



Public Facilities Committee Report

City of Newton In City Council

Wednesday, September 6, 2017

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

Absent: Councilor Lennon

Also Present: Councilors Auchincloss, Harney

City staff present: Commissioner of Public Works Jim McGonagle, DPW Director of Operations Shane Mark, City Engineer Lou Taverna

#278-17 Mayor's appointment of Brita Lundberg to the Solid Waste Commission

BRITA LUNDBERG, 5 Oakwood Terrace, Newton, appointed as a member of the SOLID WASTE COMMISSION for a term to expire September 30, 2020. (60 DAYS 11/4/17) [08/09/17 @ 11:18 AM]

Action: Public Facilities Approved 6-0 (Gentile not Voting)

Note: Internist and Infectious Disease Physician Brita Lundberg is a member of Green Newton and has been attending Solid Waste Commission meetings for approximately six months. At the suggestion of her Green Newton colleagues, Ms. Lundberg has volunteered to join the Solid Waste Commission. She emphasized her enthusiasm for being able to contribute to the SWC from a public health perspective. Committee members asked Ms. Lundberg to expand on how she hopes to contribute to the SWC and Ms. Lundberg noted that she is particularly interested in expansion of the City's organic waste pilot program and possible steps towards a Styrofoam ban. Committee members expressed gratitude for Ms. Lundberg volunteering for the SWC and noted that her perspective would be an asset to the commission. With a motion from Councilor Danberg to approve the appointment, Committee members voted unanimously in favor.

#249-17 Comcast petition for a Grant of Location on Maple Avenue

COMCAST petitioning for a grant of location to install 156"± of 1-4" conduit from existing vault at the corner of Church Street to existing vault in front of 25 Maple Avenue.(Ward 1) [08/03/2017 @ 9:15 AM]

Action: Public Facilities Approved 7-0

Note: Comcast Representative Manuel Furtado presented the request to replace existing conduit from an existing vault approximately 156"± to the corner of Church Street to a second existing vault. The Public Hearing was Opened and Closed with no member of the public wishing to speak. City Engineer Lou Taverna confirmed that Maple Avenue and Church Street will be paved in the fall and this request is the result of a coordinated effort with the utility company. Councilor Albright motioned to approve the item which carried unanimously.

#250-17 Comcast petition for a Grant of Location on Mount Ida Street

COMCAST petitioning for a grant of location to install 216'± of 1-4" conduit from existing vault near 8-14 Mount Ida Street to pole#24-3 located at the corner of Newtonville Avenue.(Ward 1) [08/03/2017 @ 8:55 AM]

Action: Public Facilities Approved 7-0

Note: Comcast Representative Manuel Furtado presented the request to replace existing conduit a length of 260'± from existing vault at 8-14 Mt. Ida Street to pole #24-3 at the corner of Newtonville Avenue. The Public Hearing was opened and closed with no member of the public wishing to speak. Mr. Taverna confirmed that the Engineering Department has no concerns about the replacement of conduit at this location. Councilor Albright motioned to approve the item which carried unanimously.

#251-17 Eversource petition for grant of location in Hammond Street

EVERSOURCE ENERGY petition for a grant of location to install 45'± of conduit from existing manhole 10776 in a southeasterly direction to upgrade the existing service at house #413 Hammond Street. [(Ward 7) 08/01/17 @ 10:43 AM]

Action: Public Facilities Approved 7-0

Note: Eversource Representative Maureen Carroll presented the request to replace 45'± of underground service in Hammond Street. Mr. Taverna noted that the conduit will be located in the grass strip and will not interfere with the recently paved street. The Public Hearing was opened and closed with no member of the public wishing to speak. Councilor Laredo motioned to approve the item and Committee members voted unanimously in favor.

