

BUILDING USE AUDIT - CONDITION ASSESSMENT
Town of Hadley, Massachusetts

Hadley Public Safety

15 East Street

Year Constructed: 1996

Construction Type: VB

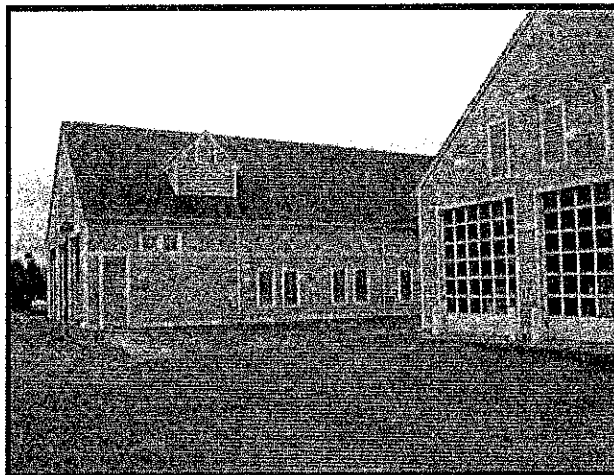
Fire Sprinklers: Yes

Approximate Building Area per Floor:

First Floor: 9734

Second Floor: 9775

Total Area: 19,509



Documents used in study:

Original Drawings dated 8 June, 1995 with as-built notes by Donham and Sweeney Architects.

General:

The

CONDITION ASSESSMENT

Life Safety: No items

Health: No items

Universal Accessibility: No items

Site: No items

Exterior: No items



The roof has required numerous repairs since its installation. A detailed inspection was not possible for the purposes of this study but based upon information received improvements need to be made. One issue is the build-up of ice on certain areas of the roof: in winter sunlight may melt snow on the upper portions of the roof but may never reach the lower portions of the roof that are shaded by the perpendicular ridge lines. This causes melting at the top and re-freezing as the melt flows down the roof leading to

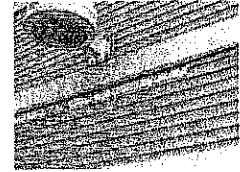
ice dams. Electric melt tape has been added to the roofs to control the damming. Shingles have also been known to blow-off at times of high winds. This is very common when the fastening staples have been over-driven into the shingles such that they reduce the holding power that they should have. It is suggested that a new metal roof system be installed, with snow guards, that will eliminate these problems.



Some vinyl siding has been blown-off and needs to be replaced.



The entrance canopy needs to be power-washed to remove the extensive cobwebs that have developed.



Interior



Carpet is rippled creating a tripping hazard. All carpeted surfaces should be replaced. We recommend linoleum for this replacement.

Mechanical



CES's experience with public safety buildings is that redundant boilers are typically provided, such that the building can operate upon the loss of a boiler. As this building has a single boiler, and that boiler is within 10 years of its expected life, if redundancy is desired the boiler should be replaced with two boilers. Ideally, to reduce operating costs, the two new boilers would be the condensing type.



There are moisture issues at the air handling units, and it appears that these issues are due to incomplete insulation of the refrigeration pipes and/or problems with the draining of the condensate from the DX cooling coils. These issues should be corrected.




For better temperature control, the two exceptions for zoning of the VAV terminal units included in the design analysis section of this study should be addressed. For the first of these exceptions (the 1st floor Lobby), a dedicated new VAV terminal unit with hot water heating coil should be provided for the perimeter spaces adjacent to the Lobby; the VAV terminal unit serving the Lobby would serve the Lobby only. For the second of these exceptions (the 2nd floor Elevator Lobby), a dedicated new VAV terminal unit with hot water heating coil should be provided for the Elevator lobby; the VAV terminal unit serving the Conference Room would serve the Conference Room only.





For under cooled and/or under heated spaces, if increasing the maximum airflow and heating airflow settings of the VAV terminal unit serving a space still does not provide sufficient cooling and/or heating respectively, the VAV terminal unit should be replaced with a larger unit.

Electrical - No Recommendations

Plumbing

 Determine the reason for the deposits/corrosion of the water system components, and provide a water conditioning system at the water entrance to reduce or eliminate such deposits/corrosion. This new water conditioning system should be provided prior to replacing any water system components. Subsequent to installing the water conditioning equipment, the accessible components of the water system should be disassembled and cleaned where the components appear to be in good condition other than the deposits/corrosion, and otherwise, where the deposits/corrosion have damaged the components beyond repair, such components should be replaced.

