



### NEW POLICE STATION & HIGHWAY DEPARTMENT A STUDY FOR THE TOWN OF SUTTON, MA





#### **Executive Summary**

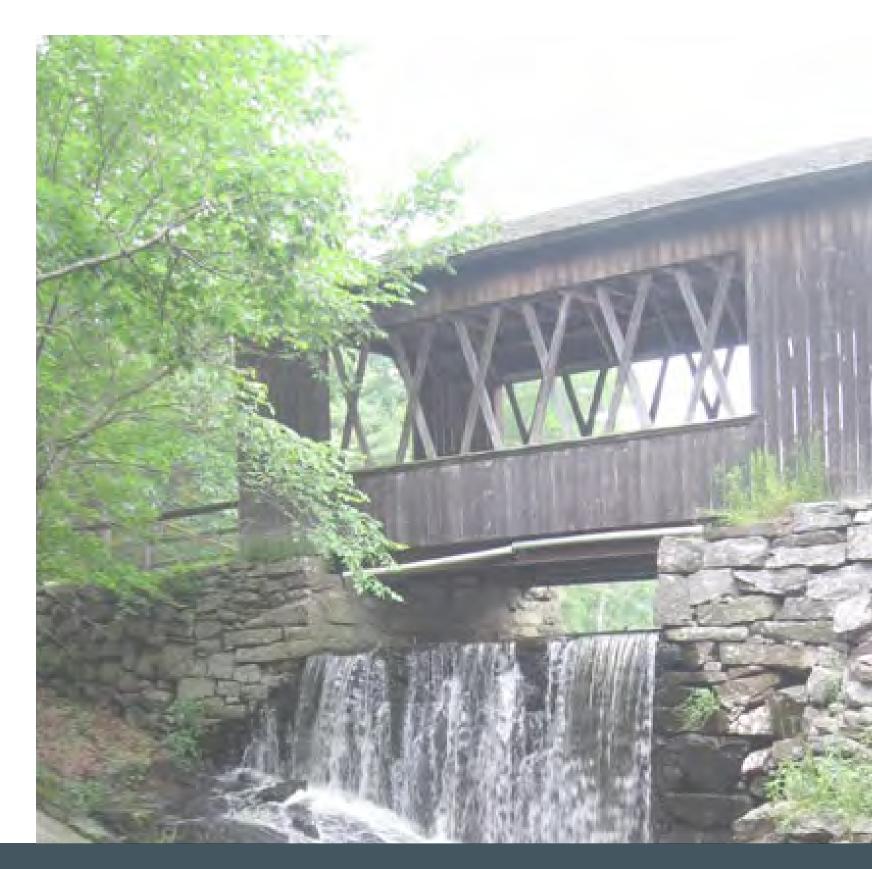
The Town of Sutton Massachusetts commissioned Tecton Architects PC. to conduct a feasibility study for a new Police Station and Highway Department Facility. The tasks for the study included preparing a space needs assessment, providing site evaluations, preparing conceptual solutions for each building and providing detailed cost estimates for each design solution.

The site evaluation reviewed the existing site conditions to determine the suitability of the proposed sites. Two new sites were reviewed under a Phase 1 environmental study. The report identified that the 489 Central Turnpike location has no significant restrictions. A wetlands setback is evident along the Eastern & Southeastern portions of the site. The report also evaluated 430 Central Turnpike site at Shaw Farm and determined this site is primarily undeveloped and wooded with no significant restrictions. Additionally, the existing site for the Highway Department was reviewed for potential reuse with an expanded facility.

The space needs assessment conducted for a new Police Facility indicates that a new facility providing adequate space for the department will be approximately 12,500 square feet will require 1.46 acres of develop-able land. Additionally the assessment conducted for the Highway Department indicated that the new facility would require 20,814 square feet of building area with 2.11 acres of develop-able land.

The program elements from the assessment were used to prepare conceptual site plans, floor plans and building elevations. Each concept was reviewed respectively with the Police Chief and Highway Department Superintendent. Based on the Opinion of Probable Costs it was determined that the cost of developing the new site at Shaw Farm would be approximately \$7,586,442 while the cost of expanding the existing Highway Department site would cost approximately \$5,511,839. It was determined that it was more economical to pursue the existing site for the new Highway Department Facility.

A.M. Fogarty provided detailed cost estimates based on the pre-schematic designs for each site. The new Police Facility would have an approximate construction cost \$5,895,350, with an estimated total project cost of \$6,759,987. The new Highway Department on the existing site would have an approximate construction cost of \$5,078,145, with a total estimated project cost of \$5,912,680. The estimates are escalated until the spring of 2016.



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### STUDY SUMMARY

#### **The Process**

The study team visited the existing facilities to build an understanding of the available assets and the challenges faced by the agencies that led to this project request. Interviews were then conducted with the respective agency leadership. The interviews focused on identifying data and functional criteria from which space needs can be derived.

The interview sessions collected information on file volume, storage needs, staffing levels, equipment utilized and operational standards.

After the interview sessions, the programmer reviewed the notes, and developed quick sketches to test possible space configurations to satisfy each identified program requirement. The quick sketches were translated into area requirements for each room or space within the program. The programmer's evaluation considered space sharing opportunities, or functions that could coexist within a space without conflict.

The resulting list of spaces and respective areas represented the "net" area requirement. The net area does not include space for wall thicknesses, circulation space, vertical chases or building structure. In the "summation" a net to gross adjustment is applied to adjust for these areas. The resultant gross area is the full building area estimate to satisfy the program need.

The Site Needs Assessment uses a similar mathematical adjustment to account for site setbacks, internal site drives and appropriate green space.

A draft Space and Site Needs Assessment were prepared for each facility, and a review session was held with the Building Committee to verify the findings. Discussions at this session focused on confirmation that program data was properly recorded, on reviewing shared space proposals, and refining understandings about program elements.

This report demonstrates the findings and conclusions resulting from the interview session and subsequent review of the draft documents.

#### Phase 1 Environmental Report

A Phase 1 Environmental Report (ASTM E 1527-13) was conducts for 489 Central Turnpike & 430 Central Turnpike by *Williamson Environmental LLC*.

'The purpose of this ESA was to investigate and obtain reasonably ascertainable information to identify to the extent feasible recognized environmental conditions at, in the vicinity of, or on site. As defined in the ASTM international E 1527-13 Standard Practices for Environmental Assessments: Phase 1 Environmental Site Assessment Process, a recognized environmental condition is "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; pr (3) under conditions that pose a material threat of a future release to the environment.'

#### 489 Central Turnpike

'The site consists of 2.09-acres of land located at the intersection of Central Turnpike and Putnum Hill Road in Sutton, Massachusetts. Based on the information reviewed during the performance of the ESA, it appears that the site had been utilized as the former Blue Jay Restaurant between the 1960s and 2005. The site building was reportedly destroyed by a fire in December 2005. The remains of the site building were razed in March 2008, and the property has been vacant since that time.

