

*WELLESLEY FACILITIES MAINTENANCE
DEPARTMENT (FMD)*



***Board of Selectmen
Project Presentations***

February 23, 2015

Presentation Overview

- *New FMD Office Project*
- *Town Hall Renovation Project*
- *HVAC Study – Town Hall & Warren*

NEW FMD OFFICE PROJECT

Presentation Outline

- *Previously presented:*
 - *9/8/14 to BOS*
 - *11/12/14 Capital Presentation*
- *Joseph Rizza – Court Street Architects*
- *Introduction/background*
- *Program*
- *Site Plan, Floor Plan & Elevation*
- *Project Costs*
- *Timeline and Next Steps*

Introduction/Background

- *Court Street Architects, Inc. (CSA) Specializing in municipal projects - Senior Centers, Town Halls, Historic Restoration/Renovation.*
 - *Prepared TH Study and designs for renovations to Schools, Police & Fire Stations*
- *CSA's Directive from FMD*
 - *Develop space needs*
 - *Design a one story building less than 3000sf on the Municipal Way site.*
 - *Prepare a Project Cost Estimate*

The Program

	Space	Area (sf)	Job Functions	Space Requirements	Actual SF
1	Maintenance Mgr	110	Mgr - Staff of 7	Either closed office or open cubicle layout	78
2	Custodial Mgr	110	Mgr - Staff of 50	Either closed office or open cubicle layout	78
3	Energy Mgr	110	Mgr - no supervision	Either closed office or open cubicle layout	78
4	Project Mgr	110	Mgr - no supervision	Either closed office or open cubicle layout	78
5	Bldg Operational Mgr	110	Mgr - no supervision	Either closed office or open cubicle layout	78
6	Financial Analyst	130	PO's invoices, payroll	Open and adjacent to Admin Assist	120
7	Admin Assist/Office Mgr	150	Office mgr/recept	Open and adjacent to Financial Assist - near entrance	156
8	Director	150		Closed office	163
9	Future CLerk	80	Assist Off Mgr/Fin Assist.	Near Financial Assist & Admin	92
10	Large Conf. Rm.	200	Weekly staff meetings	Suitable for 20 people	323
11	Small Conf. Rm.	80		For 4 people	103
12	Plan Review Area	100	Open area near mgrs	2/ 4x8 tables to layout plans w/flat files for drawings below	46
13	File Storage Area	120	Near Admin/Fin. Assist.		33

Program Cont.

