



Public Facilities Committee Report

City of Newton In City Council

Wednesday, July 21, 2021

Present: Councilors Leary (Chair), Norton, Laredo, Kelley, Kalis, and Crossley

Absent: Councilors Gentile and Danberg

Also Present: Councilor Humphrey

City Staff Present: Chief of Staff for DPW Shawna Sullivan, and Director of Transportation Jason Sobel

#290-21 Request for public way improvements at Pettee Square

HER HONOR THE MAYOR requesting approval of the public way improvements at Pettee Square at the intersection of Chestnut Street and Oak Street as part of the Pettee Square streetscape enhancements in accordance with City Ordinance 26-51. Intersection improvements include pedestrian, bicycle and vehicular safety in keeping with the city's complete streets initiative.

Action: Public Facilities Approved 6-0

Note: Shawna Sullivan, Chief of Staff for DPW and Jason Sobel, Director of Transportation presented the request for public way improvements at Pettee Square. Ms. Sullivan explained that this is a request for the raise intersection at Oak Street and Chestnut as part of the Pettee Square improvement project. Mr. Sobel's presentation is attached.

Councilors asked the following questions:

Q: What input has the City received on this project?

A: Mr. Sobel explained that they have received a lot of input regarding the streetscape and the materials that are being used for the sidewalk. The department is proposing a stamp concrete sidewalk and stamp asphalt intersection. There was also a discussion on the parking areas.

Q: Are 9 accidents average in this type of intersection?

A: Mr. Sobel explained that this is not above MassDOT's average crash rate. The goal is to have a safer intersection for all users. The department is also anticipating the increase in traffic with the upcoming development in the area.

Q: Is the grant for this project only for this location?

A: Mr. Sobel explained that the grant for this project can only be used at this location. The MassDOT grant for design had another component that deals with extending the greenway but this is still be worked on. The construction grant that the City is applying for will also only pertain to this intersection.

Q: Could this project wait until the development is in place?

A: Mr. Sobel explained that the grant does have a time limit. The initial design grant was for one-year which ended at the end of June but it was extended due to delays on the other portion of the grant. There was also still the need to go through the public meeting. The goal is for this to go construction next summer. It was noted that it is important that the village center is revitalized independent of the Northland development.

Q: Has Marc Welch, Superintendent of Urban Forestry been consulted?

A: Mr. Sobel explained that he has been consulted regarding the tree selection along with other Parks, Recreation and Culture staff.

Q: Did the Fire Department have any concerns with the design?

A: Mr. Sobel explained that they have worked with Fire Chief Gino Lucchetti on the appropriate length for the transition up to raised tables intersections. There will be 10 ft transitions which will be effective for traffic calming and should not affect the emergency vehicles.

Councilors made the following comments:

Councilors expressed their support for this project to help with safety issues in the existing intersection.

It is important to create more greenspace in the area through this project.

Mr. Sobel noted that they would be able to come back to share more about the design of the intersection as it is developed.

Councilor Crossley motioned to approve which passed unanimously.

Referred to Public Facilities and Finance Committees

#282-21 **Appropriate \$325,900 for the purchase of one new Volvo yard front end loader**
HER HONOR THE MAYOR requesting authorization to appropriate and expend the sum of three hundred twenty-five thousand nine hundred dollars (\$325,900) and authorize a general obligation borrowing of an equal amount for the purchase of one new Volvo L120H Volvo 4.50 yard front end loader.

Action: **Public Facilities Approved 6-0**

Note: Shawna Sullivan, Chief of Staff for DPW presented the request to appropriate and expend the sum of \$325,900 and authorize a general obligation borrowing of an equal amount for the purchase of one new Volvo L120H Volvo 4.50 yard front end loader. Ms. Sullivan explained that this equipment will be used at the Rumford Ave recycling center and is replacing a front-end loader that is at the end of its useful life. The department has applied for a grant which could cover up to 35% of the costs. The new loader will also meet all of the current emissions requirements and the estimate life on the loader is 12 years.