Municipal water service, and natural gas service are not available to the sire. A Mobil Gas pipeline easement (abandoned) traverses the eastern side of the property. Wetlands are located along the eastern and southeastern portions of the sire. Williamson Environmental did not review information indicated the presence USTs existing at the site, nor indicating historical storage of oil and/or hazardous materials (OHM) at the site.'

#### 430 Central Turnpike

'The subject site consists of the southwesterly portion of the 430 Central Turnpike property located in Sutton, Massachusetts. Based on information reviewed during the performance of this ESA, it appears that the subject site has historically been undeveloped wooded land. No information was reviewed indicating the presence of USTs on the subject site. No informations was reviewed indicating the use and/or storage of oil and/or hazardous materials at the subject site.'

### STUDY SUMMARY





### Sutton, MA - Police Facility Site Needs Assessment

Now Pr	ogrammed Area Name	Quan	tity	Police Fac	
		Quan	шу	Fiogrammed	AIE
S.1	Building Area				
	Building Footprint	2	story	7,500	S
	Future Building Growth (25% of programmed area)			1875	S
	Out-building Footprint			2880	S
	Subtotal:			12,255	S
5.2	Parking Area				
	Visitor Parking	10	spaces	1,650	S
	Visitor Handicapped Parking	1	spaces	270	S
	Staff Parking	24	spaces	3,960	S
	Staff Handicapped Parking	1	spaces	270	S
	Cruiser Parking	18	spaces	2,970	S
	Oversize Fleet Parking	1	spaces	325	S
	Travel Lane Allowance			7,600	9
	Subtotal:			17,045	9
5.3	Site Utilities				
	Electrical Transformers			200	S
	Emergency Generator			400	S
	Antenna Tower			500	5
	AC Equipment			400	5
	Dumpsters			240	5
	Storm Water Retention			1,500	9
	Subtotal:			3,240	ç
5.4	Site Amenities				
	Impound Lot	6	spaces	1,200	9
	Subtotal:			1,200	S
5.5	Setbacks and Green Space				
	Green space			13,500	S
	Setbacks			15,300	S
	Subtotal:			28,800	0,
	Summation				
	Minimum useable site area			62,540	S
	Minimum useable site acerage			1.44	а



### SITE NEEDS ASSESSMENT POLICE FACILITY



### SITE NEEDS ASSESSMENT POLICE FACILITY



### Sutton, Massachusetts

Site Needs Assessment

				y Departm	
New Pro	ogrammed Area Name	Quan	tity	Programmed	Area
<b>S</b> .1	Building Area				
	Building Footprint	1	story	20,814	s.f.
	Future Building Growth (10% of programmed area)			2081	s.f.
	Salt Shed Footprint			2600	s.f.
	Landscape Maerials Shelter Footprint			1200	s.f.
	Subtotal:			26,695	s.f.
<b>S.2</b>	Parking Area				
	Visitor Parking	4	spaces	660	s.f.
	Visitor Handicapped Parking	1	spaces	270	s.f.
	Staff Parking	8	spaces	1,320	s.f.
	Staff Handicapped Parking	1	spaces	270	s.f.
	Sander Staging	5	spaces	2,520	s.f.
	Trailer Parking	3	spaces	864	s.f.
	Oversize Fleet Parking	2	spaces	1,200	s.f.
	Spare Loader Bucket Storage	1	spaces	120	s.f.
	Travel Lane Allowance			10,600	s.f.
	Subtotal:			17,824	s.f.
S.3	Site Utilities				
	Electrical Transformers			200	s.f.
	Emergency Generator			200	s.f.
	Antenna Tower			500	s.f.
	AC Equipment			400	s.f.
	Dumpsters			240	s.f.
	Storm Water Retention			4,500	s.f.
	Subtotal:			6,040	s.f.
S.4	Site Amenities				
	Refueling Station			1,200	s.f.
	Brine Tank (adjacent to vehicle storage)			400	s.f.
	Water Tank			400	s.f.
	Pre-wash Area (adjacent to wash bay)			800	s.f.
	Residential sand/salt area (outside of fenced comp	ound	)	200	s.f.
	Subtotal:			3,000	s.f.

		Highv	way Departm	nent
New Pr	ogrammed Area Name	Quantity	Programmed	d Arec
S.5	Setbacks and Green Space			
	Green space		10,700	s.f
	Setbacks		18,200	s.f
	Subtotal:		28,900	s.f
	Summation			
	Minimum useable site area		82,459	s.f
	Minimum useable site acerage		1.9	ac

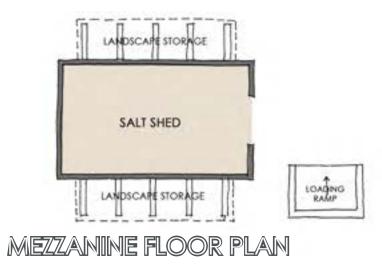
### SITE NEEDS ASSESSMENT HIGHWAY DEPARTMENT

### Sutton, Massachusetts

Site Needs Assessment

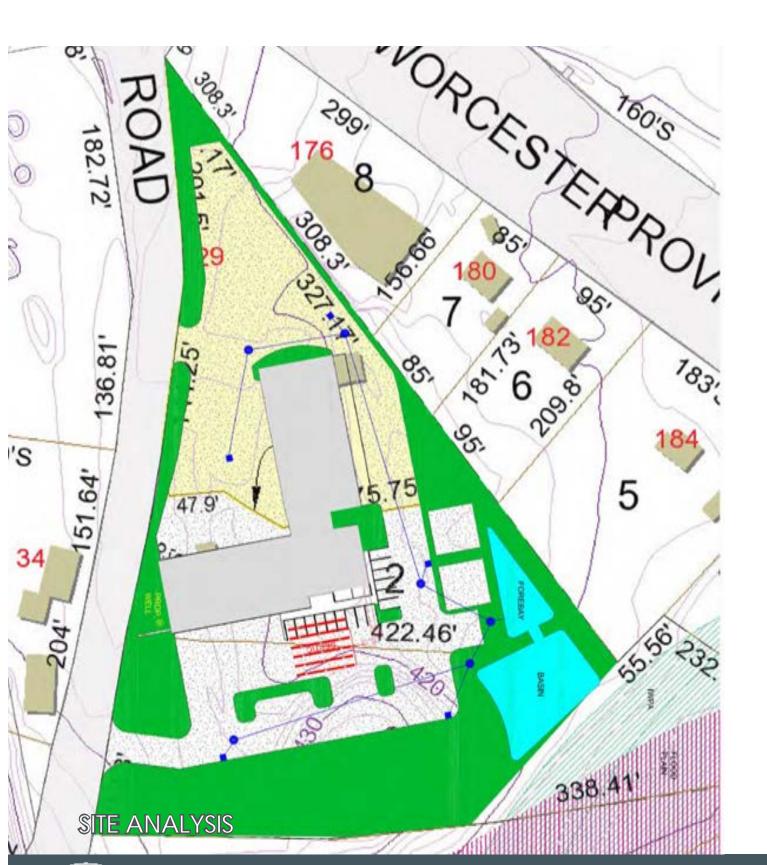
#### 337.92 AREA = 24.3 AC. 19.5 EQUIPMENT STORAGE 3 WASH BAY MECHANIC'S BAYS 100L CRIB PARTS X 61 ROOM 500 LOCKER ROOM LEC DAT ROOM U. EVER TEL COADING SALT A MECH. 00-30 \$100 LOBBY 6 OREMAN SUPER'S OFFICE 2 TURNPIKE \$23 PROPOSED HIGHWAY FACILIT 10:00 55 UTRAL 419 CONCEPTUAL SITE PLAN

