

**Town of Walpole Massachusetts**

**Municipal Facilities Master Planning Study**

**Draft Report**

**December 17, 2012**



**Maguire Group Incorporated**





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## Section 1 - Executive Summary

### Project Overview

This study is designed to provide the Town of Walpole with a plan for moving forward with the next phase of development of municipal facilities. Completing this project involved reviewing the condition of over 20 municipal buildings and assessing the needs of several Town departments that provide services to the community. Below is an outline of steps in the process used to complete this study, conclusions made for the information gathered and recommendations on priority for projects for the Town of Walpole.

**Project Research:** The process began with a review of the previous Master Plan Implementation Committee report. This provided a basis for understanding the planning work completed to date and the most recent attempts to move forward with project planning. Recent building plans for several facilities including a new Police Station, Public Safety Building, Senior Center and DPW renovation were also reviewed in addition to plans for the potential reuse of the Old Library.

The next step in the process was a comprehensive series of meeting with department leaders that have oversight of facility use and committees responsible for the planning process and regulatory requirements. Departments and committees consulted as part of this project include:

Police Department	Conservation Commission
Fire Department	Town Forest
Council on Aging	Master Plan Implementation Committee
Recreation Department	Board of Selectmen
Recreation Committee	Library Department
DPW Building Maintenance	Finance Department
DPW Highway, Parks and Cemeteries	Engineering Department
School Department	Board of Health
Economic Development	Water and Sewer

**Building Survey:** The next phase of the project involved completing a survey of 21 municipal buildings. The objective was to assess the physical condition of each facility, review recent and current capital maintenance upgrades and review the spatial quality in relation to the program needs of departments occupying the building. All available building plans of the Town's existing facilities were reviewed and a site visit was completed by a three person field team comprised of an architect, mechanical engineer and civil engineer. Town buildings in the survey included:

Police Station	Senior Center	Walpole Dog Kennel
Central Fire Station	Blackburn Hall	Walpole High School
South Fire Station	DPW	Plimpton School
East Fire Station	Old Library	Johnson Middle School
Town Hall	East Library	Bird Middle School
Food Pantry	Tuner Lodge	4 Elementary Schools



In addition to the survey of existing facilities several sites were assessed as potential sites for future development and location of new building. A comprehensive list of all Town owned property was available for consideration as well as several properties that are privately owned. Examples of properties assessed but not recommended for future use include the following:

*Walpole Woodworkers - East Street:* This property was recently considered for purchase by the Town for municipal use. The property is a large flat site with multiple existing warehouse and manufacturing buildings. Although the property is for sale the price along with the cost of demolition and remediation make the acquisition for municipal use impractical.

*Adam's Farm:* This property, acquired by the Town, includes a large undeveloped area along North Street that is suitable for development. Wetlands exist in the rear portion of the site and restrictions to development are limited only to that area. The location of the property is remote and access makes the site less desirable for a Senior Center or Police Station. Several more preferable options for development shall be considered for this property including athletic fields and a recreation facility.

*South Street - Superfund Site:* Several aspects of this site make it a desirable location for future development of municipal buildings. The COA and Police Department have expressed interest in use of this site if it becomes available. However the property is contaminated and is in the beginning process of an EPA clean-up project and will not be available for many years. The Town does not own the property and substantial costs will be incurred for additional remediation and demolition of existing buildings.

**Project Data:** Several types of data are necessary in order to successfully complete a master planning study of the scope. As a supplement to this project a review of the Town's finances, a comparative analysis of adjacent communities and a review of the most recent school enrollment projections were completed.

Review of the Town's financial picture with the Finance Director provided an understanding how capital costs are afforded within the budget. Town requirements recommend that debt service shall not exceed 10% of the overall budget and that debt service currently stands at about 7%. All project budgets recommended in this study will include a calculation of debt service to ensure affordability and financial responsibility.

Comparative data was compiled to provide a picture of 5 neighboring communities in relation to Walpole in areas such as population, overall budget, department expenditures, school enrollment and facilities. Towns included in this exercise include; Dedham, Franklin, Foxborough, Mansfield and Norwood.

Enrollment projections provided by the School Department indicate a small steady increase in school population over the past 10 years but indicates a decrease over the next 10 years. This is due to a drop in birth rate and a slowdown of families with school age children relocating to Walpole. Plans for a combined new Middle School and Elementary School were developed based on enrollment projections that show reduction of 160 middle school students and 175 elementary school students over that time period.



**Development Options:** Following the completion of the initial project research, existing conditions surveys, and gathering of data several options for future development and recommendations for capital improvements to existing building was investigated. Selection of projects recommendations were prioritized based on department needs, existing facility conditions, public safety requirements and financial considerations. Options include building new facilities as well as reuse of existing buildings. Based on information gathered through project research, existing conditions surveys and review of project data, options for the following new buildings and major addition renovation projects were assessed:

- Location for a new Senior Center
- Location for a new Police Station
- Location for a new Central Fire Station
- Location for a new combined Public Safety Building
- Reuse of the existing Police Station
- Renovation Addition to DPW facility
- Location for a combined new Middle School
- Renovation of Johnson Middle School
- Location for new Elementary School
- Addition to Blackburn Hall



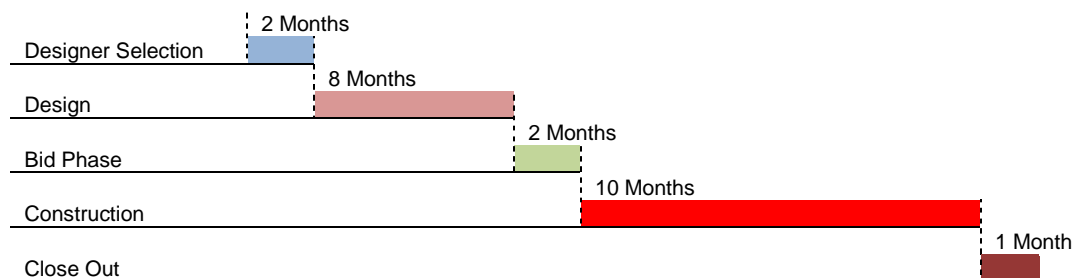
## Recommendation 1 – New Senior Center at Washington Street

**Project Budget:**        **\$5,074,500**

### Site Plan



### Project Schedule



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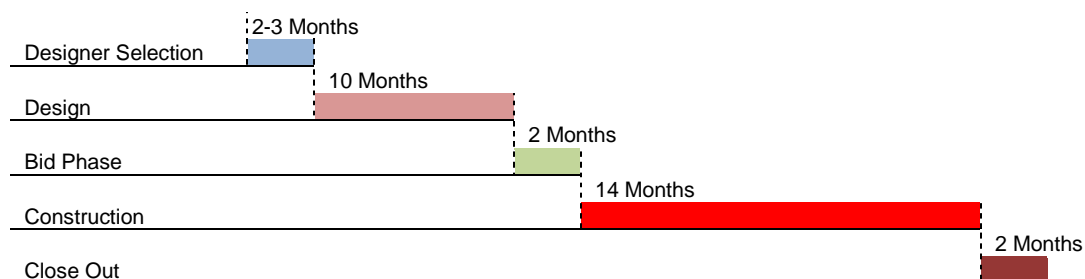
## Recommendation 2 – New Police Station at Washington Street

**Project Budget:**        **\$8,658,360**

### Site Plan



### Project Schedule





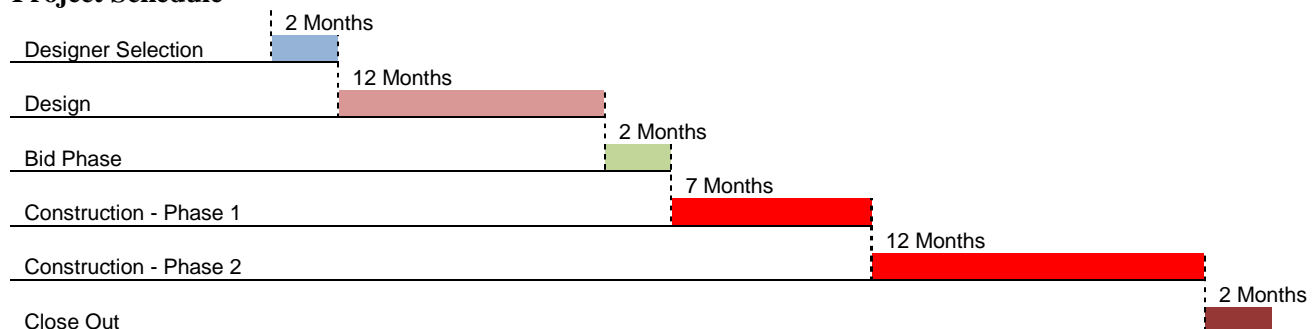
### Recommendation 3 – Addition/Renovation Central Fire Station – Town Center

**Project Budget:**       **\$11,670,000**

#### Site Plan



#### Project Schedule



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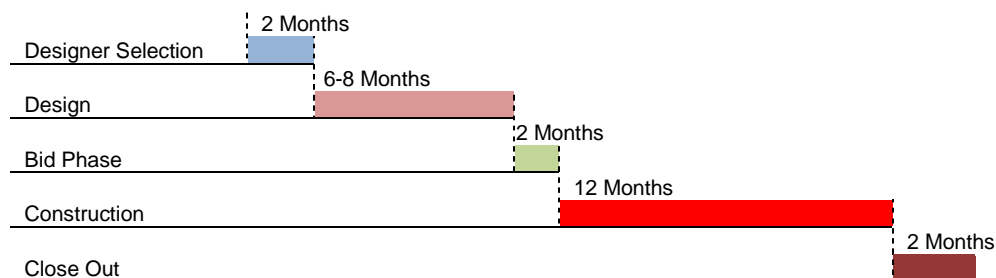
## Recommendation 4 – DPW Addition/ Renovation and Site Upgrades

**Project Budget:**        **\$3,530,000**

### Site Plan



### Project Schedule



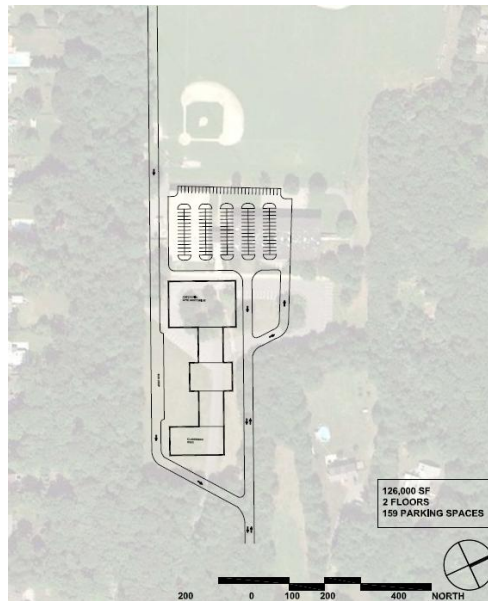
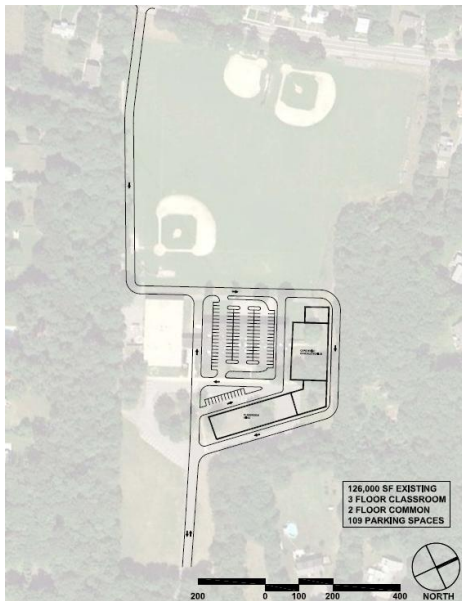
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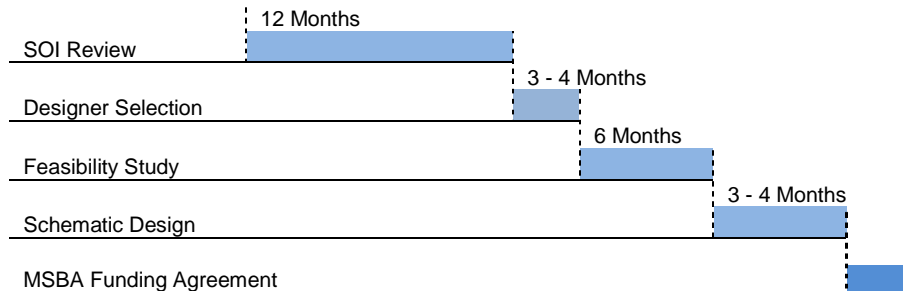
## Recommendation 5 – New Combined Middle School at Bird School Site

**Project Budget: \$48,880,000**

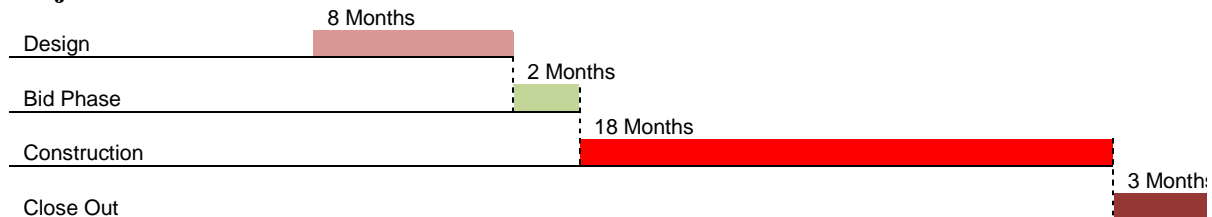
### Site Plan



### MSBA Schedule



### Project Schedule



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## Section 2 – Comparative Analysis

<b>Town</b>	<b>Population 2010</b>	<b>Change 10 year</b>	<b>Area (SM)</b>	<b>Revenue FY 2011</b>
Franklin	31,635	7.02%	26.37	109,664,957
Norwood	28,602	0.05%	10.53	154,938,705
Dedham	24,729	5.93%	10.41	95,072,492
<b>Walpole</b>	<b>24,070</b>	<b>5.46%</b>	<b>21.07</b>	<b>77,166,381</b>
Mansfield	23,184	3.44%	20.36	84,776,278
Foxborough	16,865	3.81%	19.82	62,372,515

<b>Police Department</b>	<b>Budget</b>	<b>Staff (Full Time)</b>	<b>Facility</b>
Norwood	6,079,548	63	Central Police Station
Dedham	5,057,573	44	Central Police Station
Franklin	4,452,107	54	Central Police Station
<b>Walpole</b>	<b>3,905,217</b>	<b>43</b>	<b>Central Police Station</b>
Mansfield	3,322,718	41	Central Police Station
Foxborough	2,886,604	n/a	Combined Public Safety Building

<b>Fire Department</b>	<b>Budget</b>	<b>Staff (Full time)</b>	<b>Apparatus</b>
Norwood	5,750,395	59	4 Eng, 1 Ladder, 2 Amb, 4 Other
Dedham	4,559,861	65	4 Eng, 2 Ladder, 2 Amb, 2 Other
Franklin	4,108,628	52	4 Eng, 1 Ladder, 3 Amb, 4 Other
Foxborough	3,269,161	33	3 Eng, 1 Ladder, 3 Amb, 7 Other
<b>Walpole</b>	<b>3,171,645</b>	<b>34</b>	<b>4 Eng, 1 Ladder, 2 Amb, 4 Other</b>
Mansfield	2,877,143	38	n/a

<b>Education</b>	<b>Budget</b>	<b>Enrollment</b>	<b>School Buildings</b>
Franklin	51,775,258	6,124	HS; MS – 3; Elem – 6; ECLC - 1
Norwood	42,777,680	3,880	HS; MS – 1; Elem – 5; ECLC - 1
Mansfield	36,679,946	4,423	HS: MS – 1; Elem – 2; ECLC - 1
Dedham	32,777,878	2,910	HS ; MS – 1; Elem – 4; ECLC - 1
<b>Walpole</b>	<b>32,513,667</b>	<b>3,954</b>	<b>HS; MS – 2; Elem – 4; ECLC - 1</b>
Foxborough	25,996,338	2,867	HS; MS – 1; Elem – 3; ECLC - 0



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<b>Enrollment Summary</b>	<b>Total</b>	<b>High School</b>	<b>Middle School</b>	<b>Elementary</b>	<b>ELEC</b>
Franklin	6,124	1,622	1,482	2,826	194
Mansfield	4,423	1,043	1,165	2,123	101
<b>Walpole</b>	<b>3,954</b>	<b>1,084</b>	<b>921</b>	<b>1,867</b>	<b>82</b>
Norwood	3,880	1,469	802	1,211	371
Dedham	2,910	786	663	1,131	330
Foxborough	2,867	869	924	1,074	0

#### **Current MSBA Funded Projects**

<b>School</b>	<b>Project Cost</b>	<b>MSBA Reimbursement</b>
Franklin High School	\$104,650,000	59.52%
Foxborough High School	\$15,126,000	49.31%
Dedham Avery Elementary School	\$23,367,000	50.84%
Norwood High School	\$68,665,000	59.21%

#### **Council on Aging - Facilities Summary**

Dedham	Consul on Aging Offices
Foxborough	Senior Center - with large multipurpose room
Franklin	Senior Center - with large multipurpose room
Mansfield	Combined Senior Center and Library
Norwood	Senior Center - with large multipurpose room
<b>Walpole</b>	<b>Senior Center – Section of Town Hall</b>

#### **Senior Centers Recently Completed**

Franklin Senior Center:	16,100 SF
Marshfield Senior Center:	15,000 SF
Canton Senior Center:	14,400 SF



## Section 3 - Potential Funding Sources

Funding for municipal construction projects is limited and with state and federal budgets under pressure the trend of reductions of funding sources is expected to continue. The majority of funding available is dedicated to school construction. In Massachusetts the MSBA was recently established to oversee the process of school construction funding. The state also offers programs for funding of library construction and limited funding for renovation of historic buildings. Grants for police and fire stations are also limited and generally focused on equipment, technology and new programs rather than capital improvements. Energy rebates are available for all projects and require applications submitted during the construction phase of a project.

### Schools: Massachusetts School Building Authority (MSBA)

The MSBA was established in 2004 to improve the process of funding capital improvements for Massachusetts public schools. The authority replaced the previous grant program administered by the Department of Education and as a result several changes to the process have been implemented. All school districts and towns are eligible to participate in the grant program. However each project is reviewed on an individual basis to determine eligibility for funding and reimbursement rate.

Outlined below is the process for determination of eligibility for receiving MSBA reimbursement. As indicated, several steps are required prior to an MSBA funding agreement is finalized. Once a project is determined by the MSBA to be eligible for funding a reimbursement rate is established based on factors listed below. MSBA decisions on funding are made on an individual basis and the rates are set based on community factors that are updated every year by the Department of Revenue.

Statement of Interest (SOI) - Submitted by the School Department

Module - 1	Eligibility Period: SOI is reviewed by MSBA (270 day process)
Module - 2	Selection of Designer and OPM
Module - 3	Complete Feasibility Study
Module - 4	Schematic Design – Establish project scope, budget and schedule.
<b>Module - 5</b>	<b>Funding – MSBA project funding agreement</b>
Module - 6	Detailed Design
Module - 7	Building Construction
Module - 8	Project Completion – Close out

Reimbursement Rate: Eligible school construction projects receive a reimbursement rate based on the following factors:

Base Rate	31 points (All districts eligible)
Community Income Factor	TBD
Community Property Wealth Factor	TBD
Community Poverty Factor	TBD
Incentive points	18 points max. (At the sole discretion of the MSBA)



<b>Library</b>	MPLCP Grants approved by the Massachusetts Board of Library Commissioners to provide financial support for library design and construction projects.	
	The grants are awarded on a cyclical basis when funding is available and approved by the state legislature. Projects receive up to 50% of the total eligible cost.	
<b>Police Stations</b>	COPS	Federal Grant program for Technology and special programs.
	EOPS	Executive Office of Public Safety grants for Equipment and Technology.
	EOC	Funding for development of an emergency operations center. (Police/FD/DWP collaborative)
<b>Fire Stations</b>	Leary Firefighter's Foundation: Funding for training and equipment.	
<b>Historic Building</b>	National Park Service/MHC: Reimbursement for restoration of historic buildings.	
<b>CDBG</b>	Community Development Block Grants are available (through HUD) for local projects focusing on housing and economic improvement.	
<b>Energy Rebates</b>	179D	Energy rebates
	NSTAR	Energy credits program
	National Grid	Energy credits program



## Section 4 – Building Analysis

### Police Station



#### Facility Information

**Year Constructed:** 1881

Renovated: 1983

Re-pointed: 1997

**Site:** 19,500 SF

**Parking:** 17 Total (1 Accessible)

**Square Footage:** 11,676 SF

**Restrictions:** Historic

National Register of Historic Places: 1981

**Appraisal:** \$960,300

#### General Description

The Walpole Police Department is currently located in a renovated; three story structure that once served the town as the Town Hall, the Towns Court Facility as well as the previous Police Station.

Since its' construction the exterior of the facility with its iconic clock tower has been relatively unchanged.

The Building was renovated in the 1983 to accommodate the Police Department. As part of the renovations the entrance was relocated from the front of the building, facing Main Street to the rear. This modification resolved the accessibility issue into the building.

The majorities of the renovations were internal and occurred in the walk-out basement of the facility, and included a new building entrance, dispatch, patrolmen's area and detention facility.

At one time the second floor housed the Court Room with a high ceiling and exposed decorative beams. Since then the second floor space has been renovated into office spaces and a ceiling dropped to reduce the height of the space. At one time this newly created "attic" space was

utilized as a firing range, however due to environmental and safety concerns this has been stopped.

### **Building Components**

#### **Site**

The Police Station building is situated on a hill approximately five feet above the surrounding terrain. The front area is grassed and landscaped and slopes downhill to a 4 ½ foot high stone retaining wall capped with concrete along Main Street. The original front stairway has been filled in with soil and enclosed with a CMU and brick retaining wall. Both retaining walls are in good condition. Located on the front lawn is a historic grave marker. While the site is in good condition and aesthetically pleasing, it does not appear to facilitate typical police station operations. The potential for expansion is limited due to the historical nature of the building and the lot size.

Pavement along the parking area to the rear of the building has extensive alligator cracking and patching. Stormwater runoff is collected with curbing and catch basins. Pavement markings are newly painted and signage is adequate. Bituminous concrete walkway along the north side of the police station is fair in condition. The front entrance is landscaped with planted beds along the building. Chain link fencing around the generator/electrical equipment pad to the rear of the building is rusting and should be replaced. Site lighting around the building was observed to be minimal.

#### **Parking/Circulation**

Police station parking accommodates approximately 17 vehicles in angled spaces along the rear of the building including one ADA accessible parking space. Vehicle access to the one-way police station parking lot is through the municipal parking lot to the east of the fire station. The Police Station does not have a secure drop-off or sallyport.

#### **Hazardous Materials**

There are visual indications of suspect hazardous materials. However they cannot be confirmed without proper testing. Some of the asbestos is currently being abated as renovations are performed.

#### **Structure**

The building structure consists of load bearing masonry walls with wood framed floors and roof. The structure does not comply with current seismic and reinforcing requirements; this is particularly important at the clock tower. However these features are not required by the International Existing Building Code unless other building improvements are performed. Depending on the amount and value of renovations, this will trigger what structural upgrades are required to be performed.

Currently the central stair leading to the mezzanine is sagging and structurally unsafe. To prevent further damage to the stair and possible injury to the users, the Town has cordoned off this portion of the stair.

### Exterior Façade

The exterior wall composition consists of a multi wythe brick masonry construction. Typical of the construction period the walls are not seismically braced, are not reinforced and not insulated. A visual inspection from grade revealed that the brick and mortar joints are in relatively good condition, only requiring minimal re-pointing. Similarly the wood trim, fascia, soffits and decorative trims appear to be in good condition, requiring standard maintenance.

### Roof

The slate roof was observed to be in good condition. Water damage on the interior ceiling appears to be old and the result of previous damage that has been repaired.

### Windows

All of the windows are existing wood double hung with un-insulated glass. To address the thermal loss through the glazing and maintain the historical character of the facility the town has installed internal storm windows.

### Building Interior

The interior of the facility has experienced substantial changes since its construction including renovations to the basement to accommodate the detention facility and the added ceiling construction to reduce the height of the second floor court room. This ceiling modification allowed the use of the second floor hall space to office occupancy. All finishes are in good condition including portions of the second floor that are undergoing renovations.

### Elevator

As part of the 1983 renovation an elevator was installed to the rear of the facility connecting all three levels. It should be noted that the elevator was installed prior to the implementation of the Americans with Disability Act and consequently the current elevator does not meet the ADA requirements as well as the current gurney requirement.

### Plumbing

The building is supplied by a 2" domestic water service that enters the building at the southwest side from Stone Street directly to the mechanical room. The building has two gas services. One service meter is located on the southwest side of the building and enters the mechanical room at the lower floor and internal piping serves the gas fired domestic water heater and a feed was provided at the boiler for an oil/gas dual fuel conversion, that has not been completed. The second gas service is located on the southeast corner of the building and serves the natural gas driven standby generator at the exterior of the building. The domestic hot water is generated by a 1992 state industries light duty 75 gallon, 75 MBH input gas fired storage type water heater.

Men's and women's locker rooms are located on the lower level of the building. The men's includes two urinals, one water closet, two showers and two lavatories. The women's includes one water closet and one shower. None of these rooms are accessible. The janitor's sink in the mechanical room is located two steps up from the floor surface of the locker rooms. There are



additional men's and women's toilets located on the first floor. The rooms are semi-accessible and include items that improve the access, but do not meet the space requirements of the accessible standards. The men's includes two lavatories (bi-level), two urinals (bi-level) and one water closet. Access to the women's water closet is encroached upon by a surface mounted unit convector heater cabinet within the stall. Two, unisex toilet rooms are located on the second floor that include a tank type water closet and lavatory in each. Combination stainless steel fixtures installed in each cell on the lower level are outdated. There is a single room that includes a water closet, lavatory and urinal in the office area hallway on the lower level. Fixtures are good working condition.

Plumbing distribution hot and cold water appears to be in good condition. There does not appear to be a recirculation system installed on the domestic hot water system.

### HVAC

The building is heated with forced hot water provided by the cast iron oil-fired boiler located at the lower level mechanical room with a supply and return piping system feeding the building. Additionally, a combination of fin tube radiation, unit convectors and cast iron radiators are located throughout the building. Thermostat controlled electric zone valves are installed at the radiation and convector units. The lower level and first floor offices are served with split system DX style air handling units with exterior grade mounted condensing units providing air conditioning via supply ductwork and diffusers and ducted return with ceiling grilles. Original units were York. Newer Carrier replacement units have been installed as needed. Original install 1994. Replacements were installed in 2006 renovation. The second floor air conditioning is provided by window type air conditioning units installed in each office space. The IT room on the second floor is being air conditioned via window air conditioning units. The underground oil tank is located on the southwest side of the building along Stone Street.

### Electrical

The main electrical service enters the building via an overhead service at the south side of the building. The standby gas-fired generator is located on the southeast corner of the building. Lighting consists of florescent light fixtures installed throughout the building. Most switching is via toggle switch with some occupancy sensor upgrades. Rooms are single switched with no reduction capability. Most fixtures are lamped with T-8 lamps. Original wiring is concealed in the walls. Newer circuitry has been added using surface mounted raceways similar to wire mold. Emergency lighting is provided by battery type fixtures and heads. Exit signs are battery powered LED fixtures. Egress lighting on the exterior walls is provided. The IT room is located on the second floor with a new electrical panel to support the room located in the elevator lobby on the second floor. The fire alarm system has a fire alarm panel located in the booking area electric closet. Pull stations, detection and notification devices are installed throughout the building.

### Fire Protection

There is no fire protection system installed in the building.

### Accessibility

The facility was constructed prior to the implementation of handicap codes and requirements. The improvement performed in 1983 did address some of the handicap issues, elevator, modifications to the door hardware, toilet room upgrades. However, these were prior to the issuance of the Americans with Disability Act (ADA), and consequently the facility does not meet current guidelines.

As renovations and modifications are implemented these improvements need to comply with the current codes. Additionally renovations and improvements to the facility beyond 30% of the assessed building value will trigger comprehensive building upgrades throughout the entire facility. The basement level has numerous different floor elevations only inter connected by steps.

### Code Compliance

Since the buildings conversion to a Police Station, it is assumed that all applicable code upgrades for the change were implemented in 1983.

However, as renovations and modifications are implemented these improvements need to comply with the current codes. Additionally renovations and improvements to the facility beyond 30% of the assessed building value will trigger comprehensive building upgrades throughout the entire facility

### Functional Analysis

When the Police Department moved into this building it appears that the renovations performed to accommodate them were relegated to the first floor detention area. Consequently the configuration of the upper floors remained unaltered and the Police made do with a floor plan designed for an 1880's Court House/ Town Hall and does meet have the space and adjacency requirements to function as a Police Station.

One issue is that the Town Hall was set up with a large central corridor flanked by large dedicated offices. For a Police Station to properly function three different pedestrian circulations, Public, Detainees and the Staff need to be accommodated. In larger facility the Staff portion is further divided into Administrative areas, Detectives area and Patrolmen areas. Currently with the exception of the detainees the remainder of the station is fully accessible. A second issue with the facility layout is that detainees are brought upstairs into the detective areas for interviewing purpose, compromising security and privacy.

Programmatically, in its current configuration the existing facility fails to meet the requirements of a police station as well as the requirements for the detention facility.

### **Recommendations (If no longer used by Police Department)**

**Restoration/Addition:** Full renovation of existing building including restoring the original upper level auditorium to its original condition an addition for use as a new fire station.

See Fire Station Recommendations.

**Renovation:** Limited renovation to existing building to include improvement to finishes and medication of room sizes for use as Town offices. Detention cells located in the ground floor remain in place.

Recommended budget: \$1,470,000

**Renovation/Addition:** Full renovation of existing facility including removal of detention cells. Construct an addition on the southeast side of the building to include a new stair, elevator and toilet rooms compliant with current accessibility regulations.

Recommended budget: \$3,250,000

**Restoration/Addition:** Full renovation of existing building including restoring the original upper level auditorium to its original condition. This would include removing the second floor ceiling, existing elevator, toilet rooms and stair. The original wood structure, balcony and interior detail would be restored. An addition to the building on the southeast corner with new stair, elevator and toilet rooms would also be required.

Recommended budget: \$4,650,000

**Private Development:** The Town should consider the option making the building available to a private developer for commercial or retail use.

## **New Police Station – Site Selection Report**

The Police Department is currently located in the former Town Hall building that is too small and that does not meet the functional requirements of a modern police force. The existing facility also has safety issues due to inadequate detention and booking areas and no Sallyport. Four sites were assessed as possible locations and options were reviewed based on size, constructability, location, environmental issues, restrictions and potential costs. Below is a summary of the sites reviewed along with an assessment of each locations advantages and disadvantages.

### **Sites Assessed:**

1. Washington Street - Location A
2. Washington Street - Location B
3. South Street Location – Superfund Site
4. Town Center – Current location as a combined Police /Fire Station

### **Sites Considered but Not Assessed:**

- Washington Street Location C – Site/ grading issues make construction difficult and costly.
- East Street (Woodworker’s site) – Cost of purchase \$4.5 Million.
- Central ‘Old’ Library – Site is too small for Police Station. Property to be sold by end of 2012.
- Robbins Road – Adjacent to VFW Hall. Location is too isolated from community.
- Town Center Municipal Parking Lot and Athletic Field.

### Site Options

#### **Option 1: Washington Street Location A - Recommended**

The site is approximately 6 acres of relatively flat wooded area adjacent to the DPW facility. The site has direct access to South Street in addition to Washington Street. The property is Town owned with no known environmental issues and no restrictions on development.

##### Advantages

- Site can accommodate a two level 18,000 SF facility and all Police functions.
- The property has room for expansion if needed. (Fleet Garage)
- Adjacent to DPW with potential shared facilities such as storage and impound lot.
- Direct access to Washington Street and South Street.
- No purchase costs.
- Location is favored by Police Department.

##### Disadvantages

- Distance from Town Center.

#### **Option 2: Washington Street Location B - Recommended**

The property is a large relatively flat wooded site along Washington Street across from the DPW facility. The property is Town owned and is near one of the two major aquifers that supply water to the community. Though wetlands are identified on the property, enough area exists outside the Title 5 buffer for development.

##### Advantages

- Site can accommodate a two level 18,000 SF facility and all Police functions.
- The property has room for expansion if needed. (Fleet Garage)
- Close proximity to DPW with potential shared facilities such as storage and impound lot.
- Direct access to Washington Street and South Street.
- No purchase costs.

##### Disadvantages

- Distance from Town Center.

#### **Option 3: Town Center (Current Location) – Recommended**

This site option involves the renovation of the current Police Station and an addition for a combined Public Safety building. The new addition shall also include new detention facilities, booking area and sallyport. The building will also require a new lobby, elevator, stairs and toilet rooms that are compliant with current accessibility regulations.

### Advantages

- Police Station occupies its current location and remains adjacent to Town Hall.
- New addition will provide improved safety with a new detention areas and a Sallyport.
- New addition provides opportunity for enhancement of municipal campus.
- Existing Police Station remains occupied.

### Disadvantages

- Limited parking for new facility.
- Police administration area will be separate from patrol and booking area.
- Potential reduction of public spaces in the municipal parking lot.
- Renovation /addition of existing facility is NOT favored by Police Department.

### **Option 4: South Street (Superfund Site) – Not Recommended (Until clean-up process is resolved)**

The site is located close to the center of Town on South Street and includes parcels on each side of the street. The property is contaminated and is currently under review by the EPA for clean-up. The parcel on the east side of the street is considerably less contaminated than the parcel on the west side of the street. It is unclear how long the clean-up process will take (potentially three to five years). It is possible to clean the site for use as a Senior Center. The parcel on the east side of South Street offers the best potential for development.

### Advantages

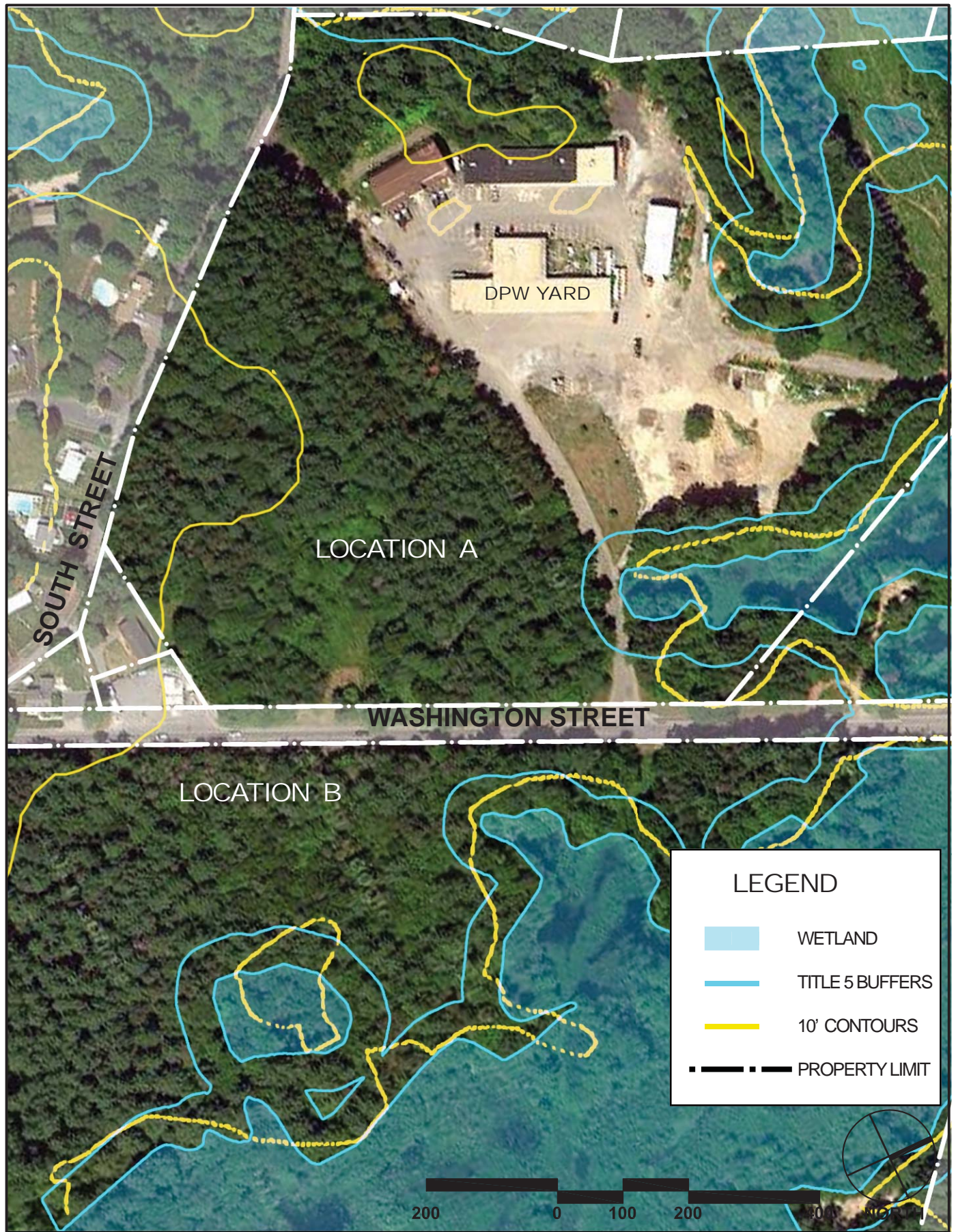
- Location is close to Town Center.
- New Police Station development would have a positive impact on the surrounding area.
- Location is favored by the Police Department.