#196-17 Petition for Drain Extension in Park Avenue

ADAM KESSLER, 94 Park Avenue, petitioning for a main drain extension in PARK AVENUE from the existing main drain at Cotton Street 155' ± in a southeasterly direction to a proposed manhole located in front of 94 Park Avenue. (Ward 7) [06/07/17 @ 12:15 PM]

PETITIONER TO PAY ENTIRE COST

Action: Public Facilities Approved 7-0

Note: Mr. Taverna presented the request for a main drain extension at 94 Park Avenue. He stated that there is a 6" bleeder drain consisting of crushed stone to help reduce the groundwater table. He noted that this drainage treatment was common in the 1800's and is inadequate. Petitioner Adam Kessler built a by-right addition to the property at 94 Park Avenue, triggering the requirement for an infiltration system designed to meet a "one hundred year storm" for the added impervious area. The City allows storm water overflow into the City's storm drainage system. As there is no existing City system at the site, the petitioner is seeking an extension to connect to the existing main drain in Cotton Street. Mr. Taverna noted that the petitioner has included "stubs" in the design of the system to allow neighbors to connect to the main drain extension in the future, at the request of the Engineering Department.

It was noted that the calculation for the infiltration system is based on the net additional square footage, not total square footage of the structure. Committee members questioned how neighbors will learn of the “stubs” in the main drain extension. Mr. Taverna confirmed that during inspection, a City inspector can notify residents of the presence of the stub. He also noted that residents wishing to tie into the extension would need to provide indication of their intention to infiltrate on their property first.

The Public Hearing was Opened.

Neal Green, 51 Cotton Street, noted that the addition at 94 Park Avenue is a huge addition and questioned how zoning regulations allowed the structure to be built. He has concerns about adequate drainage at the site and potential additional runoff from the addition. He expressed concern related to trees and landscaping that was removed.

Warren Goldstein, 47 Cotton Street, described the addition as massive and that the removal of trees will negatively affect drainage at the site. He does not believe that the construction should have been allowed.

Adam Kessler, 32 Park Avenue, reiterated that the addition was built by-right and he has conformed to all of the City’s requirements. He noted that it is a significant expense to pay for the extension of the public main.

Committee members noted that the installation of a storm water system should improve conditions at the site. Members of the public who expressed concern, also noted that they do not wish to impede the installation of the storm water system. With regard to the concerns related to tree removal, Mr. Kessler confirmed that he is working with the City’s tree warden to replace the trees per the tree ordinance.

Committee members noted that the City is working on the next phase of Zoning Reform and while zoning related concerns are not in the purview of the Public Facilities Committee, concerned citizens can contribute feedback at the public zoning review meetings.

The Public Hearing was closed. Councilor Laredo motioned to approve the item which carried unanimously.

#248-17 Petition for Drain Extension in Suffolk Road

MARK DOLINS, 37 Suffolk Road, petitioning for a main drain extension in SUFFOLK ROAD from an existing drain in Suffolk Road 160’± in a northwesterly direction to a proposed drain manhole located in front of 46 Suffolk Road. (Ward 7) [07/18/17 @ 10:20 AM]

PETITIONER TO PAY ENTIRE COST

Action: Public Facilities Approved 6-0 (Laredo not Voting)

Note: Mr. Taverna presented the petition for a main drain extension in Suffolk Road. Mr. Taverna noted that there is high groundwater at 37 Suffolk Road and chronic flooding in the basement of the residence. The petitioner proposes a roof drain and sump pump that runs into a perforated drain, infiltrating to the maximum extent possible. Mr. Taverna stated that it is not possible to design a storm water system to meet a one hundred year storm as you cannot infiltrate due to the conditions of the site. The proposed main drain extension would extend from the manhole in front of 46 Suffolk Road. After the construction is complete, the petitioner will be responsible for the cost of milling and overlaying curb to curb, 25' in either direction as Suffolk Road was recently paved.

The public hearing was opened.

Petitioner Jennifer Dolins, 37 Suffolk Road, noted that during a renovation to the house, they had to remove the existing sump pump. Subsequently, groundwater began to flood the basement. Ms. Dolins stated that the City plans showed an existing drain line that they could connect to. Upon opening the street, they found that there was no existing drain and had to engineer a connection.

Bob Deresiewicz, 46 Suffolk Road, had concerns about maintaining the integrity of his property and overflow drainage from the petitioner's drainage system. He questioned whether the capacity of the system will be able to adequately infiltrate the water on site.