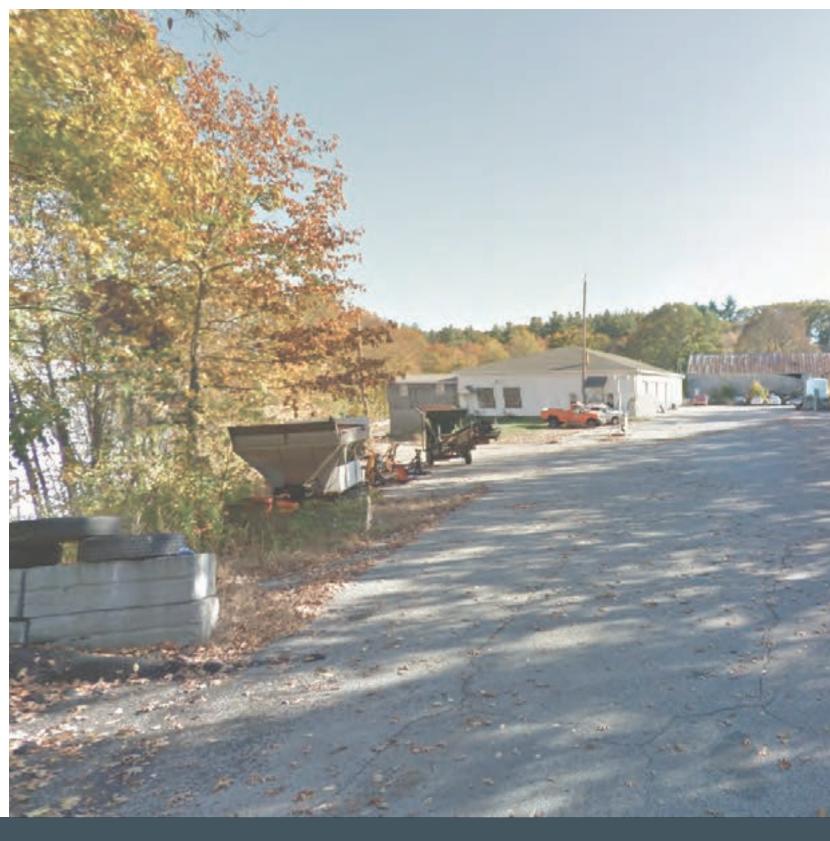
### SITE STUDY HIGHWAY DEPARTMENT - SHAWS FARM SITE