 Given the deposit/corrosion issues in the water system, the water heater should be drained and fully inspected. If significant deposits and/or corrosion of the water heater is found, the water heater should be replaced.

 Where accessible showers are required, but where such showers have thresholds that do not comply with accessibility requirements, the installation should be adapted such that the showers comply with current accessibility standards. Similarly, where accessible showers are required, but where such showers have only fixed shower heads, the fixed shower heads should be replaced by accessible hand held shower heads.

 The floor mounted service sink should be replaced.

PROGRAM INFORMATION

There are three areas lacking in the current building that are addressed in the proposed additions. These are listed as "phases" in order of their priority.

Phase 1. Additional records storage space required for the Police Department. This has been located within the porch over the main entrance where it will be convenient to the administrative staff.

Phase 2. An additional fire bay added to the north side of the building. A second floor space is indicated with the potential of providing space for Verizon Equipment for the potential cellular tower. The cost of the addition will be dependent on negotiations with Verizon.

Phase 3. An addition is proposed to allow for bunk rooms and support spaces for the fire department. This will allow for 24/7 manning of the facility should the need arise.

LIST OF DRAWINGS SHOWING EXISTING AND PROPOSED PLANS:

- EXP-1 Existing First Floor Plan
- EXP-2 Existing Second Floor Plan

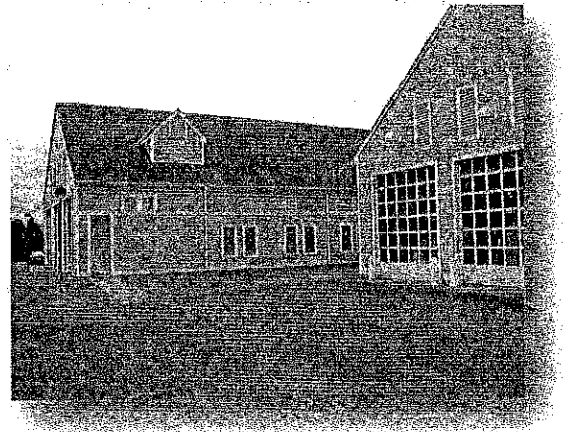
- PRP-1 Proposed First Floor Plan
- PRP-2 Proposed Second Floor Plan
- PRP-3 Proposed Site Plan

MUNICIPAL FACILITIES STUDY and PLANNING Town of Hadley, Massachusetts

Police and Fire Station Complex Structural

Introduction:

Foley Buhl Roberts & Associates, Inc. (FBRA) is collaborating with Drummey Rosane Anderson, Inc. (DRA) in the study of existing conditions and planning options for the Police and Fire Station Complex, located at 15 East Street in Hadley. The two-story, sloped roof, 17,482 square feet facility was constructed in 1997.

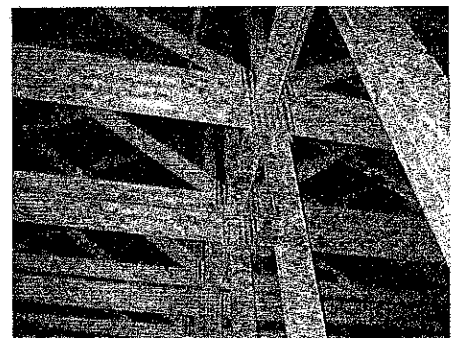


The building is composed of a two-story south wing and a one-story, three-bay apparatus wing to the north. Program elements at the First Floor of the south wing include Offices, Dispatch, Holding Cells and various support spaces for the Police and Fire Departments. Additional departmental offices are located at the Second Floor. A Weight Room is located in the unassigned Second Floor space connecting the north and south wings. There is an unused Attic space over the apparatus bays of the north wing. A passenger elevator, located near the front/east egress stair connects the First and Second Floors of the south wing.

The building site is relatively level; there is no basement.

No original structural drawings or subsurface soils information was available. No exploratory demolition or geotechnical investigations were conducted in conjunction with this study.

