



Public Facilities Committee Report

City of Newton In City Council

Wednesday, July 12, 2017

Present: Councilors Crossley (Chair), Albright, Brousal-Glaser, Laredo, Danberg

Also Present: Councilors Sangiolo, Leary

City staff present: DPW Director of Operations Shane Mark, Recycling Manager/Director of Environmental Affairs Waneta Trabert, City Engineer Lou Taverna, Deputy City Solicitor Ouida Young

#211-17 Eversource petition for grant of location on Centre Street

EVERSOURCE ENERGY petition for a grant of location to install one pole in front of #559 Centre Street and one anchor guy 100'± in a northerly direction to upgrade existing service. [(Ward 1) 07/03/17 @ 11:16 AM]

Action: Public Facilities Held 5-0

Note: Eversource Permit Representative Maureen Carroll presented the request to install one pole and anchor guy in Centre Street to upgrade existing service. It was noted that the existing service is underground and the request is to add above ground equipment. Committee members questioned whether the underground capacity can be increased to eliminate the need to locate an additional above ground pole and emphasized the City's preference for undergrounded equipment wherever possible.

The Public Hearing was opened and closed with no member of the public wishing to speak.

Ms. Carroll confirmed that she would ask Eversource's Engineering Department whether the additional capacity can be accommodated underground. Committee members were in agreement that the item should be held until August 14, pending a response from Eversource. Councilor Laredo motioned to hold the item which carried unanimously.

#212-17 Eversource petition for grant of location in Bigelow Road

EVERSOURCE ENERGY petition for a grant of location to install 60'± of conduit from manhole 9423 in a westerly direction to provide new service to house #111 Bigelow Road. [(Ward 2) 06/21/17 @ 9:57 AM]

Action: Public Facilities Approved 5-0

Note: Ms. Carroll presented the request to install 60' of conduit in Bigelow Road to provide new service to #111. The Public Hearing was opened and closed with no member of the public wishing to speak. Councilor Albright motioned to approve the item which carried unanimously.

#213-17 Eversource petition for grant of location in Austin Street

EVERSOURCE ENERGY petition for a grant of location to install 37'± of conduit in Walnut Street from manhole #3386 in a westerly direction onto Austin Street, continuing in a westerly direction 874'±, terminating at a proposed manhole in front of Philip Bram Way. [(Ward 2) 06/27/17 @ 8:46 AM]

Action: Public Facilities Approved 5-0

Note: Eversource Permit Representative Maureen Carroll presented the request to install 37' conduit in Walnut Street and 874' of conduit in Austin Street to serve the planned Austin Street development. The Public Hearing was opened and closed with no member of the public wishing to speak. Councilor Albright motioned to approve the item which carried unanimously.

#214-17 Eversource petition for grant of location in Austin Street

EVERSOURCE ENERGY petition for a grant of location to relocate pole #311/4 approximately 57'± westerly as part of the undergrounding of existing service. [(Ward 2) 06/27/17 @ 8:46 AM]

Action: Public Facilities Approved 5-0

Note: Eversource Permit Representative Maureen Carroll presented the request to take down one pole and install one pole in front of Rockland Trust Bank on Austin Street. Ms. Carroll noted that the request to relocate the pole was made on behalf of the City to accommodate plans for the Austin Street development. With no member of the public wishing to speak, the public hearing was opened and closed. Councilor Albright motioned to hold the item which carried unanimously.

#215-17 Taking of a non-exclusive easement at 19-33 Needham Street

HIS HONOR THE MAYOR requesting authorization to take a non-exclusive easement from UBC Equity Partners, LLC, over and upon a portion of the property known and numbered 19-33 Needham Street, Newton for the purpose of providing passage consistent with the use of the Upper Falls Greenway as a rail-trail, as defined by Massachusetts law, for pedestrians, bicycles, and other types of non-motorized transportation and wheelchairs or similar devices for disabled persons, whether motorized or not, and for emergency vehicles. The request further includes the taking of a temporary construction easement from the same party for the purpose of making, constructing, installing, placing and inspecting improvements in the portion of the Greenway that abuts the land to be taken for easement purposed. [07/03/17 @12:28 PM]

Action: Public Facilities Approved 5-0

Note: In 2014 the owners of the development at 19-33 Needham Street (KS Partners) were granted a special permit to increase the intensity of use at the site. The granting of the permit was contingent on a condition that the developer draft and offer a passage easement down Easy Street to the City, enabling the creation of a path onto the Greenway. Deputy City Solicitor Ouida Young noted that in the absence of the petitioner doing so, the City Law Department drafted the easement, but the developer requested a provision be included stating that if the existing lease

agreement for parking spaces with the MBTA was terminated, that the City would replace the lost parking spaces. Atty. Young noted that while it is unlikely that the MBTA will terminate the lease agreement for parking spaces, the provision is unsatisfactory to the City, as it essentially nullifies the approved special permit. In the event that the MBTA takes over the right of way, the property owner must amend the special permit to satisfy the parking requirement. Atty. Young stated that the passage easement will be non-exclusive, allowing an access path to the Greenway while still allowing the developer and abutting commercial entities access to their properties. She noted that the easement will reference and be overlaid on existing plans for clarity and confirmed that no damages will be paid as the property owner is obligated to offer the easement by the special permit as granted. A Councilor questioned whether the Law Department will be pursuing compensation from the developer. Atty. Young confirmed that the Law Department will not be seeking damages from the developer, noting that the process to collect compensation could be lengthy and possibly unsuccessful due to the fact that the developer did offer the easement to the City as a condition of the special permit.

