. Baldwin, P.E. Asst. Director Public Works	David E White, AICP Director, Planning & Zoning Department

TO: Burlington Transportation Energy and Utilities Committee
FROM: Kirsten Merriman Shapiro, Senior Policy and Project Specialist, CEDO
Laura K. Wheelock P.E., Public Works Engineer
Meagan E Tuttle, AICP, Principal Planner, Planning and Zoning
RE: Great Streets Initiative – Downtown Design & Construction Standards
DATE: March 20, 2018

The Great Streets Initiative includes the development of *Design & Construction Standards* (Standards) which will ensure that Burlington's downtown streets are built to endure decades and reflect Burlington's values, which have been articulated in many plans created by our community and adopted by the City. These Standards have been developed according to three principles:

- To create a **balance among users and uses of the right-of-way**, to ensure that all modes of travel are accommodated in a safe and adequate way;
- To guide the selection of materials and furnishings that will result in **unified public streetscapes** throughout downtown as projects are constructed over time; and
- To **reframe the center of downtown** by investing in streets that frame City Hall Park and connect downtown to the waterfront.

The principles upon which these draft Standards are based, and the benefits our community can realize through their implementation, have led to the unanimous support of each the Parks, Public Works, and Electric Commissions. We look forward to discussing these standards further with the Council in April.

What are the benefits of Great Streets Standards?

- The first, and one of the more important, benefit is to have a **single, comprehensive resource for downtown street design**. Currently, the City does not have a resource containing information on all aspects of how to design and build public streets. This leads to decision-making at the individual project level about even the most fundamental elements of street design. This resource will provide information not only about elements that are required, but also those preferences that help us implement our community goals. It will serve as a defensible set of standards to assure a consistent, minimum level of quality and performance, particularly when working with private property owners.
- The recommended street dimensions have been developed to make **small changes in how the right-of-way is allocated** among the streets' users today, **while significantly improving the ability to meet a wider variety of uses**. These changes should not be viewed as trading in one user for another. Small changes are leveraged to result in major improvements to: the safety and accessibility for all users; adequate soil volumes to grow healthy trees; and space within our streetscapes to manage stormwater runoff, which is critical to the health of Lake Champlain and the achievement of the city's stormwater permitting obligations.

- As a result of the individual project-level decision-making mentioned above, downtown's streetscapes vary widely in their design and type of elements. The Standards will provide a **more unified visual language, strengthening connections between the waterfront & Church Street**—a concept that is often discussed, but hard to address—and preventing streetscapes from appearing dated.
- Greater cohesion is not only an aesthetic benefit, but also one of function and accessibility. A more unified application of design details, such as minimum sidewalk widths and how to locate benches and trash cans, etc. will greatly **enhance the level of comfort and usability by residents and visitors alike**.
- Standards will assist the City with maintaining streetscapes. While the initial implementation may require adjustments to maintenance schedules or methods, greater cohesion in the dimensions of built environment and materials and elements used should ultimately **lead to more efficient and effective maintenance**. Specifically, as streetscapes begin to use similar enhanced materials, the need to purchase and stock a wide variety of materials and furnishings, and the need to apply a wide variety of maintenance treatments in different ways throughout downtown, will be reduced.
- Provides **more predictability and accuracy**—when estimating project costs and budgets, in where utilities are located underground, and in guiding the selection of elements that are long-lasting and durable, which will help reduce life cycle costs.
- Provides defensible guidelines for the placement of elements within the right-of-way that will **assist DPW and Council in their consideration of requests for encroachments and encumbrances**, particularly in determining whether the City's standards for a safe and accessible streetscape can be maintained.

