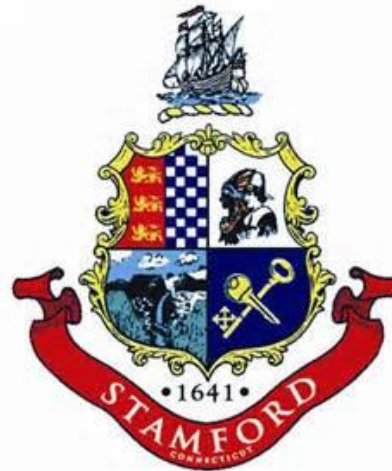


City of Stamford

ENGINEERING DEPARTMENT

FY 2017-18 Budget Presentation





Services Provided during FY15/16

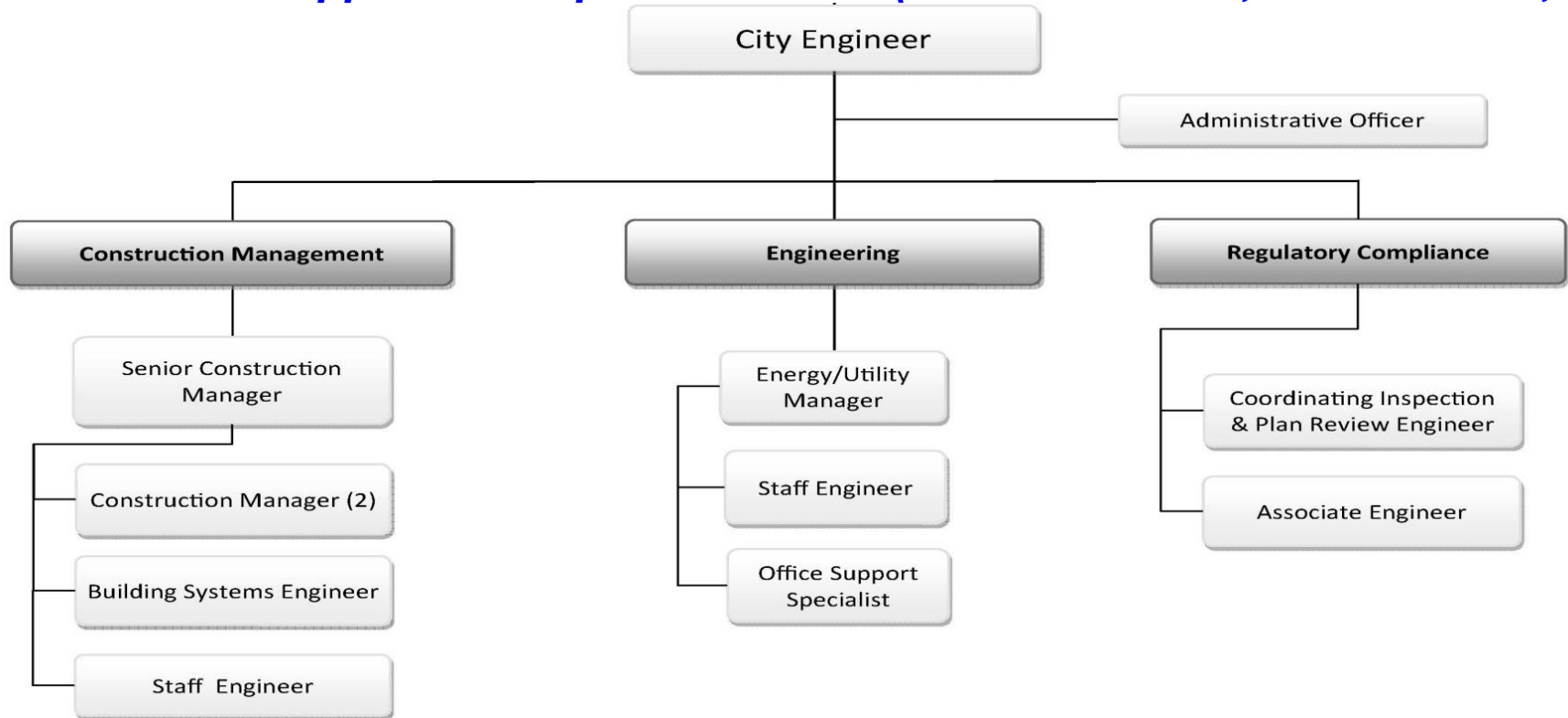
(to citizens / to departments)

Program	Services Provided (include Volume - if applicable)
Engineering Admin.	Completed 1,007 roadway light repairs
	Received \$227,851 rebates on energy management projects. Work with Outside Utility Companies to seek rebates on large scale capital projects i.e. new PD, new school.
	Replaced 84 manholes / catch basins (from 7/1/15-12/31/15)
	Received and responded to 1,507 walk-in inquiries.
Construction Mgmt.	Prepared and Issued 9 RFPs/RFQs and 21 Construction bids
	Support other departments and outside agencies with technical support & evaluation of project needs
	Assist Law Department with depositions, mediation and legal research
Regulatory	Issued 636 street opening permits, generating \$155,000 in revenue. Issued 198 street use permits, generating \$19,800 in revenue.
	Reviewed 322 site plans for other agencies, i.e. EPB, Zoning Board and ZBA and performed 134 as-built construction inspections.
	Issued 27 new house numbers



Other Department Resources

Resources that supplement department staff (i.e.: consultants, outside firms, etc.)