Councilors asked the following questions:

Q: How will this front-end loader effect the diesel emissions?

A: Ms. Sullivan provided the attached response after the conclusion of the meeting.

Q: Is the grant reflected in the amount being requested?

A: Ms. Sullivan explained that the grant would reduce the amount being requested. They are asking for the full amount to be able to order the equipment now.

Councilor Laredo motioned to approve which passed unanimously.

Referred to Public Facilities and Finance Committees

#283-21 Appropriate \$725,000 for the purchase of two 10-wheel swap loader trucks

HER HONOR THE MAYOR requesting authorization to appropriate and expend the sum of seven hundred twenty-five thousand dollars (\$725,000) and authorize a general obligation borrowing of an equal amount for the purchase of two 10-wheel swap loader trucks.

Action: Public Facilities Approved 5-0 (Councilor Norton not voting)

Note: Shawna Sullivan, Chief of Staff for DPW presented the request to appropriate and expend the sum of \$725,000 and authorize a general obligation borrowing of an equal amount for the purchase of two 10-wheel swap loader trucks. Ms. Sullivan explained that this is to replace two street division trucks that are over 15 years old, in poor condition and do not meet the emission requirements. She further explained that the swap loader trucks allow the department to use different attachments so it can be used for a number of jobs. The estimated life on the new equipment is 12 years.

It was questioned if this equipment is the most efficient on the market. Ms. Sullivan explained that they are for DPW's operations. She also explained that they have been looking at electric options but the technology is not proven yet.

Councilors noted that it is important to receive an update on the vehicle replacement program.

Councilor Crossley motioned to approve which passed 5-0 with Councilor Norton not voting.

Referred to Public Facilities and Finance Committees

#284-21 Authorization to borrow up to \$20,837,000 from the MWRA

HER HONOR THE MAYOR requesting authorization to borrow up to twenty million eight hundred thirty-seven thousand dollars (\$20,837,000) from the Massachusetts Water Resources Authority (MWRA) Local Water System Assistance Program Phase 3 as an interest free ten-year loan to be paid in equal, annual installments.

Action: Public Facilities Approved 5-0 (Councilor Norton not voting)

Note: Shawna Sullivan, Chief of Staff for DPW, presented the request for authorization to borrow up to \$20,837,000 from the Massachusetts Water Resources Authority (MWRA) Local Water System Assistance Program Phase 3 as an interest free ten-year loan to be paid in equal, annual installments. Ms. Sullivan explained that the City will be receiving \$2,083,700 per year. The City has participated in the MWRA's water pipeline assistance program since 1998 and has received approximately \$39.5 million dollars in interest free loans in this time. The current round of funding will be used to fund a portion of the water main improvements as outlined in the CIP. At this point the City has lined approximately 184 miles out of the 319 miles of water mains.

Councilor Kalis motioned to approve which passed 5-0 which passed 5-0 with Councilor Norton not voting.

The Committee adjourned at 7:37 p.m.