### Disadvantages

- Property will require purchase by Town.
- Town should not acquire property until clean-up process is complete.
- Continued environmental restrictions/ wetlands.
- Property will not be available for several years.
- Demolition and additional abatement/remediation will be required by new owner.



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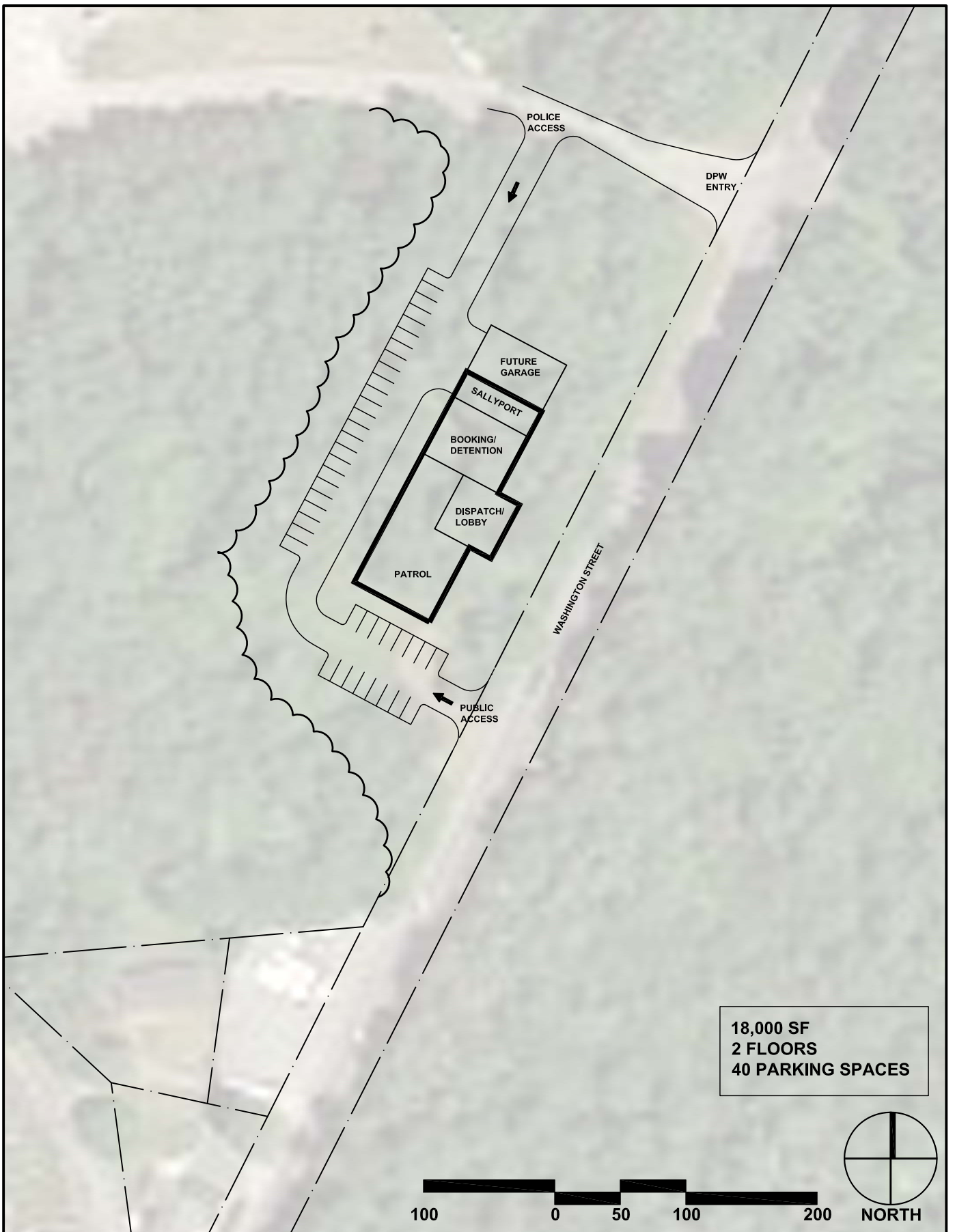
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## WASHINGTON STREET LOCATIONS A AND B

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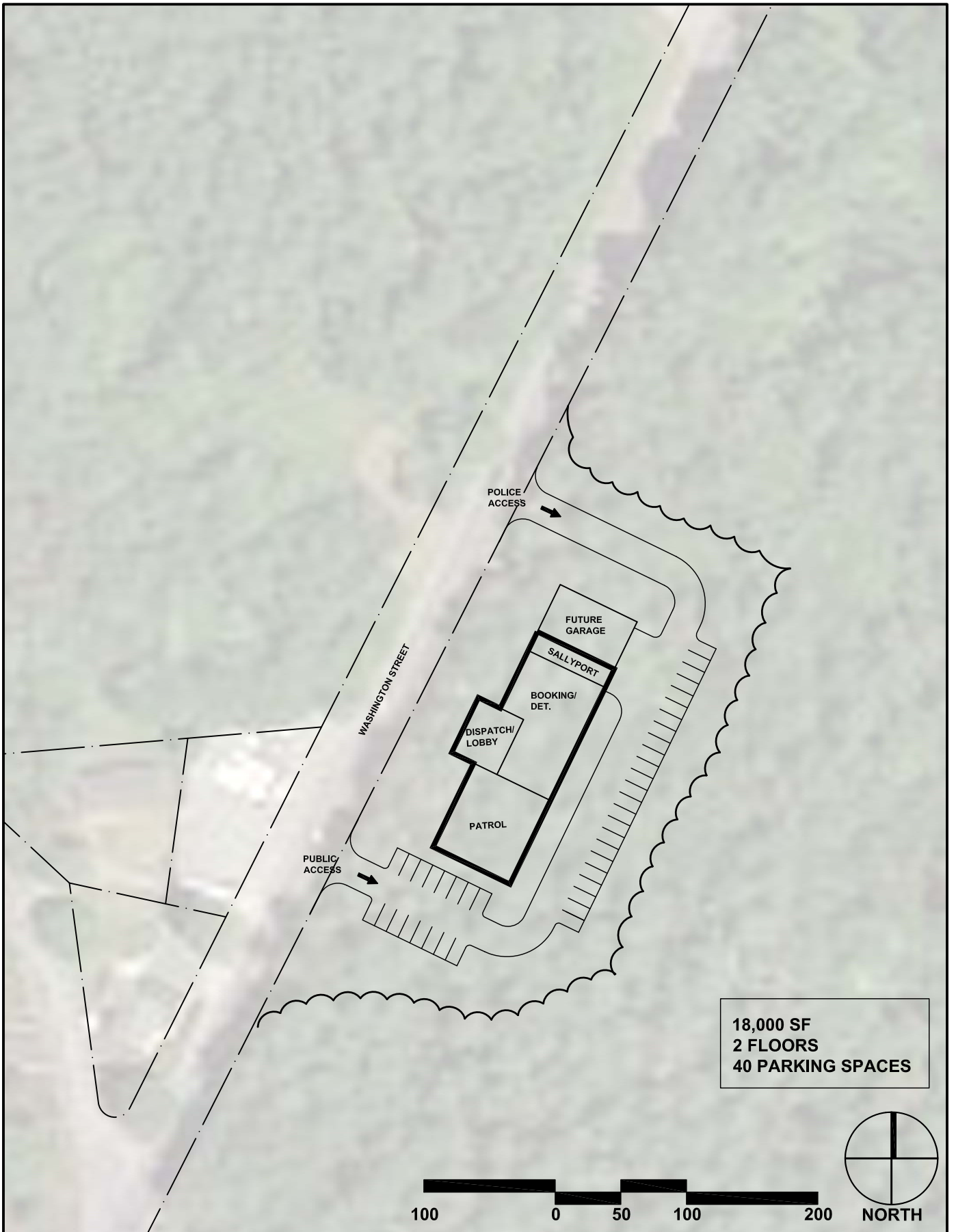
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**PD - LOCATION A**

WALPOLE MASTER PLANNING STUDY

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**PD - LOCATION B**

WALPOLE MASTER PLANNING STUDY



New Police Station Washington Street - Location B	Building SF	Variables	Cost Projection
Total Square Footage	18,000	\$305	
Construction Costs Sub Total			5,490,000
Sitework			\$ 283,000
Site Clearing			\$ 15,000
Demolition Costs			\$ -
Abatement/Remediation			\$ -
Subtotal			\$ 5,788,000
Construction Contingency		15%	\$ 868,200
Construction Escalation to end of 2013		4%	\$ 231,520
Total Construction Costs			\$ 6,887,720
Construction Cost Per Square Foot		\$383	
Soft Costs			
Design Engineering Fees (Allowance)		8%	\$ 463,040
Design Contingency		15%	\$ 868,200
Owners Project Manager (Allowance)		5%	\$ 289,400
Additional Project Costs (FFE, Comp Tech)			\$ 150,000
Total Soft Costs			\$ 1,770,640
GRAND TOTAL			\$ 8,658,360

Purchase Cost		\$ -
		\$ -
		\$ -
Total Additional Funding		\$ -
Total Project Budget		\$ 8,658,360
Total Bond		\$ 8,660,000
Interest	4%	
Years	20	
First Year Debt Service at 4%		\$ 781,400

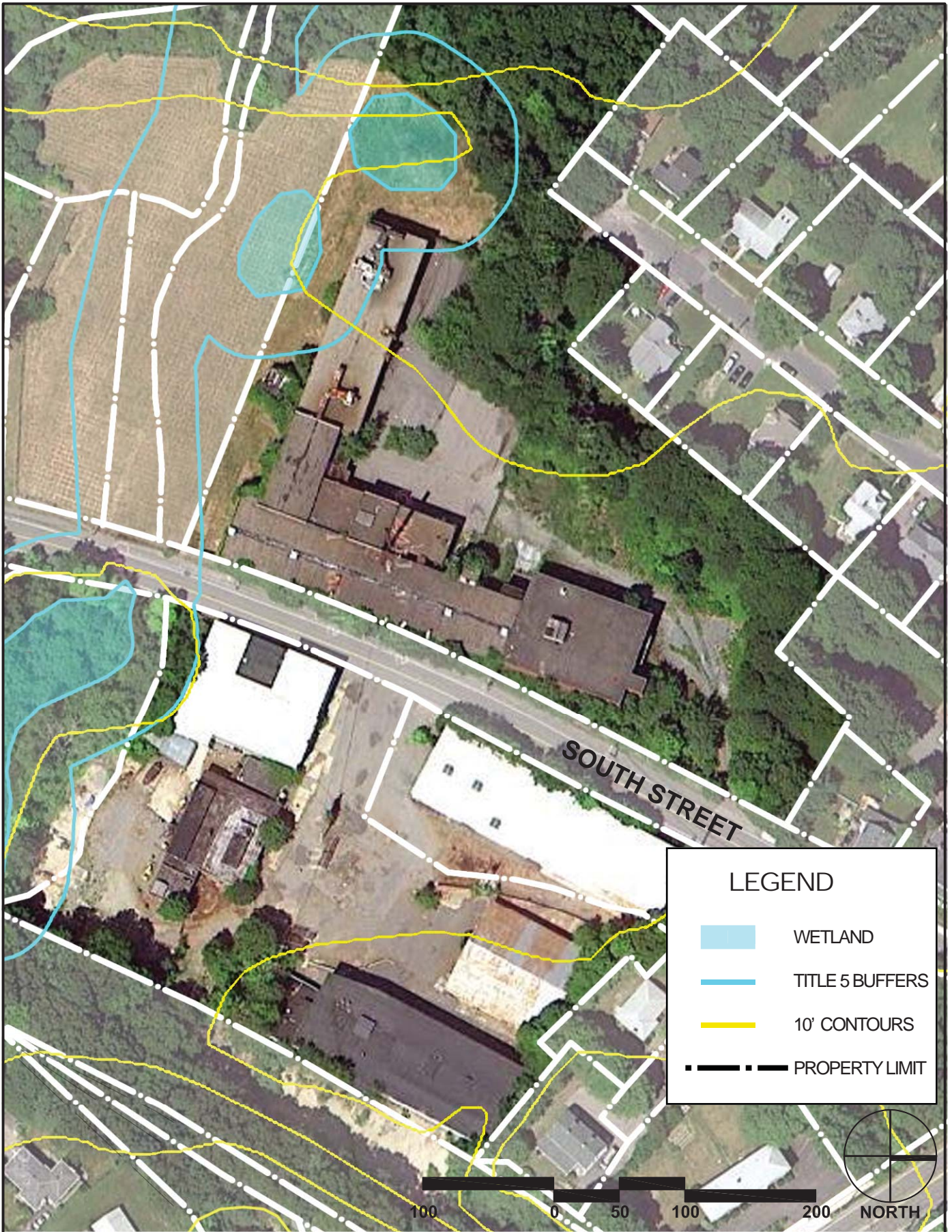
## Police Station - Washington Street Location B

### Cash Flow & Tax Impact Analysis - Construction COA Center

Scenario one - 20 year borrowing				
	Outstanding Principal	Principal Payments	Interest 4.000% Payments	Total Debt Service
	Total	\$8,660,000	\$3,622,000	\$12,282,000
1	\$8,660,000	\$435,000	\$346,400	\$781,400
2	\$8,225,000	\$435,000	\$329,000	\$764,000
3	\$7,790,000	\$435,000	\$311,600	\$746,600
4	\$7,355,000	\$435,000	\$294,200	\$729,200
5	\$6,920,000	\$435,000	\$276,800	\$711,800
6	\$6,485,000	\$435,000	\$259,400	\$694,400
7	\$6,050,000	\$435,000	\$242,000	\$677,000
8	\$5,615,000	\$435,000	\$224,600	\$659,600
9	\$5,180,000	\$435,000	\$207,200	\$642,200
10	\$4,745,000	\$435,000	\$189,800	\$624,800
11	\$4,310,000	\$435,000	\$172,400	\$607,400
12	\$3,875,000	\$435,000	\$155,000	\$590,000
13	\$3,440,000	\$435,000	\$137,600	\$572,600
14	\$3,005,000	\$435,000	\$120,200	\$555,200
15	\$2,570,000	\$435,000	\$102,800	\$537,800
16	\$2,135,000	\$435,000	\$85,400	\$520,400
17	\$1,700,000	\$435,000	\$68,000	\$503,000
18	\$1,265,000	\$435,000	\$50,600	\$485,600
19	\$830,000	\$435,000	\$33,200	\$468,200
20	\$395,000	\$395,000	\$15,800	\$410,800



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### LEGEND

-  WETLAND
-  TITLE 5 BUFFERS
-  10' CONTOURS
-  PROPERTY LIMIT



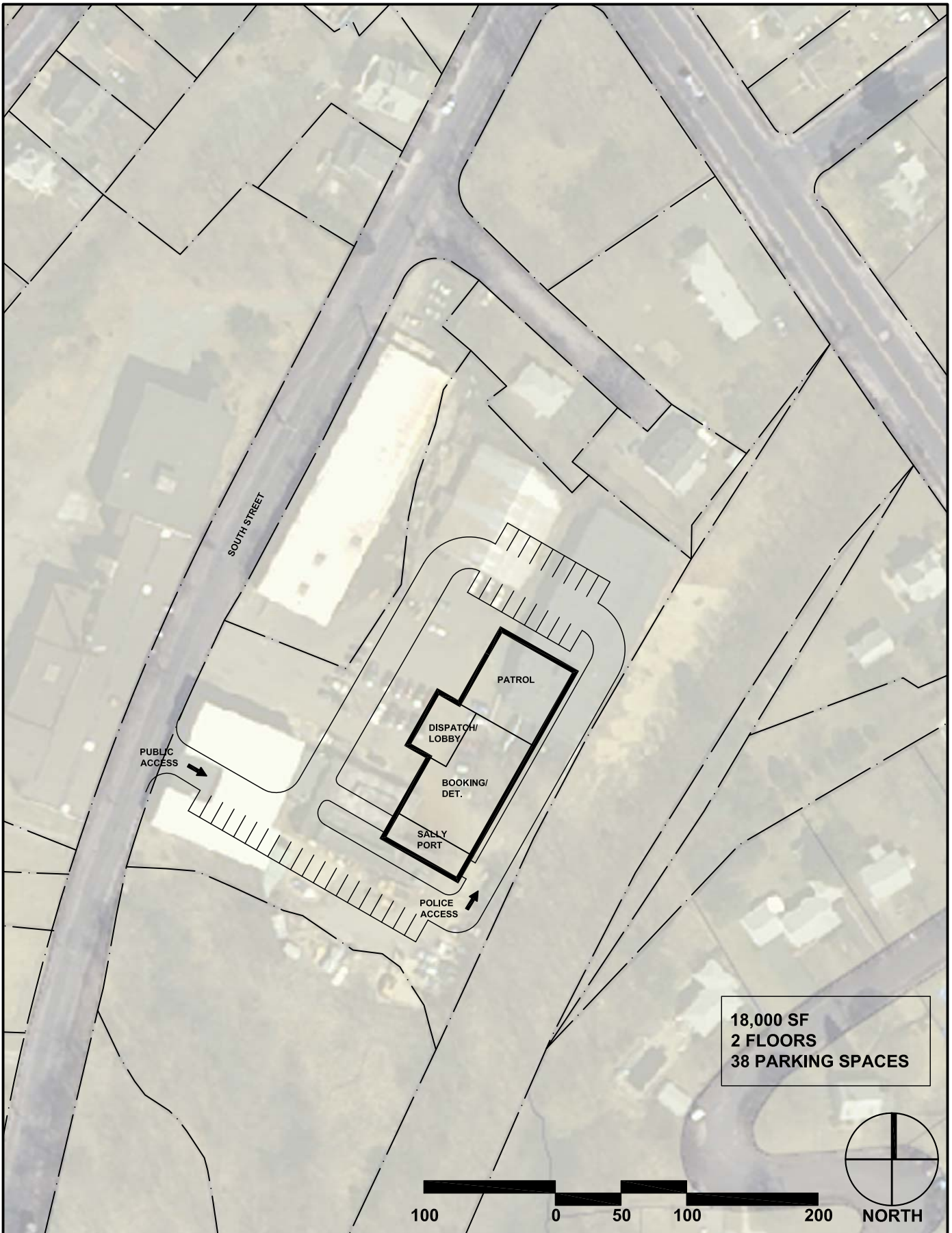
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## SOUTH STREET (SUPERFUND SITE)

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AUGUST, 2012



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## PD - SOUTH STREET LOCATION

WALPOLE MASTER PLANNING STUDY

New Police Station South Street	Building SF	Variables	Cost Projection
<b>Total Square Footage</b>	<b>18,000</b>	\$305	
<b>Construction Costs Sub Total</b>			<b>5,490,000</b>
Sitework			\$ 283,000
Site Clearing			\$ 15,000
Demolition Costs			\$ 820,000
Abatement/Remediation			\$ 170,000
<b>Subtotal</b>			<b>\$ 6,778,000</b>
Construction Contingency		15%	\$ 1,016,700
Construction Escalation to end of 2013		4%	\$ 271,120
<b>Total Construction Costs</b>			<b>\$ 8,065,820</b>
Construction Cost Per Square Foot		\$448	
<b>Soft Costs</b>			
Design Engineering Fees (Allowance)		8%	\$ 542,240
Design Contingency		15%	\$ 1,016,700
Owners Project Manager (Allowance)		3%	\$ 203,340
Site Testing (Contaminated Soils, HasMat, Geotech)			\$ 60,000
Additional Project Costs (FFE, Comp Tech)			\$ 150,000
<b>Total Soft Costs</b>			<b>\$ 1,972,280</b>
<b>GRAND TOTAL</b>			<b>\$ 10,038,100</b>

Purchase Cost	\$ -
	\$ -
	\$ -
<b>Total Additional Funding</b>	<b>\$ -</b>
<b>Total Project Budget</b>	<b>\$ 10,038,100</b>
<b>Total Bond</b>	<b>\$ 10,040,000</b>
Interest	4%
Years	20
<b>First Year Debt Service at 4%</b>	<b>\$ 906,600</b>

## Police Station - South Street

### Cash Flow & Tax Impact Analysis - Construction COA Center

Scenario one - 20 year borrowing				
	Outstanding Principal	Principal Payments	Interest 4.000% Payments	Total Debt Service
	Total	\$10,040,000	\$4,194,000	\$14,234,000
1	\$10,040,000	\$505,000	\$401,600	\$906,600
2	\$9,535,000	\$505,000	\$381,400	\$886,400
3	\$9,030,000	\$505,000	\$361,200	\$866,200
4	\$8,525,000	\$505,000	\$341,000	\$846,000
5	\$8,020,000	\$505,000	\$320,800	\$825,800
6	\$7,515,000	\$505,000	\$300,600	\$805,600
7	\$7,010,000	\$505,000	\$280,400	\$785,400
8	\$6,505,000	\$505,000	\$260,200	\$765,200
9	\$6,000,000	\$505,000	\$240,000	\$745,000
10	\$5,495,000	\$505,000	\$219,800	\$724,800
11	\$4,990,000	\$505,000	\$199,600	\$704,600
12	\$4,485,000	\$505,000	\$179,400	\$684,400
13	\$3,980,000	\$505,000	\$159,200	\$664,200
14	\$3,475,000	\$505,000	\$139,000	\$644,000
15	\$2,970,000	\$505,000	\$118,800	\$623,800
16	\$2,465,000	\$505,000	\$98,600	\$603,600
17	\$1,960,000	\$505,000	\$78,400	\$583,400
18	\$1,455,000	\$505,000	\$58,200	\$563,200
19	\$950,000	\$505,000	\$38,000	\$543,000
20	\$445,000	\$445,000	\$17,800	\$462,800

## **Central Fire Station**



### **Facility Information**

**Year Constructed:** 1954  
**Renovation/addition:** 1983  
**Temporary tent structure:** 1997  
**Decontamination area renovation:** 1998

**Site:** 11,600 SF  
**Parking:** Adjacent Municipal Lot  
**Square Footage:** 9,000 SF  
**Restrictions:** None  
**Appraisal:** \$968,500

### **General Description**

The Central Fire Station is a two story masonry building with a full basement originally constructed as a combined Police and Fire Station. In 1983, to accommodate staffing growth in both the police and fire departments, the expanded Police Department was relocated into the recently renovated Town Hall and the Fire Department was able to expand into the previously occupied police side. The facility interior was renovated and the exterior with an apparatus bay addition to accommodate larger and heavier apparatus.

Recent technological advances in firefighting equipment along with size restrictions of the older apparatus bays and doors are limiting the buildings utilization as well as the size and type of apparatus available to the town. This combined with the lack of appropriate apparatus vehicle parking, lack of storage areas and minimal living accommodations are straining the capabilities of the existing facility.

The original facility, having been constructed as a combined police and fire station, maintains a duplicated circulation and consequently inefficient interior space utilization.

### **Building Components**

#### **Site**

The Central Fire Station is in the center of Town with direct access to Stone Street. The site slopes gently to the east and stormwater is collected via curbing and catch basins. The paved apron on the front of the building has widespread alligator cracking and a large patched area. Pavement in the parking spaces on the east side of the fire station has vegetated block cracking.

Pavement markings are newly painted. Curbing along the apron is uneven and cracks are filled in with vegetation. There is limited space on the east side and to the rear of the existing building for expansion.

The building entrance is accede by a concrete ramp with a rusting handrail but is otherwise in good condition. Landscaping at the fire station is minimal with only the front entrance landscaped with shrubs and small plantings. The adjacent lawn areas are well maintained. Site lighting is located on poles, the communications towers and a series of wall mounted fixtures. The fire station has adequate signage throughout the site.

### Parking/Circulation

Both vehicles from the Fire Department and the general public enter the two-way drive of Stone Street east side of the fire station which provides access to the entire municipal complex. Fire department apparatus access one drive-through bay from the road to the rear of the station. Other fire department vehicles access bays by backing into the apron from Stone Street. Parking is provided for Fire Department personnel behind and along the east side of the building.

Directly to the north of the fire station is the municipal parking lot which has a capacity of over 100 parking spaces. The pavement in the parking lot is in fair condition with areas of significant repairs and cracking. Stormwater runoff in the parking lot sheetflows crease in the pavement which appears to channel water to a catch basin. Improved grading of the parking lot and the addition of catch basins could eliminate the possibility of flooding around catch basin.

### Hazardous Materials

There are visual indications of suspect hazardous materials including asbestos in the window calking, pipe insulation and floor tile. Testing and abatement of materials if confirmed is recommended.

### Structure

The buildings foundation consists of cast-in-places concrete and was observed to be in good conditions with no structural cracks identified within the original structure. The original apparatus bay is an elevated structural concrete slab supported by concrete beams and columns. While cracks are visible on the top surface of the elevated slab it is unclear if these cracks are cosmetic or continue through the entire slab.

The second floor framing is cast in place concrete. The sloped roof framing consists of lightweight precast concrete panels. The 1983 apparatus bay is an on grade cast in place concrete slab with bar joist roof framing and steel decking. The exterior walls, typical for the construction period are unreinforced load bearing and not seismically braced to the rest of the structure.

### Exterior Façade

The exterior façade is of brick masonry veneer, it is uncertain if the façade is a veneer with a cavity wall or if the brick veneer is integral with the masonry block backup.



The construction time frame would indicate that the original building is not insulated and consequently the brick veneer is integral with the back-up wall. The newer addition would indicate that the exterior wall is a cavity construction with a minimum of 1" rigid insulation.

The masonry walls are in good condition, requiring only minor re-pointing of the mortar joints. The rear overhead door in the 1983 addition has a crack on the upper left hand corner. This is probably due to foundation settlement. The joint should be raked out and re-pointed. Additionally we would recommend that it be monitored. Exterior trim on fascia, cupola, soffits, and eaves are painted wood and in need of painting.

### Roof

The facility has a combination of flat and sloped roofs. The majority of built up flat roofs are approximately 15 to 20 years old and while they currently do not leak they are quickly approaching the end of their useful life. The rear portion of the building has a ballasted roof only 4 years old. The sloped portion of the roof is asphalt shingles. It is approximately 20 years old and currently in good condition and no leaks identified.

### Windows

The existing windows were observed to have been recently upgraded and consist of aluminum frames with insulated glass.

### Building Interior

The first floor with the exception of the Administrative areas, appear to be original finishes. The Administrative areas have recently been re-painted and flooring replaced.

The basement storage areas as well as the second floor living quarters also have original finishes that require replacement and upgrades.

### Elevator

The building does not have an elevator.

### Plumbing

The building has a 2" domestic water service that enters the building in the lower level mechanical room and a 2" natural gas service and meter that enters the building from the south side of the building from Stone Street. The domestic hot water is generated by a new American Water Heater Company, 50 gallons, 40 MBH input gas-fired storage type water heater installed in 2007.

Single men's and women's Toilet Rooms are located on the main floor to accommodate the business operations. The toilets include a single flush valve, floor mounted water closet and wall hung lavatory in each. The fixtures are in fair serviceable condition.

The apparatus room has a single Toilet Room and a janitor's closet in addition to a commercial washing machine, emergency shower stall, eye-face wash and two well stainless steel work sinks in a core area of the garage bays.

The second floor has both single and multiple toilet room and shower facilities with fixtures that are in fair serviceable condition. The kitchen/break room has a single well stainless steel sink and commercial gas range and hood. The sanitary line exits the building on the southeast side of the building. A dedicated sanitary line serving the garage drainage system via a gasoline and oil separator exits the building on the southeast side of the building. The main roof is a gable roof with hip ends that drain via gutter and downspout to the lower flat roofs. The flat roofs are drained via roof drains and interior storm drainage piping connected to the storm water drainage system at the rear northeast side of the building.

The existing domestic hot water heater is currently 83% efficient. At the time of replacement, a higher efficiency type water heater is recommended. Replacement of plumbing fixtures with ultra low consumption fixtures and sensor activated trim is recommended.

### HVAC

The building is heated by a cast iron gas fired H.B. Smith boiler that has been retrofitted with a dual fuel Power Flame burner. Burner rating is 300 MBH minimum to 1330 maximum input. The boiler water rating is 694 MBH. An underground oil tank is located below the temporary tent canopy storage area outside the building. The forced hot water system serves perimeter convectors in the main station and unit heaters in the vehicle storage areas. The basement storage and utility spaces are not heated. The bathrooms are naturally ventilated by operable windows. Air conditioning is provided throughout the main station first and second floor rooms via window type air conditioning units. The vehicle storage areas are all fitted with vehicle exhaust systems.

Boiler has been converted for dual fuel, however, a replacement to a higher efficiency boiler is recommended for increased energy savings. The window air conditioning units are inefficient and do not provide the code required minimum outdoor ventilation rates. It is recommended that a split system air conditioning system be installed in the attic space to serve the second floor quarters. Bathroom exhaust is recommended to be installed and combined to exhaust through an energy recovery ventilation unit to capture waste energy to the outdoor ventilation for the recommended split system. The lower office area could be air conditioned via rooftop unit installed on the flat roof above the offices and main desk area with distribution fed from the corridor ceiling through sidewall diffusers.

### Electrical

The building is fed with a 400 amp, 120/208 volt, 3 phase, 4 wire service with interior metering. The service enters the basement from the utility transformer from underground at the northwest end of the building. The newer GE AV-Line switchboard and distribution panels were installed in 1982 and are in good condition. Some of the original distribution panelboards remain in the station. Lighting is a mixture of new fluorescent fixtures in the Captain's office and business office. The remainder of the lighting is a mix of retrofitted fluorescent strip lighting and overhead CFL lamped ceiling fixtures. The fire alarm system has been upgraded with a FACP, pull stations, notification devices and detection installed throughout. The building is served with battery type emergency fixtures and heads. There is a 60 kw standby generator that provides power for critical operations in the building. The generator is a diesel fueled engine with transfer switch and panel located in the basement of the building.

Additional occupancy sensors, lighting upgrades and systems improvements are recommended. Older panelboards remaining from the original building installation are recommended for replacement along with wiring and devices.

### Fire Protection

There is no suppression system installed in the commercial kitchen exhaust hood and no fire protection installed in the building.

Addition of a fire protection system to fully sprinkler the building is recommended to improve life safety of the building and minimize potential loss due to fire. The commercial cooking hood is recommended to have a chemical fire suppression system installed over the gas-fired open flame cooking range.

### Accessibility

The facility was constructed prior to the issuance of the Massachusetts Architectural Access Board (MAAB) and the Americans with Disability Act (ADA), and consequently is not compliant with either accessibility regulation.

Since the second floor is relegated to sleeping and living quarters for able body firefighters, the town of Walpole could request a waiver from the MAAB to relieve the requirements of an elevator and accessible toilet rooms on the second floor. However toilet rooms open to the public on the first floor would need to be updated to reflect the requirements of the MAAB and ADA.

### Code Compliance

The existing facility was constructed as a combined police and fire station and in compliance to the building codes in affect at the time. Since the building is still classified as a fire station, the facility is grandfathered to the previous codes. However, as renovations are implemented those modifications need to comply with the current codes. Additionally renovations and improvements to the facility beyond 30% of the assessed building value will trigger comprehensive building upgrades throughout the entire facility.

### Functional Analysis

Since the facility was constructed as a combined Police and Fire Station the interior circulation is not as response friendly as a new fire station. The existing means of egress stairs are adjacent to each other and are not enclosed.

A vertical difference of approximately 24” separates the administrative area from the apparatus bay. This height differential could be dangers to an unsuspecting fire fighter responding to an alarm.

Currently the building has two non-accessible unisex toilet rooms on the first floor and two non-accessible toilet/shower rooms the second floor. Facility has no female facilities.

The size and quantities of the apparatus bays, the size of apparatus bay doors and the size of the facility cannot accommodate current department need or future growth and security requirements.

The areaway is sandwiched between the existing building and the temporary tent structure. This area is difficult to access and properly maintain. The tent structure reduces the amount of air flow and the debris that accumulates with the areaway impacts the efficiency of the equipment.

### **Recommendation**

Due to the condition of the existing Central Fire Station and the needs of the department in the future it is recommended that a new station be constructed that will allow for the entire apparatus to be stored in one location and accommodate the needs of a modern fire department.

### **Fire Station – Site Selection Report**

The Central Fire Station is currently located in Town Center adjacent to the Police Station and in the vicinity of Town Hall, the Library and Blackburn Hall. Site selection for a Fire Station is challenging because of the need for a central location and the ability to achieve the minimum required response time. The Fire Department goal is to provide coverage to the Town with one central station large enough to hold all current apparatus and close the East and South Stations.

#### **Sites Assessed:**

- 1 Stone Street – Current Location
- 2 760 Main Street – Rout 1A NSTAR Site
- 3 609 Main Street – Rout 1A Connolly Bus Site

#### **Sites Considered but Not Assessed:**

- Washington Street Location A and B – Distance from Town Center.
- East Street (Woodworker's site) – Cost of purchase \$4.5 Million.
- South Street Location – Superfund Site
- Blackburn Hall Site - Moving Blackburn Hall too costly and impractical.
- Town Hall Site – New Town Hall would be required.
- Town Center Municipal Parking Lot and Athletic Field.

#### **Site Options**

##### **Option 1: Stone Street – Current Location - Recommended**

The current location of the Fire Station is large enough to construct a new station of adequate size to hold the department's current equipment.

##### **Advantages**

- Site is the current location of the Fire Station.
- The property is large enough to accommodate a 6 bay facility.

- Location is half block from Main Street – Rout 1A
- Fire Department is able to meet target response times.
- Location is close to Town Hall and part of the Municipal Campus.
- No purchase costs.
- Location is favored by Fire Department.

Disadvantages

- Construction phasing and temporary relocation will be required during construction.
- Upgrades to East and South Fire Stations will be needed to provide temporary support.
- New maintenance bays in the DPW facility need to be constructed and used by fire department during construction of new station.
- Construction may require phasing resulting in longer schedule and increased cost.

**Option 2: 760 Main Street (NSTAR Site) – Recommended (if property is acquired by Town)**

The property is a large relatively flat site along Main Street to the north Town Center. The property is currently owned and operated by NSTAR and includes a large garage and equipment storage facility. The north east portion of the site includes wetlands. However the largest area of level constructible land is outside the title 5 buffer.

Advantages

- Site can accommodate a two level 24,000 SF building with a 6 bay apparatus room.
- The property can accommodate parking and access needed by department.
- The central location on Main Street allows department to provide coverage to town utilizing one station.
- No construction phasing or temporary locations are required during construction.

Disadvantages

- Purchase of property by Town is required.
- Demolition of existing structure is required.
- Potential abatement and remediation may be needed.
- It is uncertain whether NSTAR is planning to continue using site.

**Option 3: 609 Main Street (Connolly Bus Site) – Recommended (if property is acquired by Town)**

The property is a large relatively flat site along Main Street to the north Town Center. The property is currently owned and operated by Connolly Bus and includes two large garages and one office building. This site is further north than the NSTAR location and somewhat less centrally located. However the location along Rout 1A makes this a workable location for the fire department.

### Advantages

- Site can accommodate a two level 24,000 SF building with a 6 bay apparatus room.
- The property can accommodate parking and access needed by department.
- The central location on Main Street allows department to provide coverage to town utilizing one station.
- No construction phasing or temporary locations are required during construction.

### Disadvantages

- Purchase of property by Town is required.
- Demolition of existing structures is required.
- Potential abatement and remediation may be needed.
- Wetlands exist at the rear of the site.
- Grading along perimeter of property is required.
- It is uncertain whether Connolly is planning to continue using site.