Title	Role - Responsibility
3 Non-Union Pay Plan Contract Employees	Manage and oversee SUT project
10 Clerk of Works Contract Employees	Perform capital project oversight and inspection
Outside Professional Consulting Architects, Engineers, and On-Call contractors	Perform A/E services, resident engineer, and construction services on capital projects

Summary of Operating Budget

Refer to Page 132 – 138 of Mayor's Proposed Operating Budget Book

Line Category	FY16/17 Projected				FY17/18 Mayor's Proposed				Variance 16/17 Projected VS Mayor's				
	Admin	CM	Reg	Total	Admin	CM	Reg	Total	Admin	CM	Reg	Total	%
Full Time Salary	534,172	575,588	192,075	1,301,835	532,941	573,023	207,799	1,313,763	(1,231)	(2,565)	15,724	11,928	0.9%
Other Salary	8,000	-	-	8,000	9,000	-	-	9,000	1,000	-	-	1,000	12.5%
Overtime	1,852	8,500	600	10,952	1,570	8,500	600	10,670	(282)	-	-	(282)	-2.6%
Employee Benefits	133,979	186,304	42,449	362,732	151,337	191,344	47,089	389,770	17,358	5,040	4,640	27,038	7.5%
Retiree Benefits	62,829	93,819	15,431	172,079	67,659	100,760	16,597	185,016	4,830	6,941	1,166	12,937	7.5%
Payments to Insurance Fund	8,735	8,735	3,494	20,964	14,128	14,128	5,653	33,909	5,393	5,393	2,159	12,945	61.7%
Purchased Other Services	436	490	164	1,090	500	490	165	1,155	64	-	1	65	6.0%
Purchased Property Services	67,546	3,619	1,156	72,321	67,956	3,854	1,170	72,980	410	235	14	659	0.9%
Utilities & Commodities	795,081	8,746	1,139	804,966	794,671	9,474	1,270	805,415	(410)	728	131	449	0.1%
Supplies	6,630	11,605	2,205	20,440	5,300	4,850	1,611	11,761	(1,330)	(6,755)	(594)	(8,679)	-42.5%
Other	285	1,340	428	2,053	1,030	1,420	460	2,910	745	80	32	857	41.7%
Grand Total	1,619,545	898,746	259,141	2,777,432	1,646,092	907,843	282,414	2,836,349	26,547	9,097	23,273	58,917	2.1%

Overall **\$59K or 2.1% increase** in FY17/18 Mayor's Proposed Budget versus FY16/17 Projected Budget

Increases

- \$12K increase in Full Time Salary due to Grade Increases for Plan Reviewer position, Step Decreases for new hire OSS and Staff Engineer positions
- \$1,000 increase in Sick Time due to Sick Leave Act that allows Clerk of Works to take sick leave
- \$27K increase in Employee Benefits due to obligated Active Medical and Life Insurance and Social Security expenses
- \$13K increase in Retiree Benefits such as OPEB and Pension Fund
- \$13K increase in Payment to Insurance Funds
- \$65 increase in Postage
- \$659 increase in Software and Equipment Maintenance fee increases
- \$449 increase in Gasoline and Telephone
- \$857 increase in Dues and Fees

Decreases

- \$282 reduction in Overtime
- \$8,679 reduction in Vehicle Maintenance due to Pool Fleet System

Summary of Capital Budget

Refer to Page 97 – 110 of Mayor’s Proposed Capital Budget Book

Project No.	Project Name	H.T.E. Balance as of 3/6/17	Bond Authorization as of 2/14/17	Dept Request	Planning Board	Mayor's Proposed	City Bonds	State Grant
C16012	CITY WIDE STORM DRAINS	184,566.73	185,166.73	1,705,000	250,000	500,000	500,000	-
CP3220	MAJOR BRIDGE REPLACEMENT	2,333,870.79	1,490,601.79	1,500,000	1,500,000	1,250,000	575,000	675,000
NEW	STRAWBERRY HILL AVENUE IMPROVEMENTS			750,000	750,000	750,000	750,000	-
CP0093	SCOFIELDTOWN PARK DESIGN AND REMEDIATION	333,553.64	95,373.64	500,000	500,000	300,000	300,000	-
CP7108	MILL ROAD DRAINAGE IMPROVEMENT	50,000.00	25,000.00	300,000	300,000	300,000	300,000	-
CP2220	MAJOR BRIDGE REPAIRS AND DESIGN	524,826.95	524,826.95	200,000	200,000	200,000	120,000	80,000
C56119	CITYWIDE ROADWAY CORRECTION	168,942.13	(113,308.73)	200,000	200,000	100,000	100,000	-
TOTAL				5,155,000	3,700,000	3,400,000		

- ❑ CP3220 : Current balance is for the design of Hunting Ridge Road Bridge and Riverbank Road Bridge replacements and partially funded for the construction and inspection of these 2 bridge replacement projects.
- ❑ CP0093 : The current balance shall be used to fund for CT DEEP required for post-closure monitoring plan and quarterly monitoring of wells, pathways at park entrance, tennis court, parking lot paving for the Park, 1 compost toilet, asphalt curbing, and landscaping maintenance agreement.
- ❑ CP2220 : The current balance is being utilized for the design and rights-of-way for the West Main Street Bridge, the final design and rights-of-way costs for Riverbank Road (ConnDOT Br. No. 04071) and Cedar Heights Road Bridges, and the rights-of-way costs for Hunting Ridge Road and Riverbank Road (ConnDOT Br. No. 135011) bridges.