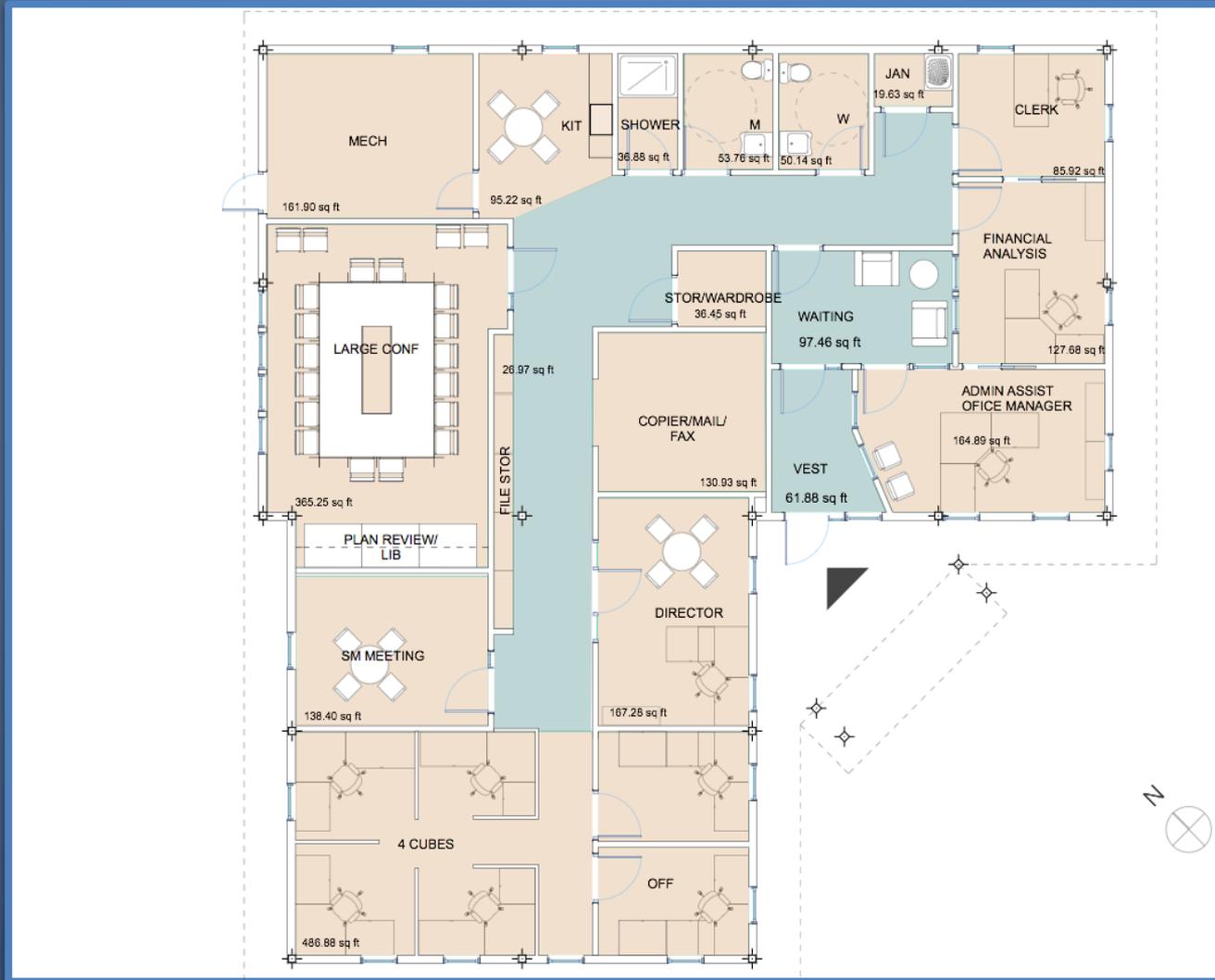
14	Waiting/Vestibule	120		2 seats for visitors	120
15	Copy/Mail/Fax Areas	80			69
16	Mech/Elect/Data Rm.	120		Small condensing boiler, split AC unit	131
17	Mens Rm	80		Assume unisex is not an option	46
18	Womens Rm	80			46
19	Kitchen	100		Sink, fridge, micro, cabinets	107
20	Shower	0			34
21	Admin Stor	0			39
	Subtotal	2140			2020
	15% Circulation	321			1.45
	Total Space Required	2461			2936

Site Plan

(Former MLP/DPW Bldg)



Floor Plan



Elevation



Project Costs

<i>Construction Cost</i>	<i>\$1,094,000</i>
<i>Geo Piers (If needed)</i>	<i>\$108,000</i>
<i>Construction Contingency</i>	<i>\$60,000</i>
<i>Total Hard Costs</i>	<i>\$1,262,000</i>
<u><i>Soft Costs (incl. \$150k design)</i></u>	<u><i>\$363,000</i></u>
<i>Total Project Costs</i>	<i>\$1,625,000</i>

Timeline & Next Steps

- **November 2014** – Included permanent office space in FY16 capital plan
- **April 2015 ATM** –
 - Request final design funding for permanent office space
 - Request funding for interim lease/move
- **June or September 2015** – Begin 3 year lease
- **April 2016 ATM** – Request construction funding for permanent office space
- **Summer/Fall 2017** – Occupy new space/end lease

QUESTIONS



TOWN HALL RENOVATION PROJECT

TONIGHT'S PRESENTATION

- *Briefly Review Court Street's Study & Previous Presentations*
 - *March 2013 by Court Street*
 - *July 2013 by FMD*
 - *September 2014 by Court Street & FMD*
- *Clerk's Office, Treasurer's Office and Building Department*
- *Review Related Projects*
- *Updated Project Costs*

COURT STREET STUDY OVERVIEW

- *Two Studies Combined - 3,000 SQ FT*
 - *Clerk's Office*
 - *Treasurer's Office*
 - *Building Department*
- *Met with Department Heads*
- *Developed Preferred Concept*
- *Developed Budgetary Cost Estimate*

PROGRAM GOALS

- *Add Compliant Records Storage Vault*
- *Improve Staff and Records Security*
- *More Efficient Use of Space*
- *Enhance Customer service*
- *Share Space Where Possible*
- *Sensitivity to Historic Building*
- *Minimize Construction Costs*