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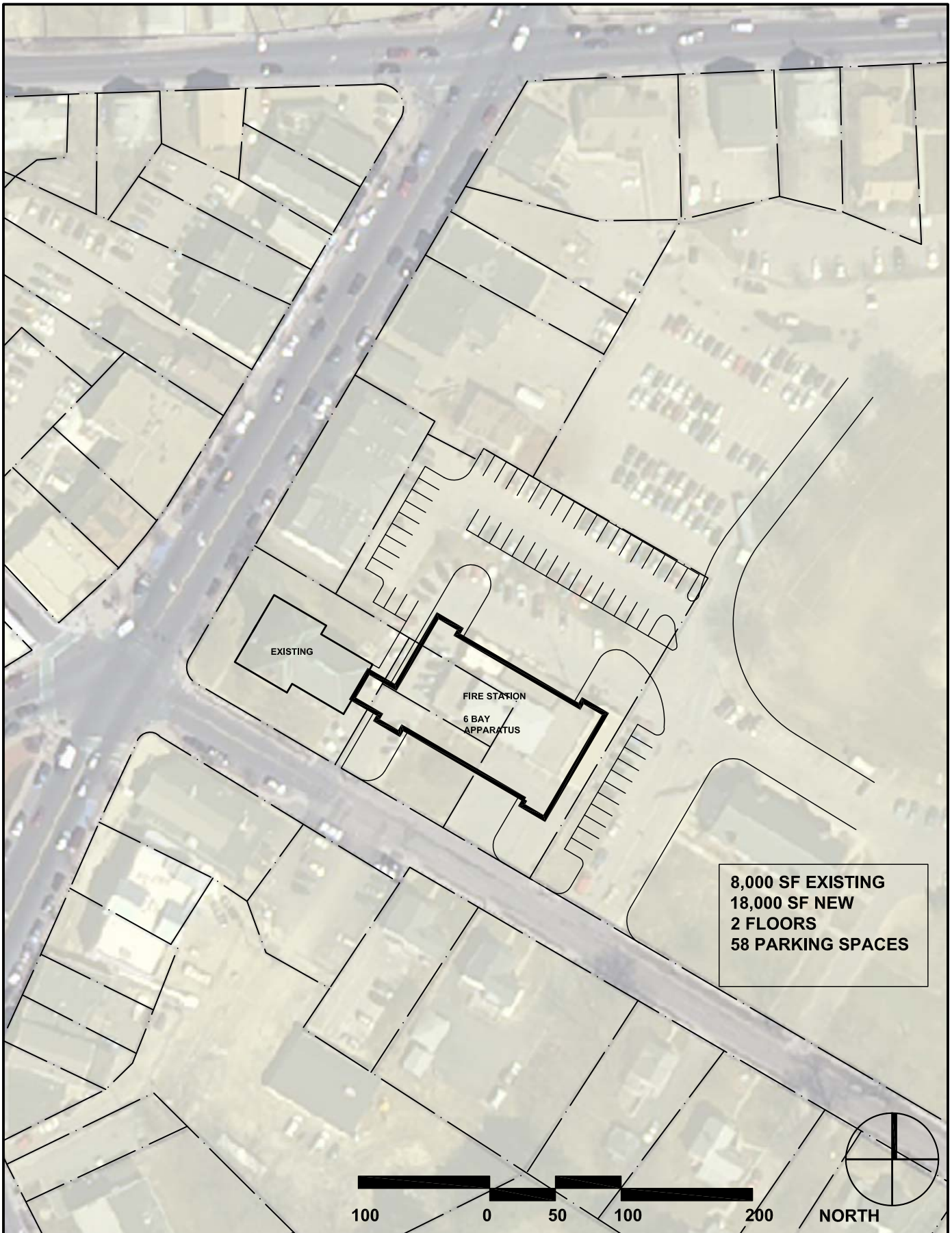
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## TOWN CENTER - ENTIRE SITE

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AUGUST, 2012



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## ADDITION/ RENOVATION FD - TOWN CENTER

WALPOLE MASTER PLANNING STUDY

Addition/Renovation Fire Station Town Center		Building SF	Variables	Cost Projection
New Fire Station	16,000			
Renovation of Existing Police Station	8,000			
<b>Total Square Footage</b>	<b>24,000</b>		\$295	
<b>Construction Costs Sub Total</b>				<b>7,080,000</b>
Sitework				\$ 150,000
Site Clearing				\$ -
Demolition Costs				\$ 225,000
Abatement/Remediation				\$ 75,000
<b>Subtotal</b>				<b>\$ 7,530,000</b>
Construction Contingency			10%	\$ 753,000
Construction Escalation to end of 2013			4%	\$ 301,200
<b>Total Construction Costs</b>				<b>\$ 7,831,200</b>
Construction Cost Per Square Foot			\$326	
<b>Soft Costs</b>				
Design Engineering Fees (Allowance)			8%	\$ 602,400
Design Contingency			15%	\$ 1,129,500
Owners Project Manager (Allowance)			3%	\$ 225,900
Additional Project Costs (FFE, Comp Tech)				\$ 160,000
<b>Total Soft Costs</b>				<b>\$ 2,117,800</b>
<b>GRAND TOTAL</b>				<b>\$ 9,949,000</b>

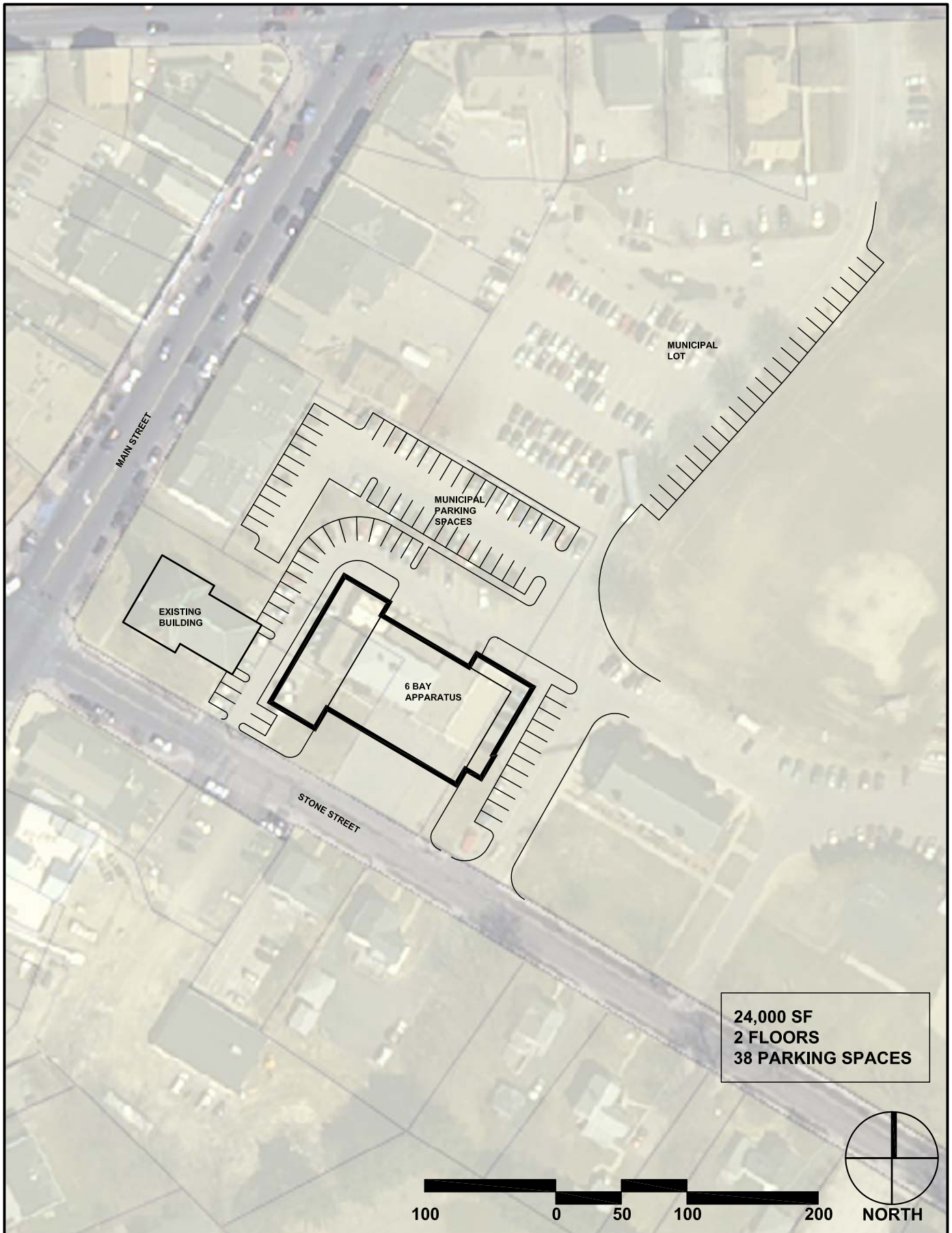
Construction of Maintenance Bays at DPW Site				<b>\$ 1,444,000</b>
Upgrades to East Fire Station				\$ 100,000
Upgrades to South Fire Station				\$ 100,000
Temporary Facilities at DPW Site				\$ 75,000
<b>Total Phasing Costs</b>				<b>\$ 275,000</b>
<b>Total Project Budget</b>				<b>\$ 11,668,000</b>
<b>Total Bond</b>				<b>\$ 11,670,000</b>
Interest		4%		
Years		20		
<b>First Year Debt Service at 4%</b>				<b>\$ 1,051,800</b>

## Addition Renovation Fire Station

### Cash Flow & Tax Impact Analysis - Construction COA Center

Scenario one - 20 year borrowing				
	Outstanding Principal	Principal Payments	Interest 4.000% Payments	Total Debt Service
	Total	\$11,670,000	\$4,890,000	\$16,560,000
1	\$11,670,000	\$585,000	\$466,800	\$1,051,800
2	\$11,085,000	\$585,000	\$443,400	\$1,028,400
3	\$10,500,000	\$585,000	\$420,000	\$1,005,000
4	\$9,915,000	\$585,000	\$396,600	\$981,600
5	\$9,330,000	\$585,000	\$373,200	\$958,200
6	\$8,745,000	\$585,000	\$349,800	\$934,800
7	\$8,160,000	\$585,000	\$326,400	\$911,400
8	\$7,575,000	\$585,000	\$303,000	\$888,000
9	\$6,990,000	\$585,000	\$279,600	\$864,600
10	\$6,405,000	\$585,000	\$256,200	\$841,200
11	\$5,820,000	\$585,000	\$232,800	\$817,800
12	\$5,235,000	\$585,000	\$209,400	\$794,400
13	\$4,650,000	\$585,000	\$186,000	\$771,000
14	\$4,065,000	\$585,000	\$162,600	\$747,600
15	\$3,480,000	\$585,000	\$139,200	\$724,200
16	\$2,895,000	\$585,000	\$115,800	\$700,800
17	\$2,310,000	\$585,000	\$92,400	\$677,400
18	\$1,725,000	\$585,000	\$69,000	\$654,000
19	\$1,140,000	\$585,000	\$45,600	\$630,600
20	\$555,000	\$555,000	\$22,200	\$577,200

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## NEW FIRE STATION - TOWN CENTER

WALPOLE MASTER PLANNING STUDY



New Fire Station Town Center	Building SF	Variables	Cost Projection
Total Square Footage	24,000	\$310	
Construction Costs Sub Total			7,440,000
Sitework			\$ 150,000
Site Clearing			\$ -
Demolition Costs			\$ 225,000
Abatement/Remediation			\$ 75,000
Subtotal			\$ 7,890,000
Construction Contingency		10%	\$ 789,000
Construction Escalation to end of 2013		4%	\$ 315,600
Total Construction Costs			\$ 8,994,600
Construction Cost Per Square Foot		\$375	
Soft Costs			
Design Engineering Fees (Allowance)		6%	\$ 473,400
Design Contingency		10%	\$ 789,000
Owners Project Manager (Allowance)		3%	\$ 236,700
Additional Project Costs (FFE, Comp Tech)			\$ 160,000
Total Soft Costs			\$ 1,659,100
GRAND TOTAL			\$ 10,653,700

Construction of Maintenance Bays at DPW Site		\$ 1,444,000
Upgrades to East Fire Station		\$ 100,000
Upgrades to South Fire Station		\$ 100,000
Temporary Facilities at DPW Site		\$ 100,000
Total Phasing Costs		\$ 300,000
Total Project Budget		\$ 12,397,700
Total Bond		\$ 12,400,000
Interest	4%	
Years	20	
First Year Debt Service at 4%		\$ 1,116,000

## New Fire Station

### Cash Flow & Tax Impact Analysis - Construction COA Center

Scenario one - 20 year borrowing				
	Outstanding Principal	Principal Payments	Interest 4.000% Payments	Total Debt Service
	Total	\$12,400,000	\$5,208,000	\$17,608,000
1	\$12,400,000	\$620,000	\$496,000	\$1,116,000
2	\$11,780,000	\$620,000	\$471,200	\$1,091,200
3	\$11,160,000	\$620,000	\$446,400	\$1,066,400
4	\$10,540,000	\$620,000	\$421,600	\$1,041,600
5	\$9,920,000	\$620,000	\$396,800	\$1,016,800
6	\$9,300,000	\$620,000	\$372,000	\$992,000
7	\$8,680,000	\$620,000	\$347,200	\$967,200
8	\$8,060,000	\$620,000	\$322,400	\$942,400
9	\$7,440,000	\$620,000	\$297,600	\$917,600
10	\$6,820,000	\$620,000	\$272,800	\$892,800
11	\$6,200,000	\$620,000	\$248,000	\$868,000
12	\$5,580,000	\$620,000	\$223,200	\$843,200
13	\$4,960,000	\$620,000	\$198,400	\$818,400
14	\$4,340,000	\$620,000	\$173,600	\$793,600
15	\$3,720,000	\$620,000	\$148,800	\$768,800
16	\$3,100,000	\$620,000	\$124,000	\$744,000
17	\$2,480,000	\$620,000	\$99,200	\$719,200
18	\$1,860,000	\$620,000	\$74,400	\$694,400
19	\$1,240,000	\$620,000	\$49,600	\$669,600
20	\$620,000	\$620,000	\$24,800	\$644,800



## Public Safety Building (Combined Police/Fire Station)

The option of constructing a new public safety building to replace two individual police and fire stations was a consideration of this study. Past studies have assessed this option and several different sites were investigated.

The challenge is to meet the requirements of both departments and design the facility that provides for shared common spaces. Selection of a location for a Fire Station is more difficult to accommodate due to requirements for department response times. Advantages to this option are that both departments would receive a new facility at the same time and that economies of scale of some building materials would reduce construction costs.

Two privately owned sites (located on Main Street) investigated for a new Fire Station would be recommended locations if the properties were available.

Below are assessments of three options for a location of a Public Safety Building in Town Center.

### **Recommendation**

**Stone Street – Not Recommended:** Location of a Public Safety Building using the current location of both the Police and Fire Stations is the best possible option for this facility. Renovation of the existing Police Station with an addition that includes new detention and booking areas and sallyport for the police station and a new fire station was assessed. The location works for both of the department's program needs however this option is not recommended for the following reasons:

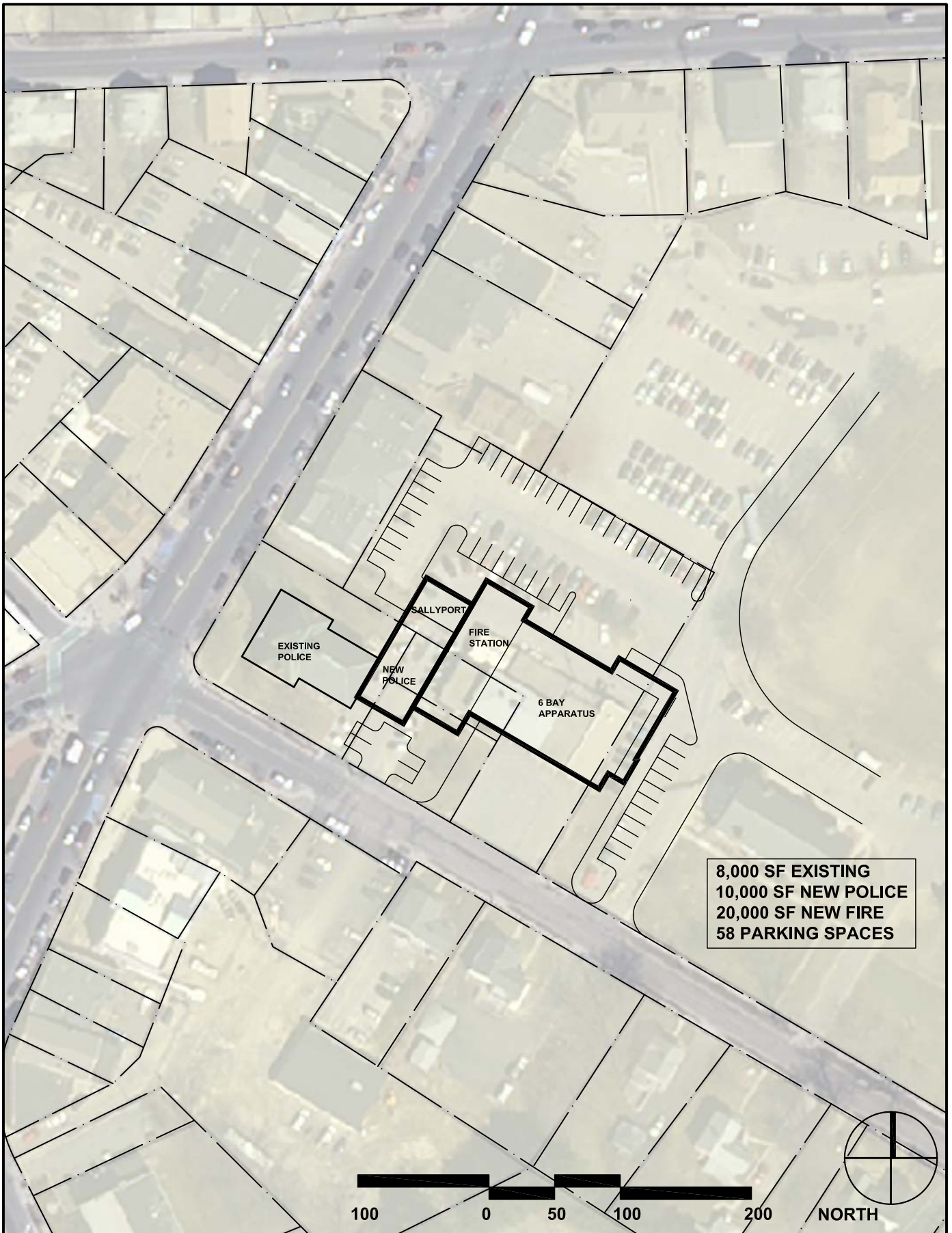
1. Much of the available parking in the Municipal lot would be lost in order to provide adequate staff parking and circulation for the facility.
2. Construction would require multiple phases.
3. Both departments would be disrupted during the process and would most likely overlap.

**Municipal Parking Lot - Not Recommended:** Location of a Public Safety Building in the current Municipal Parking lot was presented in a previous study. The space available will accommodate a building large enough to support the needs of the Police and Fire Departments. This option is not recommended for the following reasons:

1. Much of the existing parking lot would be lost.
2. Exiting from municipal parking lot location would impact fire department response times.
3. Fire Station apron exiting onto the field would create a dangerous site condition.

**Town Center Athletic Field - Not Recommended:** Location of a Public Safety Building on the existing athletic field was presented in a previous study. The space available will accommodate a building large enough to support the needs of the Police and Fire Departments. This option is not recommended for the following reasons:

1. The Town would no longer have use of the field.
2. The field has recently been upgraded and is the location of several popular annual events.
3. Exiting from athletic field location would impact fire department response times.
4. Fire Station apron exiting onto the parking lot would create a dangerous site condition.



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## COMBINED FD/PD - TOWN CENTER

WALPOLE MASTER PLANNING STUDY

New Public Safety /Reno Police Station Town Center	Building SF	Variables	Cost Projection
New Public Safety Building	30,000		
Renovation of Existing Police Station	8,000		
<b>Total Square Footage</b>	<b>38,000</b>	\$295	
<b>Construction Costs Sub Total</b>			<b>11,210,000</b>
Sitework			\$ 150,000
Site Clearing			\$ -
Demolition Costs			\$ 225,000
Abatement/Remediation			\$ 75,000
<b>Subtotal</b>			<b>\$ 11,660,000</b>
Construction Contingency		15%	\$ 1,749,000
Construction Escalation to end of 2016		4%	\$ 466,400
<b>Total Construction Costs</b>			<b>\$ 13,875,400</b>
Construction Cost Per Square Foot		\$365	
<b>Soft Costs</b>			
Design Engineering Fees (Allowance)		8%	\$ 932,800
Design Contingency		15%	\$ 1,749,000
Owners Project Manager (Allowance)		5%	\$ 583,000
Additional Project Costs (FFE, Comp Tech)			\$ 205,000
<b>Total Soft Costs</b>			<b>\$ 3,469,800</b>
<b>GRAND TOTAL</b>			<b>\$ 17,345,200</b>

Construction of Maintenance Bays at DPW Site		\$ 1,444,000
Temporary Relocation Police Department		\$ 120,000
Upgrades to East Fire Station		\$ 100,000
Upgrades to South Fire Station		\$ 100,000
Temporary Facilities at DPW Site		\$ 75,000
<b>Total Phasing Costs</b>		<b>\$ 395,000</b>
<b>Total Project Budget</b>		<b>\$ 19,184,200</b>
<b>Total Bond</b>		<b>\$ 19,185,000</b>
Interest	4%	
Years	20	
<b>First Year Debt Service at 4%</b>		<b>\$ 1,727,400</b>

## New Public Safety /Reno Police Station

### Cash Flow & Tax Impact Analysis - Construction COA Center

Scenario one - 20 year borrowing				
	Outstanding Principal	Principal Payments	Interest 4.000% Payments	Total Debt Service
	Total	\$19,185,000	\$8,052,000	\$27,237,000
1	\$19,185,000	\$960,000	\$767,400	\$1,727,400
2	\$18,225,000	\$960,000	\$729,000	\$1,689,000
3	\$17,265,000	\$960,000	\$690,600	\$1,650,600
4	\$16,305,000	\$960,000	\$652,200	\$1,612,200
5	\$15,345,000	\$960,000	\$613,800	\$1,573,800
6	\$14,385,000	\$960,000	\$575,400	\$1,535,400
7	\$13,425,000	\$960,000	\$537,000	\$1,497,000
8	\$12,465,000	\$960,000	\$498,600	\$1,458,600
9	\$11,505,000	\$960,000	\$460,200	\$1,420,200
10	\$10,545,000	\$960,000	\$421,800	\$1,381,800
11	\$9,585,000	\$960,000	\$383,400	\$1,343,400
12	\$8,625,000	\$960,000	\$345,000	\$1,305,000
13	\$7,665,000	\$960,000	\$306,600	\$1,266,600
14	\$6,705,000	\$960,000	\$268,200	\$1,228,200
15	\$5,745,000	\$960,000	\$229,800	\$1,189,800
16	\$4,785,000	\$960,000	\$191,400	\$1,151,400
17	\$3,825,000	\$960,000	\$153,000	\$1,113,000
18	\$2,865,000	\$960,000	\$114,600	\$1,074,600
19	\$1,905,000	\$960,000	\$76,200	\$1,036,200
20	\$945,000	\$945,000	\$37,800	\$982,800

## **Town Hall & Senior Center**



### **Facility Information**

**Year Constructed:** 1952

**Site:** 11.98 Acres

**Parking:** 80 (6 accessible)

**Square Footage:** 60,000 SF

**Zoning:** GR General Residential

**Restrictions:** None

**Appraisal:** \$2,948,700

### **General Description**

Originally constructed in 1952 as the Stone School, the Town Hall building is a two story structure that currently functions as the Town's administrative offices. It retains the physical qualities of a former school such as a long corridor with classrooms on each side that have been converted into offices.

The building also is the location of the Town's Senior Center which occupies one wing (the old school cafeteria) of the facility. The space includes an open activity area, office space, a kitchen and toilet rooms. The Senior Center has separate entry along with parking space for three shuttle busses.

### **Building Components**

#### **Site**

The terrain is generally flat with gentle slopes toward School Street. The rear parking lot has bituminous curbing and drains to catch basins. The paved loop driveway in front of the building drains offsite via sheetflow. Problems with flooding have not been reported. The pavement is generally in good condition minimal cracking or repairs. Bituminous curbing is present along the rear parking lot and is in good condition, and granite curbing along the south side of the building is in good condition.

Pavement markings are faded in many areas of the site and in need of repainting. Signage is prominent throughout the property and in excellent condition. Walkways around the site are generally concrete and in good condition. Site appertanances include picnic tables, trash receptables and a cannon located near the river. Fencing around the generator/electrical pad is screened chainlink in good condition. Lighting is wall mounted and though aged, appears to have adequate coverate of the property.



The front lawn of the Town Hall has well-maintained landscaping that includes mounded mulch around mature trees and plantings around the flag pole and main sign. Grass surrounding the building is well maintained.

### Parking/Circulation

A one-way drive in front of the Town Hall provides circulation and short-term parking for visitors. A two-way drive on the north side provides access to the rear parking lot. Vehicles leaving the parking lot may access other areas of the municipal complex or exit the complex via School Street. Some pavement markings including arrows and striping help to direct traffic entering the site. However potential conflicts at the entrance drive and at the one-way drive connection to the Blackburn Hall parking lot.

The Town Hall provides parking for approximately 80 vehicles. There are six accessible spaces in the rear parking lot with three additional accessible spaces near the entrance to the senior center. Three more additional accessible spaces are allocated in front of the building. No parking spaces large enough to accommodate buses for the senior center currently exist. The senior center has several buses parked in regular automobiles parking spaces with a portion of the buses overhanging onto the adjacent grass area.

### Hazardous Materials

There are visual indications of suspect hazardous materials. Survey and testing of materials is recommended. Areas of concern include:

- Asbestos floor tile encapsulated under the new flooring.
- Lead Paint
- Pipe insulation in the Mechanical Room.

### Structure

The building sits on a concrete foundation with a concrete slab basement floor. It is supported by steel columns and a concrete floor and metal deck with a steel roof truss system. All aspects of the structure were observed to be in good condition.

### Exterior Façade

The building envelope consists of brick façade with precast concrete trim. Minimal damage exists with the precast trim. Some damage to the masonry near the service entry was observed along with deterioration of the joints.

### Roof

The roof is a pitched standing seam metal roof over a wood underlayment supported by steel trusses. Two areas on each end of the building have flat roofs membrane over insulation and steel framing and support roof top units for the air conditioning system. These membrane roofs are 10 years old and in good condition.

### Windows

Aluminum windows with insulated glazing were recently installed and are in good condition. Several exterior louvers were damaged and require repair or replacement.

### Elevator

The elevator on the south end of the building is in good working condition and is compliant with current ADA regulations.

### Plumbing

The building has natural gas service with gas meter at the south end of the building near the kitchen. Gas fired appliances include the boilers, domestic water heater (DWH) and kitchen equipment. The 155 MBH (input) DWH serves the toilet rooms and kitchen.

### HVAC

The boiler room has two Laars Pennant gas-fired 750 MBH (input) boilers installed in 2007. New circulating pumps and Tekmar boiler control package distribute hot water to one heating coil in an air handling unit (AHU), unit ventilators (heating only), fin tube radiation and convectors. The Senior Center has the vertical AHU with heating coil. Cooling is provided by multiple DX air-cooled condensing units and through wall packaged terminal air-conditioners (PTAC).

Air Handling Units serve offices in Town Hall and the Senior Center. AHUs serving offices have been upgraded with thermostats in each room and automatic volume dampers at each diffuser. The kitchen has an exhaust hood with exhaust fan in the attic space.

The original boiler room in the partial basement has abandoned in place equipment including steam boilers, steam accessories, electric panels, automatic temperature control (ATC) panels, telephone board.

### Fire Protection

The building is covered by an automatic fire suppression system throughout including both attic spaces which are used for storage. The Sprinkler Room is in a closet within the basement-level boiler room.

### Accessibility

Toilet rooms need to be upgraded to comply with ADA. Though the building in general is compliant with the addition of individual toilet rooms upgrade to the primary toilet rooms are desired. Stair handrails at both egress stairs should be replaced. Senior Center wing requires ADA compliant exists including new hand rails and signage.

### Functional Analysis

Senior Center wing is small and inadequate for use in many of the activities desired by the COA. The facility offers limited office space for advocates and health care professionals and lacks the

privacy and discretion. Many activities and functions are not held in the senior center or do not happen due to space restrictions or parking limits.

The departments located in Town Hall are in tight spaces but are able to function and provide service to the public. The building has a shortage of meeting space with just one large and one small conference room. Additional space exists in other facilities such as the New Library to make up for the shortage.

## **Recommendations - Town Hall**

**Renovation:** Convert the existing Senior Center to a new Town Meeting Room. Remove stage from the exiting Town Meeting Room and convert space to conference rooms and offices.

Upgrade existing toilet rooms to comply with current accessibility requirements.

Recommended budget: \$120,000

**Renovation:** Remove old boilers in the lower mechanical room and construct a new storage room by adding a new floor above the boiler area. Upgrade the service entrance and existing toilet room to comply with current accessibility requirements.

Recommended budget: \$340,000

**Renovation:** Upgrades existing toilet rooms on the first and second floor on the south end of the corridor to comply with current accessibility requirements. Upgrade all entrances to comply with current accessibility requirements.

Recommended budget: \$720,000

## **Senior Center – Site Selection Report**

Seven sites were assessed as possible locations for a new Senior Center and options were reviewed based on size, constructability, location, environmental issues, restrictions and potential costs. Below is a summary of the sites reviewed along with an assessment of each locations advantages and disadvantages.

### **Sites Assessed:**

1. Washington Street - Location A
2. Washington Street - Location B
3. School Street Location (Current Woodworker's office/warehouse)
4. Elm Street Location (Current office retail property)
5. South Street Location – Superfund Site
6. Town Hall – Current Senior Center location
7. Robbins Road – Adjacent to VFW Hall and Johnson Middle School

### **Sites Considered but Not Assessed:**

- Washington Street Location C – Site/ grading issues make construction difficult and costly.
- East Street (Woodworker's site) – Cost of purchase \$4.5 Million.
- Central 'Old' Library – Building not accessible and site is too small to accommodate parking. Property to be sold by end of 2012.
- Adam's Farm – Partial conservation land. Location identified for other possible uses.

### **Option 1: Washington Street Location A - Recommended**

The property is approximately 6 acres of relatively flat wooded area adjacent to the DPW facility. The site has direct access to South Street in addition to Washington Street. The property is Town owned with no known environmental issues and no restrictions on development.

#### **Advantages**

- Site can accommodate a one level 15,000 SF facility, with over 100 parking spaces.
- The property has room for expansion if needed. (or a second facility)
- No purchase costs.
- Long sight lines along Washington Street.
- Recent upgrades to Washington Street.
- Location is favored by COA.

#### **Disadvantages**

- Distance from Town Center.

### **Option 2: Washington Street Location B - Recommended**

The property is a large relatively flat wooded site along Washington Street across from the DPW facility. The property is Town owned and is near one of the two major aquifers that supply water to the community. Though wetlands are identified on the property, enough area exists outside the Title 5 buffer for development.

#### **Advantages**

- Site can accommodate a one level 15,000 SF facility, with over 100 parking spaces.
- The property has room for expansion if needed.
- No purchase costs.
- Long sight lines along Washington Street.
- Recent upgrades to Washington Street.

#### **Disadvantages**

- Distance from Town Center.

**Option 3: South Street (Superfund Site) – Not Recommended (Until clean-up process is resolved)**

The site is located close to the center of Town on South Street and includes parcels on each side of the street. The property is contaminated and is currently under review by the EPA for clean-up. The parcel on the east side of the street is considerably less contaminated than the parcel on the west side of the street. It is unclear how long the clean-up process will take (potentially three to five years). It is possible to clean the site for use as a Senior Center. The parcel on the east side of South Street offers the best potential for development.

Advantages

- Location is close to Town Center.
- Senior Center development would have a positive impact on the surrounding area.
- Location is favored by COA.

Disadvantages

- Property will require purchase by Town.
- Town should not acquire property until clean-up process is complete.
- Continued environmental restrictions/ wetlands.
- Property will not be available for several years.
- Demolition and additional abatement/remediation will be required by new owner.

**Option 4: Town Hall – Not Recommended**

This site option involves demolition of the existing Senior Center and Executive Offices wing of Town Hall and rebuilding a new facility in the current location.

Advantages

- Senior Center occupies its current location.
- Senior Center remains adjacent to Town Hall with access to Town Center.
- New addition provides opportunity for enhancement of municipal campus.

Disadvantages

- Limited parking for new facility.
- Parking and traffic for major events will compete with other Town activities.
- Relocation of Town offices required.
- Recently upgraded Mechanical Room needs to remain in place.
- Relocation of Town Hall service entrance will be required.



### **Option 5: Robbins Road – Not Recommended**

This site is Town owned with no restrictions on development. The property is adjacent to the VFW Hall, the Johnson Middle school and a residential neighborhood. This property was a potential location for the Police Station. Interests opposed to a Police Station may feel that a Senior Center may be more acceptable.

#### Advantages

- The site can accommodate a one level, 15,000 SF facility, with 100+ parking spaces.
- The site has room for expansion if needed.
- No purchase cost.

#### Disadvantages

- Distance from Town Center.
- Traffic concerns with adjacency to VFW Hall and Johnson Middle School.
- Grading issues for access to the property with a steep slope off of Robbins Road.
- Street access is located near a curve in the road which reduces sight lines making vehicle access difficult and potentially dangerous.

### **Option 6: School Street – Not Recommended**

The site is located a few blocks from Town Hall on the opposite side of East Street on the corner of School Street and North Ave. An easement runs along the rear of the property. The property includes a large vacant office and warehouse structure and is currently for sale with an asking price of \$1.575 Million.

#### Advantages

- Site can accommodate a one level, 15,000 SF facility with over 100 parking spaces.
- Location is close to Town Center.

#### Disadvantages

- Purchase of the property by Town is required.
- The property allows no room for expansion.
- North end of property is adjacent to wetlands.
- Demolition and abatement of existing building is required.
- Potential remediation of contaminated soils.
- Additional utility work needed for redevelopment.
- Potential traffic issues for major events.

### **Option 7: Elm Street – Not Recommended**

The site is located at the intersection of Elm Street and East Street in center of the commercial district in Town Center. The property is currently occupied by a renovated mill building that is used for commercial and office space. Much of the retail/commercial space is empty or underutilized. The development never achieved its potential commercial success and acquisition may be possible.

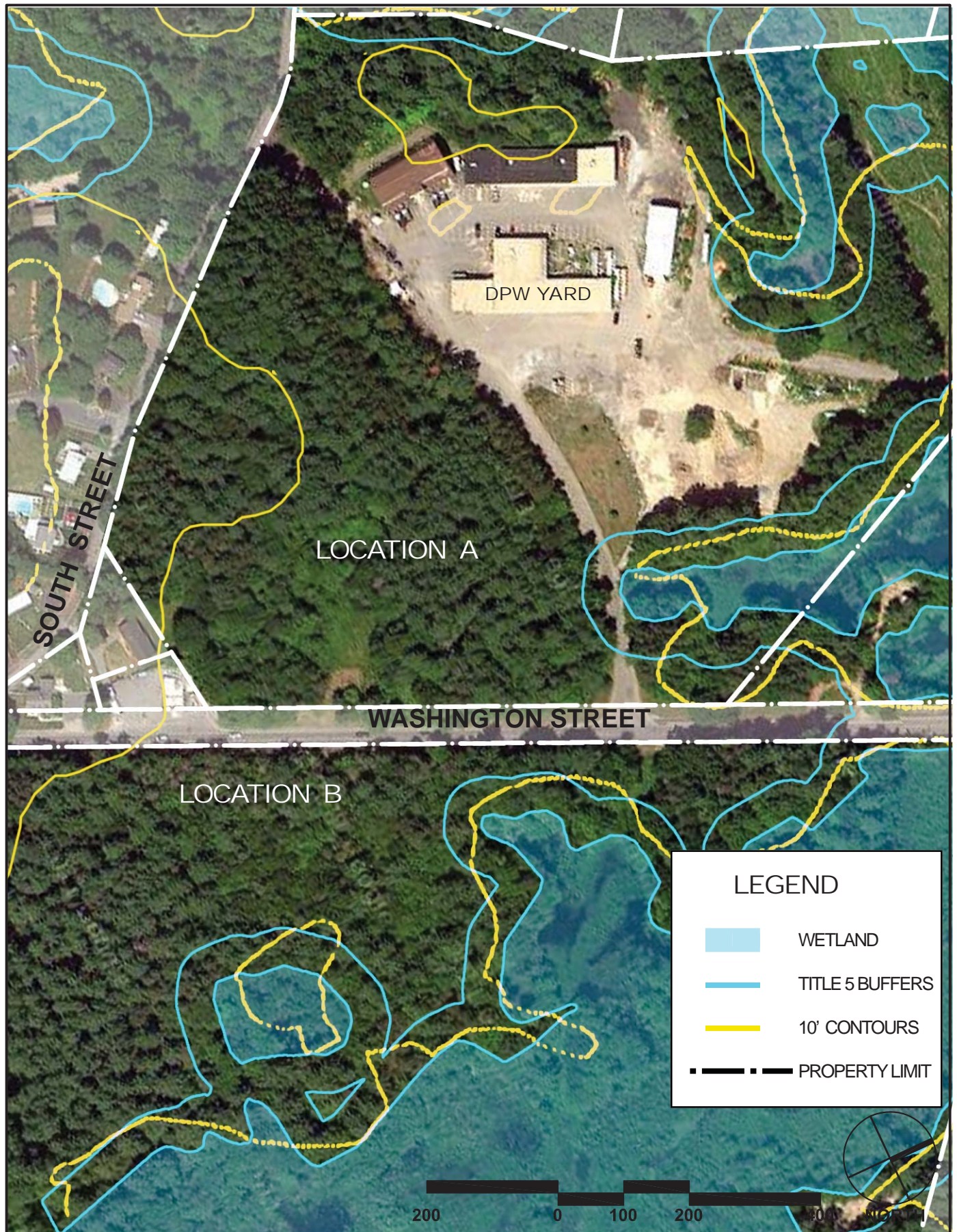
#### Advantages

- Location is close to Town Center.
- Opportunities for collaboration Senior Center and local businesses.
- Development of a Senior Center would potentially improve the area.

