

PROGRAM HIGHLIGHTS**ENGINEERING SERVICES**

<u>SERVICE INDICATORS</u>	<u>Actual 2012</u>	<u>Actual 2013</u>	<u>Estimated 2014</u>	<u>Projected 2015</u>
1. Capital Projects Designed/Managed by Engineering Staff	38	28	25	22
2. Private Development Project Plan Reviews	35	46	50	50
3. Street/Driveway/Excavation Permits	459	440	452	450
4. Utility Service Connections/Inspections	41	65	60	60
5. Monitoring Well Annual Licenses/Permits	44	43	43	42
6. GIS Referrals/Requests for Service	170	125	130	130
7. Traffic Operations Committee Referrals	23	32	30	30
8. Poles and Wires Licenses	25	6	10	10

2015 GOALS

1. Develop and/or continue an implementation strategy for City Council's consideration of improvement options on the City's priority transportation corridor - Loudon Road (CIP #19).
2. Advance and/or complete the design and/or construction of the following major transportation corridor projects in accordance with their respective program schedules: a) US Route 3 North (North State Street, Fisherville Road, Village Street from Penacook Street to the Boscawen Town Line) (CIP #35); and b) Main Street Downtown Complete Streets Improvement Project (CIP# 460).
3. Advance and/or complete the design and/or construction of the following major airport projects in accordance with their respective program schedules: a) Construction of the Parallel Taxiway to Runway 12/30 (CIP #73); b) Design the Reconstruction of Taxiway A (CIP #468); c) Design and Construct Addition to the Snow Removal Equipment Building (CIP #77); and d) Removal of Obstructions to Runway 17 and 12 Approaches (CIP #492).
4. Advance and/or complete the design and/or construction of the following major utility projects in accordance with their respective program schedules: a) Hopkinton Road/Saw Mill Road Water Main Cleaning and Lining Project (CIP #84); b) Water Main Cleaning and Lining of various streets including Fernald, Kearsarge, Lawrence, Mill, Ormond, Winthrop, Fifield, Hullbakers, Welch, and Elliott (CIP #84); c) Sewalls Falls Road Water Main Extension Project (in conjunction with the design of the Sewalls Falls Road Bridge Replacement) (CIP #86); d) Construction management of the relocation of the water and sewer mains associated with the new on line bridge replacement at Exit 12 (NHDOT project); e) Water Main Replacement at Walnut, Cross, and a portion of Community Drive – Design (CIP #85) and f) I-393/Horseshoe Pond Flood Mitigation Project (CIP #571).
5. Advance and/or complete the design and/or construction of the following major streetscape, sidewalk, traffic operation, and targeted neighborhood improvement projects in accordance with their respective program schedules: a) Downtown pedestrian signal update; McKee Square signal controller replacement; and Bouton/North Main Signal Coordination Improvements (CIP #283).
6. Advance and/or complete the design and/or construction of the following major bridge improvement projects in accordance with their respective program schedules: a) Design/Permitting/Construction of the Sewalls Falls Road Bridge Replacement Project (CIP #22).
7. Advance and implement the following major technology improvements in accordance with their respective program schedules: a) Digital Tax Map Development Project – Phase 3 (CIP #297).
8. Develop strategies for evaluating and implementing mechanisms for a City-wide Stormwater Enterprise for funding the stormwater management program (CIP #479).
9. Continue to support the comprehensive citywide traffic and transportation engineering program with staff and the Transportation Policy Advisory Committee (TPAC), including review of the City's Transportation Master Plan and the Traffic Management Policy.

ENGINEERING SERVICES**PROGRAM HIGHLIGHTS**

2014 GOALS STATUS

1. Develop and/or continue an implementation strategy for City Council's consideration of improvement options on the City's priority transportation corridors: a) Loudon Road Corridor (CIP #19); and b) Langley Parkway (CIP #40).

9-Month Status:

- a) Following notice in April 2012 by NHDOT and FHWA that the Loudon Road Corridor project was determined eligible for Highway Safety Improvement Program (HSIP) funding (90% Federal/10% Local), staff hosted a public information meeting on December 18, 2013, where over 50 residents and business owners attended and discussed the project. Project funding appropriation was approved by Council in February 2014. Staff has begun coordination with the NHDOT in administering the project design which is planned in 2014. Construction is expected to begin early in the 2015 construction season.
 - b) The traffic and environmental feasibility study is nearing completion on the Langley Parkway – Phase 3 project. Engineering staff continues to work with VHB, the City's transportation planning consultant, on the project. Extensive traffic modeling with the regional traffic model, through the assistance of NHDOT, was completed and conceptual designs of corridor alignments and intersections have been developed. Staff hosted a public information meeting in October and November 2013 with Concord Hospital, Lincoln Financial, and area residents. A city-wide public information meeting was also held on November 21, 2013. The project study is expected to be complete in mid-2014, with likely discussions during the CIP budget review hearings in mid-2014.
2. Advance and/or complete the design and/or construction of the following major transportation corridor projects in accordance with their respective program schedules: a) US Route 3 North (North State Street, Fisherville Road, Village Street from Penacook Street to the Boscawen Town Line) (CIP #35); and b) Main Street Downtown Complete Streets Improvement Project (CIP# 460).