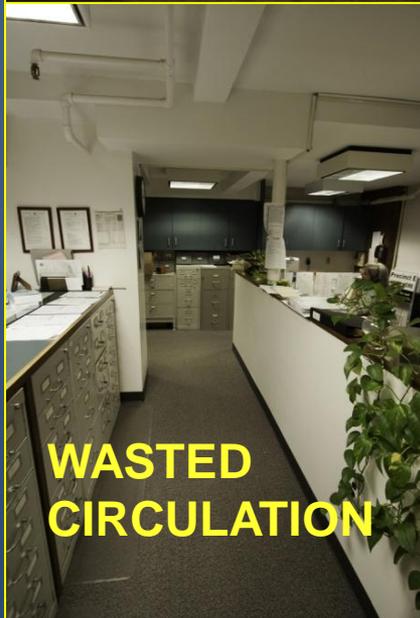
Existing Conditions



**OPEN COUNTER
WITH
COMPROMISED
SECURITY**



**OFFICE
STORAGE
INADEQUATE**



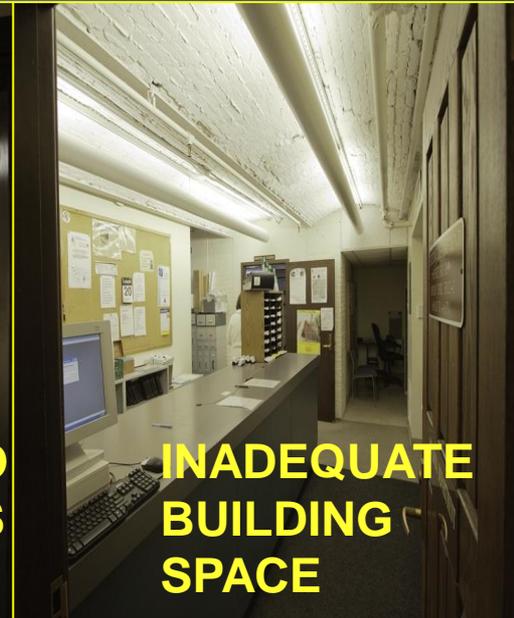
**WASTED
CIRCULATION**



**"VAULT"
STORAGE
DOES NOT MEET
ANY STATE
REQUIREMENTS**

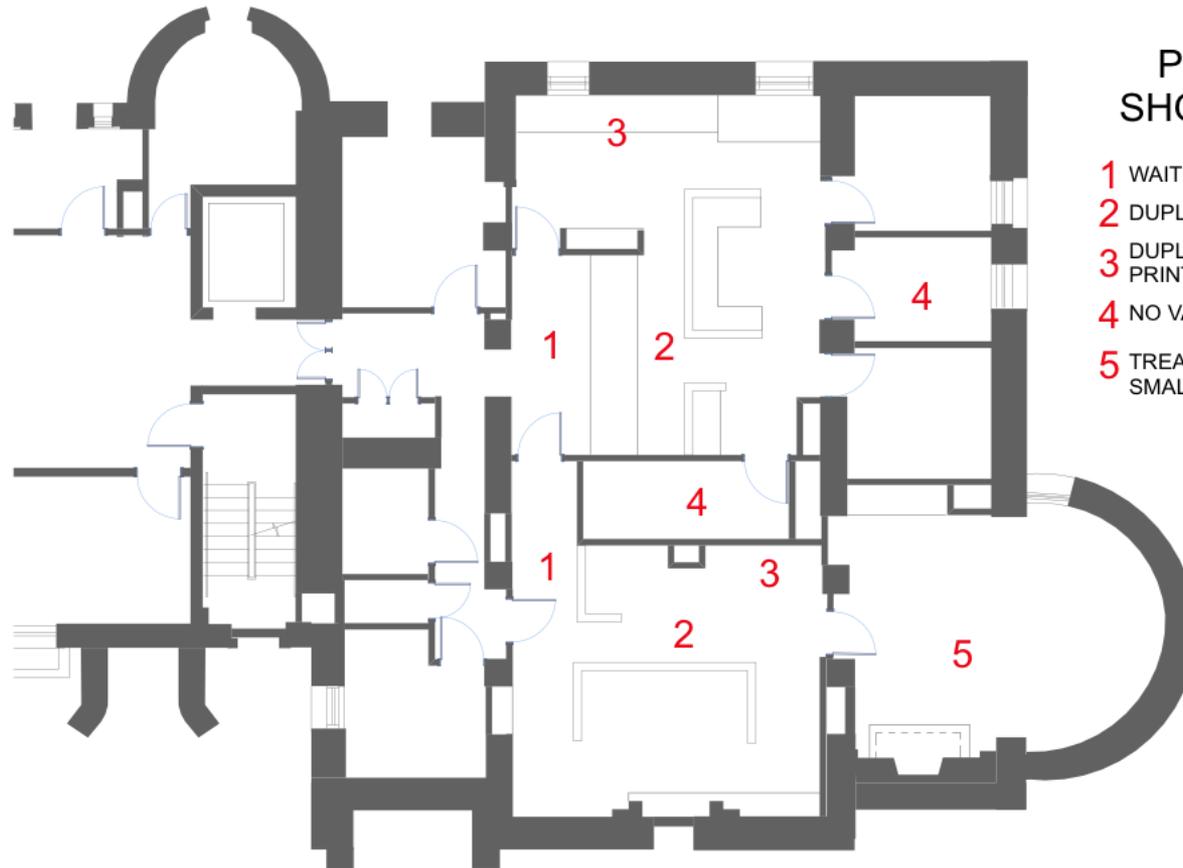


**ENTRANCE TO
TREASURER'S
OFFICE**



**INADEQUATE
BUILDING
SPACE**

Current Layout Shortfalls

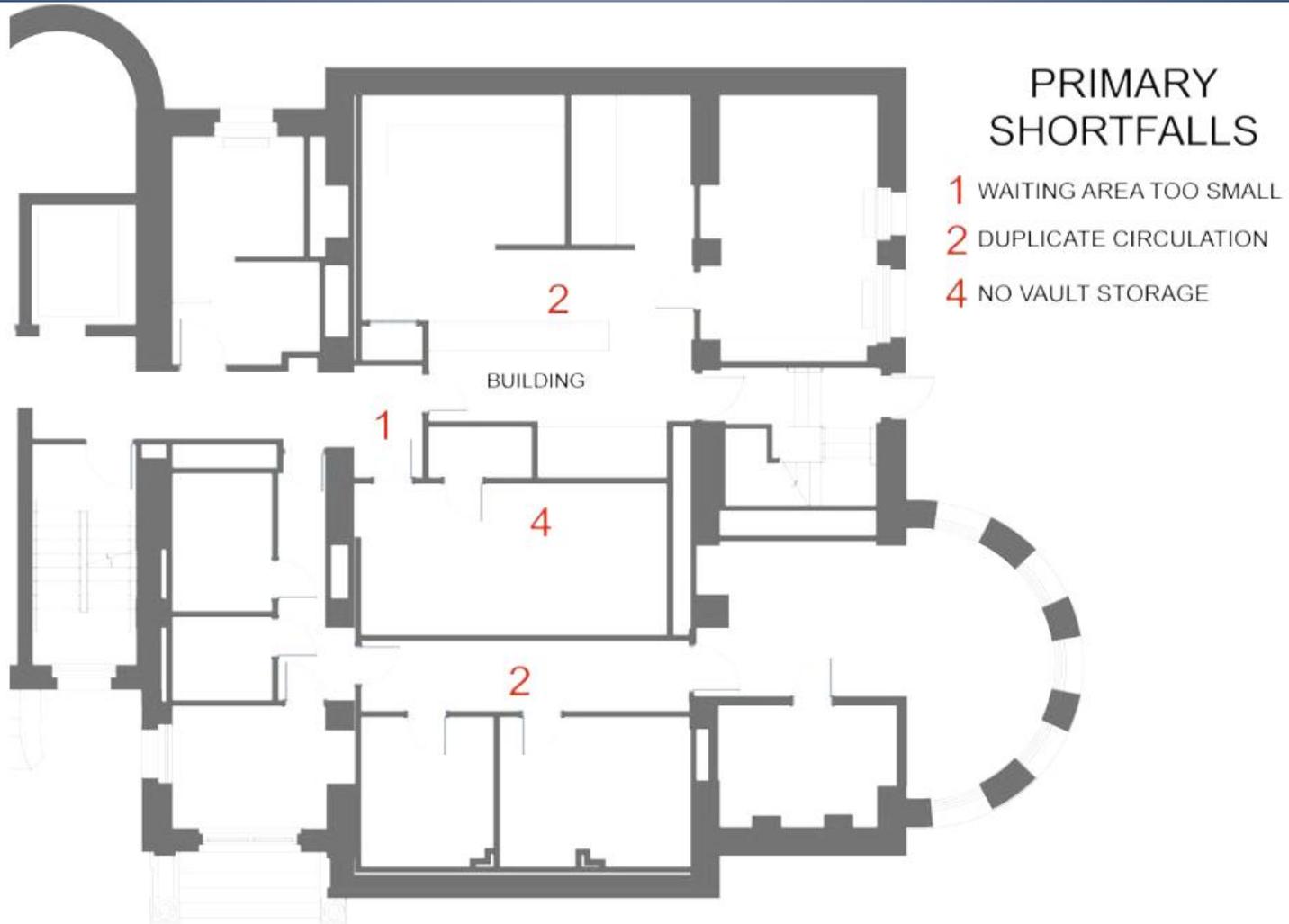


PRIMARY SHORTFALLS

- 1 WAITING AREA TOO SMALL
- 2 DUPLICATE CIRCULATION
- 3 DUPLICATE COPY/PRINT AREAS
- 4 NO VAULT STORAGE
- 5 TREASURER SUGGESTS SMALLER OFFICE

PARTIAL FIRST FLOOR - EXISTING

Current Layout Shortfalls



PARTIAL GROUND FLOOR - EXISTING

Preferred Scheme



RELATED PROJECTS

- *HVAC Improvements – FY15 Study Complete*
- *Replace Boiler – FY15 Project Spring 2015*
- *Door Renovations – Make part of renovation scope*



