



ENGINEERING SUCCESS **TOGETHER**

July 1, 2013

MUNICIPAL FACILITIES UPDATE DEDHAM, MA

EXECUTIVE SUMMARY

BACKGROUND

Prompted by the opportunity presented by Rustcraft Road for potential consolidated municipal facilities, the Town of Dedham engaged BETA Group, Inc. with Epstein Joslin Architects and VJ Associates to provide comparative information on program, site, and costs for potential municipal facilities on free-standing sites.

Accordingly, this study focuses on three municipal facilities, in order of priority:

- Police Station
- Senior Center
- Town Hall

This study draws on and serves as a partial update to previous studies of municipal facilities including the 2004 Municipal Facilities Study by Earth Tech and the 2009 Police Station Study by Dore & Whittier Architects.

PROGRAM ASSUMPTIONS

Program assumptions establish the functions and spaces anticipated in each facility. For this update, the Town has been able to draw upon previous studies and proposed program elements in the Rustcraft Road proposals. In addition, an informal poll of representative towns in eastern Massachusetts was used for comparative benchmarking.

In 2004, the Earth Tech study allocated generalized program areas as follows:
Police 30,000 GSF; Senior Center 25,000 GSF; and Town Hall 42,000 GSF.

In 2009, the Dore & Whittier study refined and reduced the program areas for the police station to +/-20,000 GSF and used 20,425 GSF as the basis for its cost estimate.

From the comparative benchmarking inquiries, it was determined that police stations for Walpole and Wellesley range from 18,000 to 21,200 GSF; senior centers for Needham and



Wellesley range from 14,000 to 23,000 GSF; and Needham's Town Hall occupies 31,500 GSF including its historic 380-seat auditorium.

Using these as planning guides, program areas were established for the Municipal Facilities Update:

Police Option A	21,000 GSF new construction; 2-stories
Police Option B	27,000 GSF new construction; 2-stories
Senior Center	16,000 GSF new construction; 1-story
Town Hall Option A	35,000 GSF new construction; 2-stories
Town Hall Option B	35,000 GSF new and renovation; 2-3 stories

These square foot areas are used as the basis for facility and site costing.

SITE ASSUMPTIONS

Over the years the Town has considered numerous potential sites for various municipal facilities. For the purposes of this update, it is understood that the Police Station and Senior Center would occupy new sites and that the Town Hall could be located on a new site or at its existing location.

The St. Mary's site on High Street is considered the most appropriate site for the construction of a new police facility. The area of the St. Mary's site is approximately 1.6 acres. There are existing utilities adjacent to the site. The site is gently sloped (except at the perimeter) and there are no significant environmental constraints anticipated. For the purposes of this analysis, the St. Mary's site was used as a "typical" development site for each of the facilities. A more detailed analysis will be required once a defined site is selected.

IMPLEMENTATION TIMELINE/SCHEDULE

The design and construction of municipal facilities can be time-consuming efforts. A typical implementation timeline for a municipal facility might include:

Designer and OPM Selection	2 months
Design and Bid Documents	6-8 months
Bidding and Negotiation	2 months
Construction	12 months
Commissioning and Move-in	1 month

For any given facility in this update, a 24-month duration from project initiation through occupancy is a useful framework. Specific project durations will depend on factors beyond this study —such as site availability, funding, permitting, etc.— and should be re-visited as specific projects are pursued.

Further, it has been assumed that municipal projects would proceed sequentially rather than concurrently. While the overall duration could be shortened if the design of one project were to overlap with the construction of another project, it was felt that a compressed schedule presents potential additional burdens in project administration and oversight and in funding and financing.

Taking the project priorities into account, starting the process in the Fall 2013 yields an overall schedule as follows:

	<i>Project Initiation</i>	<i>Project Completion</i>
Police	Fall 2013	Fall 2015
Senior Center	Fall 2015	Fall 2017
Town Hall	Fall 2017	Fall 2019

Note that construction would start in Fall 2014, Fall 2016, and Fall 2018 respectively, and these potential construction start dates inform the cost estimates.

COST ESTIMATES

Working with an independent cost consultant, VJ Associates, cost estimates for each of the facilities were developed on a “per square foot” basis. The base construction cost includes values for the site, the building, and for an estimating/design contingency and is established in current dollars. The intent is to reflect an appropriate value for a publicly-bid project if construction bids were received this year.

To allow for construction values in the future, escalation has been carried at 4% per year. For example, the Dore & Whittier study estimated the construction cost of the Police Station at \$382 per square foot in 2009. Allowing for 3 years of escalation to 2013 at 4% per year would result in a revised construction cost per square foot of \$430 in 2013.

However, construction costs represent only a portion of total project costs. In addition to the “hard” construction costs, project costs include so-called “soft costs” to cover owner responsibilities —such as design and testing fees; teledata/IT; fixtures, furnishing & equipment (F,F & E); moving; and a project contingency. Typically, soft costs can run 30-35% of construction costs. For comparison, on the Avery School, soft costs were in the range of 30% to 36% of the final construction costs.

The following provides estimated project costs. These costs include both “hard” (construction) and “soft costs.

Project Costs

Police Option A	\$	11,963,000	in 2014
Police Option B	\$	15,357,000	in 2014
Senior Center	\$	\$8,595,000	in 2016
Town Hall Option A	\$	\$21,740,000	in 2018
Town Hall Option B	\$	\$16,563,000	in 2018

Summary sheets for each facility are attached. The summary sheets provide further breakdown of the overall project costs.