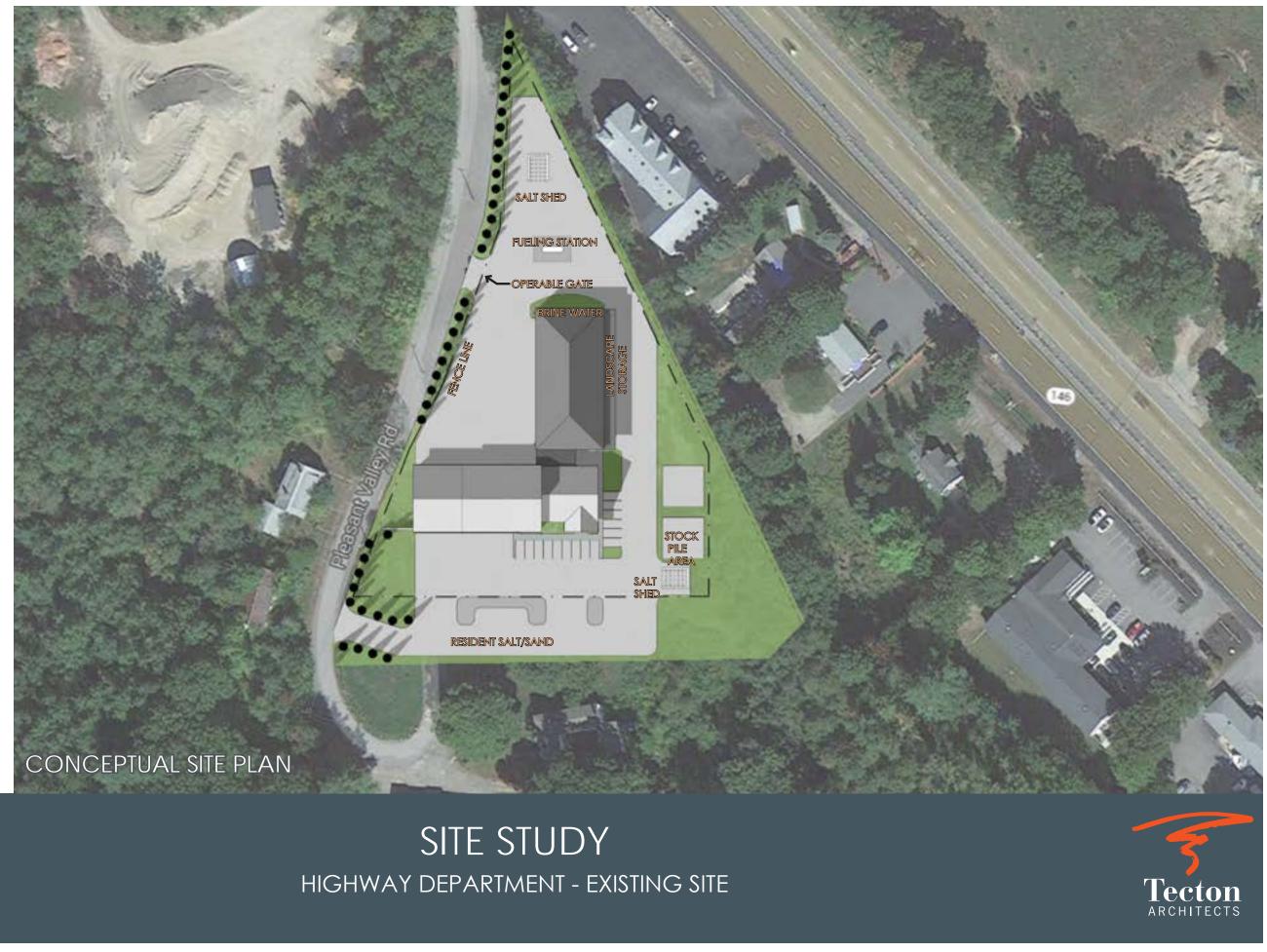






### SITE STUDY HIGHWAY DEPARTMENT - EXISTING SITE





### Sutton, MA - Police Facility Space Needs Summary

Prog	rammed Are	ea Name		Police I Program Are	
1.	Public				
	1.01	Vestibule		60	s.f.
	1.02	Lobby		400	s.f.
	1.03	Public Interview/Licensing Room		140	s.f.
	1.04	Male Restroom		65	s.f.
	1.05	Female Restroom		65	s.f.
			Subtotal:	730	s.f.
2.	Dispat	ch Center			
	2.01	Dispatch Center		320	s.f.
	2.02	Records		80	s.f.
	2.03	Unisex Restroom		75	s.f.
	2.04	Communications Equipment Room/IT		225	s.f.
			Subtotal:	700	s.f.
3.	Comm	nunity/Training Room			
	3.01	Training Room		300	s.f.
	3.02	Supply Storage		30	s.f.
	3.03	Furniture Storage		50	s.f.
			Subtotal:	380	s.f.
4.	Patrol	Facilities			
Ţ	4.01	Shift Commanders' Office		180	s.f.
	4.02	Report Preparation		220	s.f.
	4.03	Roll Call/Squad Room		300	s.f.
	4.04	Quartermaster Storage		60	s.f.
	4.05	Weapons Cleaning		50	s.f.
			Subtotal:	810	s.f.
5.	Bicycl	e Patrol			
T	5.01	Bike Storage		80	s.f.

### Sutton, MA - Police Facility Space Needs Summary

Duc				Police F	
Prog	rammed Ar	ed Ndme		Program Are	a
5.	Invest	igative			
	6.01	Detective Squad Room		220	s.f
	6.02	Interview Room		100	s.f
	6.03	Surveillance Equipment Storage Room		25	s.f
	6.04	0		0	s.f
			Subtotal:	345	s.f
7.	Depar	tment Administration			
	7.01	Administrative Assistant's Office		180	s.f
	7.02	Reprographics/Work Area		45	s.f
	7.03	File Room		50	s.f
	7.04	Supply Storage		40	s.f
	7.05	Patrol Captain's Office		160	s.f
	7.06	Administrative Captain's Office		160	s.f
	7.07	Chief's Office		200	s.f
	7.08	Conference Room		160	s.f
			Subtotal:	995	s.f
B.	Staff F	acilities			
	8.01	Male Restroom/shower		280	s.f
	8.02	Male Locker Room		360	s.f
	8.03	Female Restroom/shower		200	s.f
	8.04	Female Locker Room		110	s.f
- 1	8.05	Break Room		180	s.f
	8.06	Fitness Center		500	s.f
				10	s.f
	8.07	Mail Area		10	
	8.07 8.08	Mail Area Laundry		60	s.f
			Subtotal:		
9.	8.08		Subtotal:	60	
9.	8.08	Laundry	Subtotal:	60	s.f
9.	8.08 Prope	Laundry	Subtotal:	60 1700	s.f
9.	8.08 Prope 9.01	Laundry <b>rty and Evidence</b> Evidence Laboratory	Subtotal:	60 1700 100	s.f s.f s.f
9.	8.08 <b>Prope</b> 9.01 9.02	Laundry <b>rty and Evidence</b> Evidence Laboratory Evidence Receiving	Subtotal:	60 1700 100 80	s.f s.f s.f s.f



### SPACE NEEDS SUMMARY POLICE FACILITY



#### Sutton, MA - Police Facility

Space Needs Summary

Sec. 1	New Pro	grammed Area Name		Police Facility Program Area	New Prog	rammed Area Name
4/1	10.	Prisoner Processing			14.	Out-Building
		<ul> <li>10.01 Sally Port (2-cruiser)</li> <li>10.02 Cruiser Supply Storage</li> <li>10.03 Processing Area</li> <li>10.04 Intoxilyzer Area</li> <li>10.05 Custodial Closet</li> <li>10.06 Interview Room</li> </ul>	Subtotal:	900 s.f. 20 s.f. 300 s.f. 50 s.f. 20 s.f. 100 s.f. 1390 s.f.		14.01 Bicycle Storage 14.02 Carport 14.03 Long Term Bulk Sto
- Aller - Aller	11.	Detention Facilities				
STREET.		<ul><li>11.01 Adult Male Cells (x3)</li><li>11.02 Adult Female Cells (x2)</li><li>11.03 Unisex Juvenile Cell (x1)</li></ul>		420 s.f. 280 s.f. 140 s.f.		
			Subtotal:	840 s.f.		
	12.	Special Unit Facilities				
		12.01 RAD Gear Storage		25 s.f.		
1.4.6.000			Subtotal:	25 s.f.		
	13.	Building Services				
		<ul> <li>13.01 Custodial Closets</li> <li>13.02 Facility Maintenance Storage</li> <li>13.03 Boiler Room</li> <li>13.04 Air Handling Equipment Room</li> <li>13.05 Electrical Room</li> <li>13.06 Emergency Electrical Room</li> <li>13.07 Generator Room</li> <li>13.08 Tel/Data Distribution Closets</li> </ul>		25 s.f. 100 s.f. 300 s.f. TBD s.f. 120 s.f. 60 s.f. Exterior s.f. 25 s.f.		
			Subtotal:	630 s.f.		
		Summation				
		Facility net area: Net to gross adjustment (30%)		9,615 s.f. 2,885 s.f.		
		Facility gross area total:		<b>12,500</b> s.f.		

SPACE NEEDS SUMMARY POLICE FACILITY

#### Sutton, MA - Police Facility

Space Needs Summary

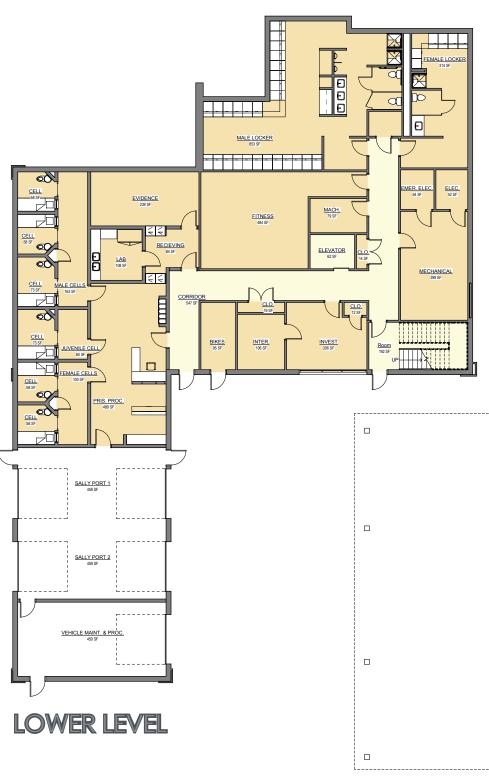
		Police Facility Program Area
		180 s.f.
itorage		2400 s.f. 300 s.f.
	Subtotal:	2880 s.f.