2016-17 Highlights

What are the most significant accomplishments made & challenges faced by the department in the last FY?

- Improving service delivery
- Improving customer satisfaction (citizens and/or internal customers)
- New services that were added
- Actions taken to increase productivity and make department more efficient.



2016-17 Highlights

What are the most significant accomplishments made & challenges faced by the department in the last FY?

■ Improving service delivery

- Develop and manage project schedules. Manage multiple priorities at the same time. Balance priorities.
- Coordinate with Highways Department to inspect final patches on every excavation permits in order to ensure the final restorations been completed to specifications.
- BOR approved new fee structure on the Obstruction permits, in an effect to shorten amount of time obstructing the sidewalks or traffic lanes, as well as generating more revenues to the City.

■ Improving customer satisfaction (citizens and/or internal customers)

- Review regulatory accomplishments (see Page 2)



2016-17 Highlights

What are the most significant accomplishments made & challenges faced by the department in the last FY?

■ New services that were added

- Worked closely with the Administration to access road paving conditions based on pavement condition assessment and traffic data.
- Support BOE and WPCA to implement FOG Abatement Program in schools.
- Providing construction oversight of ConEd lighting energy project.
- Reviewed need for improved and more efficient control of documents with goal of eliminate unnecessary work and improve access to record documents to general public. *Currently reviewing RFPs to select vendor.*



2016-17 Highlights

Actions taken to increase productivity and make department more efficient.

Cost saving measures :

- ✓ Recommend alternative solutions and perform constructability reviews with all A&E firms during design
- ✓ Perform cost analysis to better design projects
- ✓ Negotiate consultant contracts to reduce fees
- ✓ Negotiate change orders to lower fees
- ✓ Hold consultants to scope of work expressed in contracts
- ✓ Fund projects with short term payback to reduce energy costs
- ✓ Represent the City when lawsuits arise and participate in dispute resolution to mitigate claims
- ✓ Proactively negotiate infrastructure repairs and improvements at no cost to city with utility companies



2016-17 Highlights (Cont.)

Citizen services :

- ✓ Report out to press when questioned
- ✓ Act rapidly to correct defects when reported
- ✓ Investigate claims when reported
- ✓ Serve the community at large during walk-ins
- ✓ Manage multiple of priorities on a daily basis across many departments, including concerns raised by outside parties
- ✓ Report out on all jobs internally and to the public and elected officials
- ✓ Meet directly with residents, Reps and community at large to review concerns even during off hours and weekends
- ✓ Conduct public information meetings on a regular basis
- ✓ Create complex and meaningful presentations to better inform community on a regular basis
- ✓ Led large building committees to reach consensus in a timely manner on several large projects
- ✓ Design projects that are aesthetic within the context of the site and budgetary constraints



2016-17 Highlights (Cont.)

Opening of Rogers Inter-District Magnet Extension at 200 Strawberry Hill Avenue – Fall 2016 for K, 1 and 2

Completed Light Renovations and FF&E Phase in Fall 2016. Construction costs \$4M.





2016-17 Highlights (Cont.)

Completed Scofieldtown Park Landfill and New and Expanded Salt Barn Shelter – Fall, 2016

Construction Costs of \$ 6.28 million.

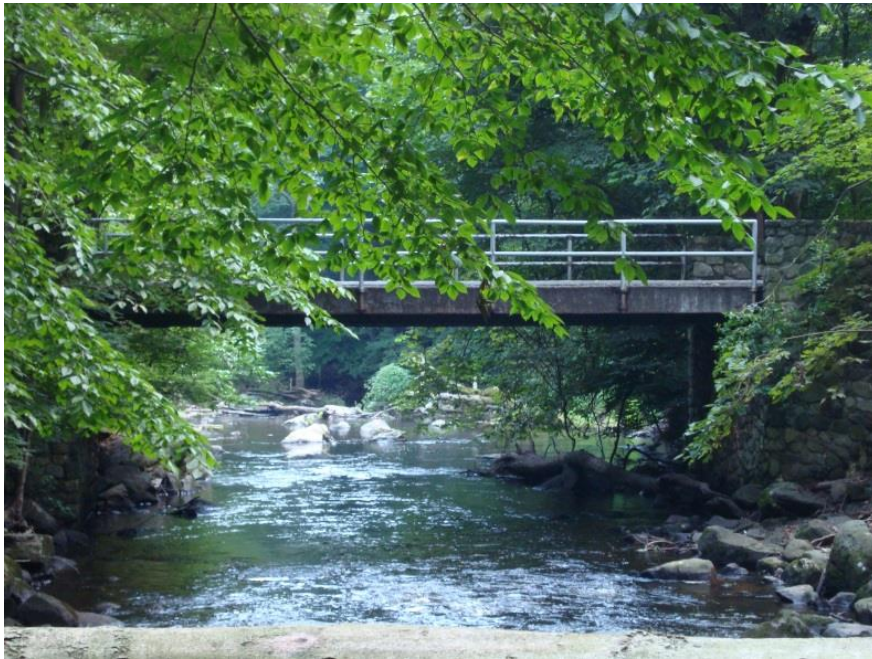




2016-17 Highlights (Cont.)

Completed Merriebrook Lane Bridge Replacement – Fall 2016

Construction Costs of \$800K.



Before



After



2016-17 Highlights (Cont.)