City Engineer Lou Taverna noted that that in anticipation of the taking, the City has completed the survey work at the site and plans to begin construction of the ADA compliant egress ramp after the taking has been approved by the Council. Councilor Danberg motioned to approve the taking of the easement at 19-33 Needham Street which carried unanimously.

Referred to Public Facilities and Finance Committees

#123-17 **Pilot Program for curbside food waste collection**
COUNCILORS SANGIOLO, NORTON, CROSSLEY, LENNON, AUCHINCLOSS, HARNEY, FULLER, ALBRIGHT, LAPPIN, AND LAREDO requesting the City through the Department of Public Works, pilot a curbside food waste collection program. [04/21/17 @ 11:15 AM]

Action: **Public Facilities Held 5-0**

#12-16 **Discussion with the DPW regarding the City's recycling and solid waste programs**
COUNCILOR LEARY, NORTON, KALIS, HESS-MAHAN, ALBRIGHT, AND CROSSLEY requesting an update from and discussion with the Department of Public Works and the Solid Waste Commission on the current status of Newton's solid waste management and recycling program operations and performance objectives, future goals and objectives, staffing, program challenges, and survey data due to be submitted to the Department of Environmental Protection. [12/28/15 @ 8:44 AM]

Action: **Public Facilities Held 5-0**

Note: Recycling Manager/Director of Environmental Affairs Waneta Trabert presented the plan for a pilot organic waste collection program using the attached PowerPoint presentation. Ms. Trabert noted that such a program would be an improvement on the City's current practice of sending organic waste to be incinerated. Mass DOT estimates that 26% - 40% of organic waste can be diverted to be composted. In Newton, 26%-40% of organic wastes and liquids would range from

3,500-7,100 tons of material diverted from the waste stream; corresponding cost savings would be \$241,000 - \$482,000., less costs associated with the collection of the organic waste.

The proposed pilot program will include 200 households and will run for a duration of four months from March – June 2018. The focus of the pilot program will be on curbside collection for unavoidable organics (fruit/vegetable rinds, corn cobs, banana peels) in addition to education related to reducing the amount of waste generated. Ms. Trabert plans to work with Bootstrap Compost to distribute five gallon buckets to each participating household at a cost of \$3/household. The buckets can be kept in locations convenient to the homeowners and will be picked up and replaced by Bootstrap at the curb on a weekly basis. Ms. Trabert noted that managing compost can be labor intensive and believes that reducing the amount of effort required may help encourage participation.

While Ms. Trabert had previously indicated her intent to apply for a Mass DEP grant for an organic waste pilot program, she determined that the information gathered from the smaller scale pilot program is necessary prior to applying for the grant. It is her intention to use the results of the pilot program to apply for the Mass DEP grant for a larger pilot program in June 2018.

At the onset of the pilot program, Ms. Trabert plans to hold orientation sessions and distribute educational material for participants. Pre and post surveys will be taken to generate information about where waste is currently going. It was noted that Bootstrap Compost will also provide data on weight of organic waste collected. Ms. Trabert estimates that the total cost of the pilot program will be approximately \$13,200 and will be covered by grant funds remaining from FY17. Pilot program objectives include measuring the impact of food waste removal from the trash, testing implementation of the program, verifying cost estimates for the City and vendor and gaining a sense of education and coordination responsibilities for City staff.

Ms. Trabert also reported on updates, meeting a range of goals and areas for improvement as follows:

Operational Objectives & Updates

- 100% on time pickup
- Decrease household trash to less than 1100 lbs.
- Increase recycling per household to 800 lbs.
- Track and Improve Curbside Compliance
- Distribute City Mailings
- Monthly Outreach events
- Establish baseline for weight of material collected at Resource Recovery Center
- Establish long term strategy and plan with SWC
- Continue to develop and follow educational plans
- Continue improvements at Rumford
- Communicate waste and recycling goals Citywide
- Discuss stakeholder priorities with SWC

Education and Outreach

It was noted that education remains a top priority for Ms. Trabert. She hopes to develop a further understanding of resident waste and has five student interns who are currently working on the following improvements:

- Webpage makeover
- Development of educational videos/You Tube videos
- Resident surveys on preferred way to receive information
- Increased use of Recycling App
- Understanding condo and apartment collection needs

