



ASSESSMENT FOR THE:

COOLIDGE SCHOOL BUILDING



MAYNARD, MA

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Coolidge School Building

Project Overview

The School Department has determined the need for a facility assessment for their administrative office building, the Coolidge School. Tappe Associates, Inc. was contracted to perform this study. The facility review included the following:

1. Review any existing studies or documents pertaining to the Coolidge School Building to assist with the evaluation of the facility.
2. Inspect and evaluate the condition of the following Coolidge School Building's building components through physical inspection and meetings with Town staff:
 - I. Building systems
 - A. Heating
 - B. Cooling
 - C. Electric
 - D. Plumbing including basement bathrooms
 - E. Fire and life safety
 - II. Building shell
 - A. Windows
 - B. Roof
 - C. Masonry
 - III Environmental
 - A. Insulation of basement pipes
 - B. Asbestos
 - IV. Any further code, habitability or building modernization issues identified by the consultant
3. Based on the assessment of Coolidge School Building's condition, make recommendations for repairs and modifications to enhance air quality, safety, energy efficiency, prevent water penetration and update obsolete building systems. Provide a report with prioritized renovation recommendations. Provide cost estimates categorized by major element of repair, such as roof repair, repointing and window repair, rather in standard construction specification sections. Include cost of design work, bid documents, construction supervision and general contractor in cost estimate. Meet with Facilities Committee to discuss recommendations and prioritization.
4. Provide 10 bound copies of the Coolidge School Building Feasibility Study.
5. Present findings to a meeting of the Maynard School Committee.



Original 1906 Bancroft School Entry



Rear Façade showing 1909 second floor addition



General Building History

The Single Story brick building (originally known as the Bancroft Street School) was initially constructed in 1906 for the use as a neighborhood elementary school. In 1909 a second floor and stair addition, for egress from the second floor, was added to the single story structure. Evidence of this addition can be noted by the change in brick color above what was the original first floor roof line of the structure. There is also evidence of a shed roof once located to the east of the rear stair addition. This is noted through the open flashing joints and penetrations which remain for the steel or timber beams once caring the roof loads. In 1932 the building was named for Calvin Coolidge and to date maintains the Coolidge School name. The next major documented repairs occurred in 1950 which involved the installation of a 2 pipe steam heating system, fresh air intake at the classrooms for unit ventilators, new boiler room wall and fire doors and other minor heating related upgrades.

In 1981 the Coolidge School was closed for use as an elementary school. The building reopened in 1984 after a major renovation project to serve the needs of administrative offices with additional space rented to local artists. The renovation project included new aluminum windows, new 2 x 4 hung ceilings, new interior partitions, first floor toilet renovation, floor refinishing, and new doors and frames.

In 1990, the Chapter I Computer Center rented space and in 1991 administrative offices moved to the Maynard High School. The Maynard Food Pantry occupied basement rooms which remain there to date. In the fall of 1995, the administrative offices returned to Coolidge and were joined by the School Age Child Care Program (SACC) and the Maynard Adult Learning Center. * This implementation of the 1995 use remains the same to date.

There is little documentation on the Coolidge School within the Town of Maynard.

**A thumbnail history of the Maynard Public Schools and School Buildings.*



GWB Partitions



Failing Plaster Ceiling and Walls in Electrical Room



Interior Building Conditions

A – INTERIOR PARTITIONS/WALLS

1. **Gypsum Wallboard (GWB):** Most of the interior drywall partitions were constructed during the 1984 renovations and are made of gypsum wallboard with wood trim. The walls are in generally good shape throughout the first and second floor. There are isolated more temporary erected gypsum walls located on the second floor which minimally serve its current needs.

- *Recommendation: New paint as required for aesthetic purposes only. Otherwise the walls are adequately functioning for its intended use. A renovation project would trigger reconfiguring and reconstruction of more permanent interior partitions.*

2. **Plaster Walls:** The original interior plaster walls show signs of wear. Isolated cracking and damage is evident through out the building. It should be noted that within the electrical closet on the first floor adjacent to the entry shows serious failure and should be immediately repaired.

- *Recommendation: Ensure that the source of the cracks or damage is repaired such as roof or envelope leaking and patch and repair plaster as required.*

3. **CMU and Brick Walls:** Most of the CMU and brick walls are located in the Lower Level of the facility and are painted. There are signs of moisture penetration and the paint is blistering and peeling off the walls. However, most of the spaces with the CMU or Brick Walls are at the service and storage areas and serve its current intended use.

- *Recommendation: Ensure that the source of the crack or damage is repaired such as roof or envelope leaking and patch and repair as required. When undertaking repairs and paint testing of the existing surface should be undertaken prior to commencing renovation work.*

Painted Brick Walls with Plywood Inserts at Former Cafeteria



Failing Plaster Ceiling at Second Floor Corridor



Second Floor Classroom



B – CEILINGS

1. **Hung Ceilings:** The 2x4 exposed spline hung ceiling are generally located on the first floor was installed during the 1984 renovations. The ceilings are in good condition and show little evidence of damage or disrepair.

- *Recommendation: None*

2. **Plaster Ceilings:** Plaster Ceilings are located on the lower level and second floor ceilings. There are signs of moisture penetration, cracking and some significant crumbling at some isolated areas. It can be assumed that the poor condition of the plaster is due to water infiltration at the roof and/ or exterior walls.

- *Recommendation: Repair the source of the leaks in the envelope before plaster is repaired and/or replaced. Immediately repair serious plaster crumbling located on the second corridor area to ensure the safety of the building's occupants.*

C – FLOORS

1. **Wood Flooring:** The original 2” wide wood flooring is in fair to good condition and is generally level. The antique quality of the floor is a nice visual reminder of the original 1906 building. However, the finish in many locations is worn and exposes the raw wood surface such as in the first floor Student Services Area at the East interior wall. In addition, there is evidence of splitting and splintering of the wood floor in more isolated locations.