9-Month Status:

- a) Construction of the City portion of the Phase 5 Utility Infrastructure Improvements (relocation of aerial utilities in Penacook Village) was completed in December 2013. Minor utility relocation work will continue through early spring with an April 2014 expected completion. Engineering staff also coordinated the construction of improvements to the Village Street Bridge over the Contoocook River, which was completed in late November 2013. The Phase 5 streetscape improvement project (Stark Street to the Boscawen Town Line), which was deferred until 2014 to complete the utility infrastructure and bridge improvements, was advertised in February and bids were opened in March. Of the four bids received, Engineering has recommended award of the project to F.L. Merrill Construction, Inc. Construction is expected to begin in mid-April and continue through the 2014 construction season.
- b) Bids from the 2nd advertisement were opened in January 2014 with only one bid received. Following a detailed review and debriefing with contractors, Engineering outlined project issues and concerns to City Council for consideration in February. Of those, day time construction, flexible work area, and adjustable parking area were among the issues presented. Engineering staff also recommended the use of a Construction Manager/General Contractor (CM/GC) procurement process, which selects contractors based on qualifications. A CM/GC request for proposals was issued on March 7th, with proposals due back on April 11th. The CM/GC evaluation and selection will begin immediately following receipt of proposals with an expectation to bring a contractor on and begin construction during the 2014 construction season.

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3. Advance and/or complete the design and/or construction of the following major airport projects in accordance with their respective program schedules: a) Construction of Phase 1 (East End) Parallel Taxiway to Runway 12/30 (CIP #73); b) Apply for FAA grant for Snow Removal Equipment (CIP #77); and c) Coordinate the installation of a new FAA Localizer.

9-Month Status:

- a) The contract for Phase I of the Parallel Taxiway to Runway 12/30 project has been awarded to Continental Paving and work is anticipated to commence in mid-April. Bids for Phase II were received in late January 2014 and F.L. Merrill Construction, Inc. is the apparent successful bidder. The contract will be awarded pending the appropriation of funds by City Council at the April 14, 2013 meeting and Governor and Council approval in late April. Construction will commence in mid-May and is expected to be completed in its entirety by the end of October 2014. The Runway Safety Determination Study is complete.
- b) Bids for a new front end loader with bucket and runway plow will be solicited for a second time in early April. The grant application was submitted to NHDOT on March 28, 2014, and will be amended pending the results of the second round of bidding.
- c) The grant offer was received in October 2013 for the installation of frangible mounts on the existing localizer. Work is scheduled to begin in the summer of 2014 by the Federal Aviation Administration.
4. Advance and/or complete the design and/or construction of the following major utility projects in accordance with their respective program schedules: a) Hopkinton Road/Saw Mill Road Water Main Cleaning and Lining Project – Design (CIP #84); b) Loudon Road Water Main Replacement Project – Phase 2 (CIP #85); c) Sewalls Falls Road Water Main Extension Project (in conjunction with the design of the Sewalls Falls Road Bridge Replacement) (CIP #86); d) Penacook Sanitary Sewer Lining Project (CIP #91); and e) Design the relocation of the water main associated with the new on line bridge replacement at Exit 12 (NHDOT project).

9-Month Status:

- a) The Hopkinton/Sawmill Water Main Lining Project design is complete.
- b) The Loudon Road Water Main Replacement project contract was completed in November 2013.
- c) Final design is underway on the Sewalls Falls Road Bridge Replacement project. Initial efforts have focused on detailed analysis of the existing truss bridge structure and environmental permitting. Design of the water main extension along Sewalls Falls Road from Manor Road to Monitor Drive is expected in 2014, in conjunction with the bridge project final design tasks.
- d) The Penacook Sanitary Sewer Lining Project was awarded to Layne Inliner, LLC, and began in mid-November 2013. The contractor will return in April to complete lining work city-wide.
- e) Design for the relocation of the water main associated with the new on-line bridge replacement at Exit 12 is being administered by NHDOT and is in the final design phase. City staff is in the process of designing the relocation of the water main and bids will be solicited for construction in mid-May.
5. Advance and/or complete the design and/or construction of the following major streetscape, sidewalk, traffic operation, and targeted neighborhood improvement projects in accordance with their respective program schedules: a) North Main/Bouton/I-393 Traffic Signal Improvements Project and Water Street Signal Coordination Improvements (CIP #283).
- 9-Month Status: An engineering study of both locations has begun, with traffic data compiled in October 2013. Construction of improvements is expected in mid-2014.