Areas for Improvement

- Education and Outreach; mailing list growth
- Improving resident accountability/Curbside Compliance
- Engagement from the Commercial Sector
- Source Reduction
- Increase Materials recovered
- Continued and increased communication with Sustainability office
- Staffing

Committee members expressed gratitude for the above and beyond quality of work produced by Ms. Trabert. Committee members were in agreement that the smaller pilot program is a positive way to introduce the organic waste program to the City. Ms. Trabert noted that when time allows, the department will be looking at the options for recycling programs for non-profits and the commercial entities in the City. Committee members were supportive of a collaboration with the School Department to increase recycling operations within the schools. Councilor Albright motioned to hold both items which carried unanimously.

Referred to Programs & Services and Public Facilities Committees

#119-14

Discussion with ISD on plans to address City non-compliance with ADA standards

ALD. ALBRIGHT AND CROSSLEY requesting discussion with the Inspectional Services Department to explain the development of short and long term plans to identify and correct buildings, sidewalks, playgrounds, etc...that do not conform to American Disability Act (ADA) standards. The discussion should include information on how improvements will be incorporated into the Capital Improvement Plan or if less than \$75,000 into a comprehensive budget plan to correct ADA deficiencies. [03/12/14 @ 4:18 PM]

Action: **Public Facilities Held 5-0**

Chairs Note: *The Committee heard an update from the Department of Public Works' about the Roads Program Strategy.*

Note: Director of Operations Shane Mark presented an overview of DPW's plans to increase preventive maintenance for roadways in FY18. Mr. Mark stated that the average PCI (pavement condition index, measure of pavement health) in the City is 62.5, and noted that

appropriate planning of preventive maintenance as well as roadway rehabilitation is essential for maximizing the useful life of the pavement. Mr. Mark noted that because some preventive maintenance will be performed on recently repaved roads, constituents may have questions. He noted that smaller investments in preventive maintenance will help the City avoid spending larger sums on more extensive work at a later time.

Mr. Mark reviewed the proposed changes to the program and indicated that City plans to increase the amount of preventive maintenance from 3% to 35% on City streets in FY18. Mr. Mark stated that after the completion of the collection of the street scan data in December 2016, DPW has identified roadways and treatments, conducted site visits, put out and awarded bids and is currently in the construction phase. He noted that in Fall/Winter 2017, DPW will be identifying future roadways and treatments. The department has allocated funds to work on streets with the lowest PCIs and plans to identify these streets in September.

Mr. Mark reviewed the varying types of pavement preservation and rehabilitation techniques (attached) and provided a list of the 32.34 miles of roadway to be treated (attached) in FY18. He reiterated that the list of streets to be treated is subject to change.

It was noted that DPW is working to ensure that residents are aware of ongoing construction in their neighborhoods. They are utilizing letters, doorknob hangers, flyers, the DPW webpage, Twitter and in person communication to ensure that residents are notified of upcoming construction. Committee members were in agreement that communication and awareness for residents is essential. Committee members suggested that the department should be conscious of not using skilled staff for distribution of materials.

It was noted that while Beta Management is overseeing milling and paving, the Engineering Department is overseeing the remainder of the work. Committee members questioned whether DPW anticipates needing additional in house project management personnel due to the dramatic increase in roadway work. Mr. Mark noted that the department will have a better sense of staff needs in the Fall. Committee members noted that City policy must be made clear and consistent across the city with regard to the impact of certain trees growing into and compromising the sidewalk, curb and/or roadway, which may require removal in the near future if not removed and replaced during major roadway reconstruction projects. Councilor Brousal-Glaser motioned to hold item #119-14 which carried unanimously.

#237-15 Update on mitigation funds from Special Permits in Newton Centre
ALD. CROSSLEY, LAREDO, and SCHWARTZ requesting an update on funds accrued from voluntary contributions from Special Permits in Newton Centre, which can be made available to complete a safe pedestrian crossing at 714-724 Beacon Street via Special Permit Board Order #1-15 and conditions noted therein. 09/14/15 @ 10:40 AM]

Action: Public Facilities voted No Action Necessary 5-0

#200-15 Update on the strategic plan for street and sidewalk improvements

ALD. LAREDO requesting that the Department of Public Works provide an update on the creation of a strategic plan for the improvement of streets and sidewalks in the City. [08/13/15 @ 11:20 AM]

Action: Public Facilities voted No Action Necessary 5-0

Respectfully submitted,

Deborah J. Crossley, Chair

Proposed Plan for Curbside Organics Collection Pilot

Public Facilities Committee Meeting
July 12, 2017

Waneta Trabert
Director of Environmental Affairs Division
City of Newton DPW



Materials Management Hierarchy



Why divert organic waste from the residential waste stream?