### SPACE NEEDS SUMMARY POLICE FACILITY













### WEST ELEVATION POLICE FACILITY



## POLICE FACILITY









### SOUTH ELEVATION POLICE FACILITY



#### Sutton, Massachusetts

Space Needs Summary

			Highway De	partment Facility
New Prog	grammed A	rea Name		Program Area
1.	Public			
	1.01	Vestibule		60 s.f.
	1.02	Lobby		150 s.f.
			Subtotal:	210 s.f.
2.	Office	S		
	2.01	Superintendant's Office		180 s.f.
	2.02	Foreman's Office		160 s.f.
	2.03	Conference Room		0 s.f.
			Subtotal:	340 s.f.
3.	Techn	ical Services (IT)		
	3.01	Network Equipment Room/IT/Telephone		100 s.f.
			Subtotal:	100 s.f.
4.	Staff F	acilities		
	4.01	Day Room/Kitchen		450 s.f.
	4.02	Locker Room		180 s.f.
	4.03	Female Restroom		90 s.f.
	4.04	Male Restroom		140 s.f.
	4.05	Laundry		0 s.f.
			Subtotal:	860 s.f.
5.	Vehic	le Repair		
	5.01	Mechanics Office		120 s.f.
	5.02	Tool Crib		250 s.f.
	5.03	Parts Storage		300 s.f.
	5.04	Parts Mezzanine		300 s.f.
	5.05	Vehicle Maintenance Bays		1,200 s.f.
	5.06	Compressor Room		50 s.f.
	5.07	Sign Shop		140 s.f.
			Subtotal:	2360 s.f.

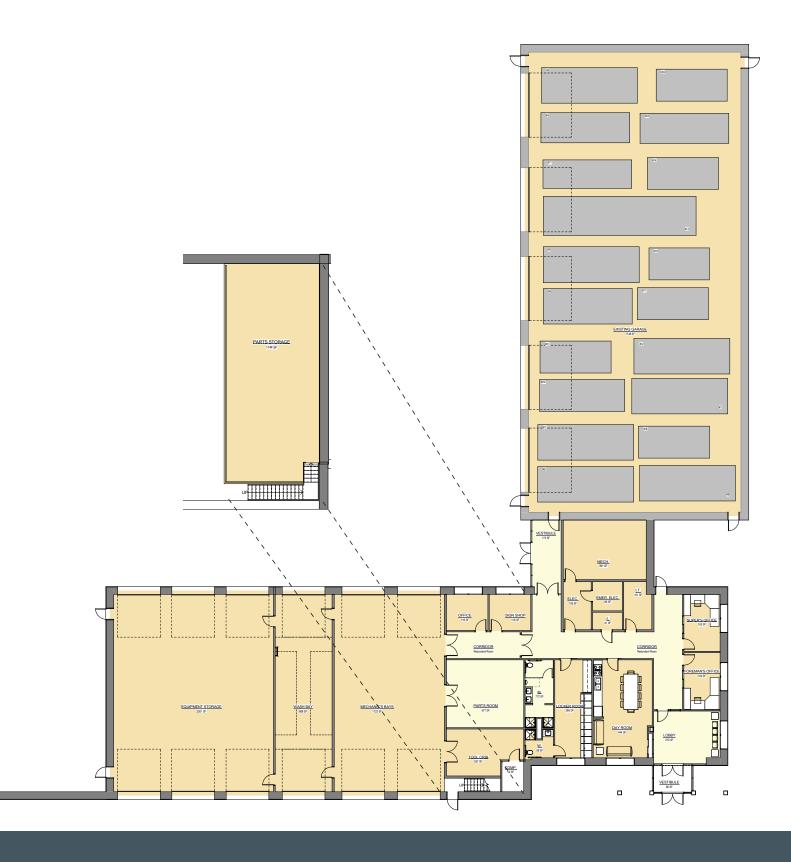
ew Prog	grammed Area	Name	Highway Dep	oartment f Program Are	,
6.	1				
	6.02 E	/ehicle Storage Bays Equipment Storage Bays Wash Bay		10,270 1,800 900	s.f.
_ !			Subtotal:	12,970	s.f.
7.	Building	Services			
	7.02 E	Custodial Closets 3oiler Room Air Handling Equipment Room		25 300 TBD	
	7.05 E	Electrical Room Emergency Electrical Room Generator Room		120 60 Exterior	s.f.
	Summati	ion	Subtotal:	505	s.f.
		acility net area: Net to gross adjustment (20%)		17,345 3,469	
	F	acility gross area total:		20,814	s.f.
8.	Out Build	lings			
	8.02 L	alt Shed andscape Materials Shelter Refueling Station		2600 1200 1200	s.f.
			Subtotal:	5000	s.f.



### SPACE NEEDS SUMMARY HIGHWAY DEPARTMENT

#### Sutton, Massachusetts

Space Needs Summary



SPACE NEEDS SUMMARY HIGHWAY DEPARTMENT







### CONCEPTUAL RENDERING HIGHWAY DEPARTMENT



### SOUTH ELEVATION



WEST ELEVATION

ELEVATIONS HIGHWAY DEPARTMENT





### EAST ELEVATION







### NORTH ELEVATION





The following pages include three Opinions of Probable Costs (OPC) and two detailed estimates.

The OPC's were developed by the programmer using square foot costs derived from past experience on similar projects. Although these OPCs are very useful in gaining an early understanding of the order of magnitude for a project, they lack the refinement of detail or the connection to market variations that a detailed estimate can provide.

The OPC developed for a new Highway Department facility at the Shaw's Farm site (430 Central Turnpike) raised concern about the magnitude of that project. As a result the Building Committee requested that Tecton consider a renovation and expansion of the Highway Department at their existing site. The third OPC presents the result of that consideration.

With the results of the OPC exercise in place, Tecton was directed to prepare estimates for the Police facility at 489 Central Turnpike and at the existing site for the Highway Department at 15 Pleasant Valley Road. Those estimates are included herein.