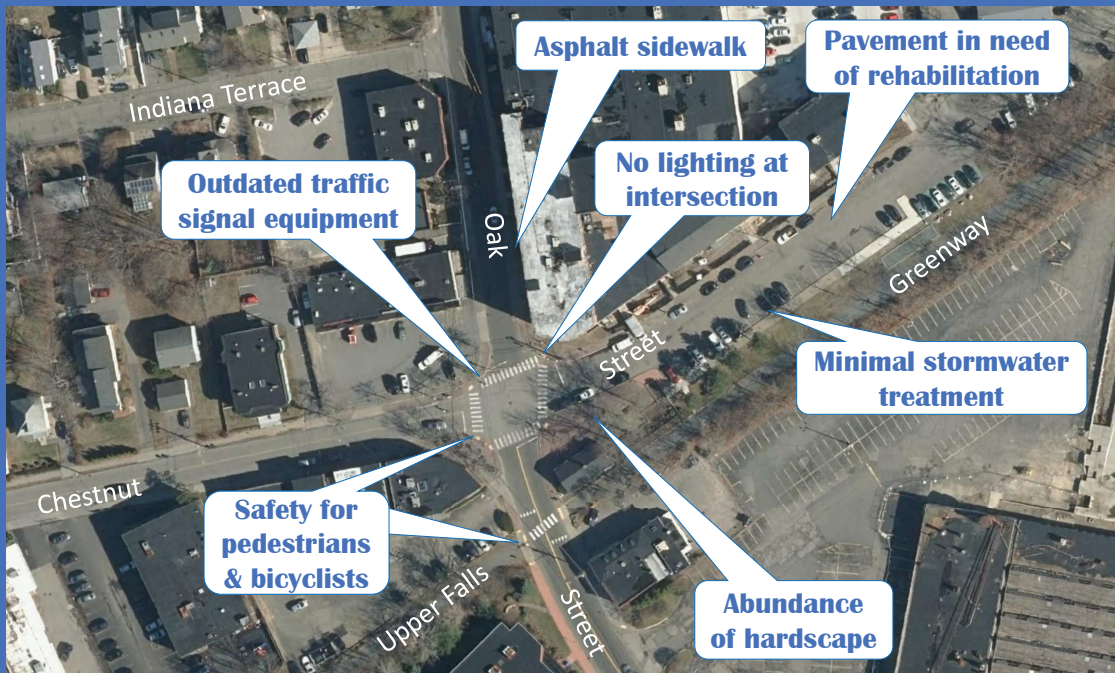
Respectfully Submitted,

Alison Leary, Chair



Public Facilities Committee
Pettee Square – Chestnut St / Oak St Intersection
July 21, 2021

Existing Conditions



Project Goals

- Introduce streetscape and beautification opportunities
- Maintain historic character of area
- Create an attractive, functional space for residents, local businesses, and Greenway users
- Improve safety and accessibility for all users
- Enhance traffic operations
- Implement traffic calming measures
- Install stormwater improvements where feasible