- Higher uses
 - Water and nutrients for soil amendment
 - Production of methane in anaerobic digestion
- Offset greenhouse gas emissions
- 26.6% of the waste stream by weight (MassDEP, 2014)
 - With liquids, up to 40%
 - For Newton this equates to 3,550-7100 tons
 - Disposal cost at \$68/ton = \$241,400 to \$482,800



Proposed Pilot Overview

- Four month pilot for 200 households
- Anticipated start: March 2018
- Two components:
 - Educational campaign to reduce food waste
 - Curbside collection for unavoidable organics
- One collection vessel: 5 gallon bucket
- Data gathered will be used to apply for funding to expand pilot



BOOTSTRAP COMPOST

- Boston-based year-round collector of curbside organics
- Residential, office, and restaurant service
- Material is processed at and used at local farms
- A portion of compost is donated to school and community garden projects
- Customers receive a 6lb compost share each quarter



Eliminate the “Ick Factor”

- One receptacle
- Secure lid for indoor or outdoor use
- Bucket is swapped out each week
 - No container maintenance for residents



Too Good To Waste Campaign

- Food waste reduction
- Tools for residents
 - Shopping
 - Storage
 - Preparation
- Orientation
- Guidebook
- Pre and post surveys



Goal is NOT to fill the bucket!



Pilot Costs

Operations

\$3/household × 200 households × 17 weeks
= \$10,200

Education/Outreach

\$15 participant guidebook printing × 200hh
= \$3,000

Total = \$13,200

- Funding source: MassDEP Recycling Dividends Grant Program



Project Goals

Gain an understanding of:

- How to implement a food waste reduction program
- The impact of food waste being removed from trash disposal
- Coordination and education responsibilities for City staff
- Costs for the City and the vendor

Is this a sustainable model?



Next Steps

- Develop MOU with vendor
- Solicit participants in narrow geographic area – one route on one collection day
- Develop education plan/materials
- Use data and information gathered from pilot to apply for grant in June 2018 to fund longer and larger organics collection pilot
- If grant is awarded, plan for expanded pilot to start in January 2019



Tentative Timeline

August 2017 –
February 2018:
Pilot Planning

Mid-June
2018: Apply
for MassDEP
grant

March – June
2018: Pilot

January 2019
(tentative): Year-
long expanded
pilot begins



Environmental Affairs Update

FY18 Operations Objectives

- 100% on time pickups for both solid waste and recycling
- Get 4,275 active collection reminders with app
- Trash: under 1,100lbs/hh
- Recycling: over 800lbs/hh
- HHW: over 700 cars

FY18 Performance Objectives

- Track and improve curbside compliance
- City-wide mailing
- Host monthly outreach events
- Establish a baseline for materials collected at the Resource Recovery Center



Current Initiatives

- Bulk waste assessment
- Improving cart management and customer service
- Development & distribution of new educational materials
- Webpage makeover
- 5 summer intern projects
 - Educational videos, resident survey, curbside compliance survey, upping app use, condo/apartment collection service inventory



Future Goals and Objectives

- Establish a long-term strategy/plan
- Continue to develop and follow annual education plans
- Continue to improve operations
- Communicate waste and recycling goals
- Discuss stakeholder priorities with SWC



Areas for Improvement

- Education and outreach
- Resident accountability
- Commercial sector
- Emphasis on source reduction
- Increase materials recovered
- Sustainability tie-ins
- Performance measures
- Specific goals
- Staffing



Contact Me

Waneta Trabert

Director of Environmental Affairs

wtrabert@newtonma.gov

www.newtonma.gov/recycling

Recycle Right Newton app





City of Newton, MA Department of Public Works

ACCELERATED PAVEMENT MANAGEMENT PROGRAM

July 12, 2017

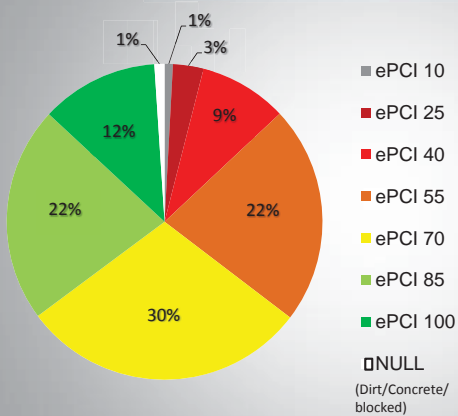
BETA

CITY OF NEWTON – ROADS PROGRAM

- Create a comprehensive pavement management program
- Coordination of utility and roadway projects
- Communication to the community
- Construction Management
- Pavement Maintenance