NEXT STEPS

This update is intended to frame the evaluation of options for the upgrading and replacement of current Town of Dedham municipal facilities. As such it provides base line information on project size, project location, and project costs that can be used as the basis for the decisions needed to advance the police station, senior center, and town hall projects, whether individually or as part of a consolidated location.

DRAFT

DEDHAM Municipal Facilities Study
 Cost Breakdown
 BETA Project #4522

30-Jun-13

Police Station - Option A	Building SF	Variables	Cost Projection
Total Square Footage	21,000	\$346	
Construction Costs Sub Total			\$7,265,370
Sitework			\$472,000
Site Preparation			\$133,000
Subtotal			\$7,870,370
Estimating/Design Contingency		15%	\$1,180,556
Construction Escalation to end of 2014		4%/Year	\$314,815
Total Construction Costs			\$9,365,740
Construction Cost Per Square Foot		\$446	
Soft Costs			
Design Engineering Fees (Allowance)		10%	\$787,037
Construction/Project Contingency		15%	\$1,180,556
Owners Project Manager (Allowance)		3%	\$236,111
Other Project Costs		5%	\$393,519
Additional Project Costs (FFE, Comp Tech)			
Total Soft Costs			\$2,597,222
Grand Total			\$11,962,962
Purchase Cost			
Total Additional Funding			
Total Project Budget			\$11,962,962

DEDHAM Municipal Facilities Study
 Cost Breakdown
 BETA Project #4522

30-Jun-13

Police Station - Option B	Building SF	Variables	Cost Projection
Total Square Footage	27,000	\$346	
Construction Costs Sub Total			\$9,341,190
Sitework			\$598,000
Site Preparation			\$164,000
Subtotal			\$10,103,190
Estimating/Design Contingency		15%	\$1,515,479
Construction Escalation to end of 2014		4%/Year	\$404,128
Total Construction Costs			\$12,022,796
Construction Cost Per Square Foot		\$446	
Soft Costs			
Design Engineering Fees (Allowance)		10%	\$1,010,319
Construction/Project Contingency		15%	\$1,515,479
Owners Project Manager (Allowance)		3%	\$303,096
Other Project Costs		5%	\$505,160
Additional Project Costs (FFE, Comp Tech)			
Total Soft Costs			\$3,334,053
Grand Total			\$15,356,849
Purchase Cost			
Total Additional Funding			
Total Project Budget			\$15,356,849

DEDHAM Municipal Facilities Study
 Cost Breakdown
 BETA Project #4522

30-Jun-13

Senior Center	Building SF	Variables	Cost Projection
Total Square Footage	16,000	\$283	
Construction Costs Sub Total			\$4,522,720
Sitework			\$675,000
Site Preparation			\$158,000
Subtotal			\$5,355,720
Estimating/Design Contingency		15%	\$803,358
Construction Escalation to end of 2016		4%/Year	\$668,394
Total Construction Costs			\$6,827,472
Construction Cost Per Square Foot		\$427	
Soft Costs			
Design Engineering Fees (Allowance)		10%	\$535,572
Construction/Project Contingency		15%	\$803,358
Owners Project Manager (Allowance)		3%	\$160,672
Other Project Costs		5%	\$267,786
Additional Project Costs (FFE, Comp Tech)			
Total Soft Costs			\$1,767,388
Grand Total			\$8,594,859
Purchase Cost			
Total Additional Funding			
Total Project Budget			\$8,594,859

DEDHAM Municipal Facilities Study
 Cost Breakdown
 BETA Project #4522

30-Jun-13

Town Hall (New)	Building SF	Variables	Cost Projection
Total Square Footage	35,000	\$345	
Construction Costs Sub Total			\$12,087,250
Sitework			\$420,000
Site Preparation			\$433,000
Subtotal			\$12,940,250
Estimating/Design Contingency		15%	\$1,941,038
Construction Escalation to end of 2018		4%/Year	\$2,588,050
Total Construction Costs			\$17,469,338
Construction Cost Per Square Foot		\$500	
Soft Costs			
Design Engineering Fees (Allowance)		10%	\$1,294,025
Construction/Project Contingency		15%	\$1,941,038
Owners Project Manager (Allowance)		3%	\$388,208
Other Project Costs		5%	\$647,013
Additional Project Costs (FFE, Comp Tech)			
Total Soft Costs			\$4,270,283
Grand Total			\$21,739,620
Purchase Cost			
Total Additional Funding			
Total Project Budget			\$21,739,620
First Year Debt Service at 4%			

DEDHAM Municipal Facilities Study
 Cost Breakdown
 BETA Project #4522

30-Jun-13

Town Hall (Renovated/Expanded)	Building SF	Variables	Cost Projection
Total Square Footage	35,000	\$262	
Construction Costs Sub Total			\$9,170,000
Sitework			\$303,000
Site Preparation			\$86,000
Demolition			300,000
Subtotal			\$9,859,000
Estimating/Design Contingency		15%	\$1,478,850
Construction Escalation to end of 2018		4%/Year	\$1,971,800
Total Construction Costs			\$13,309,650
Construction Cost Per Square Foot		\$381	
Soft Costs			
Design Engineering Fees (Allowance)		10%	\$985,900
Construction/Project Contingency		15%	\$1,478,850
Owners Project Manager (Allowance)		3%	\$295,770
Other Project Costs		5%	\$492,950
Additional Project Costs (FFE, Comp Tech)			
Total Soft Costs			\$3,253,470
Grand Total			\$16,563,120
Purchase Cost			
Total Additional Funding			
Total Project Budget			\$16,563,120