The Role of the Standards

It is intended that these standards will be used by anyone involved in the transformation of streets in downtown Burlington, including planners and project managers from the City, outside entities who provide services within the public right-of-way, professional street designers working with or on behalf of the City, and boards and commissions reviewing plans for street designs. To that end, these Standards:

- **DO** incorporate (either directly or by reference) the applicable city and state standards for the design and construction of the right-of-way.
- **DO** include both preferred and alternative materials and fixtures that will allow for flexibility in individual street design, while utilizing a family of elements that help provide cohesion among streets.
- **DO NOT** provide specific designs for each street, or specify the quantity or exact location of all elements within the downtown. While they draw upon recommendations contained within adopted plans, they **DO NOT** replace the project development process that each street design is subject to.
- **DO NOT** mandate the immediate reconstruction of all streets or replacement of elements. Instead, these standards will be applied as streets are redevelopment in a significant way, or as existing elements reach the end of their useful life.
- **WILL** take precedence over existing City guidelines regarding the design of downtown streets, and will guide future amendments to ordinances to be consistent with the standards of practice outlined in the document.
- **WILL** be updated from time-to-time to adjust to new or changing product specifications, or to adapt as lessons are learned from their implementation. Updates to individual sections of these Standards will be approved by boards and commissions of the City per their assigned charter authorities.

We respectfully request the Transportation Energy and Utilities Committee sponsor the attached draft resolution and approve and recommend adoption of the Great Streets Design and Construction Standards by the City Council.

Thank you for your consideration of the Great Streets Design & Construction Standards. The Standards can be viewed at <http://greatstreetsbtv.com/downtown-standards> Please feel free to contact any of the project managers with questions.

Resolution Relating to

ADOPTION OF THE GREAT STREETS DESIGN AND
CONSTRUCTION STANDARDS FOR DOWNTOWN
BURLINGTON

RESOLUTION _____

Sponsor(s): TEUC

Introduced: _____

Referred to: _____

Action: _____

Date: _____

Signed by Mayor: _____

CITY OF BURLINGTON

In the year Two Thousand Eighteen

Resolved by the City Council of the City of Burlington, as follows:

That WHEREAS, starting with the 1996 Municipal Development Plan that called for street design standards and then the 2011 Transportation and the planBTV Downtown & Waterfront Master Plan, the City has engaged in many years of community planning that confirmed broad agreement for a well-designed, multi-use, multi-modal downtown street network linked to a more vibrant and inviting public realm at the heart of the City; and

WHEREAS, this effort has culminated in the Great Streets Initiative; and

WHEREAS, the *Great Streets Design and Construction Standards* are the part of this Initiative which will ensure that Burlington's downtown streets are built to endure for decades and reflect Burlington's values; and

WHEREAS, the Standards have been developed to create a balance among users and uses of the right-of-way, to ensure that all modes of travel are accommodated in a safe and adequate way; and

WHEREAS, the Standards will serve as a defensible set of standards which will ensure a consistent and predictable, minimum level of quality and performance, and will guide the selection of materials and furnishings that will result in unified public streetscapes throughout downtown as projects are constructed over time; and

WHEREAS, the Standards have been developed to reframe the center of downtown by investing in streets that frame City Hall Park and connect downtown to the waterfront; and

WHEREAS, the Standards will assist the City with more efficiently and effectively procuring materials and equipment, maintaining streetscapes, and enhancing the level of comfort and usability of the City's downtown streets; and

WHEREAS, the Standards do not provide specific designs for each street, but do draw upon recommendations of a variety of adopted plans as well as local, state and federal standards to create a single, comprehensive resource for downtown street design that will not only provide information about street elements which are required, but also those preferences that help implement community-wide goals; and

WHEREAS, the Standards envision minor changes in how the public right-of-way is allocated among street users and functions (e.g. utilities, stormwater, trees) in order to leverage major improvements to safety and accessibility for all users, adequate soil volumes for healthy

trees, and space within the streetscape to manage stormwater runoff which is critical to the health of Lake Champlain and the achievement of the City's stormwater permitting obligations; and

WHEREAS, the Standards make recommendations for minor changes to the line and grade of the road to be considered during project development but do not sanction the changes without City Council approval; and

WHEREAS, these Standards will be used alongside the public engagement plan for projects of various sizes to guide the technical layout, design and placement of elements within the right-of-way based; and

WHEREAS, the Standards are primarily a technical document and over ten different departments of the City have been involved in developing it; and