#### Disadvantages

- Purchase of the property by Town is required.
- Current property ownership includes multiple parties.
- Owners have no current intention to sell property.
- The area constraints of the site allow no room for expansion.
- Senior Center would have to be smaller with less parking.
- Demolition and abatement needed.
- Additional utility work needed for redevelopment.
- Potential traffic issues for major events.

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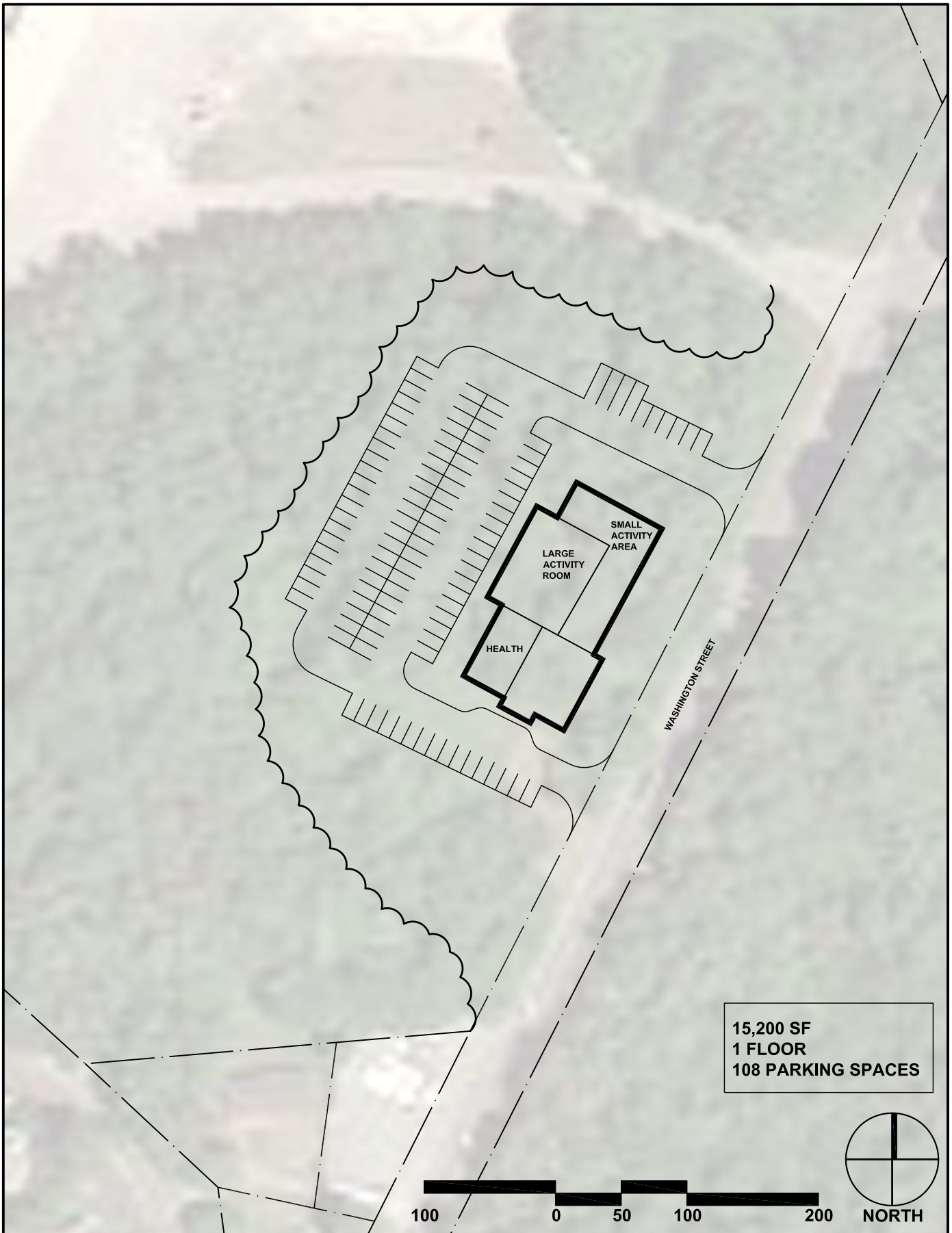
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## WASHINGTON STREET LOCATIONS A AND B

WALPOLE MASTER PLANNING STUDY  
AUGUST, 2012



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15,200 SF  
1 FLOOR  
108 PARKING SPACES

100 0 50 100 200



NORTH



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## SENIOR CENTER - LOCATION A

WALPOLE MASTER PLANNING STUDY

New Senior Center Washington Street - Location A	Building SF	Variables	Cost Projection
Total Square Footage	15,200	\$250	
Construction Costs Sub Total			3,800,000
Sitework			\$ 335,000
Site Clearing			\$ 15,000
Demolition Costs			\$ -
Abatement/Remediation			\$ -
Subtotal			\$ 4,150,000
Construction Contingency		15%	\$ 622,500
Construction Escalation to end of 2013		4%	\$ 166,000
Total Construction Costs			\$ 4,938,500
Construction Cost Per Square Foot		\$325	
Soft Costs			
Design Engineering Fees (Allowance)		6%	\$ 249,000
Design Contingency		15%	\$ 622,500
Owners Project Manager (Allowance)		3%	\$ 124,500
Additional Project Costs (FFE, Comp Tech)			\$ 140,000
Total Soft Costs			\$ 1,136,000
GRAND TOTAL			\$ 6,074,500

Purchase Cost	\$ -
Possible CDBG Funding	\$ 700,000
Possible Private Fundraising	\$ 300,000
Total Additional Funding	\$ 1,000,000
Total Project Budget	\$ 5,074,500
Total Bond	\$ 5,075,000
Interest	4%
Years	20
First Year Debt Service at 4%	\$ 458,000

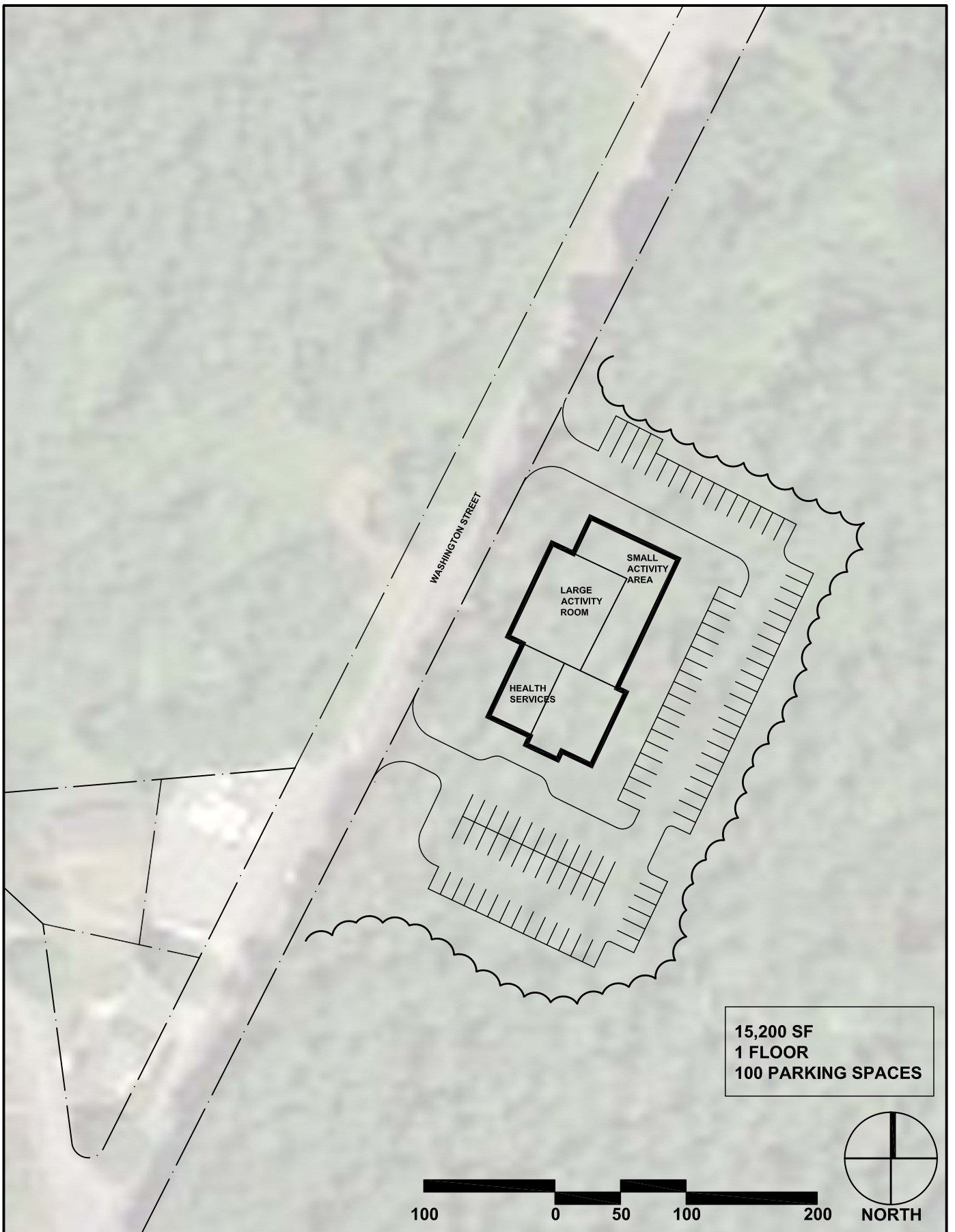
## Senior Center - Washington Street Loc A

### Cash Flow & Tax Impact Analysis - Construction COA Center

Scenario one - 20 year borrowing				
	Outstanding Principal	Principal Payments	Interest 4.000% Payments	Total Debt Service
	Total	\$5,075,000	\$2,122,000	\$7,197,000
1	\$5,075,000	\$255,000	\$203,000	\$458,000
2	\$4,820,000	\$255,000	\$192,800	\$447,800
3	\$4,565,000	\$255,000	\$182,600	\$437,600
4	\$4,310,000	\$255,000	\$172,400	\$427,400
5	\$4,055,000	\$255,000	\$162,200	\$417,200
6	\$3,800,000	\$255,000	\$152,000	\$407,000
7	\$3,545,000	\$255,000	\$141,800	\$396,800
8	\$3,290,000	\$255,000	\$131,600	\$386,600
9	\$3,035,000	\$255,000	\$121,400	\$376,400
10	\$2,780,000	\$255,000	\$111,200	\$366,200
11	\$2,525,000	\$255,000	\$101,000	\$356,000
12	\$2,270,000	\$255,000	\$90,800	\$345,800
13	\$2,015,000	\$255,000	\$80,600	\$335,600
14	\$1,760,000	\$255,000	\$70,400	\$325,400
15	\$1,505,000	\$255,000	\$60,200	\$315,200
16	\$1,250,000	\$255,000	\$50,000	\$305,000
17	\$995,000	\$255,000	\$39,800	\$294,800
18	\$740,000	\$255,000	\$29,600	\$284,600
19	\$485,000	\$255,000	\$19,400	\$274,400
20	\$230,000	\$230,000	\$9,200	\$239,200



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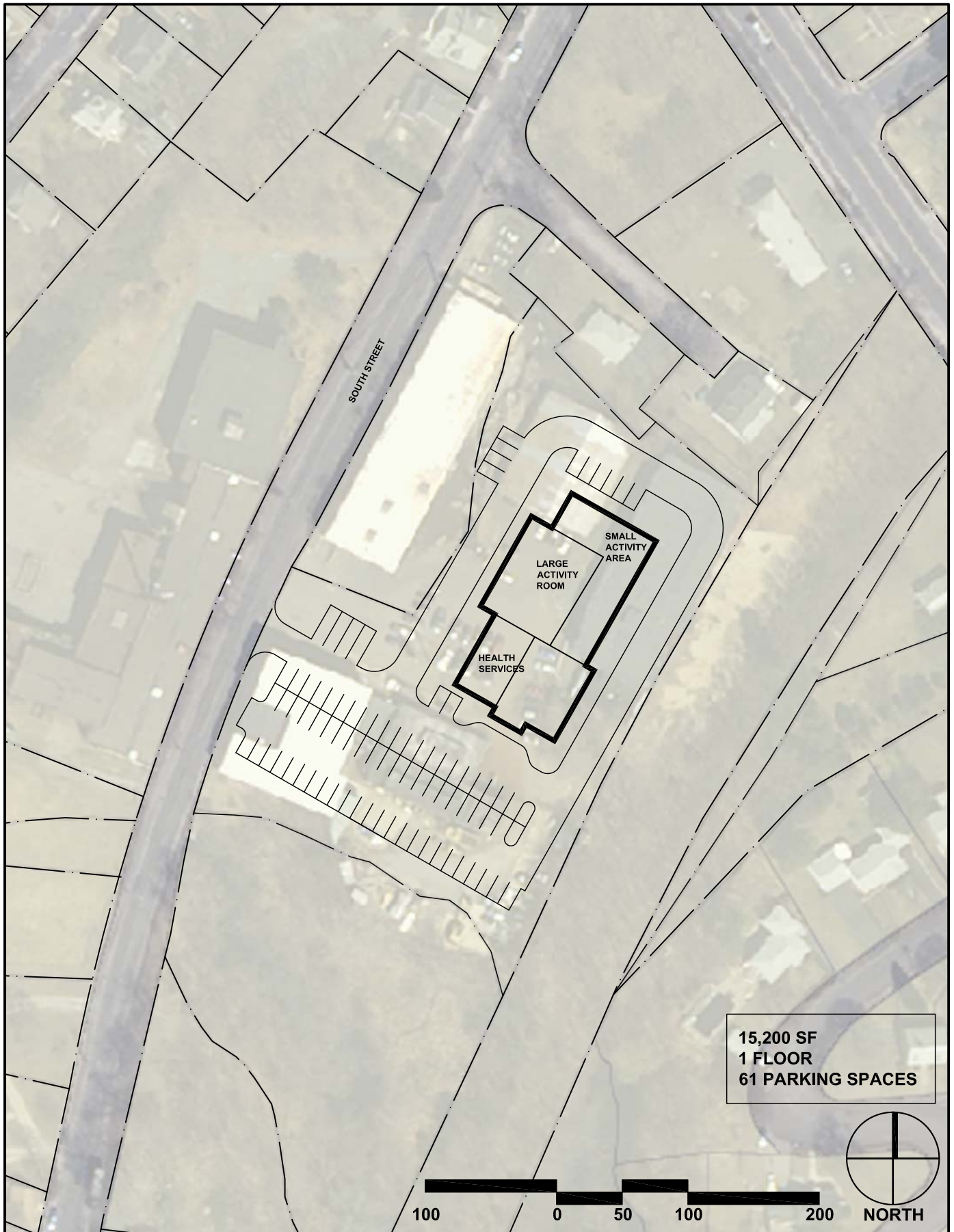
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## SENIOR CENTER - LOCATION B

WALPOLE MASTER PLANNING STUDY

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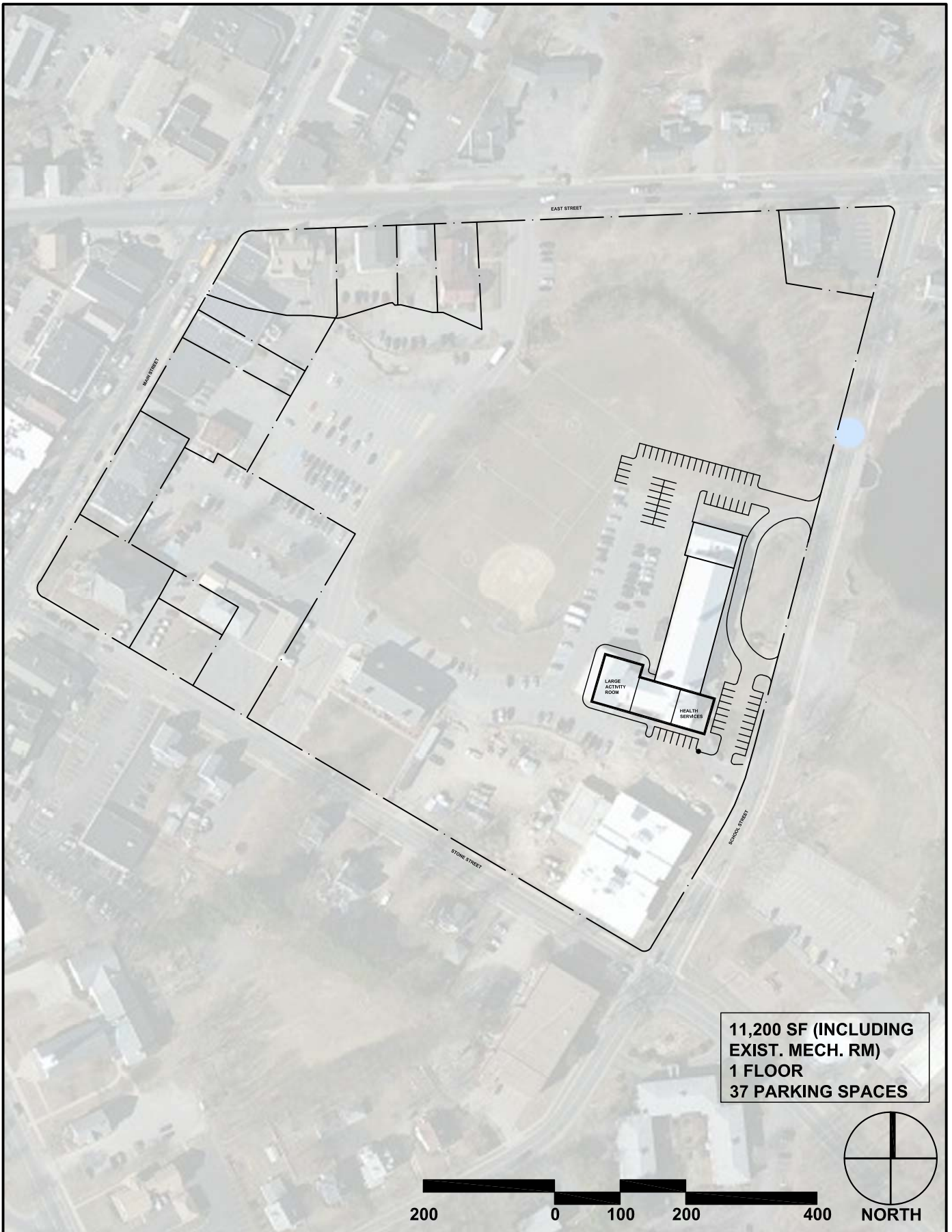


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## SENIOR CENTER - SOUTH STREET LOCATION

WALPOLE MASTER PLANNING STUDY

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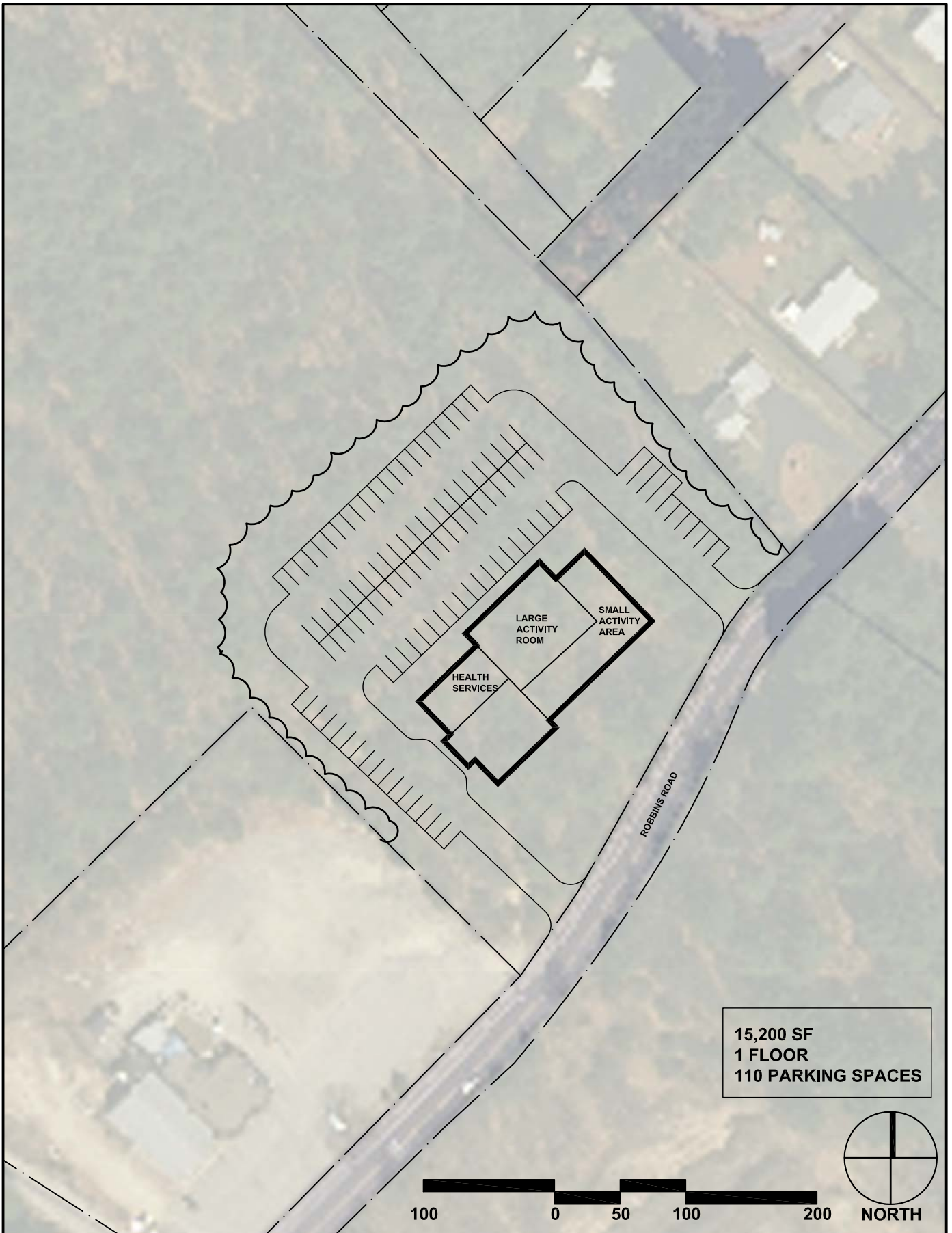
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## SENIOR CENTER - TOWN CENTER

WALPOLE MASTER PLANNING STUDY



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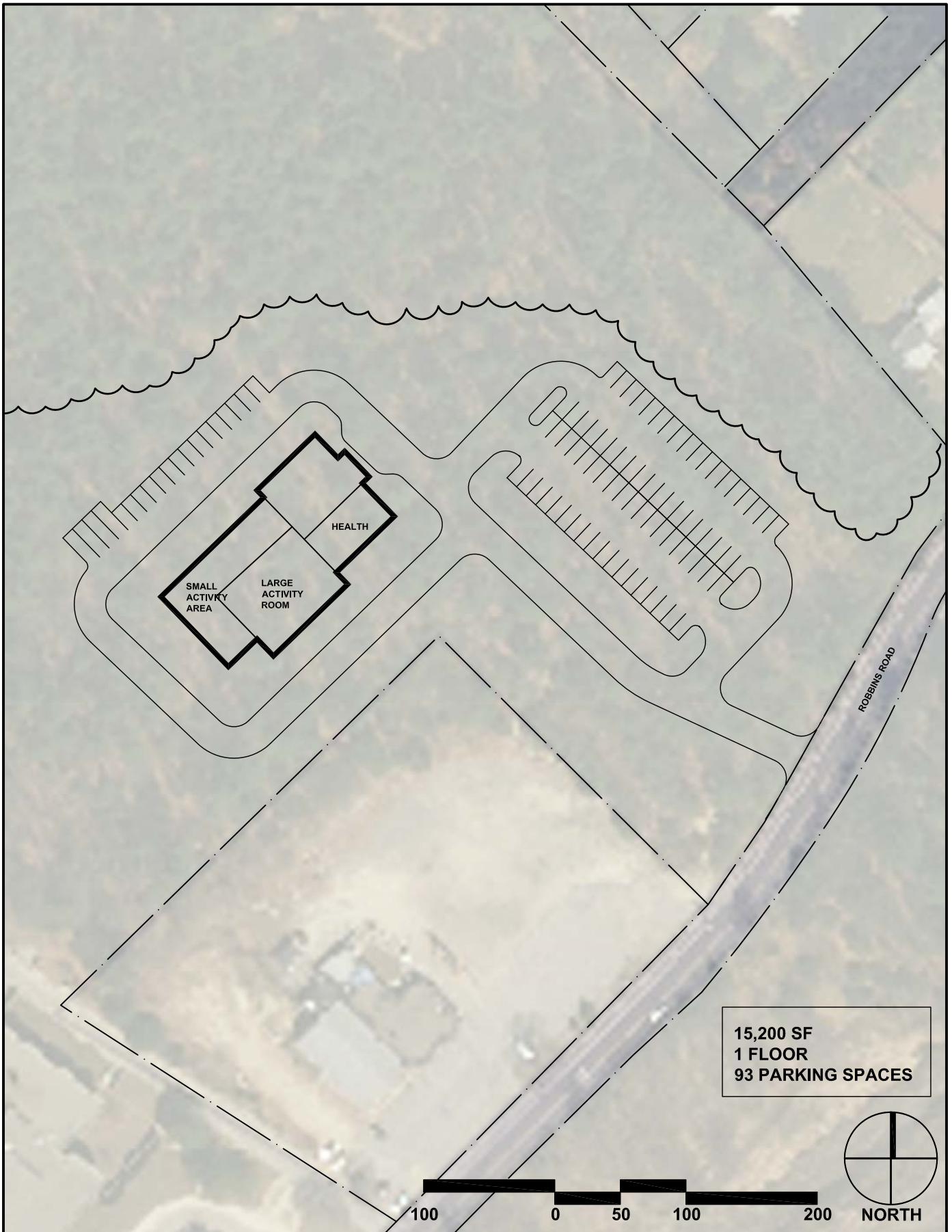
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## SENIOR CENTER - ROBBINS ROAD OPTION A

WALPOLE MASTER PLANNING STUDY

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## SENIOR CENTER - ROBBINS RD. OPTION B

WALPOLE MASTER PLANNING STUDY

15,200 SF  
1 FLOOR  
102 PARKING SPACES



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## SENIOR CENTER - SCHOOL STREET LOCATION

WALPOLE MASTER PLANNING STUDY



New Senior Center School Street	Building SF	Variables	Cost Projection
<b>Total Square Footage</b>	<b>15,200</b>	\$250	
<b>Construction Costs Sub Total</b>			<b>3,800,000</b>
Sitework			\$ 425,000
Site Clearing			\$ -
Demolition Costs			\$ 478,000
Abatement/Remediation			\$ 100,000
<b>Subtotal</b>			<b>\$ 4,803,000</b>
Construction Contingency		15%	\$ 720,450
Construction Escalation to end of 2013		4%	\$ 192,120
<b>Total Construction Costs</b>			<b>\$ 5,715,570</b>
Construction Cost Per Square Foot		\$376	
<b>Soft Costs</b>			
Design Engineering Fees (Allowance)		6%	\$ 288,180
Design Contingency		15%	\$ 720,450
Owners Project Manager (Allowance)		3%	\$ 144,090
Site Testing (Contaminated Soils, HasMat, Geotech)			\$ 60,000
			\$ -
Additional Project Costs (FFE, Comp Tech)			\$ 120,000
			\$ -
<b>Total Soft Costs</b>			<b>\$ 1,332,720</b>
<b>GRAND TOTAL</b>			<b>\$ 7,048,290</b>

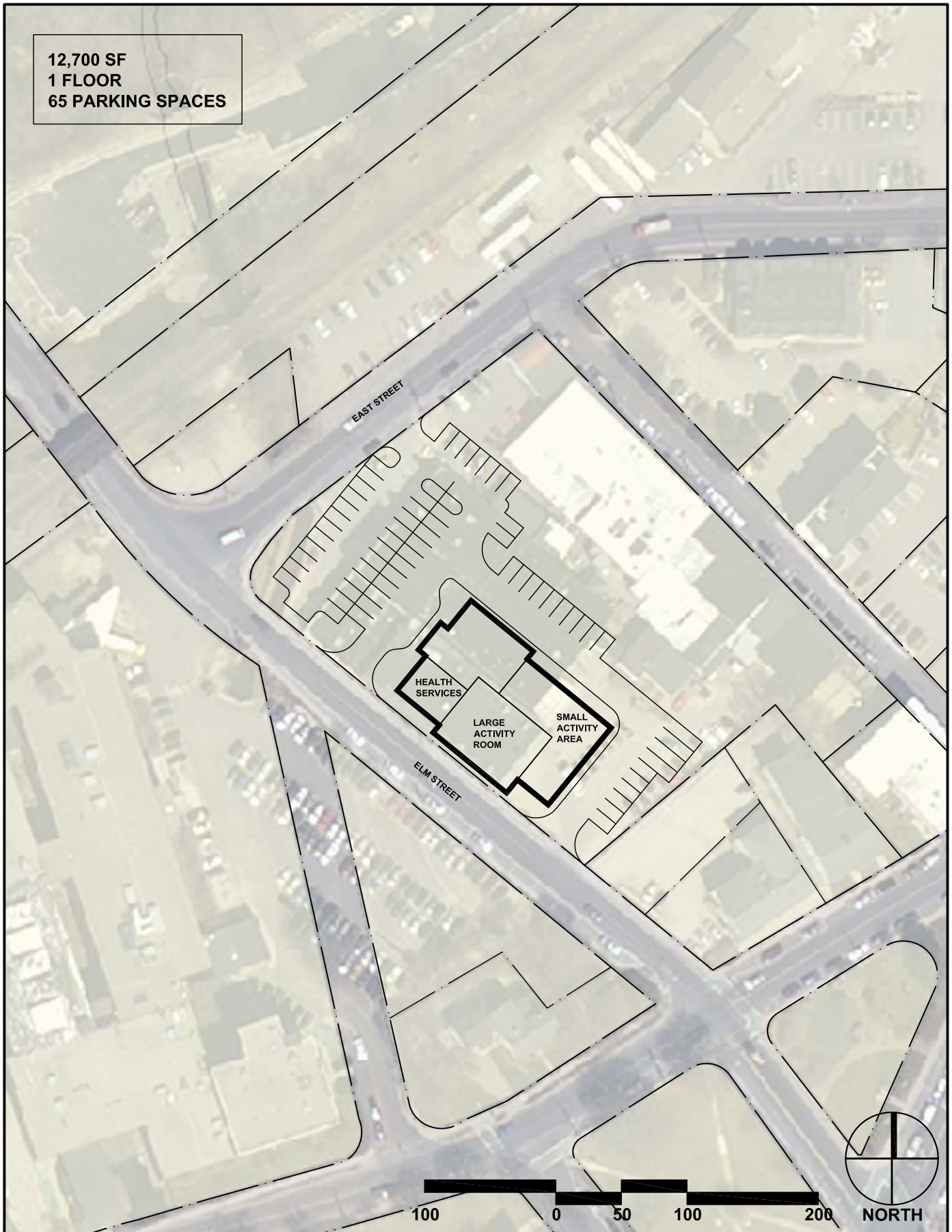
Purchase Cost	\$ 1,575,000
Possible CDBG Funding	\$ 700,000
Possible Private Fundraising	\$ 300,000
<b>Total Additional Funding</b>	<b>\$ 1,000,000</b>
<b>Total Project Budget</b>	<b>\$ 7,623,290</b>
<b>Total Bond</b>	<b>\$ 7,625,000</b>
Interest	4%
Years	20
<b>First Year Debt Service at 4%</b>	<b>\$ 690,000</b>

## Senior Center - School Street

### Cash Flow & Tax Impact Analysis - Construction COA Center

Scenario one - 20 year borrowing				
	Outstanding Principal	Principal Payments	Interest 4.000% Payments	Total Debt Service
	Total	\$7,625,000	\$3,174,000	\$10,799,000
1	\$7,625,000	\$385,000	\$305,000	\$690,000
2	\$7,240,000	\$385,000	\$289,600	\$674,600
3	\$6,855,000	\$385,000	\$274,200	\$659,200
4	\$6,470,000	\$385,000	\$258,800	\$643,800
5	\$6,085,000	\$385,000	\$243,400	\$628,400
6	\$5,700,000	\$385,000	\$228,000	\$613,000
7	\$5,315,000	\$385,000	\$212,600	\$597,600
8	\$4,930,000	\$385,000	\$197,200	\$582,200
9	\$4,545,000	\$385,000	\$181,800	\$566,800
10	\$4,160,000	\$385,000	\$166,400	\$551,400
11	\$3,775,000	\$385,000	\$151,000	\$536,000
12	\$3,390,000	\$385,000	\$135,600	\$520,600
13	\$3,005,000	\$385,000	\$120,200	\$505,200
14	\$2,620,000	\$385,000	\$104,800	\$489,800
15	\$2,235,000	\$385,000	\$89,400	\$474,400
16	\$1,850,000	\$385,000	\$74,000	\$459,000
17	\$1,465,000	\$385,000	\$58,600	\$443,600
18	\$1,080,000	\$385,000	\$43,200	\$428,200
19	\$695,000	\$385,000	\$27,800	\$412,800
20	\$310,000	\$310,000	\$12,400	\$322,400

12,700 SF  
1 FLOOR  
65 PARKING SPACES



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## SENIOR CENTER - EAST STREET LOCATION

WALPOLE MASTER PLANNING STUDY

## **Department of Public Works**



### **Facility Information**

#### **Year Constructed:**

##### **Vehicle Maintenance building**

Original Construction 1966,  
Expanded 12 bays in 1968  
Constructed Wood Shop Addition,  
1972  
Constructed Sign Shop Addition  
2007

##### **Highway Maintenance Building**

Original Construction 1999  
Expanded 4 bays in 2007

##### **Original Salt Shed**

Original Construction – Not  
available

##### **New Salt Shed**

Original Construction – 1999

**Site:** 26.14 Acres

**Parking:** 40 Approximately

#### **Square Footage:**

30,000 Highway Maintenance  
40,000 Vehicle Maintenance

**Restrictions:** None

### **General Description**

The Department of Public Works consists of four buildings located on the same site. The original building has been expanded several times and most recently a new Highway Maintenance facility has been added to the complex. Circulation around the facility is congested with numerous temporary trailers as well stock piles of equipment, materials and vehicles.

#### **Vehicle Maintenance building**

The original Vehicle Maintenance Building is a single story, slab on grade building with a small second floor accessible via a narrow non compliant set of wood stairs from the repair bays. The second floor houses a small break area, toilet/shower/locker area and a parts room. The first portion houses the repair bays, with associated lifts, monorail, storage and office.

The rest of the building is utilized for vehicle storage. The bays are approximately 18 feet wide and are all accessible from the front of the building. The last bay has been isolated and utilized for Police storage. The rear additions house the carpentry and sign shops.

### Highway Maintenance Building

The building is parallel to the Vehicle Maintenance Building and has a similar configuration. Administrative offices and crew quarter on one end with the rest of the building relegated to vehicle storage.

### Original Salt Shed

This is a wood framed gable roofed structure with large sliding wood doors on each end. This building is currently being used for parts, equipment and vehicle storage.

### New Salt Shed

This is a large prefab, center entrance wood structure dedicated for the storage of salt and sand.

## **Building Components**

### Site

The 'Town Yard' consists of four existing buildings on one site. Several trailers located around the site are used for miscellaneous storage. The entrance drive is a gradual incline up to a general flat facility. Overall the site is in a deteriorated condition.

Pavement surface on the site is generally in poor condition or in some instances nonexistent. There is significant fatigue cracking on the main access drive due to heavy truck traffic as well as extensive patching. Alligator cracking occurs is widespread on the entrance drive near Washington St. While flooding is not reported to occur at the site, minor standing water was observed on some areas of pavement. These incidents of ponding could be eliminated by repairing potholes and providing adequate slopes through fine grading during resurfacing. There are no sidewalks on site. Curbing is limited and in fair condition.

Natural vegetation is present throughout the site with minimal plantings or landscaping observed. Many areas are overgrown including the vegetation growing on top of the loam stockpiles. The entrance drive appears to be mowed along the woodland border.

### Parking/Circulation

Currently pavement markings and signage to direct traffic around the site is limited, as shown in the adjacent photo. Without delineated circulation patterns and established parking and travel ways, vehicles flow is not controlled and collisions are known to occur regularly in several problem areas. One existing drive connecting to the main entrance has been sealed off by a guardrail to eliminate use as access. However, there are other problem areas that still need to be resolved to eliminate blind spots and create clear rights of way.