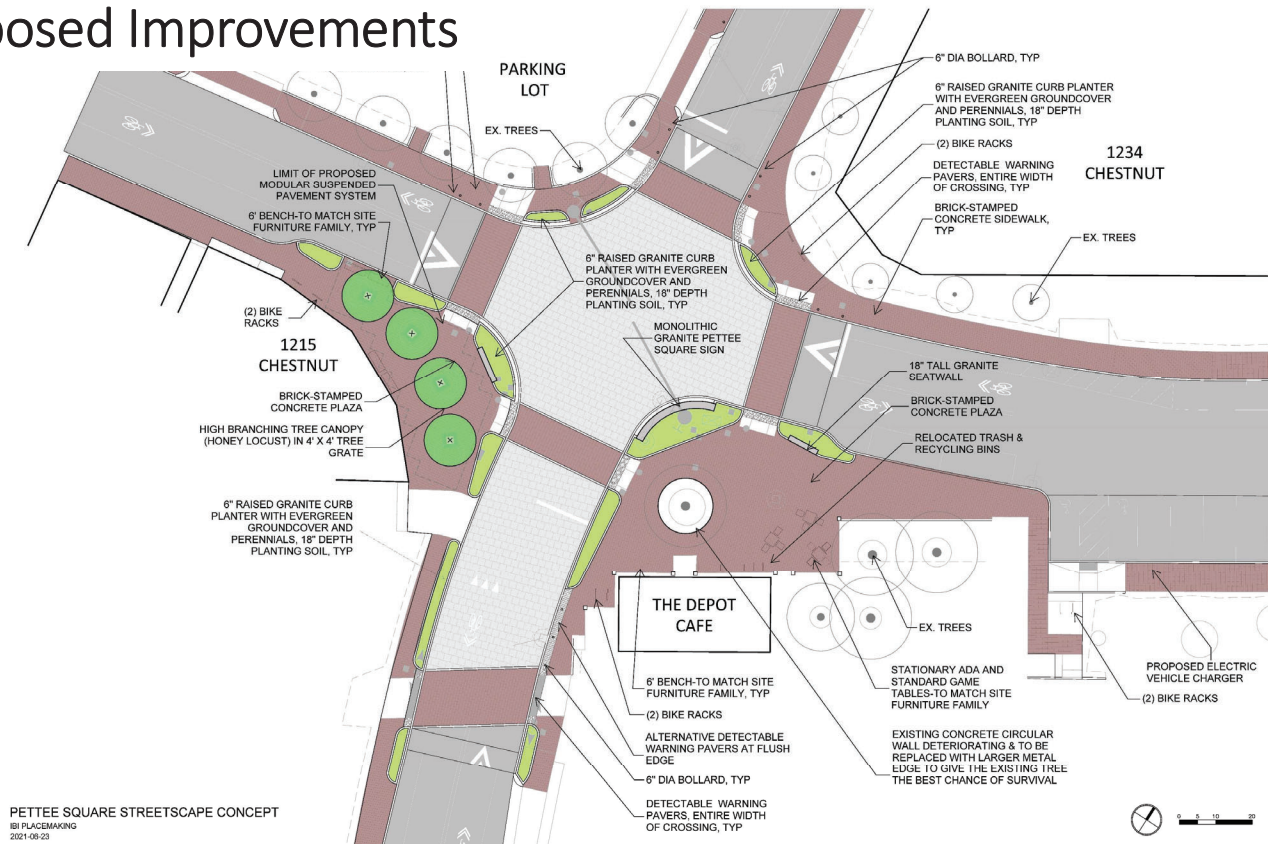
Project Process

- Spring 2020 – MassWorks grant for design funding
- September 2020 – Held Public Information & comment meeting
- November 2020 – Upper Falls Historic District Commission
- January 2021 – Upper Falls Area Council
- June & July 2021 – Upper Falls Historic District Commission
- July 2021 – Public Facilities Committee

Collaborative effort, including:

- **DPW**
- **Planning**
- **Parks & Rec**
- **Newton ADA/504 Coordinator**
- **Newton Fire Dept**
- **Engineering design consultant, TEC**

Proposed Improvements



Pettee Square Traffic Data

- 9 vehicle crashes in the past 5 years
- 2017 pedestrian volume count peak hours:
 - 18 in the morning (7am-9am), 22 in the evening (4pm-6pm)
- With Northland pedestrian projection
 - 66 in the morning (7am-9am), 121 in the evening (4pm-6pm) without shuttle service
- 85th percentile speed along Oak Street westbound toward Chestnut Street recorded as 34 mph
- Speed limit is 25 mph on all intersection approaches

Raised Intersection Benefits

- Create a safe, slow-speed pedestrian crossing
- Reinforce slow vehicle speeds
 - One of the most predictable traffic calming methods in reducing vehicle speeds
- Encourage motorists to yield to pedestrians
- Create a public space comfortable for pedestrians
 - Strong visual cue to be aware of non-motorized users
 - Proactive measure (not reactive) to accommodate anticipated increase in pedestrians
- Appropriate for emergency vehicle routes
- Consistent with City of Newton and MassDOT best practices including VisionZero and Complete Street Initiatives

Next Steps

- Complete Final Design
- Pursue MassWorks grant for construction funding
- Prepare Bid Documents & advertise for construction



Here is the info on the emissions reduction for the new loader:

The main measured emissions in a modern diesel engine are as follows:

CO - carbon monoxide

PM - particulate matter (unburned/partially burned particles leftover from the combustion process)

NOx - oxides of nitrogen (compound of oxygen and nitrogen formed under a high pressure and temperature environment)

All measured in g/kw-hr - grams per kilowatt-hour

Replacement vehicle compared as the same model size:

2021 Volvo L90H

The engine is "Tier4 final" compliant

CO 3.5 g/kw-hr

PM .015 g/kw-hr

NOx .4 g/kw-hr

For this example vehicle:

30 % in CO reduction

95 % in PM reduction

94 % in NOx reduction