PROJECT COSTS

Construction Cost	\$1,440,000
Temporary Relocation	\$100,000
<u>Construction Contingency</u>	<u>\$230,000</u>
Total Hard Costs	\$1,770,000
<u>Soft Costs (incl. \$150k design)</u>	<u>\$230,000</u>
<i>Total Project Costs</i>	<i>\$2,000,000</i>

****FY18 Capital Project***

QUESTIONS



***HVAC STUDY:
TOWN HALL &
WARREN***

Mechanical Engineering Services Project

- Scope
 - Evaluate HVAC Systems at Warren, Sprague, Bates, & TH and Recommend Improvements
 - Emphasis on ECMs at Sprague/Bates and Capital Improvements at Warren/Town Hall
 - ECMs Include Installing VSDs on Pumps and CO2 Control on Unit Ventilators
 - Capital Improvements Include Replacing AHUs, FCUs, Heat Pumps, and Associated Work

Mechanical Engineering Services Project

- Study Cost
 - \$35,000 (\$0.09/SF)
- Schedule
 - RFP/Proposals – April 2014
 - Interviews/Selection – May 2014
 - NTP/Contract – June 2014
 - Start Field Work – July 2014
 - Complete Field Work – September 2014
 - Draft/Final Report – October 2014

TOWN OF WELLESLEY

Mechanical Engineering Services Project

Bates School • Sprague School •
Warren Building • Town Hall



MacRITCHIE ENGINEERING, INC. 197 Quincy Avenue Braintree, MA 02184



Bates School

Recommended Energy Conservation Measures:

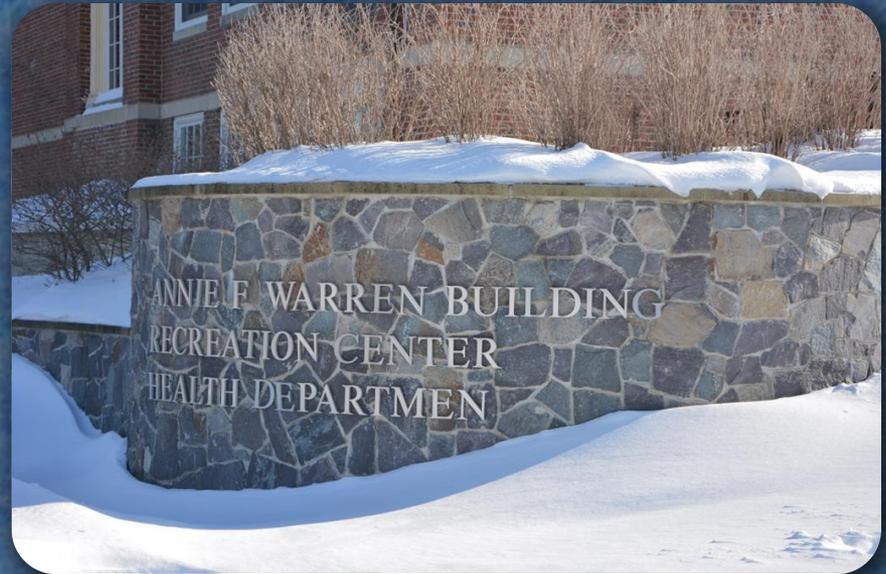
- Install CO₂ controls on unit ventilators and air handling units. Focus ventilation where & when it is needed. Control general exhaust fans based on building pressure. Simple Payback: 4.0 Years. Estimate: \$72,000.
- Repair or Replace vacuum return and boiler feed unit now at end of useful life. Tighten system against leaks, all to decrease heating time and pressure. Simple Payback: N/A. Estimate: \$60,000.