Structural Description: Based on FBRA site observations and discussions with Town personnel, the Police and Fire Station Complex is wood framed construction. Second Floor construction in the south wing and the connector could not be viewed; however, it is likely engineered lumber joists spaced at 16" o.c. supported by wood stud bearing walls and laminated veneer lumber (LVL) beams. Typical joist spans appear to be approximately 15 feet. The gable roof of the north (apparatus) wing is framed with metal plate connected prefabricated wood trusses spaced at 2'-0" o.c., which clear span the space below (approximately 50 feet). Due to the height of the trusses, they were fabricated in two pieces, including a top



"hat" truss which was field installed (Photo). Sloped roof construction in the south wing could not be viewed, but is assumed to be similar to that found in the apparatus wing. Roofing is asphalt shingles (some shingles are missing or damaged). The building was designed and constructed following the development of the seismic provisions in the Massachusetts State Building Code. Lateral forces (wind and seismic) are resisted by wood sheathed shear walls. Exterior, wood stud walls are clad with vinyl siding. Foundations are assumed to be conventional spread footings, with a concrete slab on grade at the First Floor (thickness unknown). Perimeter foundation/frost walls are cast-in-place concrete construction.

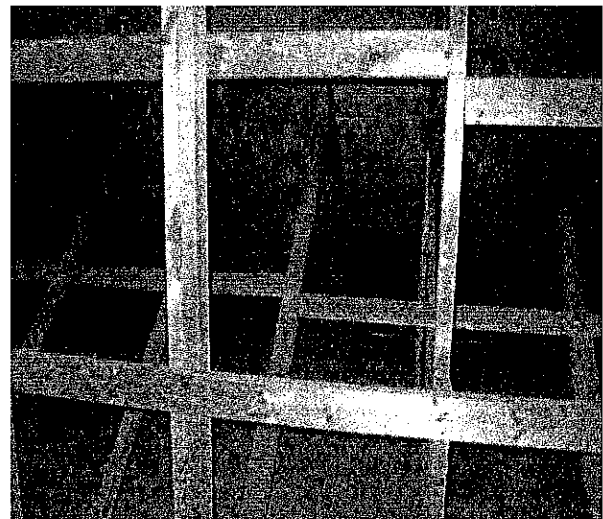
Floor and roof construction in the facility does not appear to be fire protected. The building is fully sprinklered (dry system).

Structural Conditions/Issues – Comments and Recommendations:

Structural conditions at the Police and Fire Station Complex were observed during a brief tour of the facility on July 23, 2013. Generally speaking, floor and roof construction appears to be performing satisfactorily; there is no evidence of structural distress that would indicate significantly overstressed, deteriorated or failed structural members. Foundations appear to be performing adequately; there are no signs of significant, total or differential settlements. The slab on grade in the Apparatus Room appears to be in good condition.

Structural/structurally related conditions observed during site visit are noted below:

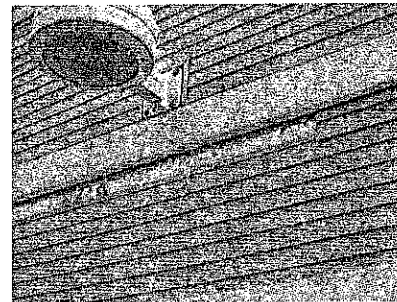
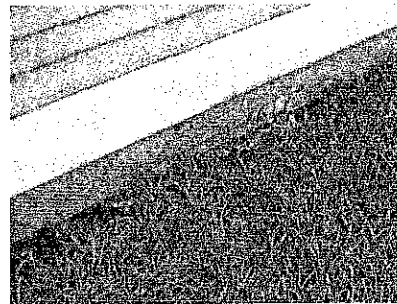
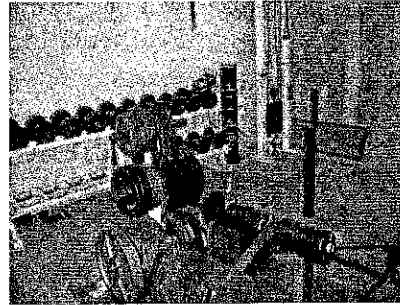
- Certain individual members of the prefabricated wood roof trusses which clear span over the Apparatus Room are braced with continuous 2x strongbacks (Photo). This member bracing is critical to the performance of the roof trusses under dead and live (snow) loads). To be effective, the 2x strongbacks need to be well anchored to the building (gable) end walls; it does not appear that this is always the case. FBRA recommends that these conditions be further reviewed and rectified, as appropriate. Similar conditions may exist at the roof of the south wing.