### Hazardous Materials

Within the Vehicle Maintenance building visual indications of suspect hazardous materials were observed. Areas of concern include the following:

- Led paint
- Window calking

- Pipe insulation

### Structure

Vehicle Maintenance Building: The original portion and the 1968 addition consist of load bearing masonry walls with a wood framed roof framing and sheathing. Portion of the existing building include a small wood framed second floor. The carpentry and print shop additions are load bearing masonry construction with steel bar joists and steel deck roof framing.

Highway Maintenance Building: This is a load bearing masonry structure with a bar joists and steel deck roof framing.

Original Salt Shed: Wood framed wood structure, with wood truss roof.

New Salt Shed: Wood framed wood structure, with wood truss roof.

### Exterior Façade

Vehicle Maintenance Building: The exterior façade of the building and the associated additions consist of load bearing masonry construction. Typical of the construction period the walls are not insulated and not seismically braced and reinforced. Additionally the original building and the 1968 addition do not have any masonry construction joints. The walls are in good condition however there are several areas of settlement cracks within the walls. This is typically noticeable at door openings as well as at building corners. All of the sealant joints have outlived their useful life and are in need of replacement. Overhead doors are insulated however they are in various stages of disrepair. Some of the personnel doors and frames have either rusted through or the wood has delaminated.

Highway Maintenance Building: The exterior façade of the Highway building and the associated addition consist of load bearing masonry construction. Typical of the construction period the walls are not insulated and not seismically braced. All of the sealant joints as well building control joints are nearing the end of their useful life. Some of the existing doors and frames have rusted through and should be replaced.

Original Salt Shed: The existing wood framed structure has a wood panel facade. The lower panels are in need of replacement additionally to extend the useful life of the building the entire exterior on the building should be painted.

New Salt Shed: The prefabricated wood framed structure is in good shape and in need of only minor repairs.

### Roof

Vehicle Maintenance Building: The roof of the Vehicle Maintenance Building consists of a single ply roof membrane with an approximate age between 10 and 15 years old. Due to the vintage of the roof replacement it is assumed that the re-roofing consisted of a complete strip to wood sub-strait and replacement of insulation and membrane to comply with the current energy code.



**Highway Maintenance Building:** The roof of the Highway Maintenance Building consists of the original single ply roof membrane on the original portion approximately 13 years old and the addition having the original single ply roof approximately 5 years old. Due to the vintage of the roofs it is assumed that the proper amount of roof insulation was installed to comply with the current energy code.

**Original Salt Shed:** The roof on the original salt shed building consists of standard three-tab asphalt shingles. It is unclear if this is still the original roof.

**New Salt Shed:** The roof on the new salt shed building consists of standard three-tab asphalt shingles. Being only 13 years old it is assumed that this is still the original roof.

### Windows

**Vehicle Maintenance Building:** The building has a combination of original steel framed windows with single pane glass as well as more recent aluminum with insulated glass. The majority of the insulated windows occur in the first floor office with the single pane glass windows relegated to the mezzanine space.

**Highway Maintenance Building:** The windows within the Highway building are aluminum framed with insulated glass. Due to the buildings vintage it is also assumed that the frames are thermally broken.

**Original Salt Shed:** The structure has no windows. Two square opening are located above each door to allow air circulation.

**New Salt Shed:** The structure has no windows. Translucent panels within roof assembly to allow natural daylight within the interior space.

### Building Interior

**Vehicle Maintenance Building:** The interior walls of the facility are exposed concrete masonry construction in various stages of disrepair. The ceiling is exposed wood framing and sheathing. The toilet and locker rooms are original vintage and in need of replacement

**Highway Maintenance Building:** Being of recent vintage all interior finishes are in relatively good conditions.

**Original Salt Shed:** Exposed wood framing on walls and roof. Due to prior abuse from front end loaders, some of the wood wainscot needs to be replaced.

**New Salt Shed:** Exposed wood framing on walls and roof.

### Elevator

No elevators exist within any of the existing structures.

### Plumbing

**Vehicle Maintenance Building:** A 2" domestic water service enters the building at the southwest end of the building to a grade level utility room. The service reduces to 1" at the meter and feeds to the building. The building has a 2" natural gas service meter and entrance located at the exterior of the southwest end of the building with internal natural gas piping feeding to the gas fired space heating equipment. The main level bathroom is a single water closet and has a utility style molded composite sink at the lavatory location. The second floor kitchen lunchroom has a two well stainless steel commercial kitchen sink. The second floor bathroom has a water closet, urinal, cast-iron service sink with trap standard and a single stall tiled shower. Domestic hot water is generated by an electric point of use water heater. There is evidence that a gas fired water heater existed in the garage area, but has been removed. There is a sanitary manhole to the northeast of the two story section of the building that receives the sanitary exit and discharge from the oil and sand interceptor that services the garage bay floor drains. The building is sheet drained to rear gutters and downspouts. The shop addition has two interior roof drains with interior rain water leaders connected to the storm drain.

**Highway Maintenance Building:** A 2" domestic water service enters the building at the southeast side of the building to a water meter located in the water heater/janitor closet room. There is a 2" potable water building feed and a 2" reduced pressure backflow installed serving a 2" non-potable building water supply. In addition, proper cross connection control devices are installed at the janitor sink, hose bibs and pressure washer equipment. There is a 2" natural gas service meter and entrance located at the exterior of the southwest end of the building with internal gas distribution piping feeding to the gas fired rooftop unit, water heater, unit heaters and infrared heaters in the building. The main office area is served by fully accessible men's room with two water closets, two urinals, two lavatories and a shower. The women's room has two water closets, two lavatories and a shower. One lavatory and one water closet are accessible. A janitor's closet serves the single story building. There is a break room area that is served by a kitchen sink/countertop. The garage addition has a single room toilet with a tank type water closet and utility style sink/lavatory. Domestic hot water is provided by a 75 gallon, 70 MBH gas fired storage type water heaters for the main office area. There is a 6 gallon point of use electric water heater that serves the garage addition bathroom. The sanitary line exits the building on the southeast side. There is a dedicated garage drain system that exits the southeast side to the site oil and sand interceptor. The building is sheet drained to gutters and downspouts located on the rear northeast side of the building.

**New Salt Shed:** No plumbing exists within this structure.

**Original Salt Shed:** No plumbing exists within this structure.

### HVAC

**Vehicle Maintenance Building:** The two story section of the building is serviced by a 60 mbh high efficiency sealed combustion gas furnace with 2.5 ton split system DX coil located in the ground level utility room. A condensing unit is located at the southwest end of the building at grade. The unit serves the office, lunchroom halls and bathrooms. There is supplemental electric baseboard radiation and a window air conditioning unit in the second floor areas.

**Highway Maintenance Building:** The office area of the building is served by a constant volume 5 ton gas fired packaged rooftop system. There is a supplemental sealed combustion gas fired unit heater serving the open break room. The single bay garage is heated with a gravity type gas fired

unit heater. The open garage is heated with infrared gas fired heaters. There are two large roof exhaust fans which provide general ventilation that are carbon monoxide sensor controlled. The garage addition is served by a gas fired roof mounted HVAC unit. There is a general exhaust that is carbon monoxide sensor controlled. All heating units and HVAC rooftop units are controlled by individual conventional thermostats. The office area thermostat is a programmable type. All equipment is original installed.

New Salt Shed: No HVAC exists within this structure.

Original Salt Shed: No HVAC exists within this structure.

### Electrical

Vehicle Maintenance Building: The main electric service for the building is a 208 volt/3ph/4 wire service that enters the building on the southwest end of the building into the mechanics shop. The service appears to be 400 amp with two 200 amp disconnects feeding from the utility meter trough. The service feeds sub-distribution panels located throughout the facility. The lighting is a mixture of industrial type florescent fixtures with T-8 lamps. There is a 30 kva natural gas driven standby generator serving the building.

The building is served by a Fire Control Instruments, Inc. fire alarm system. Pull stations are installed at main egress doors and detection and notification devices are located throughout the building. System was installed prior to the 1999 site renovations. Emergency lighting fixtures do not exist.

Highway Maintenance Building: The electrical service for the building enters overhead from the connector road via poles. The service is 400 amp 208 volt/3 ph/4 wire service. The meter socket is located on the southwest end of the building and the service feeds underground in conduit to the electric room. The distribution is limited to a 400 amp main breaker panelboard that serves the main power. It has a 100A breaker that feeds a 100A MLO dedicated lighting panel. There is a pinned time clock that serves the parking lot lighting. The lighting is florescent multi cell parabolic lens in the office and industrial 4 tube T-8 fixtures in the garage. The single bay garage has vapor tight lensed wall mounted fixtures. Emergency lighting is by battery unit/head type fixtures with LED exit signs. The fire alarm system is a fully addressable type system with exit pull stations, detection and notification devices. There is a 30 kva standby generator that is natural gas driven. The building feeds a subpanel located in the new salt storage shed. The panel is fed from the standby power which feeds the lighting.

New Salt Shed: There is a sub-panel fed from the DPW building stand-by power that feeds building lighting circuits. Lighting is by 4 foot 6 tube T-8 lamp industrial type fixtures. No fire alarm devices.

Original Salt Shed: There is a sub-panel fed from the vehicle maintenance building stand-by power that feeds building lighting circuits. Lighting is by 4 foot industrial by type fixtures with T-8 lamps. No fire alarm devices.

### Fire Protection

Vehicle Maintenance Building: There are no fire active fire suppression systems installed in this building. There was a lack of adequate fire extinguishers installed in the building.

Highway Maintenance Building: The building has a single zone wet system fire suppression system. The 6" fire service enters the building at the southeast side and rises at the fire service riser located in the single garage bay. The system has a dedicated double check valve. There is a fire department siamese connection located near the main entrance door on the southeast side of the building. Coverage appears to be adequate for the use type.

New Salt Shed: No fire protection exists within this structure.

Original Salt Shed: No fire protection exists within this structure.

### Accessibility

Vehicle Maintenance Building: The facility was constructed prior to the issuance of the Massachusetts Architectural Access Board (MAAB) and the Americans with Disability Act (ADA), and consequently it fails in providing handicap access to and within the facility.

Highway Maintenance Building: The design and construction of the facility complied with the handicap codes in affect at the time of construction.

Original Salt Shed: Not required

New Salt Shed: Not required

### Code Compliance

All of the existing facility was constructed in compliance to the building codes in affect at the time. Since the primary purpose of the building has not been modified the facility are grandfathered to the previous codes. However, as renovations are implemented those modifications need to comply with the current codes. Additionally renovations and improvements to the buildings beyond 30% of the assessed building value will trigger comprehensive building upgrades throughout the entire facility

### Functional Analysis

Vehicle Maintenance Building: The existing Vehicle Maintenance area is grossly undersized and cannot accommodate all of the current fleet. Additionally the support spaces are inadequate, insufficient and dated. The remainder of the facility is being utilized to house vehicles as well as equipment. In a new construction this would not be allowed since the roof framing is combustible and per code vehicles cannot be stored within this space since there is no fire suppression system.

Highway Maintenance Building: Even though this facility is relatively new, it is evident that the administrative area has outgrown its allocated spaces. The crew room in addition to being the break and locker room it is also being utilized as overflow office area. The women's room is also being used for file storage, and the library. The existing truck wash is limited in size and to prevent water overspray tarps have been suspended from the roof structure.

**Original Salt Shed:** Currently the existing facility is being used for storage of equipment as well as vehicles. The building codes require that if combustible materials are being stored (gas, vehicles, etc.) then the building needs to have a fully operational fire protection system. Since the primary use of the facility was for Sand/Salt storage the use change would of triggered a building modification and consequently the inclusion of a fire protection system.

### **Recommendations**

**Site Improvements:** In order to improve safety and vehicle circulation it is recommended that the site be repaved with marked parking stalls and a one way drive isle through facility site. Develop a comprehensive plan to organize storage of material on site.

See sketch and project budget

**New Construction:** Provide a new 3 bay Vehicle Maintenance Building with a new employee area including new toilet/locker rooms, lunch room, office and storage.

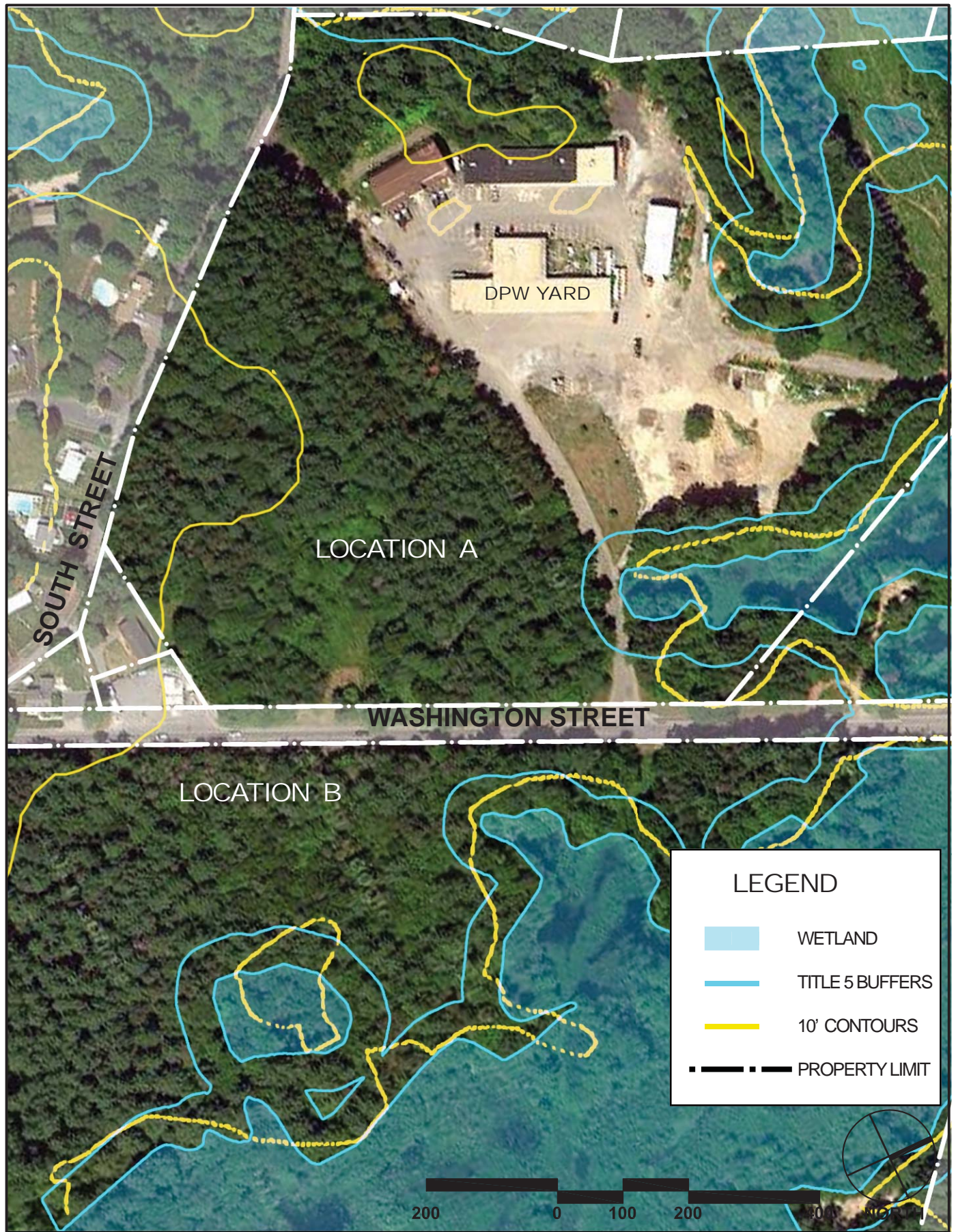
See sketch and project budget

**Renovations:** Convert existing Vehicle Maintenance office and employee area to general storage. Convert existing Vehicle Maintenance high bays (2) to vehicle wash stations. Upgrade existing overhead doors and frames and repair masonry damage throughout the exterior.

See sketch and project budget



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## WASHINGTON STREET LOCATIONS A AND B

WALPOLE MASTER PLANNING STUDY  
AUGUST, 2012



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**DPW**

**WALPOLE MASTER PLANNING STUDY**

DPW Upgrades	Building SF	Variables	Cost Projection
New Maintenance Bays	3,000		
New Office Building	1,600		
Renovation Existing Maintenance Bays	1,000		
<b>Total Square Footage</b>	<b>5,600</b>	\$285	
<b>Construction Costs Sub Total</b>			<b>1,596,000</b>
Sitework			\$ 955,000
Site Clearing			\$ -
Demolition Costs			\$ -
Abatement/Remediation			\$ 125,000
<b>Subtotal</b>			<b>\$ 2,676,000</b>
Construction Contingency		15%	\$ 401,400
Construction Escalation to end of 2013		4%	\$ 107,040
<b>Total Construction Costs</b>			<b>\$ 2,783,040</b>
Construction Cost Per Square Foot		\$497	
<b>Soft Costs</b>			
Design Engineering Fees (Allowance)		6%	\$ 160,560
Design Contingency		15%	\$ 401,400
Owners Project Manager (Allowance)		3%	\$ 80,280
Additional Project Costs (FFE, Comp Tech)			\$ 100,000
<b>Total Soft Costs</b>			<b>\$ 742,240</b>
<b>GRAND TOTAL</b>			<b>\$ 3,525,280</b>

Purchase Cost	\$ -
	\$ -
	\$ -
	\$ -
	\$ -
<b>Total Project Budget</b>	<b>\$ 3,525,280</b>
<b>Total Bond</b>	<b>\$ 3,530,000</b>
Interest	4%
Years	20
<b>First Year Debt Service at 4%</b>	<b>\$ 321,200</b>

# DPW

## Cash Flow & Tax Impact Analysis - Construction COA Center

Scenario one - 20 year borrowing				
	Outstanding Principal	Principal Payments	Interest 4.000% Payments	Total Debt Service
	Total	\$3,530,000	\$1,456,000	\$4,986,000
1	\$3,530,000	\$180,000	\$141,200	\$321,200
2	\$3,350,000	\$180,000	\$134,000	\$314,000
3	\$3,170,000	\$180,000	\$126,800	\$306,800
4	\$2,990,000	\$180,000	\$119,600	\$299,600
5	\$2,810,000	\$180,000	\$112,400	\$292,400
6	\$2,630,000	\$180,000	\$105,200	\$285,200
7	\$2,450,000	\$180,000	\$98,000	\$278,000
8	\$2,270,000	\$180,000	\$90,800	\$270,800
9	\$2,090,000	\$180,000	\$83,600	\$263,600
10	\$1,910,000	\$180,000	\$76,400	\$256,400
11	\$1,730,000	\$180,000	\$69,200	\$249,200
12	\$1,550,000	\$180,000	\$62,000	\$242,000
13	\$1,370,000	\$180,000	\$54,800	\$234,800
14	\$1,190,000	\$180,000	\$47,600	\$227,600
15	\$1,010,000	\$180,000	\$40,400	\$220,400
16	\$830,000	\$180,000	\$33,200	\$213,200
17	\$650,000	\$180,000	\$26,000	\$206,000
18	\$470,000	\$180,000	\$18,800	\$198,800
19	\$290,000	\$180,000	\$11,600	\$191,600
20	\$110,000	\$110,000	\$4,400	\$114,400

## **Blackburn Memorial Hall**



### **Facility Information**

**Year Constructed:** 1931

Renovation: 1996

**Site:** 11.98 Acres

**Parking:** 30 (2 accessible)

**Square Footage:** 12,000 SF

**Restrictions:** None

**Appraisal:** \$368,700 (Building)

### **General Description**

Blackburn Hall is a multi-purpose facility located in Town Center and is currently managed and utilized by the Recreation Department. The existing building is a two story neoclassic structure. The building includes a large two story open auditorium/ activity room with a stage and a balcony on opposite ends. The lower level consists of office space for the Recreation Department and an activity space used by a day care center.

The building was originally constructed in 1931 and was financed as a gift to the Town. Blackburn Hall has become an important presents and defines the character of Town Center.

### **Building Components**

#### **Site**

The Blackburn Hall site is generally flat with runoff captured by granite and bituminous curbing into catch basins. Most of the stormwater runoff drains to a catch basin located between the north side of Blackburn Hall and the baseball field. Pavement is in good condition with minimal cracking or repairs. Pavement markings are faded and in need of a fresh coat of paint. Signage is adequate and in good condition. Walkways are concrete and in good condition with some vegetation in joints.

Landscaping for the property that includes a well maintained lawn shrubs, trees, other plantings in addition to trash receptacles, bike rack and benches. Site lighting is provided by wall mounted fixtures with the addition of two lamp posts in front of the building. No fencing noted on the property.

There is also a baseball field directly north of Blackburn Hall that is used by the recreation department. The field has recently been improved and was observed to be in good condition. Improvements include a new backstop, stands, benches and other athletic equipment. The infield has been resurfaced with sand and the outfield grass is well maintained. The baseball field has lighting in the outfield.

### Parking/Circulation

Vehicles may enter and exit Blackburn Memorial Hall via drives on either side of the building accessed from Stone Street. Parking for approximately 30 vehicles is available on the north side of the building with two ADA accessible parking spaces. Parking is adequate for normal use however for major events use of the municipal lot, Town Hall lot and street parking are needed.

### Hazardous Materials

There are visual indications of suspect hazardous materials. Survey and testing of materials is recommended. Areas of concern include the following:

- Asbestos floor tile.
- Insulation in the basement.
- Mold behind the stage.
- Lead paint in the basement and mezzanine.

### Structure

Concrete foundation wall was observed to be in sound condition with no signs of major damage or building settlement. Minor cracking has occurred at the corners and adjacent to the concrete stairwells. Load bearing masonry columns support a wood truss system over the auditorium with a wood framing for the first floor.

### Exterior Façade

The building exterior consists of brick veneer that is in good condition. Some repair of the mortar is needed in various areas of the exterior. Precast concrete trim is in good condition. Wood trim around windows (including shutters) and wood column covers show signs of deterioration and will require paint in the near future.

### Roof

Roof consists of asphalt shingles on a wood roof substructure and framing is generally in good condition. Roof over ground floor entry along north facade is copper and needs upgrade. Fascia and gutter damage exists along the south façade and along the elevator roof.

### Windows

Windows are single pane glazing with wood frames. A select number of panes have been replaced with lexan panels and have developed a tint. Windows are not insulated and have inadequate R-value.

### Building Interior

The interior of the building needs a complete upgrade. Acoustical ceiling tile and carpet is worn and damaged in several areas and should be replaced. Interior finishes in the balcony and the first floor entry spaces require upgrades. The office space ceiling, carpet and paint in the lower level is in poor condition and requires complete renovation.

### Elevator

Elevator was installed as part of the 1996 accessibility upgrade and is in good condition.

### Plumbing

The building has natural gas service. The gas meter is at the southeast corner of the building, and gas enters the building in the basement level mechanical room. Gas fired appliances include two boilers and two furnaces. The water service also enters in the basement level mechanical room. No backflow preventer was visible in the mechanical room. An 80 gal, 208 V/3 phase, electric water heater was installed in 2005 and serves the toilet rooms and kitchenette.

### HVAC

Two Lochinvar gas fired, condensing hot water boilers serve unit ventilators and fin tube radiation. The first floor Hall is served by four (4) heating only unit ventilators. The basement level recreation center offices and day care are served by gas fired furnaces with DX cooling and hot water fin tube radiation. The condensing units are located on grade on the south side of the building. The second floor room is served by hot water fin tube radiation and a through the wall air-conditioner. Toilet rooms and storage areas are served by radiators converted from steam to hot water. The toilet rooms are also exhausted.

### Electrical

The electric service was upgraded in 1996 and includes a 225 Amp, 208 V/3 phase/4 wire main panelboard located in the mechanical room. This feeds one load center in the mechanical room and one in a closet in the recreation center offices. The fire alarm system has a non-addressable panel in the front lobby with three zones: basement, 1st floor and 2nd floor. The devices on the fire alarm system include horn strobes, heat detectors and smoke detectors. Egress lighting is provided by battery powered back up fixtures.

### Fire Protection

The building was fully sprinkled in 2010 and includes coverage in the attic space. The fire department connection is on the southeast corner of the building and ties into the main sprinkler



service in the basement level mechanical room. The system consists of 3 zones including one dry zone for the attic.

### Accessibility

Accessibility upgrades to the building were completed in 1996 with the addition of an elevator and renovation of the toilet rooms on the first floor.

Areas of the building that are not compliant include access to the stage, existing stairwells and the main entry on the south façade.

### Code Compliance

Several areas of concern exist with regard to compliance with current codes. Access to the second floor mezzanine is by a non compliant stair and no elevator access. The egress stairs on opposite ends of the auditorium are not sized according to current egress requirements. Access to the stage is by non compliant stairs on each side.

### Functional Analysis

The main auditorium is a large multipurpose room that has enough room for a variety of activities. The number of participants in some of the activities appears to exceed the capacity of building. The mezzanine and the entry spaces below could be better utilized as support spaces for the auditorium. The office space on the lower level is small and not very efficiently planned. The day care area on the lower level provides an adequate space for multiple activities for children. The layout of the room and the open plan allow for different activities to take place and adult oversight of each area.

## **Recommendations**

**Renovation:** Upgrade existing department office area to improved organizational layout including new reception area, conference room and upgraded interior finishes. Consider revising layout with office area and Recreation Room switching locations.

Recommended budget: \$85,000

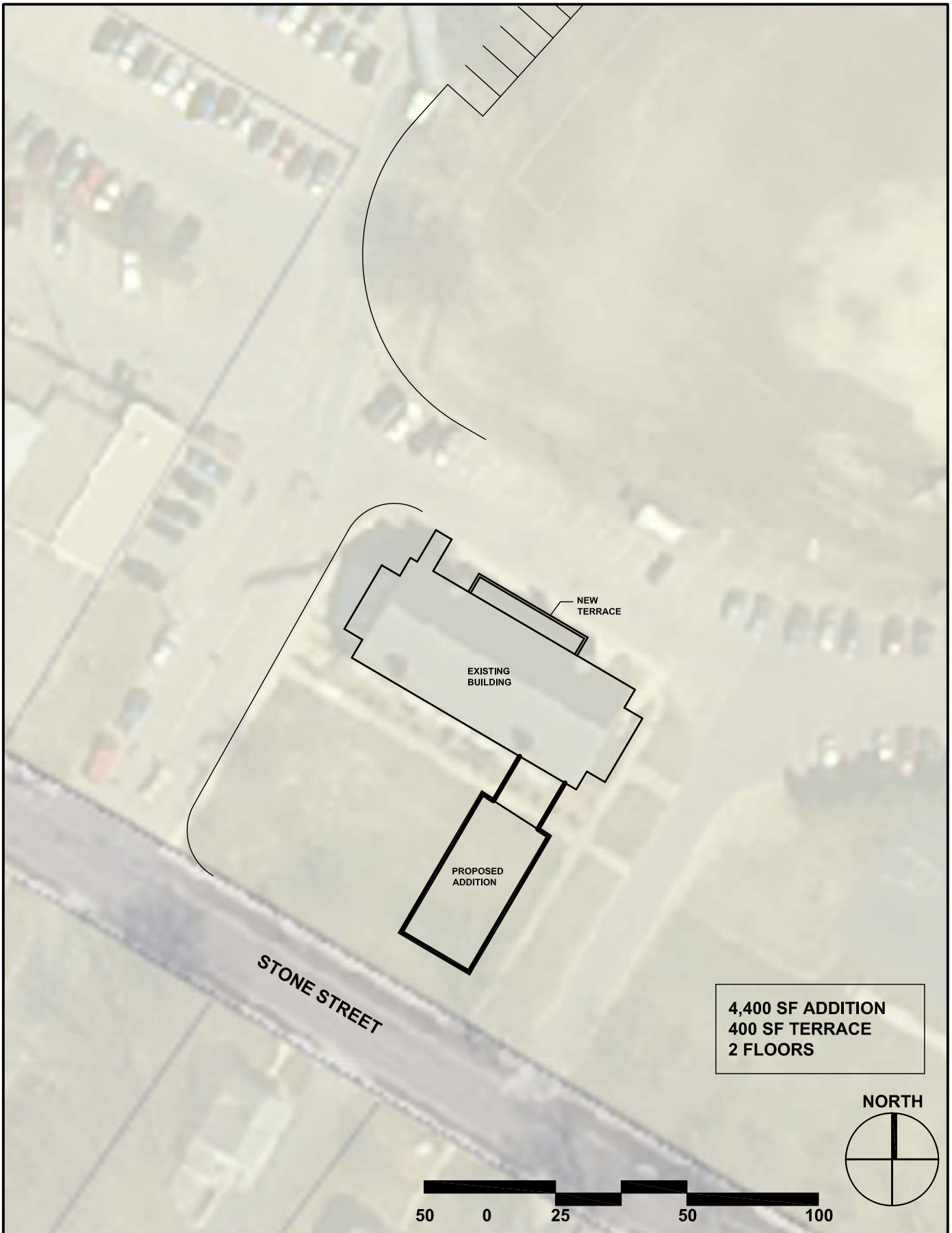
**Renovation:** Provide upgrades to the entry, support areas and mezzanine. Upgrade to make stage access compliant with current regulations.

Recommended budget: \$65,000

**New Addition:** Construct a two story 4,500 SF addition on the south side of the auditorium for new office space and additional activity areas. Construct a terrace on the North side of the auditorium.

See sketch and project budget

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**Maguire Group Inc.**  
Architects/Engineers/Planners  
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## BLACKBURN HALL ADDITION

WALPOLE MASTER PLANNING STUDY

Blackburn Hall Addition	Building SF	Variables	Cost Projection
New Terrace & 2 Exterior Doors	400	116	\$ 46,400
New Addition	4,400		
<b>Total Square Footage</b>	<b>4,800</b>	278	
<b>Construction Costs Sub Total</b>			<b>1,269,600</b>
Sitework			\$ 225,000
Site Clearing			\$ -
Demolition Costs			\$ -
Abatement/Remediation			\$ -
<b>Subtotal</b>			<b>\$ 1,494,600</b>
Construction Contingency		15%	\$ 224,190
Construction Escalation to end of 2013		4%	\$ 59,784
<b>Total Construction Costs</b>			<b>\$ 1,778,574</b>
Construction Cost Per Square Foot		\$371	
<b>Soft Costs</b>			
Design Engineering Fees (Allowance)		8%	\$ 119,568
Design Contingency		15%	\$ 224,190
Owners Project Manager (Allowance)		3%	\$ 44,838
Additional Project Costs (FFE, Comp Tech)			\$ 42,000
<b>Total Soft Costs</b>			<b>\$ 430,596</b>
<b>GRAND TOTAL</b>			<b>\$ 2,209,170</b>

Purchase Cost	\$ -
	\$ -
	\$ -
	\$ -
<b>Total Project Budget</b>	<b>\$ 2,209,170</b>
<b>Total Bond</b>	<b>\$ 2,210,000</b>
Interest	4%
Years	20
<b>First Year Debt Service at 4%</b>	<b>\$ 203,400</b>

## Blackburn Hall

### Cash Flow & Tax Impact Analysis - Construction COA Center

Scenario one - 20 year borrowing				
	Outstanding Principal	Principal Payments	Interest 4.000% Payments	Total Debt Service
	Total	\$2,210,000	\$894,000	\$3,104,000
1	\$2,210,000	\$115,000	\$88,400	\$203,400
2	\$2,095,000	\$115,000	\$83,800	\$198,800
3	\$1,980,000	\$115,000	\$79,200	\$194,200
4	\$1,865,000	\$115,000	\$74,600	\$189,600
5	\$1,750,000	\$115,000	\$70,000	\$185,000
6	\$1,635,000	\$115,000	\$65,400	\$180,400
7	\$1,520,000	\$115,000	\$60,800	\$175,800
8	\$1,405,000	\$115,000	\$56,200	\$171,200
9	\$1,290,000	\$115,000	\$51,600	\$166,600
10	\$1,175,000	\$115,000	\$47,000	\$162,000
11	\$1,060,000	\$115,000	\$42,400	\$157,400
12	\$945,000	\$115,000	\$37,800	\$152,800
13	\$830,000	\$115,000	\$33,200	\$148,200
14	\$715,000	\$115,000	\$28,600	\$143,600
15	\$600,000	\$115,000	\$24,000	\$139,000
16	\$485,000	\$115,000	\$19,400	\$134,400
17	\$370,000	\$115,000	\$14,800	\$129,800
18	\$255,000	\$115,000	\$10,200	\$125,200
19	\$140,000	\$115,000	\$5,600	\$120,600
20	\$25,000	\$25,000	\$1,000	\$26,000

## **Bird Middle School**



### **Facility Information**

**Year Constructed:** 1961  
**Renovation** 1992, 1994

**Site:** 19.2 acres

**Parking:**

**Square Footage:** 100,000 SF

**Zoning:** BR

**Restrictions:** None

**Appraisal:** \$7,541,100

### **Educational Program**

**Capacity:** Current Enrollment is 515 students

**Grades:** 6-8

#### **Existing Room/Area**

Classrooms: 19

Science Labs: 4

SPED Classrooms: 3

Computer Labs: 3

**General:** Facility has shortage of space including classrooms, language lab, testing spaces, guidance areas, meeting rooms and storage space. As a result space has been repurposed to accommodate needs. Since an elevator was added at the main stair, its capacity was reduced creating bottle necking. As a result they use one stair for going up and the other for coming down.

**Auditorium:** The Auditorium sits in the middle of the dining area splitting dining into two separate spaces. Since the kitchen is on one side of the Auditorium students are required to walk through it to get to the dining area. Auditorium eating is metal frame and plastic seats and back. It appears to be original and should be replaced. The existing room divider needs to be replaced with one with reduced sound transmission.

Gym: Full court basketball court with wood parquet flooring.

Cafeteria: Has 200 seat capacity and three sittings.

Kitchen: Kitchen function is being converted to warming/serving function. At the start of this school year food will be cooked at the high school and brought in for serving.

Library: It is being relocated to the 2<sup>nd</sup> floor and under renovation during our visit. Previous Media space will be converted for the Health and SPED program.

Nurse: Space is original and antiquated

Toilets: Spaces are original and antiquated

### **Building Components**

#### **Site**

With the exception of vehicular circulation issues there are no major issues at the site. Site lighting is adequate and there is no lighting at fields. The fields have automatic irrigation. Site is constrained by neighboring properties, but there is room for building expansion.

Staff report that the site usually does not have drainage problems with the exception of one area at the southeastern end of the driveway loop across from the front of the gymnasium. A catch basin in this location receives water from an area of the curbed loop. While the rim of the catch basin is depressed into the pavement, it appears that the position of the catch basin is not optimal for collection of water in that area. There is also an area along the eastern side of the athletic fields that receives runoff from the site above and is slow to drain and often remains in a wet condition. Currently one catch basin exists in this area to receive runoff.

The pavement is in fair condition with block cracking on the access drive and northern parking areas. There is widespread alligator and longitudinal cracking in the southern parking area and the access drive to from the southern lot toward the southeastern corner of the gymnasium has been patched in many areas. The pavement near the gymnasium loading dock has extensive alligator cracking. Sidewalks and walkways are in fair condition with some cracking but still functional. Curbing is also in fair condition. Pavement striping and lettering is adequate in most areas but needs to be repainted in several areas such as in loop directly in front of the school.

There is some maintained landscaping around the front of the building including shrubs and a flower garden. Grass on the site is mowed. A chainlink fence along the southern property line is rusted but appears to be functional. Site lighting is mounted on the buildings and poles throughout the site but not in the athletic fields. Staff have described lighting as adequate.

The athletic fields consist of a softfall field, baseball field and little league baseball field with areas of the outfield used for soccer. The fields are well maintained with equipment in good condition including backstops, benches, storage sheds and scoreboards. Grass on the field is irrigated, well-drained and maintained. There is a portable toilet located in the western corner of the field.



Directly behind the main school building there is a basketball court in fair condition. The pavement is flat with large grass-filled cracks and has been painted for other activities. The basketball hoops are adjacent to one another rather than at opposite ends of the court which would better facilitate a basketball game. The rear side of the two backboards are rusting.

### Parking/Circulation

Parking and circulation at the Bird Middle School is in need of improvements. When school is in session, parking lots are near capacity. During school events and baseball games, the southeast field adjacent to the entrance drive is utilized for parking. This solution is inadequate as parking spaces are not delineated and traffic jams occur due to vehicles blocking the exits. Additionally, during wet weather, the field will turn to mud following an event. Parking on site is insufficient including two accessible parking spaces on the loop in near the front entrance to the building as well as three to four visitor spaces.

Traffic circulation around the site during school bus drop off and pickup is particularly problematic. During morning drop-off, approximately eight buses line up in the one-way loop in sets of two blocking off vehicles access from the circle. Parents in cars then form a line behind the buses and all the way up the entrance drive, sometimes overflowing onto Washington St. Since traffic flow through the loop is blocked by the buses, teachers often access the southern parking lot by going contra to the one-way traffic flow and parents frequently turn around in the area where the entrance drive meets the loop. While the loop is regarded to be one-way by teachers and parents, there are no signs or pavement markings to indicate direction of traffic flow. In general, the site has is little traffic signage.