DISTRIBUTION OF PCI



Average PCI	62.5
% < Critical PCI (55)	35%
% > Critical PCI (55)	65%



PAVEMENT MANAGEMENT

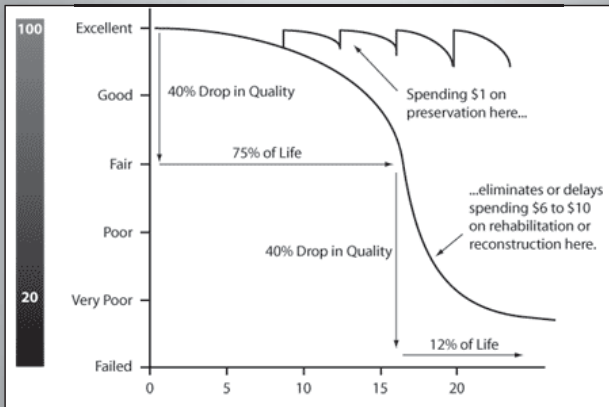


- The practice of planning for pavement maintenance and rehabilitation with the goal of maximizing the value and life of a pavement network

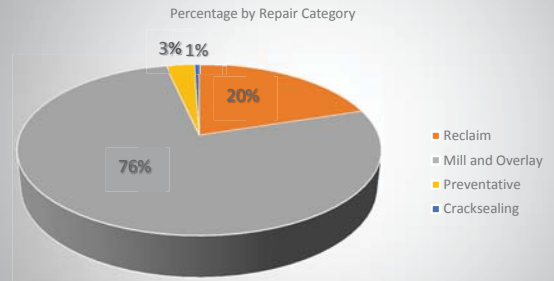
○ ***The right repair at the right time!***



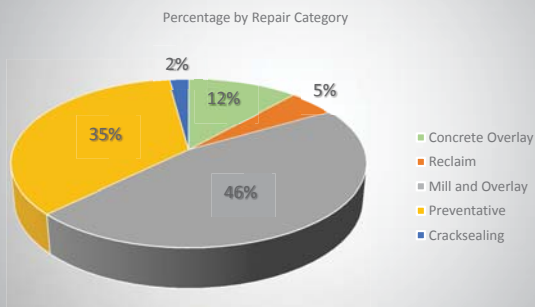
PAVEMENT MANAGEMENT



CITY OF NEWTON – PAST PROGRAM



CITY OF NEWTON – FUTURE PROGRAM



PAVEMENT MANAGEMENT

Progress Milestones

- ✓ Conduct StreetScan Inspections
- ✓ Identify roadways and treatments
- ✓ Site Visits to Confirm Inspections
- ✓ Construction Estimates
- ✓ Bid Documents
- ✓ Paving Contracts
- ✓ Begin Construction
- Identify future roadways and treatments (Fall/Winter 2017)



PAVEMENT TOOLBOX



Maintenance

- Crack Seal
- Fog Seal
- Patching

Preservation

- Microsurfacing
- Cape Seal
- Hot-In-Place

Structural Repair

- Mill and Overlay
- Reclamation
- Reconstruction



PAVEMENT MAINTENANCE TYPES

Treatment Type	Length	Mileage
Mill and Overlay	32,430	6.14
Crack Seal	74,875	14.18
Fog Seal	10,650	2.02
Microsurfacing	30,262	5.73
Cape Seal	7,007	1.33
Hot-In-Place	12,984	2.46
Reclamation	2,553	0.48
Totals	170,761	32.34



PAVEMENT MAINTENANCE MILL & OVERLAY



Mill

The existing pavement has one to two inches of the surface ground off. This treatment removes the existing deteriorated wearing surface and leaves the substructure intact.

Overlay

The intent of this treatment is to leave the existing pavement structure intact. All of the cast iron structures (manholes, catch basins water and gas gates) will be reset to meet the new pavement elevation. Minor pothole patching and other pavement repairs are done prior to installation of this treatment. This treatment adds strength to the road surface.



PAVEMENT MAINTENANCE MILL & OVERLAY

Street Name	From	To	Square Yards	Linear Feet
Beacon	Walnut	Centre	11,800	3,400
Beacon	Walnut	Chestnut	24,000	7,200
Comm Ave	Lowell	Centre	24,600	5,400
Brandeis	Greenwood	Adeline	10,333	3,100
Greenwood	Dedham	Dudley	14,100	4,000
Chestnut	Washington	Comm Ave	14,750	4,700
Church	Park	Oakland	6,700	2,500
Maple	Entire	Length	1,505	430
Waltham	Crafts	Corps Line	7,700	1,700
Dedham (After HIP)	Winchester	Nahanton	20,000	5,284
Totals			115,488	32,430

6.14 Miles



PAVEMENT MAINTENANCE



Crack Seal



Fog Seal



PAVEMENT MAINTENANCE CRACK SEAL



Crack Seal

Crack sealing is the placement of a sealant material into cracks of an existing pavement surface to prevent excess water and moisture from penetrating the asphalt. This is a preventative measure to keep the road from deteriorating further. Crack Sealing can be done as a stand-alone treatment or in conjunction with other treatments listed below.