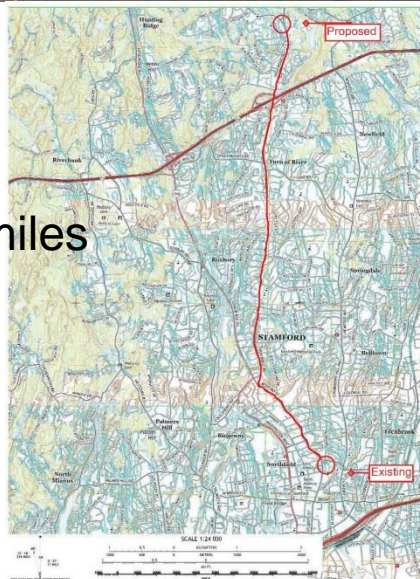
Completed Hoyt Barnum House Move – November, 2016

Restoration to be completed – Spring, 2017

Costs \$1,475,000. The roof was moved on 11/6/16. The house was moved on 11/7/16 into 11/8/16.



4.8 miles



PERSPECTIVE VIEW FROM HIGH RIDGE ROAD

Rendering



February, 2017

2016-17 Highlights (Cont.)

Completed Demolition of Maintenance Garage – Winter 2017

Demolition Costs \$245,000.





2016-17 Highlights (Cont.)

New Police Headquarters Groundbreaking – February 28, 2017



Demolition of Office Building

Hoyt Barnum Move

Demolition of Maintenance Garage



Current



Mill River Carousel Pavillion and Canopy

Construction Costs of \$4.7 million. Expected Completion Date of Spring 2017





2016-17 Highlights (Cont.)

Implement Fats, Oil, and Grease (FOG) Abatement Program at William Pitt CLC, Hillandale Avenue

Construction Costs of \$77,190



Old Grease Interceptor Unit



Completed

2016-17 Highlights (Cont.)

Lione Park Sports Lighting Installation – Spring, 2017

Construction Costs of \$485K



2016-17 Highlights (Cont.)

*New Lighting Fixtures at Westover School –
Partially funded through Alliance Grants*



Old Fixtures



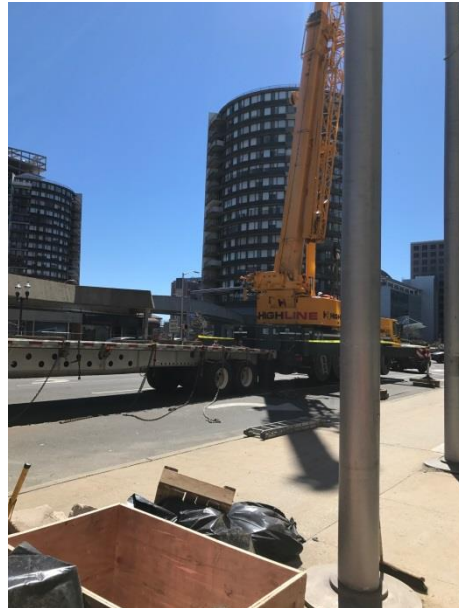
New Fixtures

2016-17 Highlights (Cont.)

Cooling Tower Replacement at Government Center

Completed April 10, 2017

Construction Costs \$1.9M



1 of 3 Cooling Sections
being installed





Department Challenges

Key Program/Department Challenges (exclude staffing level impact)

- Include factors that drive program/department costs
- Include factors that might impact productivity

Budget Scenarios

- In the event of significant budget reductions describe the impact the reduction would have?
- If additional funding could be realized how would department services be expanded or enriched?

Department Challenges

▪ *Engineering Administrative Program*

- **EID** – Carry out Energy Improvement District projects, providing resources for off-hours work in schools and Government Center.
- **Document Archival System** – As there is no filing structure for old drawings in place, developing indexing data and naming criteria for approximately 100,000 records for Electronic Document Management System can be very challenging for easy and accurately retrieval by department and public use.

▪ *Construction Management Program*

- **School Construction Projects** – Time is a major constraint for school construction projects as construction can only be performed in a limited time periods i.e. during school break, or after school hours.
- **Citywide Construction Projects i.e. Bridges, Roadways, Drainage** – Confined construction areas while keeping traffic opened, as well as trying to minimize public disruption by closing structures and creating detours.
- **Insufficient City's Bond Funds** – Even though, the appropriation was made available on H.T.E report, the City's project authorizations may not be bonded for capital projects.
- **Manage Overtime Budget** during summer work hours and projects that occur after hours.

▪ *Regulatory Compliance Program*

- **Street Use / Obstruction Permits** – With an approved ordinance regarding Street Use fee increases, the department needs to develop inspection and enforcement process to ensure that the permit applicant adhere to permit conditions, and pay extra fees. Respond to utility companies' letters rejecting fee increases.
- **Street Opening / Excavation Permits** – Enforce the permit specifications and follow through with contractor to fix failed inspection patches to meet City's standards.