WHEREAS, the Standards were also presented and received comments through the Great Streets Initiative public process and through the consideration at the Public Works, Parks, and Burlington Electric Commissions; and

WHEREAS, on December 5, 2017 the Parks Commission unanimously approved and adopted the sections of the Great Streets Standards relevant to the planting of trees, the planting and maintenance of Green Belts (area between the curb and the street line on each side of the street not used for a sidewalk), and the arrangement of elements within the sidewalk zone to protect tree health and recommended City Council approval of these sections of the Great Streets Standards; and

WHEREAS, on December 20, 2017 the Public Works Commission unanimously approved and adopted the Great Streets Standards relevant to the parking, operation, and speed of vehicles and pedestrian and vehicular traffic, including the equipment and systems regulating the parking of vehicles, the erection of guideposts, street signs, and street safety devices which are under the jurisdiction and authority of the Public Works Commission; and

WHEREAS, the Public Works Commission further recommended the City Council adoption of the Great Streets standards, including those sections relevant to the grade and width of the streets and sidewalks and construction thereof, all of which are under the City Council's jurisdiction; and

WHEREAS, on January 10, 2018 the Burlington Electric Commission recommended the City Council support the section of the Great Streets Standards relevant to the installation of electric utility facilities and decorative street lighting, which has been approved by the Department and the General Manager per the Commission's adopted Street Lighting Policy; and

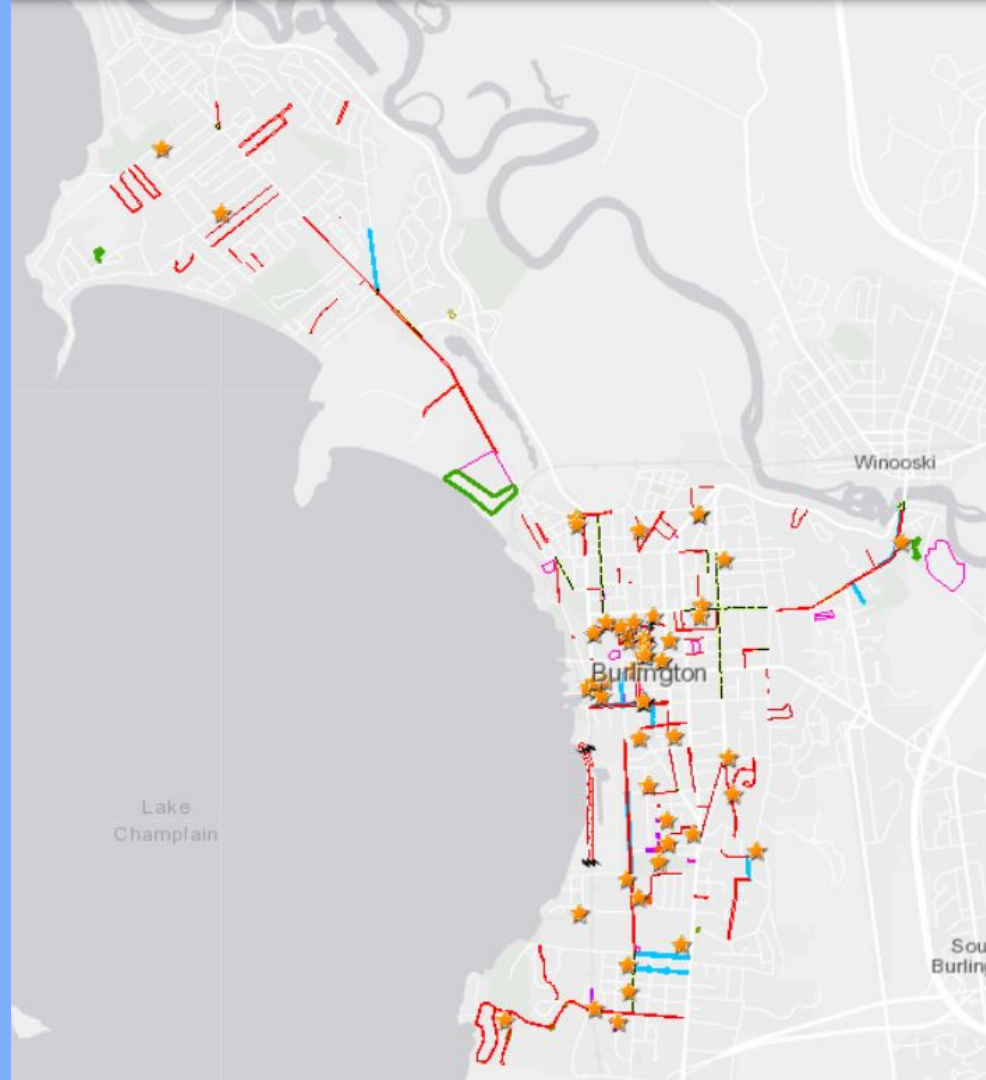
WHEREAS, on March 27, 2018, the Transportation Energy and Utilities Committee of the City Council approved and recommended adoption of the Great Streets Design and Construction Standards by the City Council; and