#### Heading

#### Construction Costs

New Facility Construction Clearing, Earthwork and Site Improve Landscaping Site Utilities CCTV System Security Access System Out-building Design Contingency (5%) Bidding and Escalation Contingency Construction Contingency (5%)

#### **Project Development and Equ**

Designer Fees Structural Peer Review Fee Interior Furnishings and Loose Equipn Furniture and Equipment Design Fee Hazardous Materials Abatement Hygenists Fees Clerk of the Works/OPM Fee Survey and Borings Materials Testing **Relocation Costs** Communications Equipment Communications Consultant Computer Equipment (owner provid Bidding Expenses -Advertising and R Site Acquisition Cost (owner provided Bonding and Legal Fees (owner prov Project Development Contingency

Total Opinion of Probable Project Costs:



### **OPINION OF PROBABLE COST** POLICE DEPARTMENT

#### Sutton, MA - Police Facility

**Opinion of Probable Project Costs** March 17, 2015

			lice Facility
	Quantity	Unit Cost	Subtotal
	12,500 s.f.	\$340 /s.f.	\$4,250,000
vements	1.44 ac.	\$220,000 /ac.	\$316,800
	1.44 ac.	\$45,000 /ac.	\$64,800
	1.44 ac.	\$90,000 /ac.	\$129,600
			\$75,000
			\$68,750
	2880 s.f.	\$60 /s.f.	\$172,800
			\$253,900
cy (5%)			\$266,600
			\$279,900
	Subtotal:		\$5,878,150
uipment Costs			
			\$419,900
			<b>\$</b> 0
ment			\$187,500
es			\$13,100
			\$0
			<b>\$</b> 0
			\$176,345
			\$15,000
			\$29,391
			<b>\$</b> 0
			\$400,000
			\$0
ded estimate)			\$0
Reprographics			\$25,000
ed estimate)			<b>\$</b> 0
ovided estimate)			<b>\$</b> 0
(5%)			\$63,300
	Subtotal:		\$1,329,535

\$7,207,685

#### Sutton, Massachusetts

Opinion of Probable Project Costs

leading	Quantity	Unit Cost	Shaw's Farm Subtotal
Construction Costs			
New Facility Construction	20,814 s.f.	\$225 /s.f.	\$4,683,150
Clearing, Earthwork and Site Improvements	1.9 ac.	\$220,000 /ac.	\$418,000
Landscaping	1.9 ac.	\$30,000 /ac.	\$57,000
Site Utilities	1.9 ac.	\$80,000 /ac.	\$152,000
CCTV System			\$41,628
Security Access System			\$62,442
Out-building	5000 s.f.	\$60 /s.f.	\$300,000
Design Contingency (5%)			\$285,700
Bidding and Escalation Contingency (5%)			\$300,000
Construction Contingency (5%)			\$315,000
Si	ubtotal:		\$6,614,920
Project Development and Equipment Costs			
Designer Fees			\$472,500
Structural Peer Review Fee			\$0
Interior Furnishings and Loose Equipment			\$166,500
Furniture and Equipment Design Fees			\$11,700
Hazardous Materials Abatement			\$0
Hygenists Fees			\$0
Clerk of the Works/OPM Fee			\$198,448
Survey and Borings			\$18,000
Materials Testing			\$33,075
Relocation Costs			\$0
Computer Equipment (owner provided estimate)			\$0
Bidding Expenses -Advertising and Reprographics			\$25,000
Site Acquisition Cost (owner provided estimate)			\$0
Bonding and Legal Fees (owner provided estimate)			<b>\$</b> 0
Project Development Contingency (5%)			\$46,300
St	ubtotal:		\$971,522
			67 507 440
Total Opinion of Probable Project Costs:			\$7,586,442

	<b>e</b> ,	/ Department	- Existing Site
leading	Quantity	Unit Cost	Subtoto
Construction Costs			
New Facility Construction	11,083 s.f.	\$225 /s.f.	\$2,493,67
Renovated Existing Facility	9,228 s.f.	\$85 /s.f.	\$784,38
Demolished Existing Facility	624 s.f.	\$7 /s.f.	\$4,36
Demolish Existing Barn	3,543 s.f.	\$7 /s.f.	\$24,80
Clearing, Earthwork and Site Improvements	3 ac.	\$125,000 /ac.	\$375,000
_andscaping	3 ac.	\$15,000 /ac.	\$45,00
Site Utilities	3 ac.	\$50,000 /ac.	\$150,00
CCTV System			\$22,16
Security Access System			\$33,24
Out-building	2000 s.f.	\$60 /s.f.	\$120,00
Design Contingency (5%)			\$202,60
Bidding and Escalation Contingency (5%)			\$212,80
Construction Contingency (5%)			\$223,40
S	ubtotal:		\$4,691,43
Project Development and Equipment Costs			
Designer Fees			\$335.10
Designer Fees Structural Peer Review Fee			
Structural Peer Review Fee			\$(
Structural Peer Review Fee nterior Furnishings and Loose Equipment			\$( \$223,40
Structural Peer Review Fee			\$ \$223,40 \$15,60
Structural Peer Review Fee nterior Furnishings and Loose Equipment Furniture and Equipment Design Fees			\$  \$223,40 \$15,60 \$
Structural Peer Review Fee nterior Furnishings and Loose Equipment Furniture and Equipment Design Fees Hazardous Materials Abatement			\$ \$223,40 \$15,60 \$ \$
Structural Peer Review Fee nterior Furnishings and Loose Equipment Furniture and Equipment Design Fees Hazardous Materials Abatement Hygenists Fees			\$ \$223,40 \$15,60 \$ \$ \$140,74
Structural Peer Review Fee nterior Furnishings and Loose Equipment Furniture and Equipment Design Fees Hazardous Materials Abatement Hygenists Fees Clerk of the Works/OPM Fee			\$ \$223,40 \$15,60 \$ \$ \$140,74 \$18,00
Structural Peer Review Fee nterior Furnishings and Loose Equipment Furniture and Equipment Design Fees Hazardous Materials Abatement Hygenists Fees Clerk of the Works/OPM Fee Survey and Borings			\$ \$223,40 \$15,60 \$ \$ \$140,74 \$18,00 \$23,45
Structural Peer Review Fee Interior Furnishings and Loose Equipment Furniture and Equipment Design Fees Hazardous Materials Abatement Hygenists Fees Clerk of the Works/OPM Fee Survey and Borings Materials Testing			\$ \$223,40 \$15,60 \$ \$140,74 \$18,00 \$23,45 \$
Structural Peer Review Fee Interior Furnishings and Loose Equipment Furniture and Equipment Design Fees Hazardous Materials Abatement Hygenists Fees Clerk of the Works/OPM Fee Survey and Borings Materials Testing Relocation Costs			\$ \$223,40 \$15,60 \$ \$ \$140,74 \$18,00 \$23,45 \$ \$
Structural Peer Review Fee Interior Furnishings and Loose Equipment Furniture and Equipment Design Fees Hazardous Materials Abatement Hygenists Fees Clerk of the Works/OPM Fee Survey and Borings Materials Testing Relocation Costs Computer Equipment (owner provided estimate)			\$ \$223,40 \$15,60 \$ \$ \$140,74 \$18,00 \$23,45 \$ \$ \$25,00
Structural Peer Review Fee Interior Furnishings and Loose Equipment Furniture and Equipment Design Fees Hazardous Materials Abatement Hygenists Fees Clerk of the Works/OPM Fee Survey and Borings Materials Testing Relocation Costs Computer Equipment (owner provided estimate) Bidding Expenses -Advertising and Reprographics			\$ \$223,40 \$15,60 \$ \$140,74 \$18,00 \$23,45 \$ \$25,00 \$
Structural Peer Review Fee Interior Furnishings and Loose Equipment Furniture and Equipment Design Fees Hazardous Materials Abatement Hygenists Fees Clerk of the Works/OPM Fee Survey and Borings Materials Testing Relocation Costs Computer Equipment (owner provided estimate) Bidding Expenses -Advertising and Reprographics Site Acquisition Cost (owner provided estimate)			\$335,100 \$0 \$223,400 \$15,600 \$15,600 \$140,743 \$18,000 \$23,453 \$0 \$23,453 \$0 \$25,000 \$1 \$25,000 \$1 \$39,100