- As no original structural drawings were available and the floor framing was not observed, the live load capacity of this construction is unknown. The use of the building is primarily office; accordingly, FBRA expects that the Second Floor was designed for a minimum live load of 50 psf with an additional partition allowance, per the building

code requirements applicable at the time of construction (780 CMR – 6th Edition). Corridors were likely designed for an 80 psf to 100 psf live load. There is no evidence that the floor is currently overloaded; however, care must be exercised when placing groups of file cabinets (particularly those that are 3 to 5 drawers high) on this type of floor construction. Central filing areas should be avoided.

- As noted above, there is a Weight Room at the Second Floor level of section which connects the north and south wings (Photo). As the floor in this area was likely designed for a live load of approximately 50 psf, there is a potential for local overloading of the floor structure. Further review is recommended.
- Rigid insulation has been applied to the outside faces of the perimeter foundation/frost walls and protected with a cementitious board. This material is deteriorating in a number of locations, due to moisture, freeze-thaw, lawn maintenance, etc. This condition is not a structural concern with respect to the long term performance of the foundations.
- Wind suction has damaged and dislodged vinyl siding in certain areas on the back (west) side of the building. This is potentially hazardous condition, as airborne sections of siding could cause damage or injury. Further review and remediation of this condition is recommended.



Building Code Requirements and Additional Comments:

Massachusetts State Building Code Requirements – General Comments:

Proposed renovations, alterations, repairs and additions to the Police and Fire Station Complex would be governed by the provisions of the Massachusetts State Building Code (MSBC – 780 CMR 8th Edition) and the Massachusetts Existing Building Code (MEBC). These documents are based on amended versions of the 2009 International Building Code (IBC) and the 2009 International Existing Building Code (IEBC), respectively.

The MEBC allows the Design Team to choose one of three (3) compliance methods. Structurally, the Prescriptive Compliance Method is preferred. In addition, Section 101.5.4.0 of the Massachusetts Amendments (Chapter 34) requires that the existing building be investigated in sufficient detail to ascertain the effects of the proposed work (or change in use) on the area

under consideration, and the entire building or structure and its foundations, if impacted by the proposed work or change in use.

Additions – General Comments:

The design and construction of any proposed additions would be conducted in accordance with the Code for new construction. Significant additions should be structurally separated from the existing building by an expansion (seismic) joint to avoid an increase in gravity loads and/or lateral loads to existing structural elements. Smaller additions can be structurally attached to the existing building, provided they do not increase the demand - capacity ratio of the existing lateral force resisting elements in the building by more than 10%. Presently, no additions to this building are proposed.

Renovations/Alterations – General Comments:

Where proposed alterations to existing structural elements carrying gravity loads results in a stress increase of over 5%, the affected element will need to be reinforced or replaced to comply with the Code for new construction. Proposed alterations to existing structural elements carrying lateral load (plywood shear walls in this case) which result in an increase in the demand - capacity ratio of over 10% should be avoided, if possible. Essentially, this means that removal of, or major alterations to the existing plywood shear walls in the building should be minimized. If this is not avoidable, more significant seismic upgrades/reinforcing will be required; potentially including the addition of plywood shear walls in alternate locations.

End of Structural Report

TOWN BUILDING ASSESSMENT STUDY
Town of Hadley, Massachusetts

Public Safety Building

15 East Street

MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION SYSTEMS

Prepared By:

Consulting Engineering Services
510 Chapman Street, Suite 201
Canton, MA 02021

August 12, 2013

GENERAL

The mechanical, electrical, plumbing, and fire protection systems were reviewed in conformance with the requirements of the following State and National codes and regulations, as applicable:

- Massachusetts State Building Code 8th Edition
- Massachusetts State Fire Prevention Regulations
- NFPA Latest Editions
- Massachusetts Plumbing Code
- Massachusetts Mechanical Code
- Massachusetts Electrical code (NEC 2011 Edition)
- Illuminating Engineering Society of North America (IESNA) Lighting Handbook
- ASHRAE 90.1 Latest Edition

The scope of this study does not include operational assessment of the fixtures and equipment reviewed; it includes only a brief visual review of the fixtures and equipment. Therefore notes regarding the condition of the fixtures and equipment may or may not be indicative of the actual condition of the systems and equipment and/or the expected life of the fixtures and equipment. Therefore it is recommended that services of a qualified technician be retained to evaluate the actual condition of fixtures and equipment prior to replacement.