Performance Metrics

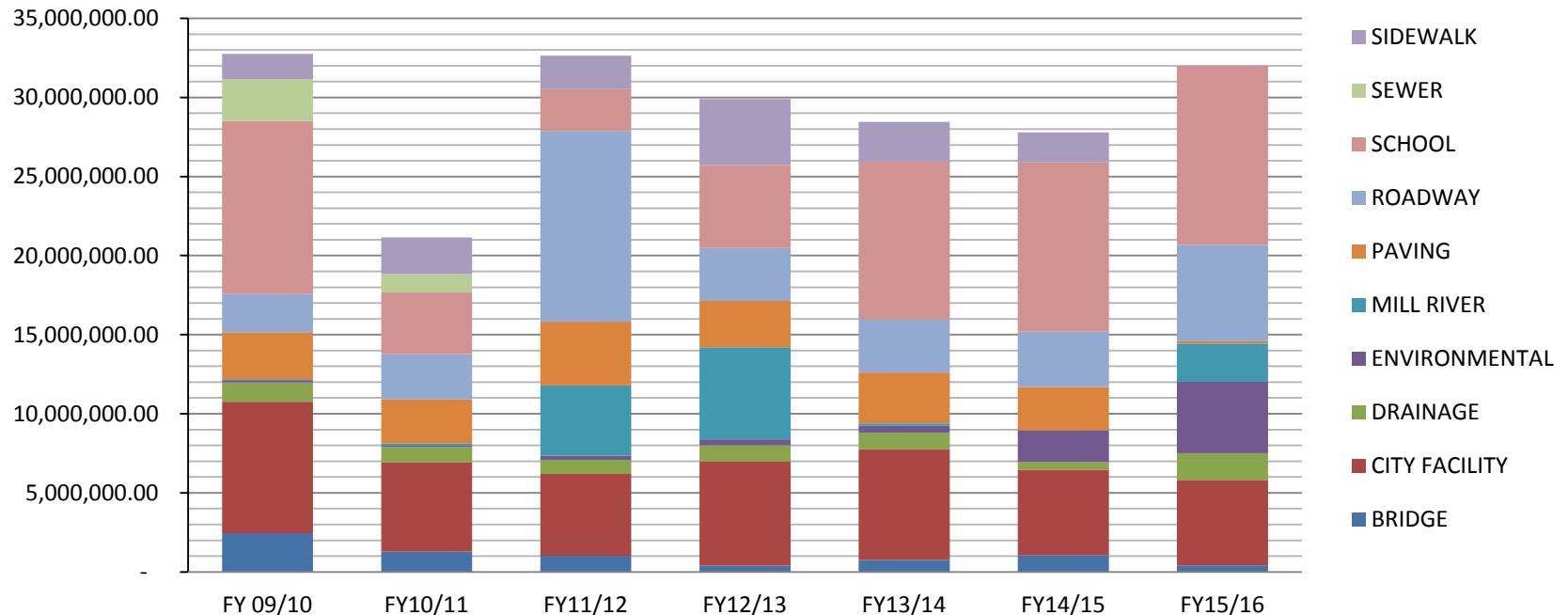
Using data explain how well your department is performing (i.e. using baseline data, performance standards and or benchmark against other groups or cities).



Performance Metrics

➤ Construction Management Program

Engineering Capital Spending By Category Over 7 Years





Performance Metrics

➤ Construction Management Program (cont.)

Sum of NET AMOUNT		Category									
Fiscal Year	BRIDGE	CITY FACILITY	DRAINAGE	ENVIRONMENTAL	MILL RIVER	PAVING	ROADWAY	SCHOOL	SEWER	SIDEWALK	Grand Total
FY 09/10	2,454,204.59	8,314,665.08	1,214,085.38	154,405.69	51,038.20	2,973,038.44	2,415,818.23	10,936,604.07	2,643,743.40	1,601,442.75	32,759,045.83
FY10/11	1,289,875.07	5,649,838.53	964,267.20	97,962.89	133,616.83	2,773,221.55	2,850,093.54	3,911,463.35	1,149,632.81	2,336,714.80	21,156,686.57
FY11/12	1,012,527.23	5,180,931.19	902,198.68	268,673.80	4,434,532.89	4,027,277.98	12,060,100.22	2,649,605.93	19.90	2,109,167.11	32,645,034.93
FY12/13	395,285.38	6,591,981.54	1,021,846.71	376,634.67	5,824,580.75	2,919,062.29	3,346,690.73	5,251,598.26		4,181,104.02	29,908,784.35
FY13/14	748,076.97	6,986,239.74	1,073,327.19	423,063.99	166,962.35	3,215,791.92	3,351,644.70	9,973,484.31		2,511,979.65	28,450,570.82
FY14/15	1,048,832.82	5,405,180.67	497,626.68	2,000,478.19	2,375.91	2,742,820.83	3,501,962.37	10,693,426.76		1,891,880.93	27,784,585.16
FY15/16	419,703.29	5,392,855.28	1,702,645.15	4,507,533.91	2,414,588.07	146,144.06	6,099,217.20	11,308,662.96			31,991,349.92
Grand Total	7,368,505.35	43,521,692.03	7,375,996.99	7,828,753.14	13,027,695.00	18,797,357.07	33,625,526.99	54,724,845.64	3,793,396.11	14,632,289.26	204,696,057.58

- Department spends approx. \$30M a year on capital projects. During past FY, majority of capital spending was in school construction i.e. New School at 200 Strawberry Hill Ave., Dolan Windows, Westhill HS. Other major capital projects during last FY are New Police HQ, Scofieldtown Landfill, Urban Transitway, and Mill River Carousal.



Performance Metrics

➤ Construction Management Program (cont.)

- Utilize experienced Clerk of Works on capital projects to oversee capital construction, check conformance between bid documents and actual construction, reduce cost for outside inspection services which carry a higher hourly rate.