PAVEMENT MAINTENANCE CRACK SEAL

Crack Seal			Length	Width	Sq. Yds.
Hemlock Street	Centre Street	Commonwealth Avenue	5,000'	36"	13,000
Newtonville Avenue	Hanzard Street	Centre Street	4,500'	24'	12,000
Duffley Road	Boylston Street	Brookline Street	6,300'	24"	17,333
Beacon Street	Washington Street	Mentmore Road	4,200'	36"	14,533
Barbara Road			675'	28"	2,175
Clark Road			600'	24"	1,800
Farmington Road			534'	28"	1,735
Leicester Avenue			745'	24"	1,990
Kenilworth Street			1,000'	24"	2,640
Montrose Street			2,332'	24"	5,560
Code Field Road			700'	23"	1,785
Philbrick Street			785'	24"	2,100
Russell Road			1,689'	26"	5,070
Sheldon Street			725'	24"	1,930
Swanwick Road			464'	28"	1,495
Amesway Road			0.36	1901'	5,200
Arappahoe Road			0.16	845'	2,300
Badgate Hill Road			0.64	337'x	6,300
Bonaire Circle			0.03	158'	800
Botts Street			0.04	127'	600
Change Street			0.12	634'	1,800
Charlotte Road			0.17	888'	2,600
Christine Street			0.46	2425'	5,500
Clark Street Branch			0.09	875'	1,300
Edgewood Road			0.05	264'	700
Grace Road			0.16	845'	2,300
Thasfords Street			0.17	1428'	3,600
Jackson Road			0.42	2218'	6,000
Lawton Street			1.33	9934'	21,000
Llewellyn Road			0.1	525'	1,400
Norman Road			0.09	475'	1,350
Oak Street			0.31	2693'	6,000
Oakmont Road			0.17	895'	2,400
Oris Street			0.09	6699'	15,000
Peach Tree Lane			0.05	264'	800
Quinnipiac Road			0.17	2894'	5,800
Rushfield Road			0.05	264'	700
Saw Mill Brook Parkway			0.82	3274'	11,000
Saban Place			0.04	213'	700
Webster Street			0.78	4118'	11,000
Willcox Road			0.27	9220'	9,200
Willcott Park			0.16	845'	2,300
TOTALS			14.18	74,875'	224,227

Square Yards	Linear Feet	Miles
224,227	74,875	14.18



PAVEMENT MAINTENANCE FOG SEAL



Fog Seal

A fog seal is a thin liquid layer applied to the surface of a paved road in relatively good condition. The intent of this treatment is to seal the pavement, rejuvenate, restore the wearing surface and provide resistance to deterioration due to the weather and sun. Subsequent to a fog seal the cracks are sealed with a liquid asphalt sealer. This treatment will extend the life of the pavement. This is classified as preventive maintenance.



PAVEMENT MAINTENANCE FOG SEAL

Street Name	From	To	Square Yards	Linear Feet
Newtonville	Walnut	Harvard	4,000	1,500
Webster	Waltham	Wolcott	11,000	4,110
Wolcott	Webster	Lexington	4,770	1,790
Hawthorn	Lincoln	Watertown	3,911	1,600
Adams	Watertown	California	4,400	1,650
Totals			28,801	10,650

2.02 Miles



PAVEMENT MAINTENANCE



Microsurfacing



Cape Seal



PAVEMENT MAINTENANCE MICROSURFACE



Microsurfacing

A Microsurfacing is a thin layer (3/8") applied to an existing paved surface. Two layers can be applied also. This treatment adds a tough wearing coat to existing pavement. The intent of this treatment is to seal and protect the existing pavement as well as provide a new wearing course. Minor pothole patching and other pavement repairs are done prior to installation of this treatment.



PAVEMENT MAINTENANCE MICROSURFACE

Street Name	From	To	Square Yards	Linear Feet
Homer	Centre	Comm Ave	21,000	5,400
Newtonville	Harvard	Centre	12,000	4,500
Dudley	Boyleston	Brookline	17,333	6,500
Beacon	Washington	Manitoba	14,933	4,200
Winchester (After HIP)	Nahanton	Dedham	28,200	7,700
Watertown	Lowell	Albermarle	8,300	1,962
Totals			101,767	30,262

5.73 Miles



PAVEMENT MAINTENANCE CAPE SEAL



Cape Seal

A complete Cape seal application is done in several steps. After roads are leveled with a thin coat of asphalt (if necessary) a full width coating of chip seal material is applied. The chip seal has a surface that can be driven on for a short time and it is rougher than standard asphalt. It has some loose chips. About a week after chip seal, the roads will receive a microsurface coating. The finished microsurfaced road will be very similar to a standard paved surface. The "Cape seal" term describes the complete multi-layer treatment