MECHANICAL

HEATING

The heating plant is a single natural gas fired non-condensing boiler that appears to be in fair condition. Two based mounted pumps supply hot water to the hot water terminal heating units throughout the building. The pumps appear to be in fair condition, and the piping components in the boiler room appear to be in fair to good condition.

The terminal heating units serving the office spaces generally consist of hot water heating coils in VAV terminal units for the spaces which are conditioned by the two air handling units. For the spaces that are not served by the two air handling units, cabinet type hot water unit heaters, both horizontal ceiling mounted and floor mounted, are provided.

The apparatus bay and garage areas of the building are heated by hot water unit heaters.

AIR CONDITIONING

Two air handling systems serve the office areas of the building. These systems generally consist of two variable air volume (VAV) air handling units with direct expansion (DX) refrigerant cooling coils and pre-heat hot water coils supplying cool air to VAV terminal units with and without hot water heating coils. There also is a VAV return air fan for each of the two air handlers. The two air handling units appear to be in fair condition.

The DX coils of these air handlers are served by grade mounted condensing units at the rear of the building that appear to be in good condition.

VENTILATION

Outside air ventilation for the spaces served by the two air handling systems is provided via those two air handling systems.

Other spaces in the building, including restrooms, locker rooms, and the apparatus bay, are served by general exhaust systems. The exhaust fans serving the vehicle apparatus area are located in the truss spaces and are very difficult to access.

There is a direct tailpipe type connected local exhaust system serving several areas of the apparatus bay. It appears to be in good condition.

CONTROLS

The temperature controls consist of programmable digital control.

DESIGN ANALYSIS

The Fire Chief noted that there are temperature control issues in several areas of office portion of this building, and CES was requested to evaluate the design with respect to these issues, therefore the inclusion of a Design Analysis section herein. However it must be understood that any critique of the design herein is made without CES knowing the constraints upon the design team during the design process, including budgetary constraints, and such constraints may have led to decisions by the design team that were less than ideal for this facility with respect to temperature control.

The basic design of the air handling systems is reasonable for a building of this use. Air handlers with DX coils and hot water pre-heat coils serving VAV terminal units with and without hot water heating coils provides for a system that, zoned correctly, sized correctly, and with controls operating properly, should provide for acceptable temperature control throughout the building.

Using sq.ft. rules of thumb, the sizing of the air conditioning units and the boiler plant appears to be an expected range for buildings similar to this, so the air conditioning and heating systems capacities are likely not contributing to the temperature control issues.

Review of the actual zoning of the system indicates that, in general, the zoning is reasonable for a facility such as this, with a couple of exceptions.

The first exception is the VAV terminal unit serving the 1st floor Lobby. This unit serves the lobby, a primarily interior zone, and also serves several adjacent perimeter spaces. With the thermostat located in the Lobby, it would be expected that the perimeter spaces served by the same VAV unit would be under heated at times during the heating season, and under cooled at times during the cooling season.

The second exception is the VAV terminal unit serving the Conference Room adjacent to the Police Chief's office, perimeter zone. This unit also serves the adjacent elevator lobby, a primarily interior zone. With the thermostat located in the Conference Room, it would be expected that the elevator served by the same VAV unit would be over heated at times during the heating season and over cooled at times during the cooling season.

Assuming the temperature controls for the VAV system are programmed properly, set correctly, and operating correctly, under cooling of some spaces could be due to the maximum airflow setting of the VAV terminal unit serving the space being too low. The simplest way of addressing this issue is to increase the maximum airflow rate, which can be done through the controls interface. If increasing the maximum airflow rate still does not provide sufficient cooling, the VAV terminal unit should be replaced with a larger unit.

Similarly, for spaces that are under heated, increasing the heating airflow setting of the VAV terminal unit serving the space via the controls interface will increase the heat

provided to the space. If increasing the heating airflow setting still does not provide sufficient heating, the VAV terminal unit should be replaced with a larger unit.