	-	/ Department	- Existing Site
Heading	Quantity	Unit Cost	Subtoto
Construction Costs			
New Facility Construction	11,083 s.f.	\$225 /s.f.	\$2,493,67
Renovated Existing Facility	9,228 s.f.	\$85 /s.f.	\$784,38
Demolished Existing Facility	624 s.f.	\$7 /s.f.	\$4,36
Demolish Existing Barn	3,543 s.f.	\$7 /s.f.	\$24,80
Clearing, Earthwork and Site Improvements	3 ac.	\$125,000 /ac.	\$375,00
Landscaping	3 ac.	\$15,000 /ac.	\$45,00
Site Utilities	3 ac.	\$50,000 /ac.	\$150,00
CCTV System			\$22,16
Security Access System			\$33,24
Out-building	2000 s.f.	\$60 /s.f.	\$120,00
Design Contingency (5%)			\$202,60
Bidding and Escalation Contingency (5%)			\$212,80
Construction Contingency (5%)			\$223,40
S	ubtotal:		\$4,691,43
Project Development and Equipment Costs			
Project Development and Equipment Costs			\$335.10
Designer Fees			
Designer Fees Structural Peer Review Fee			\$(
Designer Fees Structural Peer Review Fee Interior Furnishings and Loose Equipment			\$( \$223,40
Designer Fees Structural Peer Review Fee Interior Furnishings and Loose Equipment Furniture and Equipment Design Fees			\$ \$223,40 \$15,60
Designer Fees Structural Peer Review Fee Interior Furnishings and Loose Equipment Furniture and Equipment Design Fees Hazardous Materials Abatement			\$  \$223,40 \$15,60 \$
Designer Fees Structural Peer Review Fee Interior Furnishings and Loose Equipment Furniture and Equipment Design Fees Hazardous Materials Abatement Hygenists Fees			\$ \$223,40 \$15,60 \$ \$
Designer Fees Structural Peer Review Fee Interior Furnishings and Loose Equipment Furniture and Equipment Design Fees Hazardous Materials Abatement Hygenists Fees Clerk of the Works/OPM Fee			\$ \$223,40 \$15,60 \$ \$ \$140,74
Designer Fees Structural Peer Review Fee Interior Furnishings and Loose Equipment Furniture and Equipment Design Fees Hazardous Materials Abatement Hygenists Fees			\$ \$223,40 \$15,60 \$ \$ \$140,74 \$18,00
Designer Fees Structural Peer Review Fee Interior Furnishings and Loose Equipment Furniture and Equipment Design Fees Hazardous Materials Abatement Hygenists Fees Clerk of the Works/OPM Fee Survey and Borings			\$ \$223,40 \$15,60 \$ \$140,74 \$18,00 \$23,45
Designer Fees Structural Peer Review Fee Interior Furnishings and Loose Equipment Furniture and Equipment Design Fees Hazardous Materials Abatement Hygenists Fees Clerk of the Works/OPM Fee Survey and Borings Materials Testing			\$ \$223,40 \$15,60 \$ \$140,74 \$18,00 \$23,45 \$
Designer Fees Structural Peer Review Fee Interior Furnishings and Loose Equipment Furniture and Equipment Design Fees Hazardous Materials Abatement Hygenists Fees Clerk of the Works/OPM Fee Survey and Borings Materials Testing Relocation Costs			\$ \$223,40 \$15,60 \$ \$140,74 \$18,00 \$23,45 \$ \$
Designer Fees Structural Peer Review Fee Interior Furnishings and Loose Equipment Furniture and Equipment Design Fees Hazardous Materials Abatement Hygenists Fees Clerk of the Works/OPM Fee Survey and Borings Materials Testing Relocation Costs Computer Equipment (owner provided estimate)			\$ \$223,40 \$15,60 \$ \$140,74 \$18,00 \$23,45 \$ \$ \$25,00
Designer Fees Structural Peer Review Fee Interior Furnishings and Loose Equipment Furniture and Equipment Design Fees Hazardous Materials Abatement Hygenists Fees Clerk of the Works/OPM Fee Survey and Borings Materials Testing Relocation Costs Computer Equipment (owner provided estimate) Bidding Expenses -Advertising and Reprographics			\$ \$223,40 \$15,60 \$ \$140,74 \$18,00 \$23,45 \$ \$25,00 \$
Designer Fees Structural Peer Review Fee Interior Furnishings and Loose Equipment Furniture and Equipment Design Fees Hazardous Materials Abatement Hygenists Fees Clerk of the Works/OPM Fee Survey and Borings Materials Testing Relocation Costs Computer Equipment (owner provided estimate) Bidding Expenses -Advertising and Reprographics Site Acquisition Cost (owner provided estimate)			\$335,100 \$( \$223,400 \$15,600 \$( \$140,74: \$18,000 \$23,45: \$( \$25,000 \$( \$25,000 \$( \$39,100)

Total Opinion of Probable Project Costs:

### OPINION OF PROBABLE COST HIGHWAY DEPARTMENT

#### Sutton, Massachusetts

Opinion of Probable Project Costs March 17, 2015



\$5,511,839





175 Derby St., Suite 5, Hingham, MA 02043 TEL: (781) 749-7272 • FAX: (781) 740-2652 ptim@amfogarty.com

"Construction Cost Consultants"

PROJECT: Sutton Police Headquarters LOCATION: Sutton, MA Tecton Architects CLIENT: DATE: 19-Aug-15

NO. Cost f

No.: 15074

SUMMARY

DIVISION

### **Sutton Police Headquarters** Sutton, MA

August 19, 2015

#### **GRAND SUMMARY**

POLICE HEADQUARTERS	\$4,634,250	
TOTAL DIRECT COST		\$4,634,250
GENERAL CONDITIONS	6%	\$278,055
GENERAL ADMINISTRATIVE O&P	4%	\$196,492
INSURANCE	0.85%	\$43,425
P&P BOND	1%	\$51,088
DESIGN CONTINGENCY	10%	\$520,331
ESCALATION (spring 2016)	3%	\$171,709
TOTAL CONSTRUCTION COST		\$5,895,350
COST/SF		\$467.07