Sprague School

Recommended Energy Conservation Measures:

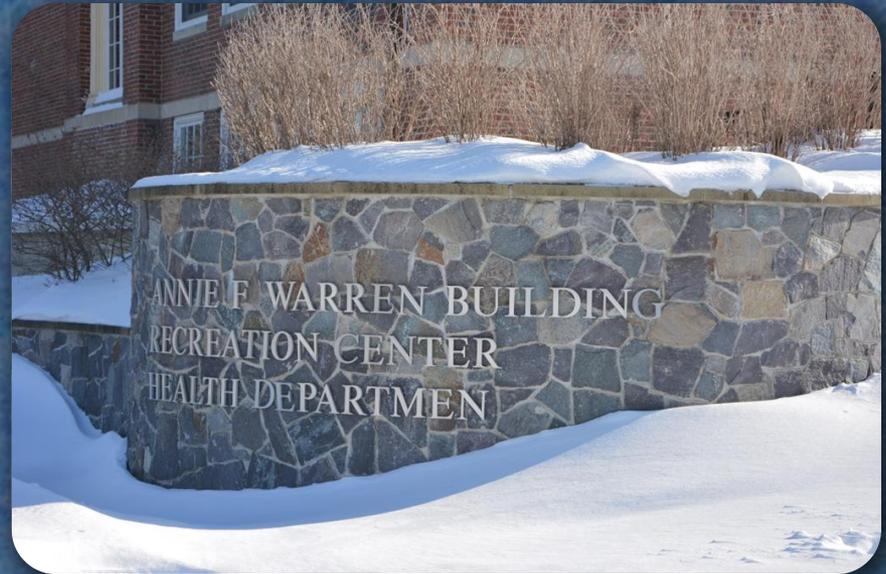
- Disable cooling to the gymnasium. Will allow restoration for assemblies as needed. Simple Payback: 0.2 Years. Estimate: \$1,000.
- Install Variable Frequency Drives (VFDs) on hot water pumps and operate them as variable-volume versus constant-volume to meet actual demands. Simple Payback: 10.0 Years. Estimate: \$68,000.



Warren Building

HVAC System Challenges and Opportunities:

- Inability to match system schedule and operation to a variety of different occupancies
- Serving areas that are not occupied or only partially occupied with fluid populations.
- Need for automatic control over equipment operation and scheduling.
- Aging equipment and deficient boiler installation causing higher maintenance.



Warren Building

Recommended Capital Improvements:

- Upgrade existing Metasys control system. Existing controls outdated. Unable to optimize system performance or remotely access. Estimate: \$91,000 – FY16.
- Replace twenty-one (21) Water-Source Heat Pumps. Units are inefficient and require high maintenance. Reached end of service life. Also, install VFDs, CO2 control, HW reset, and destratification fans. Estimate: \$500,000 – FY18.



Town Hall

HVAC System Challenges and Opportunities:

- Age and Condition of Equipment and Systems. Last major renovation 30 years ago in 1985. Replacement gives opportunity to capture current efficiencies.
- Enhance cooling, heating and ventilation to historically deficient spaces such as the Great Hall, Selectmen's offices, and Financial offices.
- Capture building enclosure improvements, windows, and insulation in the new selections. Validate and verify equipment sizing to projected loads and current code. Coordinate with proposed renovations to the Clerk, Treasurer and Building Department offices.



Town Hall

Recommended Capital Improvements:

- Ground Floor ~ Install new air handling units and duct-mounted reheat coils. Use existing ductwork.
- First, Second, and Third Floors – Install new fan coil units with electric heat. Use existing two-pipe hot water distribution system.
- Great Hall, Selectmen, and Financial Offices – Replace existing fan coil units and install several new units. Use existing ductwork where possible.
- Estimate \$1.3M (Based on recently completed projects in several Town Halls).
 - FY18 capital project



Questions and Comments Welcome



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