Also, though it may or may not be occurring in this building, the use of split DX cooling for VAV systems of this relatively small size can lead to operating problems with the refrigerant side of the system if the supply air flow drops too low. If there are such problems, they would likely be manifested by the icing of the refrigerant coils in the air handling units. If such issues are occurring, increasing the minimum airflow settings of the VAV terminal units when the condensing units are operating, via the controls interface, is one way to address the issue. This would not be an issue had the cooling system consisted of a packaged air cooled chiller system, with chilled water coils in the air handling units instead of DX coils, however the first cost of the chiller system would likely have been higher than the first cost of the DX system installed.

RECOMMENDATIONS

CES's experience with public safety buildings is that redundant boilers are typically provided, such that the building can operate upon the loss of a boiler. As this building has a single boiler, and that boiler is within 10 years of its expected life, if redundancy is desired the boiler should be replaced with two boilers. Ideally, to reduce operating costs, the two new boilers would be the condensing type.

There are moisture issues at the air handling units, and it appears that these issues are due to incomplete insulation of the refrigeration pipes and/or problems with the draining of the condensate from the DX cooling coils. These issues should be corrected.

For better temperature control, the two exceptions for zoning of the VAV terminal units included in the design analysis section of this study should be addressed. For the first of these exceptions (the 1st floor Lobby), a dedicated new VAV terminal unit with hot water heating coil should be provided for the perimeter spaces adjacent to the Lobby; the VAV terminal unit serving the Lobby would serve the Lobby only. For the second of these exceptions (the 2nd floor Elevator Lobby), a dedicated new VAV terminal unit with hot water heating coil should be provided for the Elevator lobby; the VAV terminal unit serving the Conference Room would serve the Conference Room only.

For under cooled and/or under heated spaces, if increasing the maximum airflow and heating airflow settings of the VAV terminal unit serving a space still does not provide sufficient cooling and/or heating respectively, the VAV terminal unit should be replaced with a larger unit.

ELECTRICAL

EXISTING SYSTEMS

The building electrical service is up to date and there are no concerns with the current electrical system. The building is fed by a 208Y/120 volt 3 phase service of 800 amps for a dedicated ground mounted transformer adjacent to the building. Upon entering the building the service is split into (2) 400A systems. One (NEDP) is connected to a 400A transfer switch and Katolight natural gas generator, the other is connected to a 225A non emergency panel. The entire building is powered on the NEDP service except for the cooling condensing units, small electrical room heaters, and some battery back-up lights.

The equipment and wiring is of high quality and has a significant amount of spare capacity which should be able to handle additional fire service bays and bunk space for the firemen is needed in the future. The lighting throughout the space is new; there are no concerns with the current lighting system.

The building has an interconnected fire alarm system that is new and of good quality.

RECOMMENDATIONS

None.

PLUMBING

EXISTING SYSTEMS

Water for the facility is from the municipal water system. The chemical properties of the water are such that what appears to be calcium deposits and/or other forms of corrosion are visible at several components of the plumbing system.

Hot water is provided by a natural gas fired tank type water heater in the boiler room which appears to be in fair condition. The water from the tank is tempered via a tempering valve at which severe calcification is apparent.

The lavatories, water closets, and urinals in the restrooms throughout are vitreous china and they generally appear to be in good condition. The water closets are the wall mounted flush valve low flow type, and accessible water closets are provided in several locations. The lavatories are both the counter mounted type and the wall mounted type, and they are provided with either manual two handle faucets or manual metering faucets. Accessible lavatories are provided in several locations

Accessible roll-in showers are provided in several locations in the building, but the thresholds of those showers appear to be too high for proper roll-in access. The showers are provided with pressure balanced valves and fixed and/or hand held shower heads.

There is a floor mounted mop sink which is in poor condition located adjacent to a double bowl laundry tub which appears to be in fair condition.

There is an emergency shower/eye-wash in the apparatus garage equipped with a tempering valve. All of the components of the system appear to be in good condition.

RECOMMENDATIONS

Determine the reason for the deposits/corrosion of the water system components, and provide a water conditioning system at the water entrance to reduce or eliminate such deposits/corrosion. This new water conditioning system should be provided prior to replacing any water system components. Subsequent to installing the water conditioning equipment, the accessible components of the water system should be disassembled and cleaned where the components appear to be in good condition other than the deposits/corrosion, and otherwise, where the deposits/corrosion have damaged the components beyond repair, such components should be replaced.