After learning that the drainage would be captured in a sealed pipe, Mr. Derevitz is not concerned about overflow water. Committee members asked that Mr. Taverna confirm the location of the overflow discharge prior to the Council vote. With no one else wishing to speak, the public hearing was closed. Councilor Brousal- Glaser motioned to approve the request which carried 6-0 (Laredo not voting).

Referred to Public Facilities Committee

#280-17 Updates on the FY18 Accelerated Roads Program

COUNCILOR CROSSLEY requesting periodic updates to the Public Facilities Committee on the FY18 Accelerated Roads Program. [08/28/2017 @3:13 PM]

Action: **Public Facilities Held 7-0**

Note: Commissioner of Public Works Jim McGonagle, DPW Director of Operations Shane Mark and Beta Engineering Consultant Conrad Ledger presented updates to the FY18 Accelerated Roads Program. Beta Engineering has been working with the City to use the results of the Street Scan data to assist DPW in determining road replacement versus repair and maintenance, and to help prioritize the Roads Program.

Mr. Ledger presented the attached PowerPoint, emphasizing the importance of planning the appropriate methods of preventive maintenance in order to maximize the value of the repair. Mr. Ledger explained that as roads degenerate, different types of maintenance become necessary. Mr. Ledger described a road shared by two adjacent communities highlight the importance of preventative maintenance. After full reclamation of this shared road, Fairfield, CT applied

preventive maintenance measures to preserve the integrity of the roadway. However, Bridgeport, CT chose not to invest in the same measure for their half of the road. Ultimately, the portion of the road in Bridgeport, CT required another extensive road repair while the portion of the road in Fairfield, CT only required additional maintenance. Over the same time period, Bridgeport spent more than double what Fairfield, CT spent while suffering a road with poorer conditions.

Mr. Ledger reviewed some methods of preventative maintenance that were used this construction season and presented one new method which DPW hopes to implement next summer. Mr. Ledger noted that the Street Scan data revealed an average PCI (Pavement Condition Index) of 62 which includes 31% of City streets in poor condition. Commissioner McGonagle confirmed that lists of roadways sorted by PCI and sorted alphabetically have been distributed to Councilors. DPW has established a list of streets that will be worked on and has been working to coordinate paving with the utility companies. The Commissioner stated that DPW expects to have Street Scan complete a full inspection after three years to compare average PCI. It was noted that next year, DPW hopes to increase the number of miles from 19 to 27. The Commissioner stated that miles of roads repaired and replaced is lower than anticipated this construction season due to more extensive sidewalk repair than originally estimated. Mr. Ledger emphasized the focus on ensuring ADA compliance on sidewalks and ramps. The Commissioner noted that a listing of all major street work planned for the next five years will be available for the CIP discussion.

Committee members questioned how FY18 actual costs compare with the original estimates. Commissioner McGonagle confirmed that more information will be available at the end of September. He noted that the unexpected amount of sidewalk work will be reflected in additional expenditures.

The Chair asked that the Commissioner speak to the status of the design and construction guidelines for public ways. He stated that DPW is collaborating with Planning to review standards and develop design guidelines that include standard sidewalk widths, a tree removal policy and ADA guidelines. He noted that they are hoping to create a standardized process with efforts from DPW, Engineering, Planning and Parks & Rec. He noted that there are many community advocates for competing interests. The Commissioner confirmed that while DPW is trying to balance different requests, public safety remains the first priority. He stated that once implemented, the design guidelines will be helpful, but each situation is different. The Committee was in agreement that a long range plan with clear priorities will be beneficial to the City.

The Commissioner responded to questions regarding tree removal on Beacon Street. It was noted that the initial decision to remove 29 trees on Beacon Street was reduced to three trees based on public pressure, but that the metrics used to determine when removal of a tree is in the public interest are not yet clear. Committee members expressed concern that the trees that remain will have a detrimental impact on new sidewalks in later years and urged the Commissioner to be cognizant of the long term impacts of tree related decisions. The Chair asked that clear metrics be established for when and why trees will be removed, and that a summary of additional costs that would accrue over time, as old trees die or further impact the public way, be prepared.