### Hazardous Materials

Original VAT flooring and asbestos ceiling tile was observed throughout the building. Testing and remediation of this material is recommended.

### Structure

The building is constructed with concrete columns and beams and a concrete floor roof deck supported by concrete beams. The foundations and footings are concrete with a concrete slab on grade. No cracking or other structural deficiencies were observed and overall the building is structurally sound.

### Exterior Façade

The exterior consists of brick veneer and stucco which is aged but in good condition. The stucco has some damage due to vandalism but is in good condition and repairable. Most of exterior doors have been replaced. They are steel or aluminum and in fair condition.

### Windows

Most of the windows are original 1961 single pane Lexan. They are weathered (opaque) which obstructs view of the outside. Window replacement throughout the building is needed. A few insulated windows were recently installed at the end of the connection corridor.

### Building Interior

The building has exposed concrete ceilings with 1'x1' acoustical tile between the beams. Doors are original wood with knobs (not accessible) and in poor condition. Casework is aged and at the end of its useful life. Most of the lockers are original and in poor condition and need to be replaced. Wood paneling in the corridors is original (worn) and should be upgraded. The Gym finishes need upgrading including wall finish. Resurfacing of the parquet flooring was observed to be in progress. Locker rooms are original and in poor condition and the showers appear to be unused. Student toilets need upgrading including replacing partitions. Science lab casework is original and in poor condition and should be replaced. Classroom furnishings are outdated and should be upgraded.

### Elevator

One elevator was installed in the building in 1992. It was observed to be in good condition and compliant with ADA regulations.

### Plumbing

The natural gas meter is located at grade outside of the boiler room and enters into the boiler room. Domestic hot water is provided to the school by one indirect gas fired hot water heater located in the boiler room. Hot water is circulated throughout the school. The cold water enters the school from the street in the boiler room and has a double check valve assembly. A second backflow preventer was added into the kitchen area. A relative few of the plumbing fixtures throughout the building have been updated. Drinking fountains are recessed and are not handicap accessible. Lab waste systems did appear separated from regular waste piping and a PH neutralization tank could not be located. Gas piping to science labs has been abandoned (disconnected) in place. Several make shift eyewashes were located in the science rooms.

### HVAC

The building is provided hot water by two hot water boilers, which have dual fuel burners. The boilers appear to be the original 1960 vintage, cast iron section HB Smith boilers, with an estimated efficiency of 74%. An underground, 10,000 gallon fuel oil tank is located in front of the boiler room, and is believed to be over 25yrs old. The masonry chimney is sized for an older oil fired system, most likely originally designed for #4 oil, and is oversized for the building. Hot water is distributed by three sets (1 back-up pump) of circulators, each serving a different zone in the building. The majority of the building is heated and ventilated by an array of equipment, including unit ventilators, unit heaters, cabinet unit heaters and radiant panels. The classrooms are each served by dedicated unit ventilators and in some cases additional "draft stop" radiation elements. Each classroom is provided with an exhaust grill connected to a series of exhaust fans throughout the building. Exhaust fans are typically roof mounted. Air conditioning is provided to the administrative offices only. Computer labs, special needs, and nurse's areas are not provided with air conditioning.

All of the HVAC equipment appears to be controlled with 3-way valves and uses both electronic and pneumatic controls. According to the facilities staff, the HVAC equipment is controlled

locally and not by a front end direct digital control (DDC) system. Most of the control system is pneumatic, and has reported leaks, verified, during walkthrough by the 5hp compressor running non-stop.

### Electrical

Electric service enters the side of the building in the boiler room located in the basement. Power distribution within the space is in very poor condition. Power demand is not properly met within the space, i.e. sufficient receptacles and tel/data connections are not provided. Many minor code violations, open panels, open junction boxes, overloaded circuits, multiple extension cords and power strips were observed. These issues do not represent immediate danger however they should be corrected. The fire alarm system has been recently updated and is in proper working order, but was not fully ADA compliant. It appeared that life safety items were not 2-hr rated, and some non essential circuits were also on the genset. All existing switchboards and panels were manufactured by Federal Pacific, Co., which is no longer in business; replacement parts are expensive and difficult to find. All panels were observed to be completely loaded, and no spare circuits were found anywhere in the building. There is no generator present at this building, and all life safety is on battery back-up.

Overall power distribution in the building was not capable of supporting current needs for power to classroom computers, overhead projectors, smart boards, etc. There were many cases of extension cords running around classrooms. Light fixtures are equipped with T8 lamping and controlled via toggle switches or directly by breakers in distribution panels. Most lighting consisted of bare bulb fluorescent located in ceiling wells created by structural beams. Many original fixtures serving specialty areas, such as hallways, alcoves, outdoor soffits, etc. have been abandoned in place. Site lighting is currently in poor condition. Site lighting is off building mounted spot lights at this time. Clock/bell system is the original from 1961, and is not working. No PA system or call-back feature is provided. The server and IT head-end room is similar to a closet room and did not have proper venting, clearance for safety and/or access, or an organized wiring method such as cable trays, ladders, raceways, J-hooks, etc.

### Fire Protection

The building is not equipped with a sprinkler system. The kitchen hood located in the cafeteria has an ancillary fire suppression system; a yearly inspection tag was not present.

### Accessibility

The building is non-compliant for the most part. Doors have knob (not levers), there is no auto entry and elevator is not HP accessible.

### Code Compliance

The building does not meet current building codes, including stairs and stair railings which are not-compliant.

## **Recommendation**

Planning for future school construction projects requires consideration of MSBA funding procedures and enrollment projections in addition to the physical condition of the existing facility and available educational spaces. Beginning the preliminary stages of the process several years in advance of design and construction is recommended.

Recommendations for future needs of the Bird Middle School include the following options:

**Capital improvements:** Postpone all major capital improvements until the SOI review process is complete.

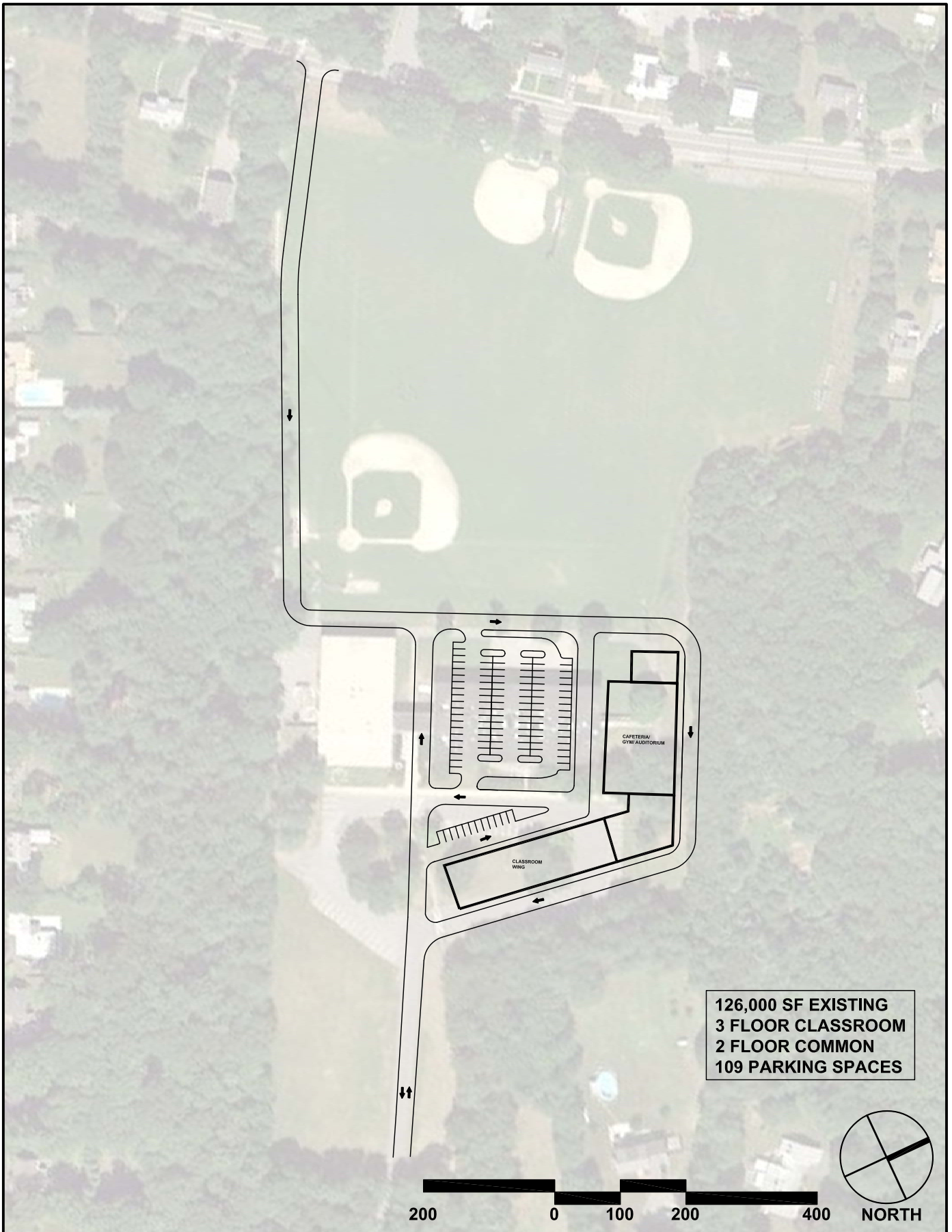
### **Construction of a new combined Middle School on the current Bird Middle School Site.**

#### Advantages

- Consolidation of two existing school into one school.
- Potential for phased construction of the new Middle School on the Bird MS site.
- Bird Middle School is a better site for new combined Middle School.
- Bird MS site has dual access from Washington and East Street.
- Bird athletic fields are in good condition.
- Bird site offers the potential for separate bus and car access.

**Renovation:** Renovation of the existing Bird Middle School building for continued use as a middle school is not recommended because the existing building :

- Existing interior spaces are inefficient. The corridors in classroom wing are oversized.
- Cafeteria seating areas and Auditorium are poorly aligned.
- The existing structure has a floor-to-floor height (10'-6") which is too low and would make installation of new building systems costly.



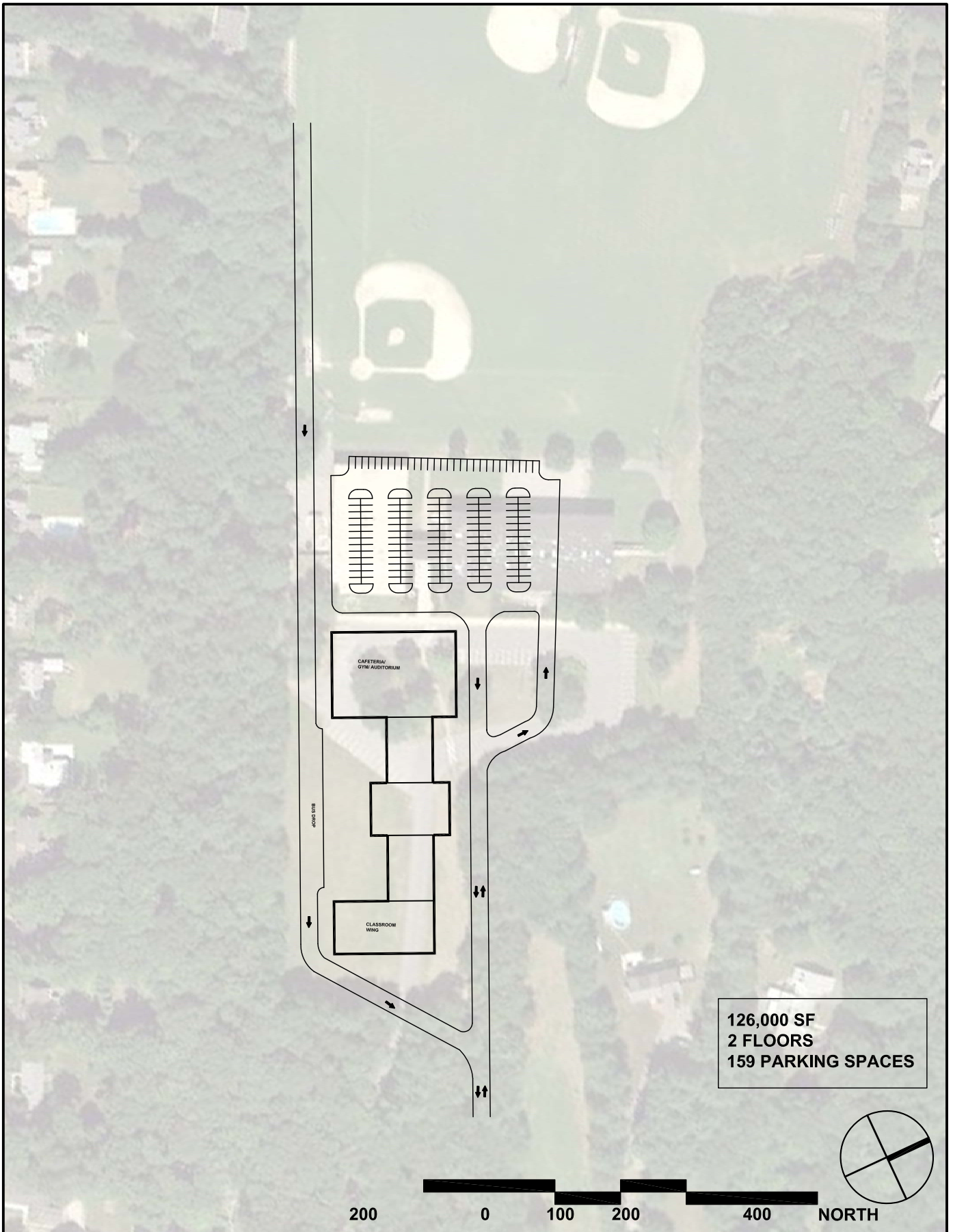
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## NEW MIDDLE SCHOOL

WALPOLE MASTER PLANNING STUDY





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**NEW MIDDLE SCHOOL**

WALPOLE MASTER PLANNING STUDY

New Middle School Bird Middle School Site	Building SF	Variables	Cost Projection
New School Building	126,000 0 0		
<b>Total Square Footage</b>	<b>126,000</b>	\$282	
<b>Construction Costs Sub Total</b>			<b>35,532,000</b>
Sitework			\$ 225,000
Site Clearing			\$ -
Demolition Costs			\$ 240,000
Abatement/Remediation			\$ 75,000
<b>Subtotal</b>			<b>\$ 36,072,000</b>
Construction Contingency		10%	\$ 3,607,200
Construction Escalation to end of 2013		4%	\$ 1,442,880
<b>Total Construction Costs</b>			<b>\$ 41,122,080</b>
Construction Cost Per Square Foot		<b>\$326</b>	
<b>Soft Costs</b>			
Design Engineering Fees (Allowance)		8%	\$ 2,885,760
Design Contingency		10%	\$ 3,607,200
Owners Project Manager (Allowance)		3%	\$ 1,082,160
Additional Project Costs (FFE, Comp Tech)			\$ 180,000
<b>Total Soft Costs</b>			<b>\$ 7,755,120</b>
<b>GRAND TOTAL</b>			<b>\$ 48,877,200</b>

Purchase Cost		\$ -
MSBA Reimbursement*	31%	\$ 15,151,932
		\$ -
		\$ -
<b>Total Funding*</b>		<b>\$ 15,151,932</b>
<b>Total Project Budget*</b>		<b>\$ 33,725,268</b>
<b>Total Bond</b>		<b>\$ 48,880,000</b>
Interest	4%	
Years	20	
<b>First Year Debt Service at 4%</b>		<b>\$ 4,400,200</b>

\*For Information only, NO MSBA funding has been awarded.

## New Middle School

### Cash Flow & Tax Impact Analysis - Construction COA Center

Scenario one - 20 year borrowing				
	Outstanding Principal	Principal Payments	Interest 4.000% Payments	Total Debt Service
	Total	\$48,880,000	\$20,522,000	\$69,402,000
1	\$48,880,000	\$2,445,000	\$1,955,200	\$4,400,200
2	\$46,435,000	\$2,445,000	\$1,857,400	\$4,302,400
3	\$43,990,000	\$2,445,000	\$1,759,600	\$4,204,600
4	\$41,545,000	\$2,445,000	\$1,661,800	\$4,106,800
5	\$39,100,000	\$2,445,000	\$1,564,000	\$4,009,000
6	\$36,655,000	\$2,445,000	\$1,466,200	\$3,911,200
7	\$34,210,000	\$2,445,000	\$1,368,400	\$3,813,400
8	\$31,765,000	\$2,445,000	\$1,270,600	\$3,715,600
9	\$29,320,000	\$2,445,000	\$1,172,800	\$3,617,800
10	\$26,875,000	\$2,445,000	\$1,075,000	\$3,520,000
11	\$24,430,000	\$2,445,000	\$977,200	\$3,422,200
12	\$21,985,000	\$2,445,000	\$879,400	\$3,324,400
13	\$19,540,000	\$2,445,000	\$781,600	\$3,226,600
14	\$17,095,000	\$2,445,000	\$683,800	\$3,128,800
15	\$14,650,000	\$2,445,000	\$586,000	\$3,031,000
16	\$12,205,000	\$2,445,000	\$488,200	\$2,933,200
17	\$9,760,000	\$2,445,000	\$390,400	\$2,835,400
18	\$7,315,000	\$2,445,000	\$292,600	\$2,737,600
19	\$4,870,000	\$2,445,000	\$194,800	\$2,639,800
20	\$2,425,000	\$2,425,000	\$97,000	\$2,522,000

## **Johnson Middle School**



### **Facility Information**

**Year Constructed:** 1966

**Renovation:** 2000

**Site:** 52.4 acres

**Parking:**

**Square Footage:** 98,000 SF

**Zoning:** PSRC

**Restrictions:** Conservation land

**Appraisal:** \$6,219,700

### **Educational Program**

**Capacity** Current Enrollment: 425 students

**Grades:** 6-8

**General:** Facility has shortage of space including classrooms, guidance, and administration

#### **Existing Room/Area**

Classrooms: 18

Science Labs: 4

SPED Classrooms: 4

Computer Labs: 2

Auditorium: 480 seat with stage. No accessible seating.

Gym: One full basketball court.

Cafeteria: 3 seating

Kitchen: Kitchen function is being converted to warming/serving function. At the start of this school year food will be cooked at the high school and brought in for serving.

Library: with classroom

Music Room: 2

### **Building Components**

#### **Site**

Site is surrounded by conservation land and has drastic elevation changes. Grades slope towards building in the front and this has caused water to enter the building in the past. Drainage for the

athletic fields is in good condition. Existing tennis courts in the rear of the building is currently used for basketball and also as a play area.

#### Parking/Circulation

There are severe problems with vehicular circulation. School bus access to the site creates conflict with the drop off area in front of the school. The result of this situation is that parents use the street or the adjacent FVW parking lot as a parking and drop-off area. This poses a dangerous situation, as Robbins Road carries high speed traffic. Except for special events, parking capacity is reported to be adequate. Parking lot drainage is reportedly good.

#### Hazardous Materials

Most of VAT flooring in the hallways has been abated but VAT is present in the classrooms. The 1'x1' concealed grid acoustical ceiling tile, between concrete beams, is original and contains asbestos.

#### Exterior Façade

The building exterior consists of brick veneer, precast concrete, exposed concrete columns and beams. Only minor cracking of masonry joints was observed. Otherwise the exterior surface is in good condition. The existing exterior doors included both original and new. The older doors appear to be worn and should be replaced.

#### Roof

The roof consists of EPDM with ballast installed 1987. Minor localized leaks occur on the interior. The roof should be replaced to eliminate leaking and minimize water damage to the interior of the facility.

#### Windows

Most of the windows are original 1966 single pane Lexan. They are weathered (opaque) which obstructs view of the outside. They all need to be replaced.

#### Building Interior

The interior of the facility includes exposed concrete ceilings, asbestos acoustic panels, VCT /VAT flooring and 1'x1' acoustical tile between the beams. Doors are original wood with levers but are poor to fair condition. Casework is aged and at the end of its useful life. Majority of lockers are original with severe wear and need to be replaced. The Gym finishes need upgrading including wall finish and refinishing parquet flooring. Locker rooms are original and in poor condition; the showers are not being used. The space needs to be completely renovated. Student Toilet Rooms need upgrading including replacing partitions. Science lab casework is original and in poor condition and should be upgraded. Existing classroom furnishings are out dated and should be replaced.

### Elevator

The existing elevator was installed 2000 and it is in good condition. It is compliant with ADA regulations.

### Plumbing

The natural gas meter is located at grade outside of the boiler room and enters into the boiler room. Domestic hot water is provided to the school by one indirect gas fired hot water heater located in the boiler room. Hot water is circulated throughout the school. The cold water enters the Johnson School from the street in the boiler room and has a double check valve assembly. A relative few of the plumbing fixtures throughout the building have been updated. Drinking fountains are recessed and not handicap accessible. Lab waste systems are separated, but a PH neutralization tank could not be located. Gas piping to science labs has been abandoned (disconnected) in place.

### HVAC

The building is provided hot water by two hot water boilers, which have dual fuel burners. The boilers appear to be the original 1960 vintage, two –pass fire tube style boilers, with an estimated efficiency of 78%. Four 330 gallon fuel oil tanks are located in the boiler room which exceeds limits for indoor storage quantity. Hot water is distributed by three sets (1 back-up pump) of circulators, each serving a different zone in the building. The majority of the building is heated and ventilated by an array of equipment, including unit ventilators, unit heaters, cabinet unit heaters and radiant panels. The classrooms are each served by dedicated unit ventilators and in some cases additional “draft stop” radiation elements. Each classroom is provided with an exhaust grill connected to a series of exhaust fans throughout the building. Exhaust fans are typically roof mounted. Two science prep rooms have been retrofitted with exhaust fans. Air conditioning is provided to the administrative offices only. Computer labs, special needs or nurse’s areas are not provided with air conditioning. All of the HVAC equipment appears to be controlled with 3-way valves and uses both electronic and pneumatic controls. According to the facilities staff, the HVAC equipment is controlled locally and not by a front end direct digital control (DDC) system.

### Electrical

Electric service enters the side of the building near the boiler room located in the basement. A standby generator is located on site. Power distribution within the space is in very poor condition. Power demand is not properly met within the space, i.e. sufficient receptacles and tel/data connections are not provided. Several minor code violations, open panels, open junction boxes, overloaded circuits, multiple extension cords and power strips were observed. These issues do not represent immediate danger however they should be corrected. The fire alarm system has been recently updated and is in proper working order, but was not fully ADA compliant. It appeared that life safety items were not 2-hr rated, and some non essential circuits were also on the genset. The generator was also located in the boiler room, which is not fire rated, and is required to be in a standalone room or enclosure. All existing switchboards and panels were manufactured by Federal Pacific, Co., which is no longer in business; replacement parts are expensive and difficult to find. All panels were observed to be completely loaded, and no spare circuits were found anywhere in the building.



Overall power distribution in the building was not capable of supporting current needs for power to classroom computers, overhead projectors, smart boards, etc. There were many cases of extension cords running around classrooms. Light fixtures are equipped with T8 lamping and controlled via toggle switches or directly by breakers in distribution panels. Most lighting consisted of bare bulb fluorescent located in ceiling wells created by structural beams. Many original fixtures serving specialty areas, such as hallways, alcoves, outdoor soffits, etc. have been abandoned in place. Site lighting is currently in poor condition. Site lighting is off building mounted spot lights at this time.

Clock/bell system is the original from 1961, and is problematic and unreliable. No PA system or call-back feature is provided. The server and IT head-end room is similar to a closet room and did not have proper venting, clearance for safety and/or access, or an organized wiring method such as cable trays, ladders, raceways, J-hooks, etc.

### Fire Protection

The building is not equipped with an automatic fire suppression system. The kitchen hood located in the cafeteria has an ancillary fire suppression system; a yearly inspection tag was not present.

### Accessibility

Doors have levers but there is no auto entry, ADA toilets, nor compliant stage access. The building does not meet current building codes, including stairs and stair railings which are not-compliant.

## **Recommendation** (if not used as a Middle School)

Planning for future school construction projects requires consideration of MSBA funding procedures and enrollment projections in addition to the physical condition of the existing facility and available educational spaces. Beginning the preliminary stages of the process several years in advance of design and construction process is recommended.

Recommendations for future needs of the Johnson Middle School include the following options:

**Capital improvements:** Complete all scheduled capital improvement projects.

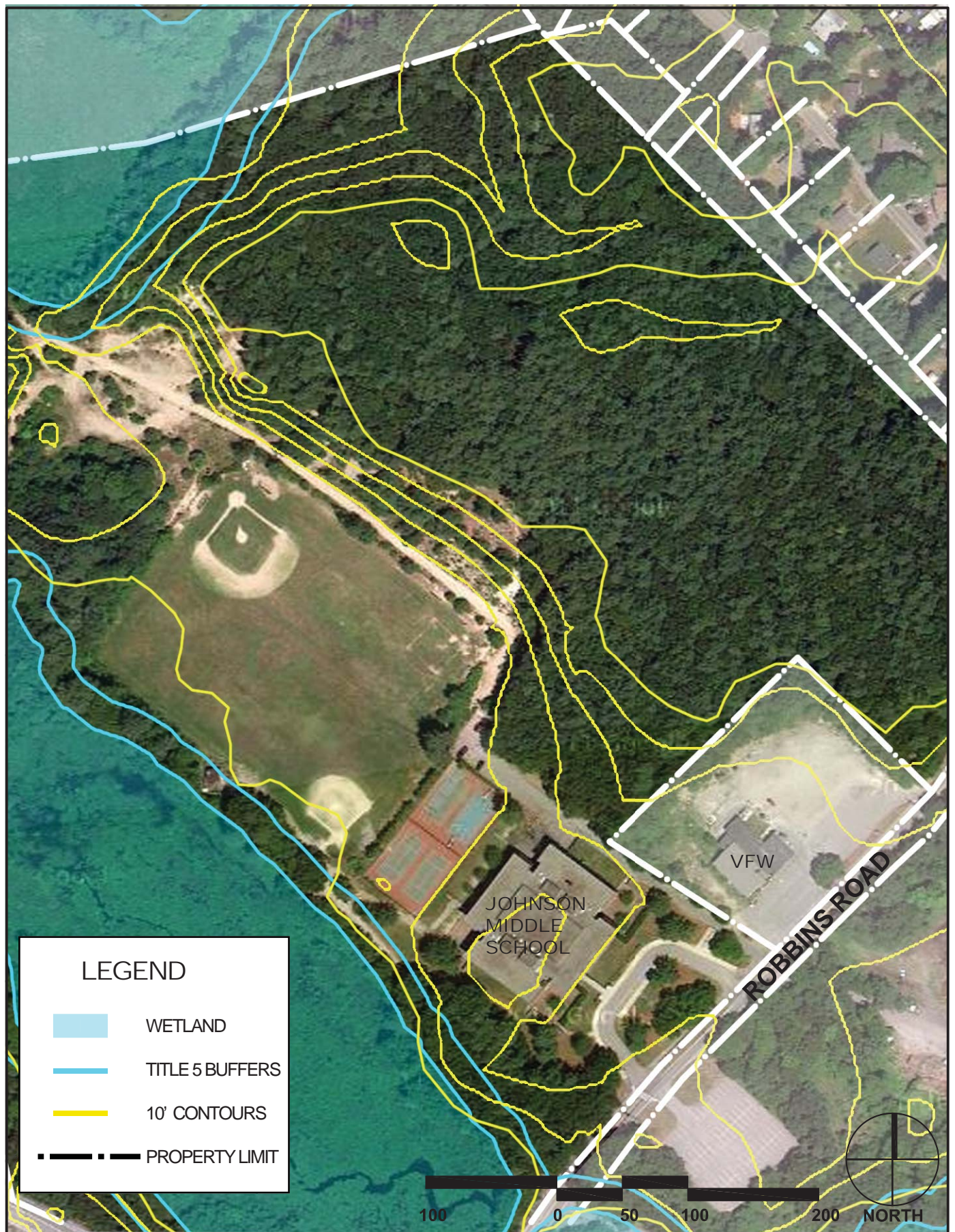
*If no longer used as a middle school*

**Consider renovation of existing building for use as an Elementary School.** (Possible replacement of Fisher School)

See attached sketch and budget.

**Consider renovation of existing building for use as a Recreation Center**

Recommended budget: \$5,000,000



**Maguire Group Inc.**  
Architects/Engineers/Planners  
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## JOHNSON MIDDLE SCHOOL

WALPOLE MASTER PLANNING STUDY  
AUGUST, 2012



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211 Congress Street, 11th Floor  
Boston, Massachusetts 02110

WALPOLE MASTER PLANNING STUDY

Renovation - Elementary School Johnson Middle School Site	Building SF	Variables	Cost Projection
Renovation of Existing Building	98,000		
	0		
<b>Total Square Footage</b>	<b>98,000</b>	\$176	
<b>Construction Costs Sub Total</b>			<b>17,248,000</b>
Sitework			\$ 175,000
Site Clearing			\$ -
Demolition Costs			\$ -
Abatement/Remediation			\$ 35,000
<b>Subtotal</b>			<b>\$ 17,458,000</b>
Construction Contingency		10%	\$ 1,745,800
Construction Escalation to end of 2013		4%	\$ 698,320
<b>Total Construction Costs</b>			<b>\$ 19,902,120</b>
Construction Cost Per Square Foot		\$203	
<b>Soft Costs</b>			
Design Engineering Fees (Allowance)		8%	\$ 1,396,640
Design Contingency		10%	\$ 1,745,800
Owners Project Manager (Allowance)		3%	\$ 523,740
Additional Project Costs (FFE, Comp Tech)			\$ 160,000
<b>Total Soft Costs</b>			<b>\$ 3,826,180</b>
<b>GRAND TOTAL</b>			<b>\$ 23,728,300</b>

Purchase Cost		\$ -
MSBA Reimbursement*	31%	\$ 7,355,773
		\$ -
		\$ -
<b>Total Funding*</b>		<b>\$ 7,355,773</b>
<b>Total Project Budget*</b>		<b>\$ 16,372,527</b>
<b>Total Bond</b>		<b>\$ 23,730,000</b>
Interest	4%	
Years	20	
<b>First Year Debt Service at 4%</b>		<b>\$ 2,139,200</b>

\*For Information only, NO MSBA funding has been awarded.

## Renovation Elementary School

### Cash Flow & Tax Impact Analysis - Construction COA Center

Scenario one - 20 year borrowing				
	Outstanding Principal	Principal Payments	Interest 4.000% Payments	Total Debt Service
	Total	\$23,730,000	\$9,940,000	\$33,670,000
1	\$23,730,000	\$1,190,000	\$949,200	\$2,139,200
2	\$22,540,000	\$1,190,000	\$901,600	\$2,091,600
3	\$21,350,000	\$1,190,000	\$854,000	\$2,044,000
4	\$20,160,000	\$1,190,000	\$806,400	\$1,996,400
5	\$18,970,000	\$1,190,000	\$758,800	\$1,948,800
6	\$17,780,000	\$1,190,000	\$711,200	\$1,901,200
7	\$16,590,000	\$1,190,000	\$663,600	\$1,853,600
8	\$15,400,000	\$1,190,000	\$616,000	\$1,806,000
9	\$14,210,000	\$1,190,000	\$568,400	\$1,758,400
10	\$13,020,000	\$1,190,000	\$520,800	\$1,710,800
11	\$11,830,000	\$1,190,000	\$473,200	\$1,663,200
12	\$10,640,000	\$1,190,000	\$425,600	\$1,615,600
13	\$9,450,000	\$1,190,000	\$378,000	\$1,568,000
14	\$8,260,000	\$1,190,000	\$330,400	\$1,520,400
15	\$7,070,000	\$1,190,000	\$282,800	\$1,472,800
16	\$5,880,000	\$1,190,000	\$235,200	\$1,425,200
17	\$4,690,000	\$1,190,000	\$187,600	\$1,377,600
18	\$3,500,000	\$1,190,000	\$140,000	\$1,330,000
19	\$2,310,000	\$1,190,000	\$92,400	\$1,282,400
20	\$1,120,000	\$1,120,000	\$44,800	\$1,164,800

## **Old Post Road Elementary School**



### **Facility Information**

**Year Constructed:** 1964  
**Renovation / addition:** 1994, 1997

**Site:** 11.43 acres  
**Parking:** 50  
**Square Footage:** 58,000 SF  
**Zoning:** RB  
**Restrictions:** None  
**Appraisal:** \$7,562,800

### **Educational Program**

Capacity Current Enrollment is 465 students

Grades: K-5

Classrooms: 23  
Science Labs: 0  
SPED Classrooms: 3  
Computer Labs: 1  
Music Room: 1

General: Facility has shortage of space including classroom, testing spaces, guidance areas, meeting rooms and storage space. As a result space has been repurposed to accommodate needs. In 1994 the school added 3 modular classrooms, which were supposed to be a temporary measure and have been in use ever since. A major concern issue is their adjacency to the Gym building. Students climb on the roof of the modular classroom area, and from there on the roof of the gym, causing safety issues and liability.

Cafetorium: The Cafetorium has 5 sittings, with each grade having separate meal times. The stage is not accessible.

Gym: Full court basketball court with wood parquet flooring.

Kitchen: Kitchen function is being converted to warming/serving function. At the start of this school year food will be cooked at the high school and brought in for serving.



Library: It in good condition: carpet flooring, good lighting, acoustical clouding.

Nurse: Space is original and antiquated.

Toilets: Spaces are original and antiquated

Other: the PA system is not functioning well, causing safety concerns.

## **Building Components**

### **Site**

The curbing and sidewalks at the front of the school and drop-off areas are in major disrepair, and have limited accessibility. The site shows no major drainage issues. Site lighting is inadequate and there is no lighting at baseball field and limited lighting at basketball court. The fields are not irrigated. Play areas require upgrades and maintenance of the safety surface. Site is constrained by neighboring properties, but there is room for building expansion.

### **Parking/Circulation**

Car and bus drop-off circulations are separated. There is enough room for all 8 buses to cue up for drop-off and pick-up. There is lack of parking capacity, especially during special events.

### **Hazardous Materials**

There is Original VAT flooring and asbestos 1'x1' ceiling tile in the 1964 building.

### **Structure**

The building is constructed with steel framing and steel roof joists and supported on a concrete foundation and footings. The ground floor is slab on grade. No settlement or cracking related to structural deficiencies was observed. The south end of building experienced some damage when it was hit by a vehicle which resulted in localized leaks at windows.

### **Exterior Façade**

Walls: Brick veneer is aged but in good condition. The panels underneath the widows are in poor condition. Most of exterior doors have been replaced and are equipped with panic hardware. They are steel or aluminum.

### **Roofing**

The roof is mostly asphalt shingles in good condition, with membrane roofing at the modular classroom section, and metal roofing at the gym. Localized repairs are needed, and leaks are present at building joints and additions thresholds.

### **Windows**

Some of the existing windows are original 1966 single pane Lexan. They are weathered (opaque) which obstructs view of the outside. These windows are not insulated and all need to be replaced.

Double glazed windows were installed at the 1994 addition. Modular classrooms have single pane windows, some of which are leaking.

### Building Interior

Finishes on the interior of the building include ceilings with 2x2 and 2x4 tiles, GWB ceilings and exposed structure ceilings in Cafetorium. The majority of the flooring is VCT, with some VAT; Carpet at Library and wood flooring at Gym. Doors are in good condition and have mostly been replaced during the 1994 addition/renovation. A small number of doors are original and hardware upgrades. Casework is original but in good condition. The school has no lockers, but open cubbies for storage and benches along the corridors. Student toilets need upgrading including replacing partitions. Classrooms furniture is mostly original and outdated and should be replaced.

### Elevator

The building does not have an elevator.

### Plumbing

The building has natural gas service. The gas meter enters the building near the kitchen and feeds both boiler systems, two domestic water heaters and cooking equipment in the kitchen. The water heaters are located in the basement mechanical room. One water heater serves the kitchen and the other serves the toilet rooms and classroom sinks throughout the building. A backflow preventer for the domestic water service was not observed. The kitchen exhaust hood was equipped with an Avtech fire protection system.

### HVAC

The school has two central heating boiler systems and localized DX cooling in specific areas. Both boiler systems are located in the basement level Mechanical Room and are dual fuel. The first has two Weil McLain 88 Series steam boilers rated at 1600 MBH (output) each and serves unit ventilators, H&V units, fin tube radiation and unit heaters in the original 1964 section of the building. The second boiler system has a 6 section Hydrotherm hot water sectional cast iron boiler rated at 1800 MBH and serves unit ventilators, H&V units, fin tube radiators and unit heaters in the 1994 addition. The modular classrooms installed in 1997 have packaged gas fired heating/DX cooling roof top units and not tied into systems in the 1994 addition.

Cooling is available in limited areas of the school. The administration area has through the wall air-conditioners and the library and modular classrooms have packaged roof top units noted above. The building is equipped with a combination of pneumatic and electric controls. An above ground fuel oil storage tank is located outside the kitchen and feeds the duplex pump set in the basement mechanical room.