Given the deposit/corrosion issues in the water system, the water heater should be drained and fully inspected. If significant deposits and/or corrosion of the water heater is found, the water heater should be replaced.

Where accessible showers are required, but where such showers have thresholds that do not comply with accessibility requirements, the installation should be adapted such that the showers comply with current accessibility standards. Similarly, where accessible showers are required, but where such showers have only fixed shower heads, the fixed shower heads should be replaced by accessible hand held shower heads.

The floor mounted service sink should be replaced.

FIRE PROTECTION

EXISTING SYSTEMS

The building is fully sprinklered by a dry sprinkler system. In general the sprinkler entrance, piping systems, and heads appear to be in good condition, however there are several locations in the office areas where the interface between the sprinkler heads and the ceiling is incomplete.

RECOMMENDATIONS

Modify piping and/or provide escutcheons at locations in the office area where the interface between the sprinkler heads and the ceiling is incomplete.



TOWN OF HADLEY FACILITIES AUDIT
POLICE AND FIRE STATION COMPLEX
HADLEY, MA 01778

GFA 15,872



Description	Note	Quantity	Unit	Price	Total
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Basic Quantities		GFA		Girth	
basement		-	sf	-	lf
level 1		10,670	sf	546	lf
level 2		5,202	sf	558	lf

Life Safety

☒ No work identified

Health

☒ No work identified

Universal Accessibility

☒ No work identified

Site

☒ No work identified

Exterior

<input checked="" type="checkbox"/> Replace Metal Roof					\$
demo existing roof coverings		13,871	sf	1.03	14,287
disposal		1	ea	4,286.10	4,286
new metal roof, flashings & trim		13,871	sf	18.29	253,701

Sub Total - Direct Cost 272,274

General Conditions		16.00%		43,564
Overhead & Profit		18.00%		56,851
Design & Price Reserve		15.00%		55,903
Escalation	May-15	8.16%		34,973
Bond		2.40%		11,126
Soft Costs/Design Fees		30.00%		142,407

Total Project Cost 617,098

<input checked="" type="checkbox"/> Replace Siding					\$
new vinyl siding	allow	200	sf	14.32	2,864

Sub Total - Direct Cost 2,864

General Conditions		20.00%		573
Overhead & Profit		23.00%		791
Design & Price Reserve		15.00%		634
Escalation	May-15	8.16%		397
Bond		3.00%		158
Soft Costs/Design Fees		30.00%		1,625

Total Project Cost 7,042

TOWN OF HADLEY FACILITIES AUDIT
POLICE AND FIRE STATION COMPLEX
HADLEY, MA 01778

GFA 15,872



Description	Note	Quantity	Unit	Price	Total
Power Wash Canopy					\$
Power Wash Canopy		308	sf	2.03	625
Sub Total - Direct Cost					625
General Conditions		20.00%			125
Overhead & Profit		23.00%			173
Design & Price Reserve		15.00%			138
Escalation	May-15	8.16%			87
Bond		3.00%			34
Soft Costs/Design Fees		30.00%			355
Total Project Cost					1,537

Interior

Replace Carpet					\$
remove carpet		5,378	sf	0.49	2,635
disposal		1	ea	790.50	791
marmoleum tile floor		4,110	sf	6.07	24,948
Sub Total - Direct Cost					28,374
General Conditions		20.00%			5,675
Overhead & Profit		23.00%			7,831
Design & Price Reserve		15.00%			6,282
Escalation	May-15	8.16%			3,930
Bond		3.00%			1,563
Soft Costs/Design Fees		30.00%			16,097
Total Project Cost					69,752