Committee members asked whether the “hot in place” method of melting and recycling existing pavement in one operation, will have lasting damage on the trees impacted. Commissioner McGonagle noted that the “hot in place” method was performed on one of the hottest days of the year with limited wind. He noted that the circumstances were out of the ordinary. The Commissioner confirmed that DPW has visited and spoken with other communities to verify that permanent damage is not done. It was noted that pictures were taken prior to the treatment and that DPW will confirm in the spring that the trees leaf out normally. Committee members asked that the Commissioner ask the vendor if additional precautions/heat shields can be incorporated to the process.

Committee members asked what, if anything is being done to coordinate the undergrounding of utility poles. Commissioner McGonagle noted that the utility companies will not give the City any estimates until there are design funds and undergrounding equipment is very expensive. Committee members asked that the possibility to underground be considered, where possible. The Commissioner stated that although the City has developed a strong working relationship with some utility companies, there are limitations to the number of police details available on a daily basis. He noted that utility and vendor work has been delayed due to police detail availability. The Commissioner confirmed that the City will be interviewing candidates for a Police Detail Coordinator who will help with the scheduling of police details.

The Committee held the item and adjourned at 9:10 pm.

Respectfully submitted,

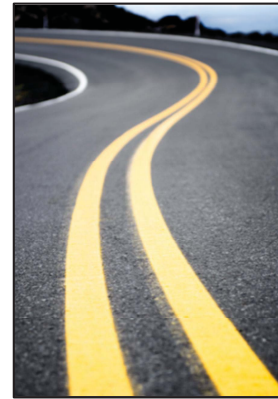
Deborah J. Crossley, Chair

Accelerated Pavement Management Program Program Update



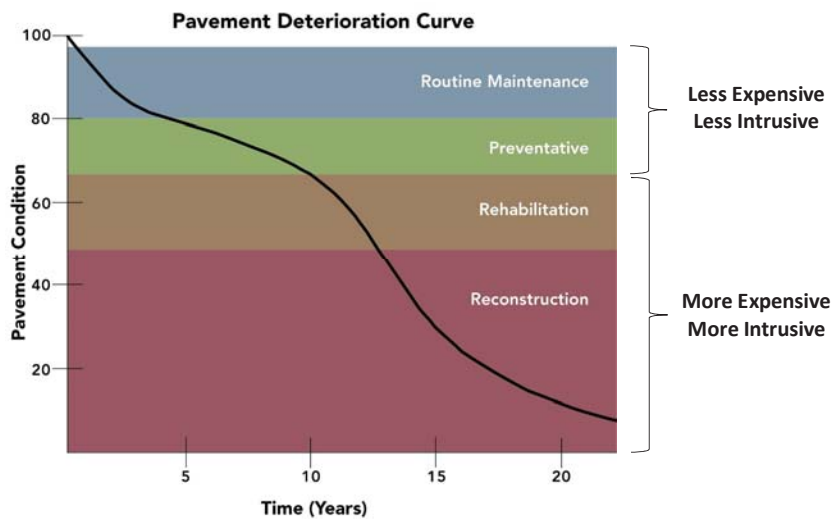
September 6, 2017

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



Pavement Management



<p>Bridgeport, CT 2004: 2" Mill & Fill \$12 per sy</p> <p>2017: 2" Mill & Fill Reclamation Total: \$24-\$44 per sy</p>	<p>Fairfield, CT 2004: 2" Mill & Fill \$12 per sy</p> <p>2010: Crack Sealing & Microsurfacing \$4.50 per sy</p> <p>2017: Crack Sealing & Microsurfacing \$4.50 per sy Total: \$21 per sy</p>
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Preservation Success!

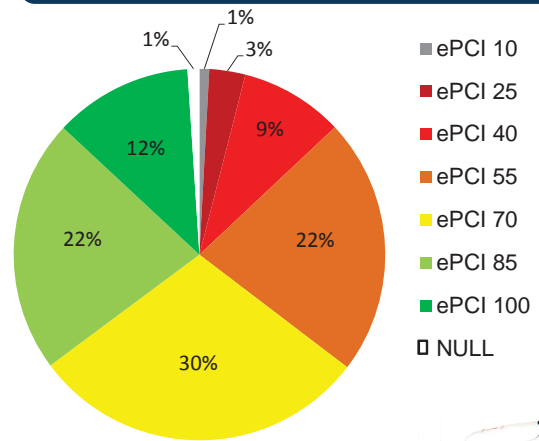
City of Newton – Roads Program

1. Create a comprehensive pavement management program
2. Coordinate utility and roadway projects
3. Communication to the community
4. Preparation of bid documents and Construction Management
5. Pavement Maintenance