PAVEMENT MAINTENANCE CAPE SEAL

Street Name	From	To	Square Yards	Linear Feet
Russell	Entire	Length	5,070	1,699
Sylvester	Entire	Length	1,495	464
Farmington	Entire	Length	1,725	534
Barbara	Entire	Length	2,175	675
Jerome	Entire	Length	1,990	745
Clark	Entire	Length	1,820	680
Philbrick	Entire	Length	2,100	785
Sheldon	Entire	Length	1,930	725
Olde Field	Entire	Length	1,785	700
Totals			20,090	7,007

1.33 Miles



PAVEMENT MAINTENANCE HOT-IN-PLACE



Hot In-Place Recycling

Hot In-Place Asphalt Recycling is the process of rehabilitating deteriorated pavement. Existing asphalt is heated with two to three roadway heaters then scarified and mixed with a recycling agent. This new mix is then paved over the existing surface to correct surface distresses not caused by structural inadequacy. The new in-place product will then require a top course of micro-surfacing or Hot Mix Asphalt



PAVEMENT MAINTENANCE HOT-IN-PLACE

Street Name	From	To	Square Yards	Linear Feet
Winchester	Nahanton	Dedham	28,200	7,700
Dedham	Winchester	Nahanton	20,000	5,284
Totals			48,200	12,984

2.46 Miles



PAVEMENT MAINTENANCE RECLAMATION



Full Depth Reclamation

This treatment is intended for a roadway that has outlived its useful life. It is considered to be the most aggressive resurfacing treatment. The entire pavement structure is completely pulverized to depth of 14" to 20". Most of the pulverized material is reused as a subbase for the asphalt paving. Additional material may be required to be blended in the subbase to meet specifications. After the subbase is installed a minimum of 4" of asphalt is installed in multiple layers.



PAVEMENT MAINTENANCE RECLAMATION

Street Name	From	To	Square Yards	Linear Feet
Adams	Watertown	Washington	13,720	2,553
Totals			13,720	2,553

0.48 Miles



PAVEMENT MANAGEMENT COMMUNICATION

- ◉ Mailed Letters
- ◉ Flyer Drops
- ◉ Message Boards
- ◉ DPW Webpage
- ◉ Twitter
- ◉ Face-to-Face



PAVEMENT MANAGEMENT COMMUNICATION

Dear Newton Resident:

In October of 2016, City leaders made a commitment to you to engage in an accelerated roads program aimed at improving road quality, driver experience and safety. The outlined program calls for an investment of \$100 million over a 10 year period to facilitate an improvement in pavement condition and pedestrian facilities.

On the reverse of this page is a map of the roads scheduled to be resurfaced this year. Our records indicate that your residence will be directly impacted due to the construction. You may be receiving this notice if you need to use one of these roads, and your road is not actually being worked on.

Also, please note that as part of this accelerated program, the City will be utilizing roadway treatments to preserve roadways that are in good condition to slow their deterioration caused by traffic, weather and other variables that cause our roadways to deteriorate. There are several different surface treatments being installed, Fog Sealing, Microsurfacing, Overlaying, Milling and Overlaying, Cape Sealing, Hot In-Place Recycling and Full Depth Reclamation.

Fog sealing and micro surfacing are thin wearing surfaces applied to existing pavement intended to extend the life of the pavement. The remaining treatments, Overlaying, Milling and Overlaying, Cape Sealing, Hot In-Place Recycling and Full Depth Reclamation are more extensive construction and activities may consist of any of the following: lowering and plating of manholes and catch basins, grinding and grading of the road surface, adjusting of manholes and catch basins, installation of asphalt base, placement of final layer of asphalt, adjustment of driveway aprons, replacement of sidewalk and curb ramps, resetting of curbing and restoration of disturbed lawn area.

Please be advised that with the exception of Fog Sealing and Microsurfacing, street surface openings will be restricted for a period of at least five years after a new pavement surface is laid, except in cases of extreme emergency. If you plan to install or repair a gas service, underground electric service, underground telephone, underground cable service, water service, sewer service or any other work that would require excavating in the street, the work must be done before the street is repaved. You can use the following utility contact numbers to request service installation: National Grid 1-800-233-5325, NSTAR 1-888-633-3797, Verizon 1-800-870-9999, Comcast 1-800-266-2278, RCN 1-800-746-4726.

On-street parking will be prohibited during construction. You will be given as much access as the work allows and the DPW will do their best to minimize any inconvenience. You will receive a hand delivered notice at least one day prior to the start of construction. The work zone may extend several feet beyond the edge of the existing pavement but will stay within the City-owned-land. If you have any invisible fences, low voltage lighting or sprinkler systems near the pavement, please clearly mark the locations of these items.

If you have any questions or concerns please call the Engineering Division (617) 796-1000 or send an email to customerservice@newtonma.gov. If you leave a message someone will return your call.