	TOTTE
DIVISION 02 - EXISTING CONDITIONS	0
DIVISION 03 - CONCRETE	238,576
DIVISION 04 - MASONRY	439,837
DIVISION 05 - METALS	5,005
055000 METAL FABRICATIONS	75,982
DIVISION 06 - WOOD, PLASTICS & COMPOSITES	451,743
DIVISION 07 - THERMAL & MOISTURE PROTECTION	,
071000 DAMPPROOFING, WATERPROOFING & SEALANT:	70,691
072000 THERMAL PROTECTION	44,882
073100 ROOFING, FLASHING & ACCESSORIES	80,623
074012 SIDING & TRIM	49,232
DIVISION 08 - OPENINGS	166,564
084000 ALUMINUM ENTR. & STOREFRONTS	43,844
085000 WINDOWS	82,280
088000 GLAZING	25,074
DIVISION 09 - FINISHES	,
092000 GYPSUM BOARD ASSEMBLIES	263,809
093000 TILE	64,540
095100 ACOUSTICAL CEILINGS	103,629
096500 RESILIENT FLOORING	34,588
096800 CARPETING	7,836
097200 SEAMLESS EPOXY FLOORING	22,177
099000 PAINTING	46,966
DIVISION 10 - SPECIALTIES	114,354
DIVISION 11 - EQUIPMENT	62,275
DIVISION 12 - FURNISHINGS	9,075
<b>DIVISION 13 - SPECIAL CONSTRUCTION</b>	0
<b>DIVISION 14 - CONVEYING EQUIPMENT</b>	110,000
<b>DIVISION 21 - FIRE SUPPRESSION</b>	155,671
DIVISION 22 - PLUMBING	227,865
DIVISION 23 - HVAC	411,110
DIVISION 26 - ELECTRICAL	466,555
DIVISION 31 - EARTHWORK	126,848
<b>DIVISION 32 - EXTERIOR IMPROVEMENTS</b>	292,928
DIVISION 33 - UTILITIES	339,691
TOTAL	4,634,250
	. ,



### DETAILED ESTIMATES POLICE DEPARTMENT

O. OF SQ. FT.:	12,622
PER SQ. FT.:	367.16

#### \*GSF excludes the attic 1830 GSF

IVISION	PERCENT	COST
TOTAL	OF PROJECT	PER SF
0 238,576 439,837 5,005 75,982 451,743	0% 5% 9% 0% 2% 10%	$\begin{array}{c} 0.00 \\ 18.90 \\ 34.85 \\ 0.40 \\ 6.02 \\ 35.79 \end{array}$
70,691	2%	5.60
44,882	1%	3.56
80,623	2%	6.39
49,232	1%	3.90
166,564	4%	13.20
43,844	1%	3.47
82,280	2%	6.52
25,074	1%	1.99
263,809 64,540 103,629 34,588 7,836 22,177 46,966 114,354 62,275 9,075 0	6% 1% 2% 1% 0% 0% 1% 2% 1% 0% 0% 0%	$\begin{array}{c} 20.90\\ 5.11\\ 8.21\\ 2.74\\ 0.62\\ 1.76\\ 3.72\\ 9.06\\ 4.93\\ 0.72\\ 0.00\end{array}$
110,000	2%	8.71
155,671	3%	12.33
227,865	5%	18.05
411,110	9%	32.57
466,555	10%	36.96
126,848	3%	10.05
292,928	6%	23.21
339,691	7%	26.91
4,634,250	100%	367.16



175 Derby St., Suite 5, Hingham, MA 02043 TEL: (781) 749-7272 • FAX: (781) 740-2652 ptim@amfogarty.com

"Construction Cost Consultants"

PROJECT: LOCATION: CLIENT: DATE: Sutton Dept of Public Works Sutton, MA Tecton Architects 04-Sep-15

No.: 15074

### SUMMARY

### Sutton Dept of Public Works Sutton, MA

September 4, 2015

#### **GRAND SUMMARY**

POLICE HEADQUARTERS	\$3,991,857	
TOTAL DIRECT COST		\$3,991,857
GENERAL CONDITIONS	6%	\$239,511
GENERAL ADMINISTRATIVE O&P	4%	\$169,255
INSURANCE	0.85%	\$37,405
P&P BOND	1%	\$44,006
DESIGN CONTINGENCY	10%	\$448,203
ESCALATION (spring 2016)	3%	\$147,907
TOTAL CONSTRUCTION COST		\$5,078,145
COST/SF		\$241.31

DIVISION 02 - EXISTING CONDITIONS
DIVISION 03 - CONCRETE
DIVISION 04 - MASONRY
DIVISION 05 - METALS
055000 METAL FABRICATIONS
DIVISION 06 - WOOD, PLASTICS & COMPOSITES
<b>DIVISION 07 - THERMAL &amp; MOISTURE PROTECTI</b>
071000 DAMPPROOFING, WATERPROOFING & SH
072000 THERMAL PROTECTION
073100 ROOFING, FLASHING & ACCESSORIES
074012 SIDING & TRIM
DIVISION 08 - OPENINGS
084000 ALUMINUM ENTR. & STOREFRONTS
085000 WINDOWS
088000 GLAZING
DIVISION 09 - FINISHES
092000 GYPSUM BOARD ASSEMBLIES
093000 TILE
095100 ACOUSTICAL CEILINGS
096500 RESILIENT FLOORING
096800 CARPETING
097200 SEAMLESS EPOXY FLOORING
099000 PAINTING
DIVISION 10 - SPECIALTIES
DIVISION 11 - EQUIPMENT
DIVISION 12 - FURNISHINGS
<b>DIVISION 13 - SPECIAL CONSTRUCTION</b>
DIVISION 14 - CONVEYING EQUIPMENT
DIVISION 21 - FIRE SUPPRESSION
DIVISION 22 - PLUMBING
DIVISION 23 - HVAC
DIVISION 26 - ELECTRICAL
DIVISION 31 - EARTHWORK
<b>DIVISION 32 - EXTERIOR IMPROVEMENTS</b>
DIVISION 33 - UTILITIES

TOTAL

### DETAILED ESTIMATES HIGHWAY DEPARTMENT

NO. OF SQ. FT.:	21,044
COST PER SQ. FT.:	189.69

#### \*GSF excludes the attic 1830 GSF

	DIVISION TOTAL	PERCENT OF PROJECT	COST PER SF
	66,589 215,090	2% 5%	3.16 10.22
	311,792	8% 1%	14.82
	29,880 87,404	1% 2%	1.42 4.15
	287,404	2% 7%	4.15
ION	207,434	7 70	15.00
SEALANT:	54,071	1%	2.57
	99,652	2%	4.74
	102,478	3%	4.87
	141,200	4%	6.71
	181,550	5%	8.63
	62,444	2%	2.97
	12,000	0%	0.57
	0	0%	0.00
	50,723	1%	2.41
	15,796	0%	0.75
	11,400	0%	0.54
	10,264	0%	0.49
	1,200	0%	0.06
	0	0%	0.00
	51,458	1%	2.45
	13,619	0%	0.65
	2,150	0%	0.10
	1,200	0%	0.06
	0	0%	0.00
	0	0%	0.00
	168,352	4%	8.00
	111,185	3%	5.28
	317,976	8%	15.11
	375,704	9%	17.85
	232,531	6%	11.05
	593,916	15%	28.22
	382,800	10%	18.19
	3,991,857	100%	189.69