NOW, THEREFORE, BE IT RESOLVED that the City Council hereby approves the adoption of the Great Streets Design and Construction Standards for Downtown Burlington, and particularly adopts those sections related to the grade and width of the streets and sidewalks, and the construction thereof; and

BE IT FURTHER RESOLVED that the City Council hereby approves of where necessary the individual Commissions and Departments to make periodic updates to these Standards per their individual authorities within the City Charter and resolutions.



Year 2: Sustainable Infrastructure Plan



By The Numbers: Water Main Rehab

- **Total Construction Year 2018 Water Rehab Work**
 - **~3.65 mi**
- Water Main Rehab Carryover
 - Relining: 1 mi
 - Replacement: 0.9 mi
- Water Main Rehab - 2018 New Contract
 - Relining: 1.3 mi
 - Replacement: 0.45 mi

Water Main Rehab

Relining

- Allen Street (all)
- Charlotte Street (all)
- Flynn Ave (255 Flynn to Shelburne)
- Hillcrest Road (all)
- Maple (South Willard to South Prospect)
- Maple (Pine to St. Paul)
- Pine St (Howard to Lakeside; Main to Maple) -- Carryover

Replacement

- Ethan Allen Parkway (Lopes Ave to North Ave) -- *scheduled during school recess to minimize traffic impacts*
- Church Street (Adams Street to Maple Street) -- *scheduled later in season to minimize Lower Downtown disruption*
- Maple (Battery to Pine) -- Carryover
- Colchester (Barrett to Nash) -- Carryover
- Latham Ct -- Carryover
- Ferguson (Pine St to Shelburne Rd) -- Carryover

By The Numbers: Paving

- **Total Construction Year 2018 Paving Work**
 - **Up to 8+ mi of paving and patching**
- Paving Carryover
 - Plattsburg, Cherry, Manhattan, Lakeview Cemetery: ~0.6+ mi
- Paving - 2018 Original List
 - Reclaim: 3.67 mi
 - Mill & Fill: 0.34 mi
- Paving - 2018 Addendum (response to Winter conditions)
 - Reclaim: 0.61 mi
 - Mill & Fill: 1.65 mi
 - Patching: 1.44 mi