Crack Seal				Length	Width	Sq. Yds.
Homer Street	Centre Street	Commonwealth Avenue		5,400'	35'	21,000
Newtonville Avenue	Harvard Street	Centre Street		4,500'	24'	12,000
Dudley Road	Boyleston Street	Brookline Street		6,500'	24'	17,333
Beacon Street	Washington Street	Manitoba Road		4,200'	32'	14,933
Barbara Road				675'	29'	2,175
Clark Road				680'	24'	1,820
Farmington Road				534'	29'	1,725
Jerome Avenue				745'	24'	1,990
Kenilworth Street				1,000'	24'	2,660
Montrose Street				1,335'	24'	3,560
Olde Field Road				700'	23'	1,785
Philbrick Street				785'	24'	2,100
Russell Road				1,699'	26'	5,070
Sheldon Street				725'	24'	1,930
Sylvester Road				464'	29'	1,495
Annawan Road			0.36	1901'		5,200
Arapahoe Road			0.16	845'		2,300
Baldpate Hill Road			0.64	3379'		8,300
Bonaire Circle			0.03	158'		800
Butts Street			0.06	317'		800
Champa Street			0.12	634'		1,800
Charlotte Road			0.17	898'		2,600
Christina Street			0.46	2429'		5,500
Clark Street Branch			0.09	475'		1,300
Edgewood Road			0.05	264'		700
Grace Road			0.16	845'		2,900
Hawthorn Street			0.27	1426'		3,800
Jackston Road			0.42	2218'		8,000
Lexington Street			1.12	5914'		21,000
Llewellyn Road			0.1	528'		1,400
Norman Road			0.09	475'		1,350
Oak Street			0.51	2693'		8,000
Oakmont Road			0.17	898'		2,400
Otis Street			0.89	4699'		13,000
Peach Tree Lane			0.05	264'		800
Quinobequin Road			0.37	1954'		5,900
Richfield Road			0.05	264'		700
Saw Mill Brook Parkway			0.62	3274'		11,000
Suban Place			0.04	211'		700
Webster Street			0.78	4118'		11,000
Winsor Road			0.57	3010'		9,100
Wolcott Park			0.16	845'		2,300
			14.18	74,875'		224,227

Crack Seal TOTAL

14.18 74,875'

	Street Name	From	To	Est. LF
2017 Mill and Overlay	Beacon Street	Centre Street	Walnut St	3,400
	Beacon Street	Walnut St	Chestnut St	6,200
	Commonwealth Ave	Lowell Avenue	Centre Street	5,400
	Brandeis Road	Greenwood Street	Adeline Road	3,100
	Greenwood Street	Dedham Street	Dudley Street	3,975
	Chestnut Street	Washington Street	Commonwealth Ave	4,700
	Church Street	Park Street	Oakland Street	2,500
	Maple Ave	Church St	End	430
	Waltham Street	Crafts Street	City Line	1,700
	Dedham St	Needham St	Nahanton St	

Microsurfacing			Length	Width	Sq. Yds.
Homer Street	Centre Street	Commonwealth Avenue	5,400'	35'	21,000
Newtonville Avenue	Harvard Street	Centre Street	4,500'	24'	12,000
Dudley Road	Boyleston Street	Brookline Street	6,500'	24'	17,333
Beacon Street	Washington Street	Manitoba Road	4,200'	32'	14,933
Winchester Street	Nahanton Street	Dedham Street	7,700'	32'	28,200
Watertown Street	Lowell Avenue	Albermarle Road	1,962'	38'	8,300
			5.73	30,262'	101,767

Fog Seal			Length	Width	Sq. Yds.
Newtonville Avenue	Walnut Street	Harvard Street	1,500'	24'	4,000
Webster Street	Waltham Street	Wolcott Street	4,110'		11,000
Wolcott Street	Webster Street	Lexington Street	1,790'		4,770
Hawthorn Street	Lincoln Road	Watertown Street	1,600'	22'	3,911
Adams Street	Watertown Street	California Street	1,650'		4,400
			2.02	10,650'	28,081

Cape Seal			Length	Width	Sq. Yds.
Russell Road			1,699'	26'	5,070
Sylvester Road			464'	29'	1,495
Farmington Road			534'	29'	1,725
Barbara Road			675'	29'	2,175
Jerome Avenue			745'	24'	1,990
Clark Road			680'	24'	1,820
Philbrick Road			785'	24'	2,100
Sheldon Street			725'	24'	1,930
Olde Field Road			700'	23'	1,785
			1.33	7,007'	20,090

Hot-In-Place			Length	Width	Sq. Yds.
Winchester Street	Nahanton Street	Dedham Street	7,700'	32'	28,200
Dedham Street	Brush Hill Road	Nahanton Street	5,284'	34'	20,000
			2.46	12,984'	48,200

HMA Overlay			Length	Width	Sq. Yds.
Dedham Street	Brush Hill Road	Nahanton Street	5,284'	34'	20,000
			1.00	5,284'	20,000

Crack Seal			Length	Width	Sq. Yds.
Variety of Streets			74,875'		224,227

	14.18	74,875'	224,227
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TOTALS 24.26 128,078'