### Electrical

The main electric gear was upgraded during the 1994 addition and includes an 800 amp, 208 V/3 phase/4 wire switchboard located on the basement level adjacent to the mechanical room. This switchboard serves the entire school and feeds panels located throughout the school. Distribution

panels serving the modular classrooms are located in the hallway leading to the modular classrooms. The school experiences periodic power outages. The size of the electrical service and potential surges in power should be reviewed.

The fire alarm system is a zoned system with a keyed panel in the main lobby. The zoned panel is located on the basement level adjacent to the electric gear. Devices on the fire alarm system include horn strobes, heat detectors and smoke detectors. Egress lighting is provided by battery powered back up fixtures.

### Fire Protection

The building was fully sprinkled in 1994 and the sprinkler room is within the basement level mechanical room. The zoned sprinkler system has a back flow preventer. The modular classrooms were added to the system in approximately 2009.

### Accessibility

The building is compliant for the most part, although some doors have knobs (not levers), there is no auto entry and stage is not HP accessible.

## **Recommendation**

Planning for future school construction projects requires consideration of MSBA funding procedures and enrollment projections in addition to the physical condition of the existing facility and available educational spaces. Beginning the preliminary stages of the process several years in advance of construction is recommended.

Recommendations for future needs of the Old Post Road School include the following options:

**Capital improvements:** Postpone all major capital improvements until the SOI review process is complete.

**Renovation:** Plan for renovation of existing building for continued use as an Elementary School.  
Recommended Budget: \$14,220,000

**Renovation /Addition:** Renovate classroom wing of existing building and demolish temporary classrooms and foundation. Construct addition for more classrooms and core facilities.

**New Building:** Construct a new 58,000 square foot school in the existing field and demolish existing building and construct new parking lot and athletic field. Consolidation of the Old Post Road and Fisher School should be considered.

*If no longer used as a school*

**Private Development:** The Town should consider the option making the building available to a private developer for residential use.

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## LEGEND

- 10' CONTOURS
- PROPERTY LIMIT

200

100

200

400

NORTH



**Maguire Group Inc.**  
Architects/Engineers/Planners

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Boston, Massachusetts 02110

## OLD POST ROAD SCHOOL

WALPOLE MASTER PLANNING STUDY  
AUGUST, 2012





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## OLD POST ROAD ELEMENTARY SCHOOL

WALPOLE MASTER PLANNING STUDY



New Elementary School Old Post Road School Site	Building SF	Variables	Cost Projection
New School Building	58,000		
	0		
	0		
<b>Total Square Footage</b>	<b>58,000</b>	\$258	
<b>Construction Costs Sub Total</b>			<b>14,964,000</b>
Sitework			\$ 135,000
Site Clearing			\$ -
Demolition Costs			\$ 180,000
Abatement/Remediation			\$ -
<b>Subtotal</b>			<b>\$ 15,279,000</b>
Construction Contingency		10%	\$ 1,527,900
Construction Escalation to end of 2013		4%	\$ 611,160
<b>Total Construction Costs</b>			<b>\$ 17,418,060</b>
Construction Cost Per Square Foot		\$300	
<b>Soft Costs</b>			
Design Engineering Fees (Allowance)		8%	\$ 1,222,320
Design Contingency		10%	\$ 1,527,900
Owners Project Manager (Allowance)		3%	\$ 458,370
Additional Project Costs (FFE, Comp Tech)			\$ 160,000
<b>Total Soft Costs</b>			<b>\$ 3,368,590</b>
<b>GRAND TOTAL</b>			<b>\$ 20,786,650</b>

Purchase Cost		\$ -
MSBA Reimbursement*	31%	\$ 6,443,862
		\$ -
		\$ -
<b>Total Funding*</b>		<b>\$ 6,443,862</b>
<b>Total Project Budget*</b>		<b>\$ 14,342,789</b>
<b>Total Bond</b>		<b>\$ 20,790,000</b>
Interest	4%	
Years	20	
<b>First Year Debt Service at 4%</b>		<b>\$ 1,871,600</b>

\*For Information only, NO MSBA funding has been awarded.

## New Elementary School

### Cash Flow & Tax Impact Analysis - Construction COA Center

Scenario one - 20 year borrowing				
	Outstanding Principal	Principal Payments	Interest 4.000% Payments	Total Debt Service
	Total	\$20,790,000	\$8,728,000	\$29,518,000
1	\$20,790,000	\$1,040,000	\$831,600	\$1,871,600
2	\$19,750,000	\$1,040,000	\$790,000	\$1,830,000
3	\$18,710,000	\$1,040,000	\$748,400	\$1,788,400
4	\$17,670,000	\$1,040,000	\$706,800	\$1,746,800
5	\$16,630,000	\$1,040,000	\$665,200	\$1,705,200
6	\$15,590,000	\$1,040,000	\$623,600	\$1,663,600
7	\$14,550,000	\$1,040,000	\$582,000	\$1,622,000
8	\$13,510,000	\$1,040,000	\$540,400	\$1,580,400
9	\$12,470,000	\$1,040,000	\$498,800	\$1,538,800
10	\$11,430,000	\$1,040,000	\$457,200	\$1,497,200
11	\$10,390,000	\$1,040,000	\$415,600	\$1,455,600
12	\$9,350,000	\$1,040,000	\$374,000	\$1,414,000
13	\$8,310,000	\$1,040,000	\$332,400	\$1,372,400
14	\$7,270,000	\$1,040,000	\$290,800	\$1,330,800
15	\$6,230,000	\$1,040,000	\$249,200	\$1,289,200
16	\$5,190,000	\$1,040,000	\$207,600	\$1,247,600
17	\$4,150,000	\$1,040,000	\$166,000	\$1,206,000
18	\$3,110,000	\$1,040,000	\$124,400	\$1,164,400
19	\$2,070,000	\$1,040,000	\$82,800	\$1,122,800
20	\$1,030,000	\$1,030,000	\$41,200	\$1,071,200

## **Fisher Elementary School**



### **Facility Information**

**Year Constructed:** 1955

**Addition:** 1967

**Renovation:** 1998 & 2004

**Site:** 20 acres

**Parking:** 90

**Square Footage:** 87,000 SF

**Zoning:** PSRC

**Restrictions:** Possible wetlands

**Appraisal:** \$8,769,300

### **Educational Program**

**Capacity** Current Enrollment: 443 students

**Grades:** K - 5

Classrooms: 22

Science Labs: 0

SPED Classrooms: 7

Computer Labs: 1

Auditorium: No fixed seating / not enough room for assembly space

Gym: 2 Regulation basketball court with wood parquet flooring. One Gym is also used for assemblies.

**General:** Facility has shortage of space including classroom, therapy spaces, guidance areas, meeting rooms, storage space, administrative area, health office area. Many rooms have been repurposed to meet school needs.

**Cafeteria:** 200 seat with 3 sittings

**Kitchen:** Kitchen function is being converted to warming/serving function. At the start of this school year food will be cooked at the high school and brought in for serving.

**Library:** Functionally efficient / but needs updated finishes and furniture / the conference room is poorly ventilated and overheats

**Music Room:** in good condition with movable quire stage

**Nurse:** The Nurse's Office is part of the original construction and antiquated.

Toilets: Spaces are original and antiquated

Other: The PA system is not functioning well, causing safety concerns.

## **Building Components**

### **Site**

The parking area is provided with lighting, but some of them are not functioning properly. The sidewalks have been patched and maintained, but significant work should be done to replace damaged curbing and add accessible curb cuts.

The play equipment is fairly new and in good condition. The wood chips safety surface shows wear and does not have a consistent adequate depth. The school uses the practice field maintained by the town, which does not have any major drainage issues.

### **Parking/Circulation**

The bus and car access and circulations have separate drive isles. While the 8 buses drop-off functions well, the car drop off takes place in the rear of the school, in an unmarked paved area. This is potentially a safety concern.

There is lack of parking capacity, especially during special events. The bituminous concrete surface has extensive cracking and should be resurfaced and restriped.

### **Hazardous Materials**

Areas of concern include VAT flooring and asbestos 1'x1' ceiling tile throughout the building. Window caulking and pipe insulation also potentially contain asbestos.

### **Structure**

The building is constructed of steel beam framing with a steel truss roof. The foundation and footings are concrete with a slab on grade. No visible signs of settlement, extensive cracking in the structure or exterior façade was observed.

### **Exterior Façade**

The exterior walls consist of brick and stone veneer with exposed concrete foundation at the base. The masonry is aged but in good condition. Most of exterior doors have been upgraded and are steel or aluminum and have been equipped with panic hardware.

### **Roofing**

The existing roofing is a mix of rubber and EPDM with ballast. It was installed 1989. No signs of leaking were observed in the building interior. However replacement should be considered as the roof has surpassed life expectancy.

### Windows

Most of the windows are double pane and have been replaced in the late 90's. Some original single pane windows still exist, causing energy efficiency issues and water infiltration.

### Building Interior

The existing ceiling consists of small areas of hard ceilings with textured finish, asbestos ceilings with 1'x1' and acoustical tile, 2'x2' drop ceilings. Most doors are original wood some with non accessible hardware and in poor condition. Doors located in the 1998 addition have compliant hardware. Casework is aged and at the end of its useful life. Majority of lockers are original but in good condition.

Floor surfaces in the corridors have VCT tiles with 2'x2' ceiling tiles and glazed tile walls in the original building. The Gym finishes need upgrading including wall finish and window treatments. Parquet flooring in good condition, needs refinishing. Locker rooms are original and in poor condition and the showers appear to be unused. Student toilets need upgrading including replacing partitions. The library has carpet flooring, tectum walls, 1'x1' ceiling tiles, and needs to be renovated. Classrooms have all been equipped with overhead projectors and smart boards.

### Elevator

The elevator was installed 1998 and is in good working condition and is compliant with current ADA requirements.

### Plumbing

The building has natural gas service. The gas meter is on the north side of the building and passes through two classrooms and a courtyard before entering the mechanical room. The shutoff valve is located in the first classroom where the gas pipe enters the building. None of the kitchen equipment was gas fired.

The domestic water service has a back flow preventer at the meter located outdoors at the rear of the school. Domestic hot water is provided by a Bryan water tube boiler in the basement level mechanical room that was installed in 1986 and has a capacity of 720 MBH (output). The water heater serves the kitchen and toilet rooms and sinks throughout the building.

### HVAC

The school has two dual fueled HB Smith 450 Mills steam boilers in the basement level Mechanical Room. The 20 section boilers are 4100 MBH (gross output) each. One is original to the 1950 building, and the second was added with the 1968 addition. There is one steam loop serving the auditorium and cafeteria and two hot water loops serving the remainder of the school. Steam to hot water heat exchangers located in the mechanical room with the boilers feed the hot water loops. The steam and hot water loops serve unit ventilators, H&V units, fin tube radiators, convectors and unit heaters located throughout the school.

Cooling is limited to through-wall air conditioners in the administration area and the special education classroom. The building is equipped with a combination of pneumatic and electric controls. An above ground fuel storage tank is located in the rear courtyard and feeds a duplex



pump set in the basement mechanical room. Exact tank capacity was not known but is at least 5,400 gal according to a label on the tank. The 1950 wing has the original hot water piping. There have been multiple leaks in the past three years and this system has no water treatment. This piping should be replaced.

### Electrical

A 2000 amp, 208 V/3 phase switchboard is located in the basement level electric room. This feeds multiple distribution panels in closets and corridor walls throughout the building. The panels are a combination of replacement and original. A 30 KW, oil fired, stand-by generator is located in the basement level adjacent to the electric room. One of the boilers, freezers in the kitchen and most of the egress lighting are on the standby generator.

The fire alarm system is a zoned system with a keyed panel at the main entry. The system has four zones, and the main panel is located in the original electric room behind the mechanical room. The fire alarm devices consist of horn strobes, smoke detectors and heat detectors.

### Fire Protection

There is no sprinkler system in the building. The kitchen exhaust hood was not equipped with a fire suppression system either. Installation of a sprinkler system is recommended.

### Accessibility

Several area of the building are non-compliant with ADA regulations. Door hardware requires upgrade. The entry needs an automatic door opener. The gym is only accessible from outside the building and the stage not accessible.

## **Recommendation**

Planning for future school construction projects requires consideration of MSBA funding procedures and enrollment projections in addition to the physical condition of the existing facility and available educational spaces. Beginning the preliminary stages of the process several years in advance of construction is recommended.

Recommendations for future needs of the Fisher School include the following options:

**Capital improvements:** Postpone all major capital improvements until the SOI review process is complete.

**Renovation:** Plan for renovation of existing school for continued use as an Elementary School.  
Recommended Budget: \$14,220,000

*If no longer used as a school*

**Demolition:** Demolition of existing building and construction of new athletic fields.  
Recommended Budget: \$1,730,000

## **East Fire Station**



### **Facility Information**

**Year Constructed:** 1925

**Site:** 6,955 SF

**Parking:** 4 unmarked (0 accessible)

**Square Footage:** 6,480 SF

**Restrictions:** None

**Appraisal:** \$548,300

### **General Description**

The East Fire Station is a two story masonry building with a full basement. The facility has served the Town of Walpole for numerous years however due to technological advances in firefighting equipment, size restrictions of the apparatus bays and doors, as well Town staffing/budget issues the station has been deactivated as a manned response station and currently used as a storage area for reserve vehicles.

At the time of its construction the first floor was used for fire apparatus and the second floor for fire fighters living quarters. The second floor was renovated in 2005 and expanded from just living quarters to living quarters and a large training/conference room. As part of this renovation the apparatus bay was updated, a new watch room and toilet room were constructed.

### **Building Components**

#### **Site**

The site is small and includes a paved parking area large enough for four cars with no accessible parking. The bituminous pavement is in poor conditions with substantial cracks. The concrete apron in front of the bays was observed to be in good condition. The concrete retaining wall in the rear of the site and the concrete wall and stairs leading to the basement are also in good condition. The hand rail is in poor condition and non compliant with ADA and should be replaced. Small planted areas exist on the side of the building and are in fair condition.

### Hazardous Materials

There are visual indications of suspect hazardous materials. Survey and testing of materials is recommended. Areas of concern include the following:

- Pipe insulation in basement.
- Lead paint and stain throughout the interior and exterior.

### Structure

The buildings foundation consists of cast-in-places concrete. Currently in good condition and no structural cracks or other deficiencies identified. The apparatus bay slab is a concrete slab supported by steel beams and steel columns. The second floor and roof are conventional wood frame construction.

Since its construction the second floor has sagged by several inches. The renovations in 2005 re-leveled portions of the floor, however it is not certain if they addressed the cause of the sagging floor or simply constructed on top of it.

### Exterior Façade

The exterior walls consist of a brick masonry facade on a concrete load bearing block back up. The brick a common bond with a flemish header course every third course. The exterior masonry detailing includes several soldier and header bands as well as an intricate brick pediment with brick corbelled dentils, masonry accents and infills.

Typical of the construction period, the walls are not insulated and the brick and block walls have an intertwined construction. The double wythe masonry wall has no vapor barrier, insulation or weeping capabilities. The exterior walls are unreinforced load bearing and not seismically braced to the rest of the structure. Overall the masonry construction is in good condition.

### Roof

The roof construction consists of wood decking on conventional flat roof framing spaced approximately 16" on center. The roofing material is ballasted single ply roof membrane approximately 15-years old. The membrane roof is near the end of its useful life and should be scheduled to be replaced within the next 5 to 10 years. The roof slopes to the rear with all storm water collection, gutters and downspouts, occurring at the back of the facility

### Doors and Windows

The apparatus bay doors have been replaced with sectional doors to accommodate the larger equipment. The windows as part of the 2005 building renovations have been replaced with aluminum double hung frames and insulated glazing.

### Building Interior

The interior of the facility is in overall good conditions. The basement area is strictly relegated to mechanical equipment and storage and remains relatively unchanged from its original construction.

The finishes within the first floor are excellent condition. As part of the 2005 renovations the apparatus bay received a new epoxy floor, new ceiling tiles and paint. The rear of the apparatus bay, the main entry into the facility, was renovated to accommodate a new watch room and unisex toilet room.

Recent renovations to the second floor modified the existing spaces to provide a small kitchen, combined dining day room and a unisex toilet room at the rear of the facility with a dormitory style bunk room at the front of the facility. The space between the living quarters and the dormitory was renovated as a large training conference room. Access between the floors is through a non enclosed wood stair. Direct access from the dormitory to the apparatus bay is provided with a fire pole. However, the clam shell on the pole is not fire rated.

### Elevator

The facility does not have an elevator.

### Plumbing

A 1-1/2" domestic water service enters the building in the basement level in a non-functioning bathroom. The service is reduced to a 1/2" supply to the water meter and 1/2" supply to the building. The building has a 1-1/2" natural gas service and meter that is external to the building. The gas piping runs on the exterior of the building to the roof and supplies a packaged rooftop unit that services the second floor of the building. The domestic hot water is generated by an American Water Heater Company, 50 gallons, 240 volt, single phase, 4.5 kw electric storage type water heater located in the basement. The heater is fairly new and in good serviceable condition.

There is a single bathroom located on the first floor which includes a low consumption tank type water closet and a drop in lavatory in a tiled vanity. The fixtures are in good serviceable condition. There is a single molded tab stand utility sink located in the vehicle storage area. The sink has a threaded hose connection on the faucet that is not equipped with a vacuum breaker. There is a full bathroom located on the second floor which includes a low consumption tank type water closet, drop-in lavatory in a vanity and a tiled shower with molded base. The fixtures are in good serviceable condition. There is a kitchen area located on the second floor with a single well drop-in stainless steel sink and dishwasher. The fixtures are in good serviceable condition. The 4" sanitary line runs exposed in the basement level and exits through the non-functioning bathrooms at the front of the building. The garage does not have a dedicated floor drain. The roof is flat and is drained to two scupper and downspout locations on the rear of the building. The downspouts are connected to the buried storm drainage system.

### HVAC

The building is heated by a cast iron oil fired Weil-McLain Gold series boiler. The boiler rating is 144 MBH. The boiler was installed in 2003. There are two 275 gallon fuel oil storage tanks located in the basement that are dual piped. The boiler provides heating for the first floor and vehicle storage area. The piping distribution system is steel. The piping serves cast-iron sectional radiators and fintube radiation. The basement is unheated. A gas fired packaged rooftop unit provides heating and air conditioning via hard ducted supply and return air ductwork and ceiling diffusers to the entire floor. The unit is controlled by a programmable thermostat. There is no ventilation provided for the first floor bathroom. The second floor bathroom has a ceiling exhaust located in the shower and an operable window. There is a dedicated vehicle exhaust system installed in the vehicle garage.

### Electrical

The building is fed with a 200 amp 120/208 volt, 3 phase 4 wire service with exterior meter socket. The service is overhead from a utility pole at the street to a utility pole adjacent to the building and from the pole to a weather head mounted on the side of the building. The service runs to the basement through an exterior mounted conduit. The service panel is in new condition and is a 42 space breaker GE panelboard. There is a 100 amp sub panel located on the second floor with 30 breaker spaces serving the second floor and HVAC rooftop distribution. Lighting is a mixture of incandescent and compact florescent on the first floor. Industrial opens two lamp T-8 fixtures in the vehicle garage, surface mounted 1 x 4 florescent lensed two lamp T-8 fixtures in the basement and 2 x 2 lensed recessed florescent T-8 fixtures on the second floor. Lighting control is by toggle switch.

The fire alarm system has been upgraded with FACP, pull stations, notification devices and detection installed throughout. CO detection has been installed in the basement. The building is served with battery type emergency light fixtures and heads. There is a 60 kw diesel fueled stand-by generator that provides standby power for the entire electrical services with automatic transfer switch located adjacent to the electric service in the basement.

### Fire Protection

The building does not have an automatic fire suppression system.

### Accessibility

The facility was constructed prior to the issuance of the Massachusetts Architectural Access Board (MAAB) and the Americans with Disability Act (ADA), and is non compliant with current regulations.



Since firefighters, need to be able bodied to perform their duties, the Town could request a waiver from the MAAB to relieve the requirements of an elevator and accessible toilet rooms.

Any renovations or change of use group to the building will require that the facility be brought up to comply with MAAB and ADA. The extent of compliancy will depend on the costs of the renovations versus the buildings assessed value.

### Code Compliance

The existing facility was constructed as a fire station and in compliance to the building codes in affect at the time. Since the building is still classified as a fire station, the facility is grandfathered to the previous codes. However, as renovations are implemented those modifications need to comply with the current codes.

Renovations to the second floor such as renovating the existing spaces into a training/conference room could impact the building usage, fire separation requirements between the floors, requiring an enclosed means of egress, the number of egress required from the second floor as well as the handicap accessibility issues.

Per the International Existing Building Code (IEBC) and Massachusetts code addendums, changes in building use and major renovations will trigger major structural upgrades and seismic improvements.

### Functional Analysis

Currently the building only has one non-accessible unisex toilet room on the first floor, and one non-accessible unisex toilet room the second floor. There are no female firefighter's accommodations, either for toilet rooms or sleeping quarters

Due to floor sagging, the 2005, renovations leveled off areas of the floor however this created several areas of different floor heights.

The size of the apparatus bays, the apparatus bay doors and the size of the facility in general will be the determining factor if this facility can remain usable as an active manned fire station.

### Recommendations

**Renovation:** Limited upgrades to the existing building for temporary use as a functioning fire station if a new station is constructed on the location of the existing Central Fire Station.

Recommended budget: \$100,000

**Renovation:** Provide limited renovation of the existing building for use as Town office space, storage or potentially a new location for the Food Pantry.

Recommended budget: \$250,000

**Private Development:** The Town should consider the option making the building available to a private developer for commercial or retail use.

## **South Fire Station**



### **Facility Information**

**Year Constructed:** 1923

**Site:** 11,000 SF

**Parking:** 3 unmarked (0 accessible)

**Square Footage:** 5,000 SF

**Restrictions:** Wetlands

**Appraisal:** \$265,300

### **General Description**

The South Fire Station is a two story masonry building with a full walk-out basement. The facility has served the Town of Walpole for numerous years however due to technological advances in firefighting equipment, size restrictions of the apparatus bays and doors, as well Town staffing/budget issues the station has been deactivated as a manned response station and currently used as a storage area for reserve vehicles.

At the time of its construction the first floor was used for fire apparatus and the second floor for fire fighters living quarters. The second floor has been recently renovated and converted from living quarters to a large fitness room. The remainder of the facility has been unchanged from its 1923 construction.

### **Building Components**

#### **Site**

The site is small and adjacent to a river and undeveloped residential property. The condition of the pavement is mostly poor. Bituminous concrete parking area and the apron have substantial cracks and are with filled with vegetation. A small sidewalk exists along the east side of the building and is poor condition. The planted area along the river and in the rear of the building is overgrown and requires maintenance.

#### **Parking/Circulation**

Parking is very limited and restricted to two or three tandem parking spaces on either side of the front apron. No handicap parking is identified.

### Hazardous Materials

There are visual indications of suspect hazardous materials. Survey and testing of materials is recommended. Areas of concern include the following:

- Pipe insulation in basement
- Sealant joints in windows
- Flooring tiles
- Lead paint and stain throughout the interior and exterior

### Structure

The buildings foundation consists of cast-in-places concrete. Currently in good condition with no cracks or other structural deficiencies identified. The apparatus bay slab is a concrete slab supported by steel beams and steel columns. The second floor and roof are conventional wood frame construction. The exterior walls are unreinforced load bearing and not seismically braced to the rest of the structure.

### Exterior Façade

The exterior walls consist of a brick masonry facade on a concrete load bearing block back up. The brick pattern is a running bond with a flemish header course every sixth course.

Typical of the construction period, the walls are not insulated and the brick and block walls have an intertwined construction. Consequently the double wythe masonry wall has no vapor barrier, insulation or weeping capabilities. Overall the masonry construction was observed to be in good condition.

### Roof

The roof construction consists of wood decking on conventional hip roof framing spaced approximately 16" on center. The roofing material is a three tab asphalt roof shingles approximately 20-years old. It is anticipated that similarly to the rest of the facility the roof is not insulated. The shingle roof is approaching the end of its life cycle and this is evident by the open bird mouths on the roof. The facility does not have gutters or downspouts.

### Doors and Windows

The original swinging wood apparatus bay doors have been replaced with metal coiling doors. The coiling system was installed in the exterior of the building in order to maintain the original height of the door opening. The windows are the original steel framed awning windows with single pane, un-insulated glazing.

### Building Interior

The interior of the facility is in various stages of repair. Access between the floors is through a non enclosed wood stair that is not compliant with accessibility or building code requirements.

The basement area is used as a mechanical room and for limited storage and remains relatively unchanged from its original construction. A sump pit and pump are located in the right front corner of the building to address potential flooding.

The first floor, is dedicated to the fire apparatus parking, the structural slab appears to have been replaced since the original construction to accommodate larger and heavier apparatus. The finishes within the first floor require updating.

The second floor fitness area has been recently renovated (within the last two years) and was observed to be in good condition. The other spaces on the second floor require updating and renovation.

### Elevator

No elevator exists within the facility.

### Plumbing

A 1" domestic water service enters the building in the basement at the entry side of the building. There is a 1" water meter in the basement and 1-1/2" supply to the building. The building has a 1" natural gas service and meter that is external to the building on the opposite side from the entrance. The 1" gas piping runs through the exterior wall and through the basement to the new gas boiler. The domestic hot water is generated by a Mor-Flo 40 gallon 240 volt, single phase, 4.5 kw electric storage type water heater located in the basement. The heater is in good serviceable condition.

There is a single bathroom located on the second floor which includes a low consumption tank type water closet, wall hung lavatory with metering faucets and a FRP panel shower stall with molded base. The water closet and lavatory are in good serviceable condition. The shower is in fair condition. There is a combination efficiency type sink and electric range installed on the second floor. The fixture is in poor condition. The 4" sanitary line runs exposed in the basement level and exits through the front wall of the building and is connected to the street sewer. The vehicle garage has a single drain located in the center of the vehicle storage area. The drain is connected directly to the sanitary drain.

The roof is a 4-way hip style and drains direct from roof edge. There are no gutters or downspouts installed.

### HVAC

The building is heated by a high efficiency, Lochinvar Knight series, gas fired, sealed combustion, condensing boilers with new zone circulators with copper and steel distribution piping. The boiler was installed in the winter of 2012. The piping serves cast iron radiators, fin-tube radiation, and propeller type unit heaters. There are three programmable thermostats that control the zone circulators for the heating system. The

basement is unheated. The second floor large room has a single window type air conditioner installed in a glass pane window. Glazing has been removed from the window panes to facilitate the installation. There is a dedicated vehicle exhaust system installed in the vehicle garage.

### Electrical

The building is fed with two electric services. One is a 120/208 volt, 3 phase, 4 wire, 125 amp service and the other is a 120/240 volt, 1 phase, 3 wire, 200 amp service. The second service feeds a 60 amp fused distribution panel on the second floor with (4) 15 amp fused circuits. The meter sockets are located on the right side of the building and are fed overhead from the street pole mounted transformers to service weatherheads. The meters feed to panelboards located in the basement. The panels are in good serviceable condition. Lighting is a mixture of incandescent ceiling fixtures and industrial type 2-lamp strip fixtures with 4 foot T-8 lamps. Lighting control is by toggle switch.

The fire alarm system has been upgraded with FACP, pull stations, notification devices and detection installed throughout. CO detection has been installed in the basement. The building is served with battery type emergency light fixtures with heads. There is no generator installed for this facility.

### Fire Protection

Building currently has no automatic fire suppression system.

### Accessibility

The facility was constructed prior to the issuance of the Massachusetts Architectural Access Board (MAAB) and the Americans with Disability Act (ADA), and is non compliant with current regulations.

Since firefighters, need to be able bodied to perform their duties, the Town could request a waiver from the MAAB to relieve the requirements of an elevator and accessible toilet rooms.

Any renovations or change of use group to the building will require that the facility be brought up to comply with MAAB and ADA. The extent of compliancy will depend on the costs of the renovations versus the buildings assessed value.

### Code Compliance

The existing facility was constructed as a fire station and in compliance to the building codes in affect at the time. Since the building is still classified as a fire station, the facility is grandfathered to the previous codes. However, as renovations are implemented those modifications need to comply with the current codes.

Consequently the renovations to the second floor, renovating the existing spaces into a fitness area could impact the building usage, fire separation requirements between the floors, requiring



an enclosed means of egress, the number of egress required from the second floor as well as the handicap accessibility issues.

Per the International Existing Building Code (IEBC) and Massachusetts code addendums, changes in building use and major renovations will trigger major structural upgrades and seismic improvements.

### Functional Analysis

Currently the second floor of the building is used as a fitness room only has one non-accessible unisex toilet room.

The facility has limited use as an emergency outpost during major events in neighboring Foxboro Stadium.

The size of the apparatus bays, the apparatus bay doors and the size of the facility in general will be the determining factor if this facility can remain usable as an active manned fire station.

## **Recommendations**

**Renovation:** Limited upgrades to the existing building for temporary use as a functioning fire station if a new station is constructed on the location of the existing Central Fire Station.

Recommended budget: \$100,000

**Renovation:** Provide limited renovation of the existing building, including site improvements, for use as storage or potentially a new location for the Food Pantry.

Recommended budget: \$150,000

**Private Development:** The Town should consider the option making the building available to a private developer for commercial or residential use.

## **Central Library**



### **Facility Information**

**Year Constructed:** 1903  
**Addition:** 1965

**Site:** 33,200 SF

**Parking:** 18 spaces, (2) Accessible

**Square Footage:** 26,000 SF

**Zoning:** GR General Residential

**Historical:** No MHC restrictions for redevelopment

### **Building Components**

#### **Site**

Parking lot has several areas of surface deterioration and concerns with drainage. The parking stalls and drive isle are not clearly demarcated. Accessible spaces are not clearly identified and are not compliant with current ADA standards. Sidewalks were observed to be damaged and not evenly set. Curb cut located in the rear of the building is not constructed to ADA standards. Site lighting was observed to be inadequate. Underground oil tank should be removed.

#### **Hazardous Materials**

Hazardous materials survey is needed for the soil around the underground oil tank, tile adhesives, caulking, pipe insulation and other potential areas.

#### **Structure**

Foundations for the building are cast in place concrete and granite block. No damage, settling or cracking was observed with any part of the foundation.

#### **Building Exterior**

Masonry is in good condition some cracking was observed and minor repair to joints may be required. Wood fascia and soffit has some deterioration and requires repair and paint. Sealant around door/window frames requires patching.

### Windows

Existing windows are steel frame with single pane glazing. Many of the original glass panels have been replaced with lexan panels. Over time these panels develop a clouding that obstructs vision. Neither lexan nor the original single glazed window provided adequate R-Value. Several windows in original building were replaced with double glazed aluminum windows.

### Roof

The roof for the original building is a pitched slate roof that is in fair condition and requires some repair work including reattaching and replacing loose or damaged shingles.

The roof over the addition is a membrane roof with ballasts. This part of the roof is in poor condition. Roof and flashing material is failing particularly adjacent to the connection to the original building resulting in water penetration. Existing roof is approximately 20 years old and needs to be replaced. Significant water damage from roof leaks was observed particularly in walls and ceiling near the connection between the original building and new addition.

### Building Interior

Existing stack and mezzanine system installed to accommodate 90,000 volumes should be removed. Circulation desk and built-in book shelves should also be removed. Carpet is worn and needs replacement. Ceiling tile has severe water damage and should be replaced. Fresh paint is needed throughout all interior spaces.

### Plumbing

Water service enters the building through the basement level mechanical room where the water meter is located. The water service did not have a back flow preventer. Low flow fixtures are recommended in the toilet rooms to reduce water usage.

### HVAC

Heating is provided by an oil fired boiler in the basement mechanical room. The boiler is functional and in good condition for its age. A new higher efficiency boiler with better modulation and lower operating costs is recommended. The building has a pneumatic control system. An upgrade to a direct digital control (DDC) system is recommended to provide improved control throughout the building. Cooling to the building is provided by two DX roof top units and through-the-wall air-conditioning units. Central air handling units (RTU) with cooling and hot water heating are recommended to provide comfort throughout the building and address ventilation air requirements. Ventilation air for portions of the building not served by the RTUs is achieved through operable windows.

### Fire Protection

The building is equipped with heat and smoke detectors but has no sprinkler coverage. A full automatic fire suppression system for the building is recommended.

### Electrical System

Electric service enters the building through a room adjacent to the mechanical room in the basement. This room also houses the telephone and data services. There is no standby power for the building. Emergency lighting is provided with a battery system located in a basement janitor's closet. A new emergency lighting system is recommended. Occupancy sensors were installed in some spaces. Additional occupancy sensors and a lighting control system are recommended.

### Accessibility

Building and site do not comply with current ADA standards. Accessible paths, ramps and curb cuts require reconstruction.

The main entry to the building is a half level below the first floor and is not accessible. A new entry with an elevator is needed. Updated toilet rooms are needed.

Existing elevator provides limited accessibility between floors. It requires a key to operation and First Floor access is through the children's activity room.

### Functional Analysis

Uses for the building are limited due to the size limits of both the site and available interior spaces.

Site is too small to accommodate a combined public safety facility or individual stations.

Existing building would require costly renovations to comply with ADA requirements. Site would not accommodate required additional parking even with construction of a new facility.

It is recommended that if the Town retains ownership of the building that it be fully renovated. Maintenance costs for the existing building will continue to increase over time.

## **Recommendation**

**Private Development:** Building will be sold to a private developer by the end of 2012.

## **Food Pantry**



### **Facility Information**

**Year Constructed:** 1900

**Site:** N/A

**Parking:** 4 approximately (gravel unmarked) 0 Accessible

**Square Footage:** 3,000 SF

**Zoning:** PCRC

**Restrictions:** None

**Appraisal:** \$241,243 (Building)

### **General Description**

The Food Pantry is located in a two story wood framed structure that was once used as the primary residence for the Water Treatment Plant Engineer. Since then the residence has been used by the Food Pantry to organize and distribute food for those in need.

It appears that the residence was constructed in two phases; the left side (looking at the house from the front) was the original house, evident from the stone foundation. The right side was built latter on and has cast-in place concrete foundations.

The Interior of the facility has not been modified and the rooms can still be identified as the living, dining kitchen etc.

### **Building Components**

#### **Site**

The Food Pantry shares a site with the Town Water and Sewer Department facility including a common access drive off of Washington Street. The grounds include a walk way to the front and rear access and lawn. The site is well maintained and generally in good condition.

#### **Parking/Circulation**

Parking is limited to rear of the facility on a gravel lot. The number of spaces appears to be adequate for the building function. No accessible parking spaces are identified. Parking spaces associated with the Water and Sewer department are used by patrons with no accessible path from

the lot to the building entry. The parking lot should be paved and parking spaces marked with a HC space designated.

### Hazardous Materials

There are visual indications of suspect hazardous materials. Survey and testing of materials is recommended. Areas of concern include:

- Pipe insulation in basement
- Lead paint and stain throughout the interior and exterior
- Mold on the wood doors in the basement

### Structure

The buildings foundation consists of two different materials. The original house has a stone foundation while the addition has cast-in-places concrete. Currently both in good conditions, no structural cracks were identified. However there are indications of water infiltration through the stone foundation wall as well as mold growth on the concrete foundations. The upper floor and roof are conventional wood frame construction.

### Exterior Façade

The exterior of the facility has been recently clad in vinyl siding, it is not certain if any insulation was added to the building as part of the residing effort.

### Roof

The roof construction consists of wood decking on conventional hip roof framing spaced approximately 16" on center. The roofing was recently replaced and consists of a three tab asphalt roof shingles. Similarly to the siding, it is unclear if any roof insulation was added as part of the roofing replacement. Currently the facility does not have any gutters and downspouts. It is unclear if this was done by design or a selected choice when the roof was replaced.

### Doors and Windows

The windows as part of the building renovations have been replaced with vinyl double hung frames and insulated glazing.

### Building Interior

The basement area is strictly relegated to the mechanical aspect of the building as well as storage. However, lack of air circulation, moisture infiltration and wood paneling have created the optimum circumstances for mold growth.

The first floor, previously the living, dining and kitchen are currently being utilized as the packaging and "shopping" area. The majority of these spaces have been equipped with shelving allowing the clients to freely navigate through aisles (albeit narrow) to "shop" for their needs.



The second floor, previously the bedrooms is relegated to food storage this includes portions of the existing toilet room. One of the front bedrooms is used as an office/conference room. Finishes within all of the spaces are original and in good condition. Access between the floors is through a non enclosed wood stair. A second means of egress is through a bedroom however the stair is not code compliant.

### Elevator

No elevator exists with this facility.

### Plumbing

The building has a 5/8" domestic water service on the south side of the building with a water meter located at the basement level along with a 3/4" cold water main feed. The building has a 1-1/4" natural gas service meter and entrance to the basement located at the south side of the building with internal gas distribution piping serving the space heating hot water boiler in the basement. There is a full bathroom on the second floor that is serving as a storage room for empty boxes. Domestic hot water is generated by a 50 gallon electric storage type water heater 240 volt 4/5 kw installed in 1997. The 4" sanitary line exits the building on the west side and connects to the city sewer system. There is a residential 2 well stainless steel kitchen sink with handle faucets and spray.