ENGINEERING SERVICES**PROGRAM HIGHLIGHTS**

6. Advance and/or complete the design and/or construction of the following major bridge improvement projects in accordance with their respective program schedules: a) Design/Permitting of the Sewalls Falls Road Bridge Replacement Project (CIP #22).
9-Month Status: Final design of the bridge project is underway. The bridge design team completed the bridge type, size, and location study and presented it to City Council in March. Council endorsed the recommendation by staff and the project design team and selected the steel girder bridge alternative. Staff concluded work with the review agencies on mitigation for the removal of the bridge resource and has executed a memorandum of agreement. Completion of final design and environmental permitting will continue through 2014 in order to complete final design and advertise the project for construction in November.
7. Advance and implement the following major technology improvements in accordance with their respective program schedules: a) Digital Tax Map Development Project – Phase 2 (CIP #297).
9-Month Status: Final plans of the second phase of the Digital Tax Map Development Project were completed and delivered in February 2014. The next phase of the project was deferred to the FY 2015 capital program.
8. Develop strategies for evaluating and implementing mechanisms for a City-wide Stormwater Enterprise for funding the stormwater management program (CIP #479).
9-Month Status: Staff reviewed a conceptual strategy for a stormwater utility with the Fiscal Policy Advisory Committee in late 2011. Although the project was not funded in the FY 2014 program, Engineering staff will continue to develop data and prepare funding option plans for Council review.
9. Continue to support the comprehensive citywide traffic and transportation engineering program with staff and the Transportation Policy Advisory Committee (TPAC), including review of the City's Transportation Master Plan and the Traffic Management Policy.
9-Month Status: This is an ongoing effort. Engineering staff supports the full TPAC committee, as well as Bike, Pedestrian, and Public Transit subcommittees.

ADDITIONAL 2014 ACCOMPLISHMENTS

1. In response to continued flooding in the I-393/North Main Street area, Engineering staff coordinated design review workshops with NHDOT, NHDES, local stakeholders, and the NH Society for the Protection of Forests to develop potential solutions to mitigate flooding within the area. The process continues with the development of a capital project design to mitigate flooding and add capacity to an undersized section of storm drain along North Main Street and Horseshoe Pond Lane.
2. Having received good contract pricing for sanitary sewer cleaning and lining (CIP #91 – FY 2014), Engineering staff worked closely with the General Services Department to add sections of sanitary sewer found to be in deficient condition or near failure. Sections include Memorial Field, Manchester Street, Rockland Road, and Village Street.
3. Scott Sykes, Engineering Technician II, and Kevin Demers, Engineering Technician I, both received Master Road Scholar awards by the UNH Technology Transfer Center. The NH Roads Scholar Program establishes educational and training requirements across four levels of achievement and includes coverage of subjects essential to effective local road management. The Master level is the highest level of achievement and represents a commitment to excellence in the industry.
4. Engineering staff developed ArcGIS Server based web GIS applications. The PC version has fully replaced the ten-year old ArcIMS sites for internal and public users. A preliminary mobile device version is being tested by General Services Department users.
5. Engineering staff worked closely with the General Services Department to create comprehensive Penacook sewer system maps of capital improvements, sewer inspections, and assessments. This is a document required by the EPA for the Penacook Wastewater Treatment Plant permit renewal.

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6. Completed a title search of the Holiday Inn / Tsunis property for the City acquisition of land for the northerly extension of Storrs Street.
7. Completed a title search of the Walker School property and the history and status of North State Street for the discontinuance of a portion of North State Street and the conveyance to Bill Binnie Media.
8. Completed a title search of the State House property, the State House Plaza, and the history and status of North Main Street for the Downtown Streetscape Improvements project.
9. Coordinated the readdressing of the Havenwood Heritage Heights campus on East Side Drive in conjunction with the redevelopment of a portion of the property.
10. Completed a title search of the State held LCIP land on Sewalls Falls Road, researched the history and status of Sewalls Falls Road, and researched the history of the Sewalls Falls Bridge.
11. Engineering staff coordinated the design of City Hall modifications to move the Finance Department to the 2nd Floor and the Planning Division to the 3rd Floor.
12. Completed a Runway Safety Area Determination Study funded through the NHDOT Airport Improvement Program Grant Fund. This study identifies penetrations to the runway safety area (RSA) and short and long term solutions for maintaining our runway approach minimums.
13. Created a digital library of the City's traffic signal permits and plans.
14. Collaborated with staff from the Concord School District to investigate ways to better manage on-site school traffic during pick-up times at Abbot-Downing and Mill Brook Schools for the purpose of alleviating off-site congestion and parking issues.