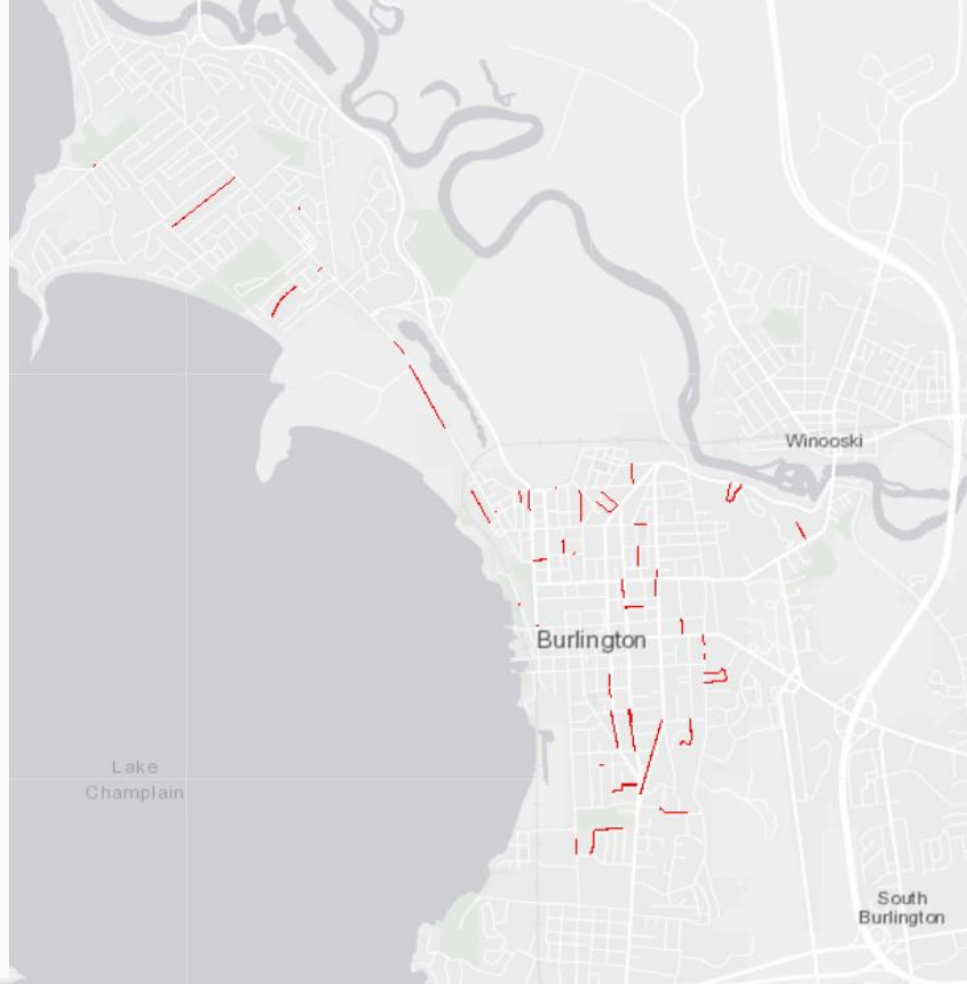
ORIGINAL Cal Year 2018 Paving Plan

Street Name	Section	PCI	Length	Type of Work	Coordination
Austin Dr	All	13	0.32	Reclaim	Water/Storm
Birch Ct	All	46	0.38	Reclaim	Water
Cayuga Ct	All	52	0.25	Reclaim	Water/Sewer
Colchester Ave	Barrett St – Nash Pl	56	0.34	Mill & Fill	Water
Crescent Road	Prospect - Hillcrest	37	0.38	Reclaim	Water
Dorset Ln	All	68	0.05	Reclaim	
Dunder Rd	All	25	0.29	Reclaim	
Maple ST	Battery – St. Paul East of Intersection	43	0.22	Reclaim	Water
Oakbeach Dr	Flynn – Ledgewood Cir	51	0.21	Reclaim	
South Cove	All	44	0.66	Reclaim	Water/Sewer
Pleasant Ave*	All	23	0.44	Reclaim	
Curtis Ave*	All	30	0.47	Reclaim	BED
Total Reclaim			3.67	MILES Reclaim	
Total Mill/Fill			0.34	MILES Mill/Fill	

*These Streets Bid as Alternates

Winter Deterioration Paving & Pavement Patching

Street	Section	PCI ⁺	Length	Type of Work	Coordination
Pine St	Flynn-Lakeside	49	0.42	Reclaim	Water 2019
Pine St	Lakeside -Kilburn	52	0.40	Modified Mill & Fill	Water 2018
North Ave	Lakeview Cem-Ethan Allen Parkway	56-70	1.06	Mill & Fill	
North Ave	Ethan Allen Parkway – Shore Road	50	0.52	Patching	
North Ave	Strong – Crowley	49	0.25	Patching	
Colchester Ave	Nash Pl-East Ave	67	0.19	Mill & Fill	
Colchester Ave	East Ave – University Pl	67	0.32	Patching	
Park St*	Manhattan-North St	56	0.19	Reclaim	
North St.	N. Union – Hyde St	59	0.19	Patching	
College Street	S. Union – S. Willard	50	0.07	Patching	
Maple St	Church St – S. Winooski	35	0.09	Patching	
Total Reclaim			0.61	MILES Reclaim	
Total Mill/Fill			1.65	MILES Mill/Fill	
Total Patching			1.44	MILES Patching	