PCI Ranges

<u>Condition</u>	<u>Pavement Rating</u>	<u>Maintenance Category</u>
Excellent.....	100-92.....	Defer Maintenance
Good.....	92-80.....	Routine Maintenance
Fair.....	80-65.....	Preventive Maintenance
Poor.....	65-50.....	Rehabilitation
Very Poor.....	Below 50.....	Reconstruction

Initial Road Network Survey



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



Conclusion



Review – Analyze - Prioritize

- Create custom reports
 - Parent/Child Report
 - Roadways by PCI
- Cost Benefit Value
 - Data driven analysis to assist with prioritizing repairs
- Initial Street Lists
 - Coordinate with Utilities
 - Assess for Trees
 - Evaluate Sidewalks



2017 Paving Program

Repair Treatments



Crack Seal



Fog Seal

2017 Paving Program

Repair Treatments



Microsurfacing



Cape Seal

2017 Paving Program

Repair Treatments



Hot In-Place Recycling

2017 Paving Program

Repair Treatments

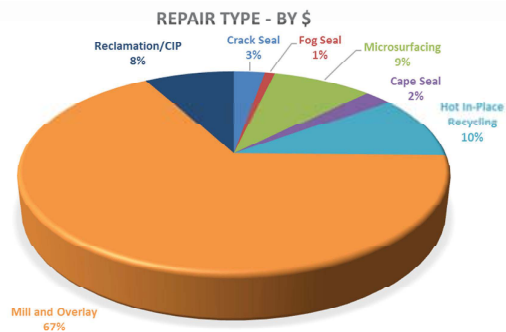


Mill and Overlay



Full Depth Reclamation

2017 Paving Program



Repair Type	Mileage	Length	Sq. Yds.
Crack Seal	8.51	44,933'	218,007
Fog Seal	2.02	10,650'	28,081
Microsurfacing	5.36	28,300'	93,467
Cape Seal	1.92	10,162'	28,167
Hot In-Place Recycling	3.20	16,895'	62,937
Mill and Overlay	6.02	31,775'	103,689
Reclamation/CIP	0.59	3,092'	10,100
	19.10	145,807'	544,447

Beacon Street

@ Beaconwood Road



Commonwealth Avenue

@ Ellison Road



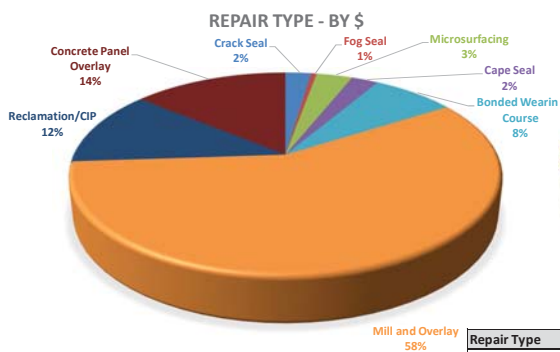
2018 Paving Program

New Repair Treatments



Bonded Wearing Course

2018 Paving Program



Repair Type	Mileage	Length	Sq. Yds.
Crack Seal	9.00	45,000'	220,000
Fog Seal	1.27	6,730'	18,200
Microsurfacing	2.48	13,120'	40,200
Cape Seal	2.27	12,000'	33,000
Bonded Wearing Course	4.17	22,000'	79,717
Mill and Overlay	6.59	34,770'	108,100
Reclamation/CIP	1.18	6,250'	18,050
Concrete Panel Overlay	0.31	1,650'	6,000
Total	27.28	141,520'	523,267

Concurrent Work

- Sidewalks
 - \$40 per SY
- Curb Ramps
 - \$65 per SY
- New Curbing
 - \$40 per FT
- Remove and Reset Curbing
 - \$20 per FT
- Tree Removals and Replanting Program