The bathrooms are not accessible and the plumbing fixtures are dated and in fair to good condition. The shower has a conventional mixing faucet, and is not pressure balanced. The cold and hot water systems are not insulated. Moisture is contributing to the condensation and mold growth on the cold water piping. Cleaning of the piping surfaces and insulation are recommended. The water heater is approaching its useful life and the warranty has expired. General fixture upgrades and layout changes are recommended to better fit the use group change.

### HVAC

The building is heated by a cast iron gas fired Peerless boiler that was installed in 1988. The boiler input is 85 MBH. The forced hot water system feed cast iron radiators at the perimeter of each main room and entry area throughout. Distribution piping is schedule 40 carbon steel. The system is partially insulated. Insulation has been damaged by exposure to moisture and has mildew and mold growth. Some of the radiators have been removed to facilitate the installation of storage shelving. The basement is unheated. The bathrooms are not mechanically exhausted.

Boiler replacement, radiator replacement and selective piping replacement is recommended. High efficiency condensing boiler wall pack with direct vent is recommended. A dehumidifier is recommended for installation in the basement to remove excess moisture causing mold growth. Foundation walls should be painted with vapor barrier coating to minimize moisture infiltration. Split system air conditioning at second floor is recommended to improve occupant comfort.

### Electrical

The building is fed with a 100 amp 120/240 residential electric service to meter socket via overhead service at the south side of the building. The service enters the basement to a 100 amp fused disconnect and into a 100 amp MLO 20 space general electric breaker panel. A

combination of romex, MC cable and BX cable feed the building circuits. The lighting is primarily incandescent with some CFL replacements. The emergency lighting is provided by battery type fixtures and heads. There is fire alarm system with Simplex annunciator at the first floor entrance. The fire alarm control panel and communication box is located in the basement. The panel is by Fire Control Instruments, Inc. Pull stations, detection and notification devices are located throughout the building. General upgrade recommended to building electrical system. Increase service size to 200 amp to allow the installation of air conditioning system throughout. Upgrades to general lighting are needed to improve energy efficiency. Installation of occupancy sensors to control lighting of rooms is recommended.

### Fire Protection

No fire protection system installed in the building including fire extinguishers. Installation of a sprinkler system is recommended to improve life safety and minimize risk of building loss due to fire. Review of fire extinguisher requirements and location throughout the building.

### Accessibility

Currently the facility fails to provide handicap access to and within the building for both clients as well as staff. Currently the building only has one non-accessible unisex toilet room on the second floor.

The facility was constructed as a primary residence and as such did not need to comply with any accessibility requirements. However since the building use has changed the building needs to be upgraded to comply with the Massachusetts Architectural Access Board (MAAB) and the Americans with Disability Act (ADA). The extent of compliancy depends on what is readily achievable, and the dollar value triggered by building renovations.

### Code Compliance

The facility was constructed as a single family residence and is currently being utilized as a food pantry. This use group change would of have required that the facility be brought up to code to comply with the new business use group.

It is apparent that this was not performed. This may have been a temporary solution to find a home for the food bank, which now has become a more permanent solution.

## **Recommendations**

**Site Improvements:** Upgrades to the site shall include pavement of parking lot with accessible parking spaces, accessible path to the entry and additional site lighting.

Recommended budget: \$40,000

**Renovation:** Upgrade existing facility to improve functional layout of interior spaces, upgrade interior finished and renovate existing Kitchen and Toilet Rooms. Remove wood cabinets from basement and improve ventilation to eliminate mold.

Recommended budget: \$65,000

Recommend considering an alternate location for the Food Pantry.

### **East Community Center (East Library)**



### **Facility Information**

**Year Constructed:** 1936

**Site:** 11,100 SF

**Parking:** 4 spaces (No accessible)

**Square Footage:** 4,000 SF

**Zoning:** GR General Residential

**Restrictions:** None

**Appraisal:** \$261,400

### **General Description**

Formerly the East Walpole Library, this facility is currently used by the Department of Recreation as a community and activity center. The building consists of a first floor with two main rooms that have recently been renovated and a recently renovated single toilet room. The second floor is empty and includes a small kitchenette. The basement currently functions as mechanical room and storage space.

### **Building Components**

#### **Site**

The relatively small site is on a corner lot in a residential neighborhood. Lawn and planted areas are in good condition and appear to be well maintained. One existing bike rack is broken and rusted and should be removed. One park bench and a newer bike rack exist and both are in good condition.

#### **Parking/Circulation**

Existing parking lot includes four spaces with no accessible space designated. Driveway and spaces are not marked and should be paved with more spaces added if possible. One accessible space should be established along with an accessible path to the entry.

### Hazardous Materials

Hazardous materials were potentially observed in the basement of the building. Areas of concern include lead paint, pipe insulation, asbestos tile and mastic.

### Structure

Building is a wood frame structure on stone foundation. Some cracking in the foundation was observed but poses no serious concerns. Some spalling of the plaster surface over the foundation was observed and should be repaired. No damage or deterioration to the structure of the building was observed. The concrete walls of the exterior stairwell to the basement are in fair condition. Metal handrails are in poor condition and not ADA compliant and should be replaced.

### Exterior Façade

Exterior façade material consists of vinyl siding. When observed the building was in the process of receiving an upgrade of siding over a 1" sheet of rigid insulation. The wood trim around the front porch and the ceiling of the front porch need to be painted.

### Roof

Existing roof is constructed of asphalt shingles and appears to have no damage or deterioration at this time. Gutters, downspouts and flashing are in good condition. No sign of water damage resulting from damage to the roof was observed on the interior of the building.

### Windows

New windows have been installed throughout the building and are vinyl replacement windows with insulated glass. Wood trim frames on the interior were recently painted.

### Building Interior

Ceiling tiles are new and in good condition. The building interior is currently being renovated and with new light fixtures and the wood molding, chair rail, built in book cases and wall surfaces have recently been painted and are in good condition.

### Elevator

No elevator exists within this facility.

### Plumbing

Toilet room on the first floor was recently upgraded and is in good condition however the room does not comply with ADA requirements. Toilet rooms and sink in the basement are in poor condition and should be upgraded or removed. Kitchenette in the second floor is also in poor condition and should be replaced.

### HVAC

Heating system consists of oil powered boiler that is approximately 10 years old and in good working condition. Building has no air conditioning.

### Electrical

Electrical system has some recent upgrades including new light fixtures on the first floor. Lighting on the second floor and in the basement needs to be replaced.

### Fire Protection

The building has smoke detectors and a fire alarm system that were observed to be in good working condition. No sprinklers are in this building.

## **Recommendations**

**General Upgrades:** Pave driveway and parking lot with additional parking included. Clean and renovate the second floor and basement including the kitchenette.

Recommended budget: \$55,000

## **Plimpton School**



### **Facility Information**

**Year Constructed:** 1914

**Site:** 5.38 acres

**Parking:** High School parking lot

**Square Footage:** 16,000 SF

**Zoning:** PSRC

**Restrictions:** Town Forest

**Appraisal:** \$2,689,700

### **Educational Program**

The building has several functions including SPED classrooms, a robotics program, the school department print shop and administrative offices for the food service. The building is the oldest of the school department facilities.

### **Existing Room/Area**

Classrooms: 3

Science Labs: 0

SPED Classrooms: 3

Computer Labs: 0

### **Building Components**

#### **Site**

Site and athletic fields for the Plimpton School are shared with Walpole High School.

#### **Parking/Circulation**

Parking and driveway for the school are shared with Walpole High School.

#### **Hazardous Materials**

The building has not been abated. ACT flooring at corridors, and mold at staff bathroom.

#### **Structure**

Foundations and structural framing were observed to be in good condition with no visible signs of settlement or cracking associated with structural deficiencies.



### Exterior Façade

Walls: Brick veneer is aged but in good condition. Stucco is in good condition. Original decorations and portico in good conditions.

### Roofing

Standing seam metal roofing system was installed in 2001 and was observed to be in good condition. No water damage or other issues relating to roof failure were observed in the interior of the space.

### Windows

All of the windows are double pane insulated, and have been installed in 2001.

### Building Interior

Interior finished for the building include exposed structure and 2'x2' ceiling tile. VAT at corridors, concrete flooring at bathrooms, carpet flooring at classrooms, and wood flooring at woodshop and offices. Doors are original and not accessible. Most doors have knob hardware. Casework is original and in poor condition. The existing lockers were previously used by the high school and are in poor condition. Student toilets have original wood partitions, and are in need of immediate repair. Classrooms furnishings are a mix of old and new and in poor condition.

### Elevator

The building is not equipped with an elevator, thus the second floor is completely inaccessible.

### Plumbing

The gas meter from the street is located at grade adjacent to the boiler room and appears to only serve the boiler burner. No domestic hot water heater is located in the facility, which utilizes point of use water heaters. It appears the plumbing fixtures have not been updated in recent years.

### HVAC

The building is heated by one cast iron steam boiler which has a dual fuel burner which appears to have been installed in the last 5 years. An older boiler feed unit is also located in the boiler room. There are three 330 gallon oil tanks adjacent to the boiler room, and appears to only serve the boiler burner. The building is heated by unit ventilators and cast iron radiators. Ventilation is provided by the unit ventilators or by operable windows. The classrooms are cooled by window air conditioning units which are installed in select classrooms. The men's and women's bathrooms do not have any exhaust fans. All HVAC equipment is locally controlled, with no DDC controls in the space.

### Electrical:

Two electric services enter the front of the building adjacent to the main entrance. There is no standby power for the building. Power distribution within the space is in poor condition and upgrades are recommended. The fire alarm system is recently updated and in proper working order. Light fixtures are equipped with T8 lighting and controlled via toggle switches. Life safety exit signs and emergency battery units are up and in good condition.

### Fire Protection

The building has smoke detectors located throughout the facility. There is no fire service from the street or sprinklers located in the building.

### Accessibility

The building is non-compliant for the most part. Doors have hardware that is non-compliant with ADA regulations. No automatic entrance and compliant elevator currently exist at this facility. Existing interior stair and hand rails are not compliant with current ADA regulations.

## **Recommendation**

**Renovation:** Complete a programming review of functions and space allotment to ensure that utilization of area within the facility are being maximized. Modify existing spaces to better accommodate use by multiple departments, upgrade core spaces and interior finishes.

Recommended budget: \$175,000

## **Boyden Elementary School**



### **Facility Information**

**Year Constructed:** 1932  
**Additions:** 1960 & 1970  
**Addition/renovation:** 2004

**Site:** 5.69 acres  
**Parking:** 68  
**Square Footage:** 87,000 SF  
**Zoning:** RB  
**Restrictions:** Adjacent to conservation land  
**Appraisal:** \$7,871,700

### **Educational Program**

**Capacity:** Current Enrollment: 470 students  
**Grades:** K - 5

Classrooms: 20  
Science Labs: 0  
SPED Classrooms: 4  
Computer Labs: 1  
Music Room: 1  
Auditorium: N/A

Gym: Full court basketball court with rubber flooring.

Cafeteria: Cafetorium is used for assemblies and has 3 seatings at lunch.

Kitchen: Kitchen function is being converted to warming/serving function. At the start of this school year food will be cooked at the high school and brought in for serving.

Library: Is in good condition.

Nurse: Space has been updated during the 2004 renovation.

Toilets: Some spaces are original and antiquated.

## **Building Components**

### **Site**

Overall the site is in good condition. Site lighting is adequate and was recently installed. The sidewalks and curbing at the front of the school have recently been renovated (2012). The playing fields at the rear of the building are flooding, due to the proximity to the wetland, and the lighting is minimal. Areas of concern include the play structure and surface which is in disrepair.

### **Parking/Circulation**

Vehicular circulation is an issue of concern for the school. Car drop-off is optimal and happens at the front of the school. Bus access and drop-off is provided in rear parking lot and not directly adjacent to the building, and town property. The pedestrian path is not safe particularly for younger students due to distance from the building and inadequate lighting.

### **Hazardous Materials**

The building has been abated during the 2004 renovation and no signs of hazardous materials were observed.

### **Structure**

The building is constructed of steel beams and columns with a steel joist roof frame. The foundation and footings are concrete with a slab on grade floor. The Gym roof is supported by an exposed steel truss. No indications of structural deficiencies were observed. In 2005 the school's bell tower collapsed during a wind storm.

### **Exterior Façade**

Exterior walls are a combination of new and old brick veneer: aged in the older sections of the building but in good condition.

The CMU façade constructed with the 2004 addition needed additional work completed on the sealant in 2005. Doors were upgraded with the renovation however some of the original doors that remain show signs of advance wear.

### **Roofing**

The existing shingle roof was renovated in 2011 with the exception of the gym and is in good condition. The membrane roof completed with the 2004 addition is also in good condition. Minor leaks have occurred at building expansion and joints.

### **Windows**

All windows were installed or replaced during the 2004 renovation/addition with aluminum windows with insulated glazing. They were observed to be in good condition.

### Building Interior

The interior finished within the building include exposed structure at Cafetorium, 2'x4' and 2'x2' ceiling tiles throughout corridors and classrooms. Ceilings are in good condition. Tectum panels at gym are structurally sound, but show discoloration. The flooring is VCT in classrooms and corridors, exposed concrete at student bathrooms, rubberized flooring at gym and some carpet at kindergarten classrooms. Doors have been replaced during the 2004 renovation and are in good condition. Casework is original but in good condition. Student Toilet Rooms need upgrading including replacing partitions.

### Elevator

In good condition, the elevator was installed as part of the 2004 addition.

### Plumbing

The natural gas meter is located at grade outside of the boiler room and enters into the boiler room. Domestic hot water is provided to the school by one indirect gas fired hot water heater located in the boiler room. Hot water is circulated throughout the school. The cold water enters the Boyden School from the street in the boiler room and has a double check valve assembly. The plumbing fixtures throughout the building have all been updated.

The existing domestic hot water heater is currently only 83% efficient and could be switched out with a gas fired condensing domestic hot water heater which has much higher efficiencies.

### HVAC

The building is provided hot water by three boilers, one of which was added during the 2002 addition, which have dual fuel burners. The 10,000 gallon underground fuel oil tank is located in front of the building. Hot water is distributed by three sets (1 back-up pump) of circulators, each serving a difference zone in the building. The majority of the building is heated and ventilated by an array of equipment, including unit ventilators, rooftop units, heat recovery units, unit heaters, cabinet unit heaters and radiant panels. The old portion of the school is served by unit ventilators. The 2002 addition has radiant panels and 100% outdoor air heat recovery units located on the roof with a few unit ventilators serving the classrooms. Air conditioning is provided to the teacher's room, media/ computer room, and the nurses office by a DX cooled rooftop unit. All HVAC equipment appear to be controlled with 3-way valves and uses both electronic and pneumatic controls. According to the facilities staff, the HVAC equipment is controlled locally and not by a front end direct digital control (DDC) system.

In the future, the existing boilers are recommended to be replaced with high efficiency, gas fired, condensing boilers to allow greater energy savings. The old part of the school's unit heating and ventilating units, including unit ventilators, indoor air handling units, and baseboard radiation are recommended to be updated. New unit ventilators with an energy recovery section may be used. For consistency with the school addition, radiant panels with roof mounted heat recovery units are recommended to provide heat and ventilation. A DDC system is recommended to be installed for better comfort and control.

### Electrical

Electric service enters the side of the building into the boiler room located in the basement. A standby generator is located on site. Power distribution within the space is in poor condition. Power demand is met within the space, i.e. sufficient receptacles and tel/data connections are provided. The fire alarm system is recently updated and in proper working order. A recently updated kitchen includes an Ansul system. Light fixtures are equipped with T8 lamping and controlled via toggle switches. Occupancy sensors were installed in some places. Additional occupancy sensors and lighting control systems improvements are recommended. Site lighting is currently in good condition.

### Fire Protection

The fire protection service enters the high school in the boiler room. A double check valve assembly, wet alarm check valve, and dry valve are located immediately after the service enters the boiler room. The entire school has sprinkler coverage. The old portion of the building is covered by a dry sprinkler system. The new/renovated portion of the building is also covered by recessed sprinkler heads. The kitchen hood located in the cafeteria has an ancillary fire suppression system.

### Accessibility

The building is compliant for the majority of the areas. There is no auto-entry, and some of the bathrooms need to be upgraded to be compliant.

## **Recommendation**

**Capital improvements:** Complete all scheduled capital improvements.

**Site Improvements:** Upgrade site to improve access, circulation, expand parking and improve play structure surface.

Recommended budget: \$120,000



## **Elem Street Elementary School**



### **Facility Information**

**Year Constructed:** 1977

**Renovations:** 1996, 1998, 1999

**Renovation/ addition:** 2004

**Site:** 11.46 acres

**Parking:** 80

**Square Footage:** 103,000 SF

**Zoning:** R

**Restrictions:** Adjacent conservation land

**Appraisal:** \$9,923,500

### **Educational Program:**

Capacity: Current Enrollment: 478 students

Grades: PK - 5

Classrooms: 27

Science Labs: 0

SPED Classrooms: 5

Computer Labs: 1

Auditorium: Cafetorium: stage accessible by ramp

Gym: Full court

Cafeteria: Cafetorium used for assemblies: 3 seatings

Kitchen: Serving Kitchen

Library: Yes / with media center

Music Room: 1

## **Building Components**

### **Site:**

The site is in good condition and was repaved during the 2004 addition. Site lighting was installed the same year and is adequate. All sidewalks and curbing were improved the same year, and are in good condition. The field is not irrigated and it needs reseeding. There is no lighting at the play field. The play equipment is in good condition. The safety surface is wood chips, and is well maintained.

### **Parking/Circulation:**

The car and bus circulations are separated and efficient. The school's parking is currently at capacity, and could use additional spaces for special events.

### **Hazardous Materials:**

The entire building was abated during the 2004 renovation / addition.

### **Structure:**

Concrete foundations are in good condition. No issues with the steel columns and the load bearing CMU walls were observed.

### **Exterior Façade**

Walls: Brick veneer is aged but in good condition. CMU block at the new addition in good condition. Metal paneling is in good condition. All exterior doors have been replaced. They are aluminum frame and equipped with panic hardware.

### **Roofing**

Most of the roofing is EPDM with ballast, installed in 2008 and is in good condition. Shingle roof at 1977 building in poor condition, and leaking. Skylights along the corridor are translucent panels and are showing signs of age and discoloration.

### **Windows**

Most windows have been replaced during the 2004 addition and are double pane. There are some original windows left and they are inoperable.

### **Building Interior**

Interior finished for the building included exposed ceilings structure at gym and Cafetorium and 2x2 ceiling tiles throughout the remainder of the school. Doors have been replaced in 2004 and are in good condition. Some casework is aged but in good condition. VCT tile throughout the classrooms, ceramic tile at bathrooms, carpet at library, wood flooring at the gym are all in good condition. Gym had retractable bleachers, and is also used for assembly. The stage at the Cafetorium is in good condition and accessible by ramp. Cafetorium is also used for assemblies,

and has 3 seatings. The kitchen will be used as a warming kitchen, and is in good condition. Student toilets are in good condition. Some need replacement of partitions.

### Elevator

The elevator is complaint with current ADA requirements and was observed to be in good condition.

### Plumbing

The building has natural gas service and two gas meters. One gas meter is on the front of the building at the day care and serves the gas-fired HVAC roof top units. The other is at the rear of the building and serves the boiler and two of the three domestic water heaters. The domestic water service has a back flow preventer at the meter located outdoors at the rear of the school. Domestic hot water is provided by three separate water heaters. One is located in the mechanical room and serves toilet rooms and classroom sinks in the rear of the building. This water heater is a storage tank fed by the boiler. The second is gas-fired and in a closet near the distribution panel near the administration wing of the building. This serves the toilet rooms and classroom sinks. The third is gas-fired and in the cafeteria.

### HVAC

The school is served by a combination of a boiler and packaged gas-fired heating, DX cooling packaged roof top units. An oil-fired, Burnham hot water boiler is located in them. The boiler has a 116 MBH capacity (output) and has one loop for heating and one loop for the domestic hot water storage tank. The school is heated and cooled throughout by the packaged roof top units. Above ground fuel oil storage tank is located in a vault in the mechanical room. The tank has an approximate capacity of 2,000 gallons and feeds the dual fuel boiler in this mechanical room.

### Electrical

This building has two electric services to the building each with a separate meter. One is a 1600 amp, 208 V, 3 phase, 4 wire distribution panel located in the mechanical room in the day care portion of the building. The second is a 1000 amp, 208 V, 3 phase, 4 wire switchboard in the addition at the rear of the building. Both switchboards feed distribution panels located throughout the building. The fire alarm system is a keyed system with a zone panel at the main entry. The fire alarm devices consist of horn strobes, smoke detectors and heat detectors.

### Fire Protection

The building is fully sprinkled including a standpipe in the stairwell of the day care portion of the building. Presence of a back flow preventer could not be verified. The siamese fire department connection is at the main entry to the building.

## **Recommendation**

**Site Improvements:** Upgrade site to expand parking, increase size of athletic field and improve play structure surface.

Recommended budget: \$120,000

## **Walpole High School**



### **Facility Information**

**Year Constructed:** 1909

**Additions:** 1927, 1954, 1984

**Renovation /addition:** 2001

**Site:** 14 acres

**Parking:** 353 spaces

**Square Footage:** 190,000 SF

**Zoning:** PSRC

**Restrictions:** Adjacent to Town Forest

### **Educational Program:**

Capacity Current Enrollment is 1160 students

Grades: 9-12

Classrooms: 39

Science Labs: 10

SPED Classrooms: 7

Computer Labs: 6

General: Facility is functioning well, although at full capacity, with dedicated space for classrooms, language lab, testing spaces, guidance areas, meeting rooms and storage space.

Although there are no current space and organizational issues, the rising enrollment predicts issues in the near future. The school hosts most of the summer programs for the town of Walpole.

Auditorium: The Auditorium sits 500 / stage is accessible by lift. Currently not air conditioned, the space also has issues with drainage at the roof, and leaks have previously occurred.

Gym: 2 gyms: 1 full court / one with cardio equipment & dedicated wrestling space.

Cafeteria: Has 4 sittings, serving 300 – 350 students per sitting. Although this was the main addition in 2001, the space is functioning at capacity.

Kitchen: Recently updated in good condition. The kitchen will prepare food for all the schools in Walpole, flash freeze it and ship it out.

2 serving lines: one for cold cut sandwiches and one for hot meals.

Library: In good condition: computer room adjacent.

Nurse: In good condition, with 2 exam rooms.

Toilets: All toilets have been upgraded and are ADA compliant.

## **Building Components**

### **Site**

The paved area is in good condition, and the striping was recently updated (2009). There are no major drainage issues, and localized curbing repairs are necessary. Although site lighting exists, additional lights are necessary in the pick-up drop off area.

The football field has new artificial turf, with bleachers and sports lighting in good condition (2010). The practice field located on a higher elevation, recently reseeded in good condition. Ponding occurs at the baseball field, in the concession stand area.

### **Parking/Circulation**

Cars and bus circulations are separated and functioning properly. The parking is sufficient, with designated spots for both teachers and students.

### **Hazardous Materials**

The entire building was abated during the 2001 renovation. There are some issues with the chemical neutralization tank, which is not ventilating properly.

### **Structure:**

The concrete foundations and the steel framing structure were in good condition. No problems associated with structural deficiencies were observed.

### **Exterior Façade:**

Walls: Brick veneer is aged but in good condition – needs repointing at the 1909 building. The retaining wall at the front of the building is not draining properly, and shows efflorescence.

### **Roofing:**

Roofing includes asphalt shingles over the pitched roof and membrane roof installed with the 2001 renovation addition. No issues resulting from roof deficiencies such as water damage or staining were observed.

### **Windows**

All of the windows were upgraded in 2001 and are aluminum with double pane insulated glazing. Windows throughout the building were observed to be in good condition.

### **Building Interior:**

Interior finishes include 2'x4' and 2'x2' acoustical ceiling tile throughout the corridors and classrooms, sound attenuated surface in the auditorium and exposed concrete in basement

classrooms. Flooring consists of VCT at classrooms and labs, ceramic tile at bathrooms, VCT and carpet flooring throughout the building corridors and carpet in library. Interior finishes were observed to be in good condition. Doors have been upgraded during the 2001 renovation / addition. Casework is in good condition throughout the entire High School building.

Lockers are a combination of new and original and mostly in good condition. Gym finishes are in good condition. Locker rooms have been updated in 2001 and are in good condition; the showers and shower partitions are in good condition. The gym also features a workout room with new equipment. Student toilets have been updated including replacing partitions. Science lab casework is in good condition. Classrooms furnishings are a mix of original and new, and in good condition.

#### Elevator:

Elevator was in good working conditions and is compliant with current ADA requirements.

#### Plumbing:

Natural gas enters the High School between the cafeteria and boiler rooms, entering the boiler room and splitting off towards the indoor gas fired equipment and the emergency generator adjacent to the boiler room at grade. Domestic hot water is provided to the high school by one gas fired PVI Turbopower hot water heater located in the boiler room. The cold water enters the High School from the street in the boiler and has a backflow preventer. The science classrooms are equipped with emergency shower and eye protection.

#### HVAC

The high school is heated by four HB Smith Series 28 dual fuel boilers and Powerflame burners. Fuel oil is supplied by a duplex pump set and underground fuel oil storage tank located between the cafeteria and boiler room. According to the facilities personnel, two running boilers are sufficient to heat the building, giving the school complete redundancy in the event of a boiler failure. Hot water is distributed by eight pumps oriented in a primary-secondary piping distribution system. The primary four boiler pumps are constant speed, while the secondary hot water pumps have been updated with variable frequency drives. Heating and ventilations is provided to the school through an array of equipment, including rooftop air handling units, indoor air handling units, unit ventilators, fan coil units, cabinet unit heaters, and unit heaters. The hot water is controlled by two-way and three way valves depending wing of the building the equipment is in. Part of the new portion of the high school is heated, ventilated, and air conditioned by split, DX cooled air handling units. The tel-data room is cooled by a dedicated ductless split air conditioning unit. The high school utilizes both electronic and pneumatic controls. The school has Metasys direct digital control (DDC) system and on-site operator workstation. According to the school personnel, the Walpole Department of Public Works monitors and controls the mechanical equipment and set-points.

#### Electrical:

Electric service enters the building on the ground floor into a room adjacent to the boiler room. Power distribution systems were updated in 2001 to include a new life safety system with a separate emergency electrical room, as well as standby power for the building. A natural gas generator is located on site. Current power demand is met within the space, i.e. sufficient



receptacles and tel/data connections are provided. The data room currently serves the Walpole School district. There is 100% sprinkler coverage within the building. The fire alarm system is recently updated and in proper working order. A recently updated kitchen includes an Ansul system. Light fixtures are equipped with T8 lamping and controlled via toggle switches.

Fire Protection:

The fire protection service enters the high school in the basement of the newest wing of the building through a 6" pipe. A double check valve assembly and alarm check valve assembly are located immediately after the service enters the building. The entire school has sprinkler coverage. The kitchen hood located in the cafeteria has an ancillary fire suppression system.

## **Turner Lodge**



### **Facility Information**

**Year Constructed:** 1900

**Site:** 23,204 SF

**Parking:** 20 unmarked (0 accessible)

**Square Footage:** 1,200 SF

**Zoning:** PSRC

**Restrictions:** Wetlands

**Appraisal:** \$361,000

### **General Description**

Turner Lodge is a small building on the perimeter of Turner Pond along Elm Street that is used primarily for ice skating events. The building is one story with a basement built into the side of a hill with one level fronting the street. Use of the building is seasonal and managed by a local skating club.

### **Building Components**

#### **Site**

The site is rustic and unorganized located on the south side of the pond. The property includes the main building along with a storage shed. The site slopes toward the pond with a half basement exposed lower level on the pond side. The site is in poor condition requiring cleaning and maintenance. The wood porch and walkways are in poor condition and in need of repair. The railings are not secure and pose a hazard with heavy use. The patio is made of gravel and is cluttered with old furniture and outdoor cooking equipment.

#### **Parking/Circulation**

Access and circulation onto are accomplished with unmarked drive isles and parking spaces. Access to the site is off of Elm Street with a gravel driveway and approximately 20 parking spaces. More spaces are most likely used when use of the facility is most active.

#### **Structure**

The building consists of a wood frame structure supported by a stone foundation. Minor repair is needed for the foundation otherwise the building structure is in good condition. The building exterior is construction of a combination of painted wood siding.

### Roof

The roof is asphalt shingle with aluminum gutters and downspouts. Signs of wear are evident with the roof otherwise it is in good condition.

### Windows

Windows are wood with wood frames and single pane glazing. The building has partial aluminum replacement windows are included and are in good condition.

### Building Interior

The interior is in poor condition with several items needing repair or replacement. The existing carpeting is worn and odorous. Replacement with a durable tile should be considered as it would better suit the building's use. All built-in cabinets and kitchen appliances should be replaced. The entire interior requires a fresh coat of paint.

### Accessibility

The building and in particular the exterior has components that are not accessible including the ramps and handrails that extend from the porch to the pond.

## **Recommendation**

**General Upgrades:** Pave driveway and parking lot with accessible parking spaces. Upgrade kitchen, toilet room and interior finishes. Repair existing storage shed, upgrade patio and repair access to pond.

Recommended budget: \$45,000

## **Dog Kennel**



### **Facility Information**

**Year Constructed:** 1976  
**Renovation:** 2011

**Site:** 122,242 SF  
**Parking:** 4 approximately (0 accessible)  
**Square Footage:** 600 SF  
**Zoning:** LM  
**Restrictions:** None  
**Appraisal:** \$191,700

### **General Description:**

The Walpole Dog Kennel represents a recent reconstruction and renovation of an old pump station into a dog kennel with cages on the interior and exterior of the facility. Five cages constructed of chain link fence exist on the interior of the building along with an Office, Toilet Room, Mechanical and storage space. The interior of the building is in good condition including all finishes and structural elements.

The exterior space included outdoor cages also constructed of chain link fence material. Parking is on a gravel lot with no markings and no accessible spaces. The roof and exterior surface are in good condition and no deficiencies were observed.

### **Recommendation**

**General Upgrades:** Upgrade building ventilation and provide regular cleaning on cage area.  
Recommended budget: \$15,000

## **Walpole Library**



### **Facility Information**

**Year Constructed:** 2011

**Site:** 11.98 Acres

**Parking:** 64

**Square Footage:** 38,000 SF

**Zoning:** GR

**Restrictions:** None

**Appraisal:** \$6,133,100 (Building)

### **General Description:**

The new Walpole Library recently opened at the beginning of 2012 the facility is in very good condition. The library is a two story 32,000 SF building and has a capacity for approximately 90,000 volumes. In addition to specific library activity the new facility includes several conference and meeting rooms available for use by all members of the community. The rooms compensate for the shortage of meeting spaces in other Town facilities.

As the building is recently completed it is recommended that a plan for maintenance be put in place to maintain the condition. Additionally, a post occupancy review of the program spaces and functional requirements should be preformed and adjustments be made if needed.

### **Recommendation**

**General Upgrades:** Complete a post occupancy review of the program spaces and functional requirements of the building. Make adjustments to space allocation as needed.

## Massachusetts School Building Authority (“MSBA”) – Reimbursement Rate Calculation

- Reimbursement rates for MSBA approved, eligible school construction and renovation projects are calculated pursuant to a formula that is established in Massachusetts General Law, Chapter 70B section 10 (M.G.L. c. 70B § 10).
- The statutory formula starts all districts at a Base Rate of 31 percentage reimbursement points.
- The Base Rate of 31 percentage reimbursement points may be adjusted based on three socioeconomic factors:
  - **Community Income Factor:** the district’s per capita income as a percent of statewide average per capita income. This data is provided by the Department of Revenue. Pursuant to statute, there is a sliding scale for the allocation of percentage points for this category based on community’s relationship to the statewide average.
  - **Community Property Wealth Factor:** the district’s per capita equalized property valuations as a percent of statewide average per capita valuations. This data is provided by the Department of Revenue. Pursuant to statute, there is a sliding scale for the allocation of percentage points for this category based on the community’s relationship to the statewide average.
  - **Community Poverty Factor:** measured by the district’s proportion of low income students, as defined by federal eligibility for free or reduced price lunch, as a percent of the statewide average proportion of low income students. This data is provided by the Department of Education. Pursuant to statute, there is a sliding scale for the allocation of percentage points for this category based on community’s relationship to the statewide average.
- The last step in the reimbursement rate calculation process is for the MSBA, in its sole discretion, to review if a district is eligible for Incentive Points. Statute dictates that no district shall be eligible for more than 18 Incentive Points in total, and that no one category of Incentive Points can be more than 6 points. Current categories of Incentive Points are:
  - Model School Program (up to 5 points)
  - Newly Formed Regional School District (up to 6 points)
  - High Efficiency Green School Program (up to 2 points)
  - Best Practices for Routine and Capital Maintenance (up to 2 points)
  - Overlay Zoning (MGL 40R or 40S) (up to 2 points)
  - Use of CM-at-Risk (up to 1 point)
  - Renovation/Re-use of Existing Facilities (up to 5 points)
  - Establishing a Maintenance Trust (up to 1 point with district match)
- The sum of the Base Rate, plus additional points, if any, from the three socioeconomic factors, plus Incentive Points, if any, results in the MSBA’s reimbursement rate for a project.

Base Rate (31 points)  
+ Community Income Factor *(if any)*  
+ Community Property Wealth Factor *(if any)*  
+ Community Poverty Factor *(if any)*  
+ Incentive Points *(if any, in the sole discretion of MSBA)*  
= MSBA Reimbursement Rate

- It should be noted that regional school district reimbursement rates are calculated using the same data and factors, but each socioeconomic factor is weighted to reflect each municipality’s representation of the total regional district enrollment.



# Walpole, MA Projected Enrollment

School District:

Walpole, MA

10/20/2011

Enrollment Projections By Grade*																			
Birth Year	Births	School Year	PK	K	1	2	3	4	5	6	7	8	9	10	11	12	UNGR	K-12	PK-12
2006	258	2011-12	68	305	304	318	301	320	337	307	326	305	307	287	271	245	17	3950	4018
2007	259	2012-13	69	270	317	307	320	307	324	332	304	325	290	314	284	274	0	3968	4037
2008	253	2013-14	70	264	281	320	309	326	311	320	329	303	309	297	310	287	0	3966	4036
2009	199	2014-15	71	208	275	284	322	315	330	307	317	328	288	316	293	314	0	3897	3968
2010	256	(est.)	72	267	216	278	285	328	319	326	304	316	312	294	312	296	0	3853	3925
2011	245	(est.)	73	255	278	218	279	290	332	315	323	303	300	319	291	316	0	3819	3892
2012	242	(est.)	74	253	265	281	219	284	293	328	312	322	288	307	315	294	0	3761	3835
2013	239	(est.)	75	249	263	268	282	283	287	289	325	311	306	294	303	319	0	3719	3794
2014	236	(est.)	76	246	259	266	269	287	226	283	286	324	296	313	291	306	0	3652	3728
2015	244	(est.)	77	254	256	262	267	274	290	223	280	285	308	303	309	294	0	3605	3682
2016	241	(est.)	78	252	264	259	263	272	277	286	221	279	271	315	299	313	0	3571	3649

\*Projections should be updated on an annual basis.

Based on an estimate of births

Based on children already born

Based on students already enrolled

Projected Enrollment in Grade Combinations*											
Year	PK-5	K-5	K-6	K-8	5-8	6-8	7-8	7-12	9-12		
2011-12	1953	1885	2192	2823	1275	936	631	1741	1110		
2012-13	1914	1845	2177	2806	1285	961	629	1791	1162		
2013-14	1881	1811	2131	2763	1263	952	632	1835	1203		
2014-15	1805	1734	2041	2686	1282	952	645	1856	1211		
2015-16	1765	1693	2019	2639	1265	946	620	1834	1214		
2016-17	1725	1652	1967	2593	1273	941	626	1852	1226		
2017-18	1669	1595	1923	2557	1255	962	634	1838	1204		
2018-19	1647	1572	1861	2497	1212	925	636	1858	1222		
2019-20	1629	1553	1836	2446	1119	893	610	1816	1206		
2020-21	1680	1603	1826	2391	1078	788	565	1779	1214		
2021-22	1665	1587	1873	2373	1063	786	500	1698	1198		

See "Reliability of Enrollment Projections" section of accompanying letter.  
Projections are more reliable for Years 1-5 in the future than for Years 6 and beyond.

Projected Percentage Changes			
Years	K-12	Diff.	%
2011-12	3950	0	0.0%
2012-13	3968	18	0.5%
2013-14	3966	-2	-0.1%
2014-15	3897	-69	-1.7%
2015-16	3853	-44	-1.1%
2016-17	3819	-34	-0.9%
2017-18	3761	-58	-1.5%
2018-19	3719	-42	-1.1%
2019-20	3652	-67	-1.8%
2020-21	3605	-47	-1.3%
2021-22	3571	-34	-0.9%
K-12 Change		-379	-9.6%