SIDEWALKS 2018: ~3.9 miles



CURB 2018: ~8 segments

By the Numbers: Transportation

- 2: New pedestrian signals
- 12: New crosswalks
- 8: Intersections from PlanBTV getting safety upgrades
- 1.83 mi: New bike lanes
- 0.71 mi of Protected bike lanes
- 1.77 mi Traffic Calmed Streets & Neighborhood Greenways

By The Numbers: Sewer & Stormwater Rehab

- 0.67 miles of sewer and combined sewer rehab
- 0.34 miles of stormwater pipe rehab
- Investment Comparison:

	2017	2018
Sewer Rehab	\$45K	\$172K
Stormwater Rehab	\$120K	\$135K

ENGAGEMENT

January 2018



We steward Burlington's infrastructure and environment by delivering efficient, effective and equitable public services

Public Engagement Plan

OVERVIEW

Best practices, public safety, regulatory requirements and the needs of the community inform every decision we make. DPW undertakes a variety of projects and performs a variety of services in Burlington. Finding the right ways to reach the community and providing opportunities for the community to reach us are essential elements of effective public engagement. This engagement strategy will be tailored to meet the needs of our city.

Burlington is a dynamic and diverse city with residents who deserve and expect well planned, well-built and properly maintained infrastructure. As Vermont's largest city, with a population of over 40,000, Burlington has a wide range of residents, business owners, students, commuters and tourists who come to rely on DPW-provided services and infrastructure. From recycling and street maintenance to the implementation of long-term capital projects, our neighbors and visitors should have meaningful opportunities to be informed, to provide input and to make recommendations to DPW's planning process.

This plan uses the Community, Economic, and Development Office's (CEDO) civic engagement framework as a guide and directly references their 'Core Values of Civic Engagement'¹ below, and provides a step toward helping DPW achieve its public engagement goals while continuing to serve Burlington. This plan will evolve as public engagement tools expand and as DPW and the community refine the public engagement process.

¹ These are cited directly from a draft CEDO civic engagement document and are based on a version Alexandria, Virginia previously published.

Community Outreach Conducted

- Neighborhood Meeting -- Lower Downtown
- Public Works Commission Meeting
- Ward 5 NPA
- Individual Stakeholder Meetings

Business Outreach Conducted

- Business Associations
- Individual Business Visits & Outreach

Upcoming

- Ward 4&7 NPA, 3/28
- Downtown Parking and Transportation Council, 3/29
- New American Burlington Parents (hosted by BSD), April 3
- Ward 1&8 NPA, 4/11
- April North Ave News
- April BED bill insert
- Refugee & Immigrant Service Provider Network Meeting, May 17

Ongoing

- Front Porch Forum
- Church Street Marketplace Friday Newsletter (~monthly)
- Digital Engagement
- NPA's
- Community & Business Outreach

Community Resources

- **BTV Construction Portal:** burlingtonvt.gov/construction
- **Report non-emergency maintenance requests:** SeeClickFix.com
- **DPW Customer Service:** 802-863-9094
- **Water Resources, including 24/7 urgent support:**
802-863-4501/water-resources@burlingtonvt.gov
- **Sustainable Infrastructure Plan & Construction Season Info:**
burlingtonvt.gov/DPW/Reinvestment



CITY OF BURLINGTON, VERMONT
CITY COUNCIL TRANSPORTATION, ENERGY & UTILITIES COMMITTEE

c/o Department of Public Works
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Councilor Maxwell Tracy, Chair *WARD 2*
Councilor Richard Dean, *East District*
Councilor Ali Dieng, *WARD 7*