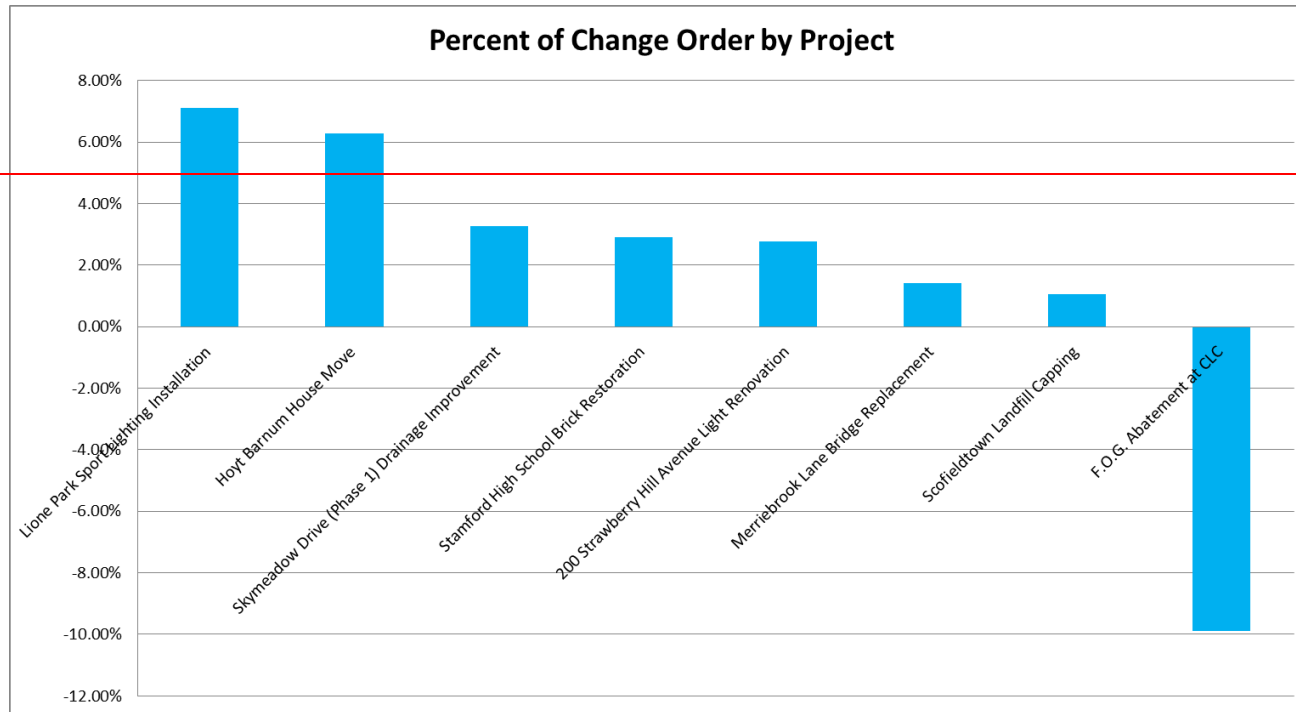
CP No.	Project	Capital Monies Spent in FY15/16	Clerk of Works Costs for Each Project in FY15/16	Percentage of Clerk of Works Costs Compared to Project Costs
C5B629	Dolan School Renovations	\$ 1,416,462.39	\$ 22,665.14	1.60%
C5B622	SHS Modernization (Calendar Year 2016)	\$ 1,516,399.27	\$ 29,285.19	1.93%
C3B444	200 Strawberry Hill Renovations	\$ 3,879,724.25	\$ 93,234.89	2.40%
CP1372	Oakdale Road Culvert and Catch Basin	\$ 367,693.43	\$ 24,364.44	6.63%
C16012	Citywide Storm Drains	\$ 503,009.50	\$ 37,125.78	7.38%

- Cost of outside inspection is 2.5 times the hourly rate approximately \$90/hour. Currently Clerk of Works average rate is \$36/hour.
- Percent of Inspector Cost varies from project to project depending on complexity and size. CTDOT uses 15% Inspection Costs for budgeting purposes.



Performance Metrics

➤ Construction Management Program (cont.)