Energy & Water Conservation

No work identified

Hazardous Materials

No work identified

TOWN OF HADLEY FACILITIES AUDIT
POLICE AND FIRE STATION COMPLEX
HADLEY, MA 01778

GFA 15,872



Description	Note	Quantity	Unit	Price	Total
<u>Mechanical</u>					
■ Add Redundant Boiler					\$
demo existing boilers		1	ea	1,924.70	1,925
disposal		1	ea	577.50	578
new condensing boilers	allow	2	ea	37,240.00	74,480
local piping, valves & hook-ups		2	ea	5,586.00	11,172
Sub Total - Direct Cost					88,155
General Conditions		20.00%			17,631
Overhead & Profit		23.00%			24,331
Design & Price Reserve		15.00%			19,518
Escalation	May-15	8.16%			12,210
Bond		2.40%			3,884
Soft Costs/Design Fees		30.00%			49,719
Total Project Cost					215,448
■ Condensation Issues					\$
correct insulation & draining issues	allow	1	ea	4,900.00	4,900
Sub Total - Direct Cost					4,900
General Conditions		20.00%			980
Overhead & Profit		23.00%			1,352
Design & Price Reserve		15.00%			1,085
Escalation	May-15	8.16%			679
Bond		3.00%			270
Soft Costs/Design Fees		30.00%			2,780
Total Project Cost					12,046
■ Temperature Control					\$
additional VAV units, duct, piping & hookups	allow	2	ea	9,800.00	19,600
Sub Total - Direct Cost					19,600
General Conditions		20.00%			3,920
Overhead & Profit		23.00%			5,410
Design & Price Reserve		15.00%			4,340
Escalation	May-15	8.16%			2,715
Bond		3.00%			1,080
Soft Costs/Design Fees		30.00%			11,120
Total Project Cost					48,185

TOWN OF HADLEY FACILITIES AUDIT
POLICE AND FIRE STATION COMPLEX
HADLEY, MA 01778

GFA

15,872



COSTPRO, INC.

Description	Note	Quantity	Unit	Price	Total
■ VAV Replacement if Required (Price is Per VAV unit) replace VAV units, modify duct, piping & controls		1	ea	9,800.00	\$ 9,800
Sub Total - Direct Cost					9,800
General Conditions		20.00%			1,960
Overhead & Profit		23.00%			2,705
Design & Price Reserve		15.00%			2,170
Escalation	May-15	8.16%			1,357
Bond		3.00%			540
Soft Costs/Design Fees		30.00%			5,560
Total Project Cost					24,092
<u>Electrical</u>					
■ No work identified					
<u>Plumbing</u>					
■ Water Conditioning add new system, clean/replace corroded items	allow	1	ea	24,500.00	\$ 24,500
Sub Total - Direct Cost					24,500
General Conditions		20.00%			4,900
Overhead & Profit		23.00%			6,762
Design & Price Reserve		15.00%			5,424
Escalation	May-15	8.16%			3,393
Bond		3.00%			1,349
Soft Costs/Design Fees		30.00%			13,898
Total Project Cost					60,226
■ Replace Water Heater demo existing water heater		1	ea	1,266.25	\$ 1,266
disposal		1	ea	379.80	380
new water heater	allow	1	ea	24,500.00	24,500
local piping, valves & hook-ups		1	ea	3,675.00	3,675
Sub Total - Direct Cost					29,821
General Conditions		20.00%			5,964
Overhead & Profit		23.00%			8,231
Design & Price Reserve		15.00%			6,602
Escalation	May-15	8.16%			4,130
Bond		3.00%			1,642
Soft Costs/Design Fees		30.00%			16,917
Total Project Cost					73,307

TOWN OF HADLEY FACILITIES AUDIT
POLICE AND FIRE STATION COMPLEX
HADLEY, MA 01778

GFA 15,872



Description	Note	Quantity	Unit	Price	Total
5 Accessible Showers					\$
modify showers for accessibility	allow	1	ea	7,056.00	7,056
Sub Total - Direct Cost					7,056
General Conditions		20.00%			1,411
Overhead & Profit		23.00%			1,947
Design & Price Reserve		15.00%			1,562
Escalation	May-15	8.16%			977
Bond		3.00%			389
Soft Costs/Design Fees		30.00%			4,003
Total Project Cost					17,345
6 Replace Service Sink					\$
demo existing service sink		1	ea	181.07	181
disposal		1	ea	54.30	54
new service sink & trim	allow	1	ea	3,503.50	3,504
Sub Total - Direct Cost					3,739
General Conditions		20.00%			748
Overhead & Profit		23.00%			1,032
Design & Price Reserve		15.00%			828
Escalation	May-15	8.16%			518
Bond		3.00%			206
Soft Costs/Design Fees		30.00%			2,121
Total Project Cost					9,192
<u>Fire Protection</u>					
7 No work identified					