Inquiries:
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Transportation, Energy and Utilities Committee of the City Council

Tuesday, March 27, 2018 5:00 PM

**Burlington Department of Public Works – Front Conference Room
645 Pine Street – Burlington, VT**

–AGENDA–

Members Present: Councilor Max Tracy, TEUC Chairperson Councilor Richard Deane, TEUC Member
Councilor Ali Dieng, TEUC Member

City Staff Present: Chapin Spencer, DPW Nicole Losch, DPW Phillip Peterson, DPW Patrick Mulligan, DPW
Norm Baldwin, DPW Robert Goulding, DPW Kirsten Shapiro, CEDO Meagan Tuttle, Planning and Zoning

Residents Present: See Attendance Sheet

1. Agenda

- a. Councilor Tracy called the meeting to order at 5:25 pm

2. Public Forum

- a. None

3. Minutes of 02/27/2018

- a. Councilor Tracy moved for a motion on the minutes, Councilor Dine moved to approve the minutes and Councilor Dieng seconded. All in favor.

4. Champlain Parkway Right of Way Process – Necessity Hearing

- a. Kirsten Merriman-Shapiro and Norm Baldwin
- b. 15 minutes
- c. Action: Informative, no action needed.
- d. General discussion:
 - i. Ali Dieng: How is it going so far? Norm, people are curious about what is going to happen. Each parcel of property has unique situations. Several properties have walls

and/or fences in the City's ROW. There is an interest in how the project will affect their home or business. The hope is to get everything in front of Council by late April.

- ii. Chapin: we need to very careful on how we handle this as this can be a sensitive issue. Please let us know if there are any issues or concerns.
- iii. Ali Dieng: Where does it fall in the public engagement plan? This project was not created before our new public engagement process was adopted.

5. Great Street Standards

- a. Meagan Tuttle presenting
- b. 25-minute duration
- c. General discussion:
 - i. Richard Deane: Are there overlaps between any traffic standards and Great Streets? We do not specify anything which is not allowed within and adopted traffic standards.
 - ii. Deane: What has the public engagement been on the bulletin boards? There have been several discussions about all the street furnishings, and each one will be rolled out during each situation. We are trying to provide uniformity, but not prescriptive.
 - iii. Deane: How is this creating a situation for boring? We have been using the standards to design streets. We are looking at how everything will fit; each street is different from each other. The important thing we are looking for is balance; and we need some consistency. We need to ensure there is a minimum level of comfort and usability. We have designed several different options, to fit several situations, we do want to have some flexibility but it needs to be balanced with cost and individual private elements.
 - iv. Dieng: Digital signs would be a great idea? We have a placeholder which illuminates this possibility.
- d. Action: Recommend approval of Great Streets Standards to City Council. Councilor Tracy moved for a motion on the recommendation, Councilor Dean moved to approve the recommendation and Councilor Dieng seconded. All in favor.

6. Great Street Design Plans for Cherry and Bank

- a. Laura Wheelock presenting
- b. 25-minute duration
- c. Action: Informative, no action needed.

7. Lower downtown construction coordination and traffic control update

- a. Rob Goulding presenting
- b. 10-minute duration
- c. Action: Informative, no action needed.

- d. General discussion:
- e. Here is a link to find any information people can use for their own needs.
<https://www.burlingtonvt.gov/dpw/reinvestment/lower-downtown> ,
<https://www.burlingtonvt.gov/construction>

8. Overview of 2018 Construction Season

- a. Rob Goulding presenting
- b. 10-minute duration
- c. Action: Informative, no action needed.
- d. General discussion:
 - i. Here is a link to find any information people can use for their own needs.
<https://www.burlingtonvt.gov/dpw/reinvestment/lower-downtown> ,
<https://www.burlingtonvt.gov/construction>

9. Propose City management of Eagles Landing parking

- a. Patrick Mulligan presenting
- b. 5-minute duration
- c. Action: Informative, no action needed.

10. Councilors' Update

11. Adjourn

- a. Councilor Tracy motioned to adjourn and Councilor Deane seconded. Meeting was adjourned at 7:03 PM.