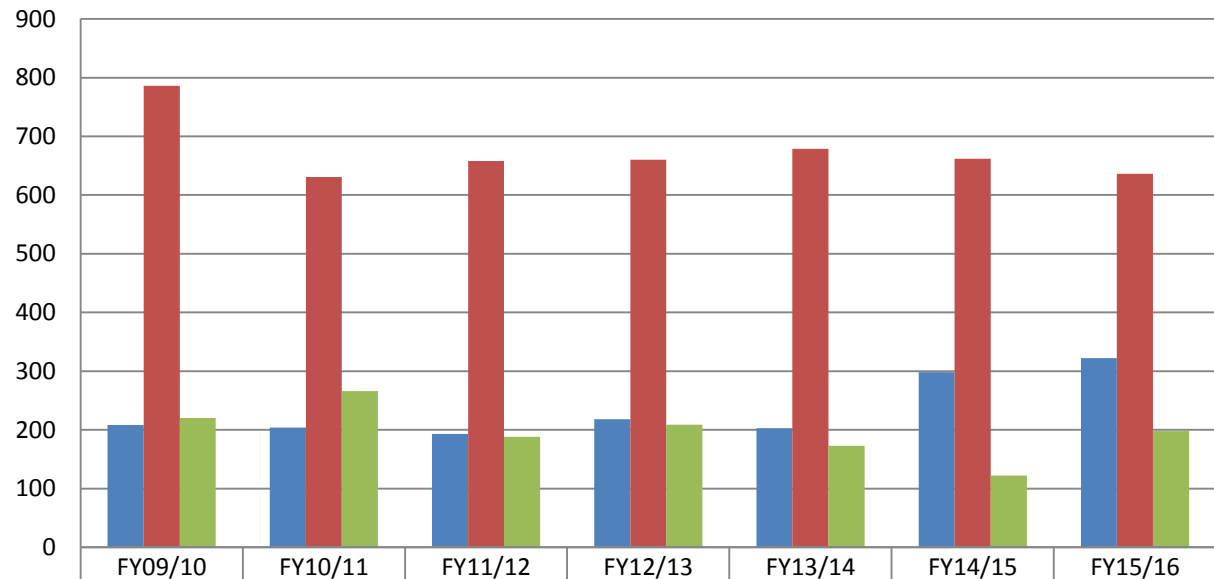


Industry
Standard

- Percent of Change Order in the Industry Standard is 5%.
- Based on the list of recent projects completed in FY16/17 above, the average change orders managed by Engineering Department is 1.86%.
- Lione Park Lighting change order at 7.12% due unforeseen subsurface conditions. A re-design of a footing was needed.
- Hoyt Barnum change order at 6.28% due to unforeseen deteriorated structure of the house that needs replacements.

Performance Metrics

Amount of Site Plan Review and Permit Issued Over Past 7 Years



	FY09/10	FY10/11	FY11/12	FY12/13	FY13/14	FY14/15	FY15/16
■ Amount of Site Plan Review	208	204	193	218	203	298	322
■ Amount of Street Opening Permits Issued (Revenue Generating)	786	631	658	660	679	662	636
■ Amount of Street Use Permits Issued (Revenue Generating)	220	266	188	209	173	122	198



2017-2018 Goals

What are your department goals and plans for 2017-18?

- List Goals and Priorities for your department in 2017-18
- Describe in detail the plan to achieve them
- What are the obstacles to attaining your goals?
- How will you measure your success?



2017-2018 Goals

Addition Rogers Inter-District Magnet Extension at 200 Strawberry Hill Avenue

(128,703 sq.ft. with existing barn area)



Estimated Construction Costs of \$54.5 million. Expected Completion Dates are as follows

- Light Renovations Phase – Completed Fall, 2016
- Addition Phase – Fall, 2018
- Like-new renovations & additions – Fall, 2019



2017-2018 Goals

Construction of New Police Headquarters (94,245 sq.ft.)

Estimated Construction Costs of \$43.5 million. Expected Completion Date of Summer, 2018.