ENGINEERING SERVICES**BUDGET DETAIL**

	2011 ACTUAL	2012 ACTUAL	2013 ACTUAL	2014 BUDGETED	2014 ESTIMATED	2015 BUDGET
REVENUE						
LICENSE FEES	\$7,485	\$4,510	\$5,260	\$4,540	\$4,500	\$4,560
PERMITS, STUDIES AND MISC	\$4,418	\$3,502	\$2,809	\$12,612	\$13,010	\$1,000
MISCELLANEOUS	\$2,025	\$2,250	\$1,613	\$1,800	\$3,000	\$2,000
POLE LICENSE RECORDING FEE	\$280	\$400	\$120	\$100	\$90	\$100
REPORTS, PRINTS & COPIES	\$2,908	\$2,687	\$4,806	\$2,600	\$3,200	\$2,600
ADMIN FRM IMPACT FEES & TRUSTS	\$40,012	\$40,013	\$40,000	\$20,000	\$20,000	\$20,000
OTHER FEES AND CHARGES	\$12,280	\$14,437	\$11,913	\$18,150	\$13,860	\$17,600
Total	\$69,407	\$67,798	\$66,520	\$59,802	\$57,660	\$47,860
APPROPRIATIONS						
COMPENSATION	\$514,781	\$559,851	\$622,418	\$730,217	\$733,032	\$728,401
OUTSIDE SERVICES	\$75,874	\$48,785	\$54,392	\$74,917	\$74,870	\$68,355
SUPPLIES	\$12,599	\$14,028	\$13,771	\$13,270	\$13,040	\$13,270
VEHICLE MAINTENANCE	\$7,030	\$10,081	\$7,943	\$10,000	\$10,000	\$10,000
INSURANCES	\$18,726	\$18,125	\$21,277	\$21,987	\$21,699	\$20,279
FRINGE BENEFITS	\$316,327	\$354,823	\$402,210	\$292,506	\$325,304	\$323,666
ADMIN CHARGES ALLOCATED	(\$176,430)	(\$198,156)	(\$194,580)	(\$259,840)	(\$259,840)	(\$259,800)
Total	\$768,907	\$807,538	\$927,430	\$883,057	\$918,105	\$904,171

BUDGET DETAIL**ENGINEERING SERVICES**

<u>POSITION TITLE</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
City Engineer	1.0	1.0	1.0	1.0
Associate Engineer	2.0	2.0	2.0	2.0
Traffic Engineer	1.0	1.0	1.0	1.0
City Surveyor	1.0	1.0	1.0	1.0
GIS Coordinator	1.0	1.0	1.0	1.0
Project Manager	1.0	1.0	1.0	1.0
Senior Engineering Technician	1.0	1.0	1.0	1.0
Engineering Technician II	2.0	2.0	2.0	2.0
Engineering Technician I	4.0	4.0	4.0	4.0
GIS Analyst	1.0	1.0	1.0	1.0
Engineering Aide	1.0	1.0	1.0	1.0
Fiscal Supervisor	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>
Total	17.0	17.0	17.0	17.0

ENGINEERING SERVICES**FUNDING IMPACT**

A Program Change Request (PCR) to reclassify a Fiscal Supervisor position, which was drafted to address a labor class specification issue, was not recommended for funding by the City Manager.

In the FY 2010 budget, Division labor reductions resulted in the elimination of an administrative position following the elevation of the then part-time Fiscal Supervisor position to full-time. Recognizing the loss of the administrative position, the FY 2010 adopted budget included the provision that the Planning Division's Administrative Specialist would split time with the Engineering Division to provide administrative support. That sharing of duties was attempted on a limited basis but did not prove to be efficient and was largely discontinued.

As a result, the current Fiscal Supervisor has addressed most of the administrative support matters for the Division. The proposed class specification in the PCR was developed to recognize that practice and would have included both fiscal and administrative responsibilities.

Since the drafting of the PCR in February 2014, the Engineering and Planning Divisions have been co-located in the same suite on the 3rd floor of City Hall. This move provides for greater efficiencies between divisions. Most pertinently, this move has allowed for the physical move of the Planning Division's Administrative Specialist II position to the Engineering Division's front counter, thereby being in a position to provide support for both Engineering and Planning. It is anticipated that this will reduce some of the administrative burden on the Fiscal Supervisor. Whether it addresses the entirety of the concern that led to this PCR remains to be determined. This is a situation that will continue to be monitored.