Rendering



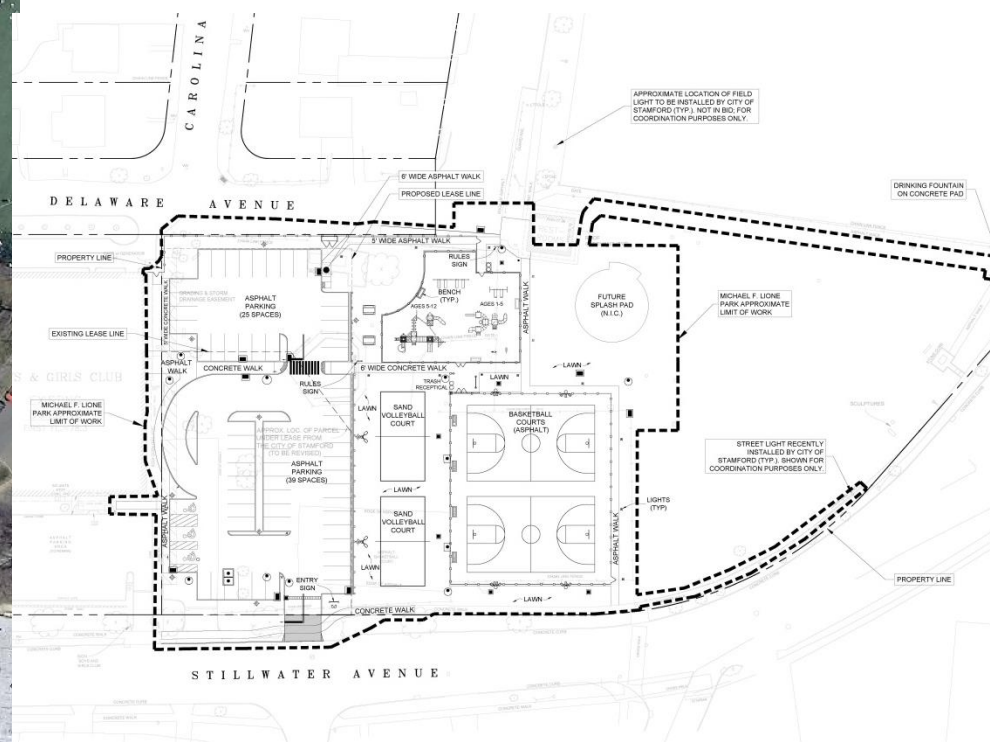


2017-2018 Goals

Partnering with Outside Agencies; Boys & Girls Club Improvement at Lione Park



Proposed Site Improvement Plan





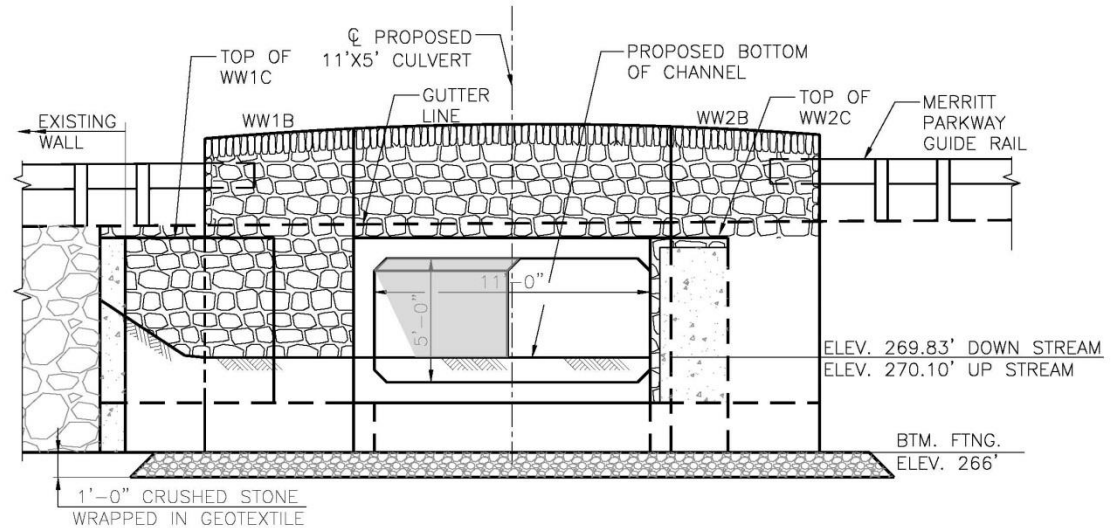
2017-2018 Goals

Riverbank Road Bridge Design

Estimated Construction Costs of \$1.1million.



Existing



OUTLET ELEVATION

SCALE: 1/4" = 1'-0"

Proposed Elevation



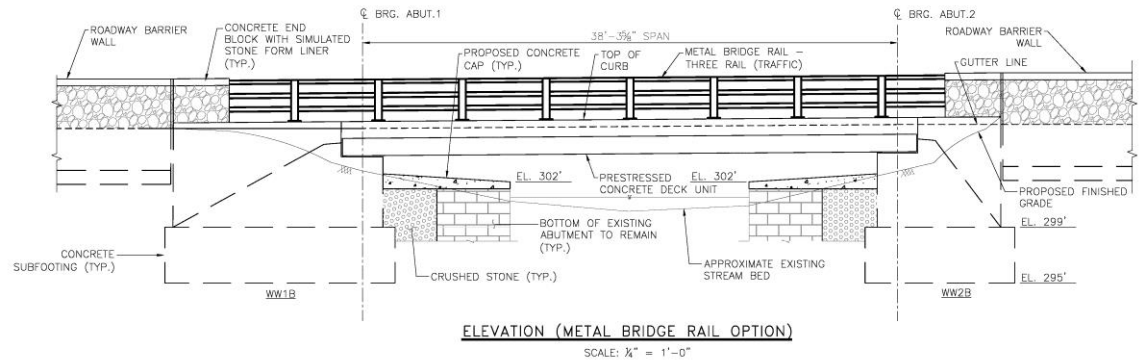
2017-2018 Goals

Hunting Ridge Road Bridge Design

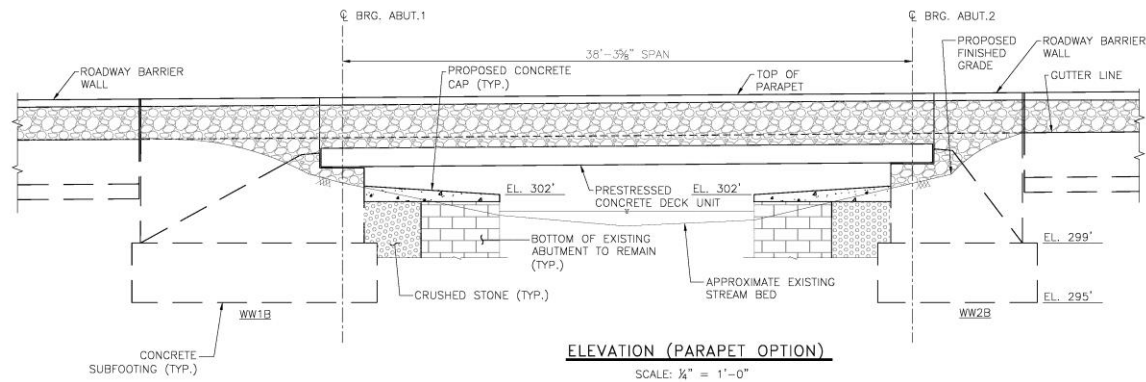
Estimated Construction Costs of \$2 million.



Existing



Proposed Elevation





Department Changes

Major changes planned for the department

- Include new or improved services (or processes) the department will provide to citizens or to other City departments or personnel
- Describe what management is doing to reduce department costs or eliminate services that are no longer critical



Department Changes

Major changes planned for the department

- Document Archival System - To perform Document Imaging, Electronic Storage, and Information Management Service that is searchable by various criteria.
- Contract Documents - Continue to work with Legal and Purchasing Departments to develop tight contract documents that protects City's interest and to reduce legal claims.
- Support Administration with construction inspection and oversight of ConED Energy Performance Contract at Government Center and 15 schools.
- Support BOE maintenance to administrate school construction alliance grants on 15 projects.
- Revised ordinance regarding Street Use permitting that links construction duration with a fee structure.