- *Recommendation: Refinish (sand and polyurethane) and patch the wood floors as required throughout the facility.*

Original Wood Floors without finish



Window Treatments at Double Hung Windows



Pair of Original Doors with transom and side lights in Lobby



Main Central Stair

Worn metal plates

2. **Concrete Flooring:** The lower level floor is a painted concrete floor in adequate condition for its current use as a storage area.

- *Recommendation: The painted floor should be scraped and prepped for new paint or the existing finish can be concealed by adding sheet or VCT flooring.*

4. **Carpet:** Broadloom Carpet is installed in the second floor rear classroom. The carpet is not properly adhered and is old and worn.

- *Recommendation: Replace with VCT.*

D – WINDOW TREATMENTS

The existing roller shades are in fair condition and are serving the basic needs of the space. There are

- *Recommendation: If future renovations are undertaken window treatments may be replaced for both functional and aesthetic purposes. New shades have perforations or louvers for omitting light in order to use technology while maintaining a connection to the exterior and while gaining some light.*

E– INTERIOR DOORS/ HARDWARE

The interior solid core doors though out the facility are in adequate condition. The pair of original wood doors with adjacent side lights and transoms in the main first floor lobby requires refurbishment and painting.

- *Recommendation: If substantial renovations are undertaken than all doors must be ADA compliant which would include lever handles and proper clearances at both the pull and push side of the doors.*



Stair connecting between first floor and second



Stair connecting basement and first floor



Accessible Toilet on First Floor

F- INTERIOR STAIRS

The main connecting stair between the first and second floor are wood stairs with metal inset plates are showing signs of wear and age. The railing is not compliant and the stair does not serve as an enclosed fire rated egress

- *Recommendation: If substantial renovations are undertaken then all doors must be ADA compliant which would include lever handles and proper clearances at both the pull and push side of the doors.*

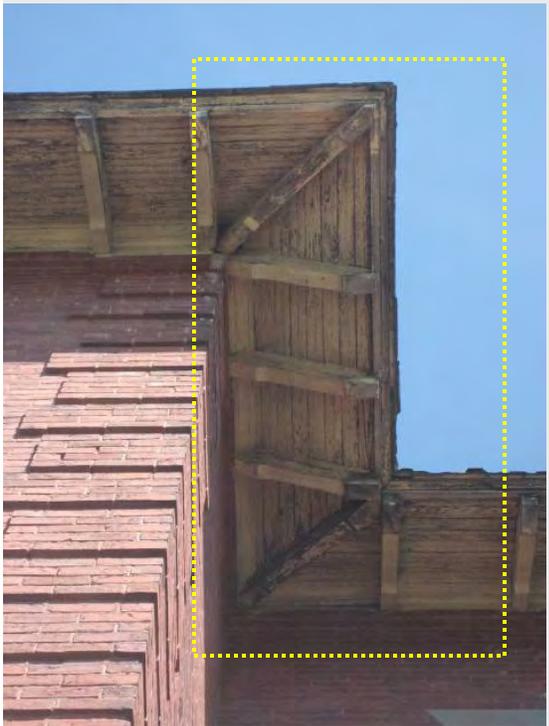
G- TOILETS

There are three toilet rooms in the building. Only toilet room in first floor has provisions to accommodate wheelchair access.

- *Recommendation: If substantial renovations are undertaken full ADA compliance may be required. (See also Accessibility section.)*



Slate Roof / Damaged Chimney Cap



Overhang at Deteriorated Building Facia

Exterior Envelope Conditions

A – Roof

Slate Roof: It was reported by the staff that the slate roof has received minimal maintenance over the years. The metal roof at the chimney caps are aged, worn and torn. The second floor ceiling shows marks of roof leaks in many locations, which suggests water infiltration due to poor flashing, ridge connections and age.

TAI spoke Lennie Lombardo from Garland Company, contact person for roof maintenance. He indicated that although slate is a very durable material, a roof of this vintage would be considered old and would have the propensity to fail at flashings and cracking shingles.

- *Recommendation: Confirmation is required that the leaks are not active. If leaks still exist, roofing should be repaired to the extent possible as a temporary solution.*
- *If extensive renovation is planned in the future, complete roof refurbishing or replacement should be considered because of the roof age and potential for continuous failure. Options for new roofs include composite Architectural shingles, which give the appearance of slate at a fraction of the cost. In addition, Snowguard rails should be provided above all walking surfaces.*

B-FACIA / OVERHANG: In some areas the underside of overhang is exposed bare wood. It is suspected that deteriorated (rotted) wood exists due to continuous exposure to weather. (Paint is peeling off at underside of overhang.)

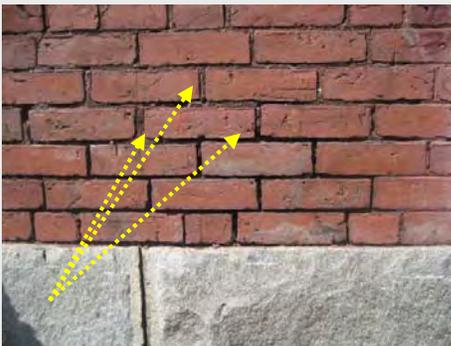
- *Recommendation: Strip remaining of paint, inspect for rotted, damaged wood. Repair, epoxy and replace wood as necessary, then prime & paint.*



Efflorescence at Masonry



Graffiti on Brick Wall



Eroded Mortar Joints

C-CHIMNEY: Metal roof cap on the brick chimney is damaged. Signs of prior repairs and replacement of some bricks at the top of the chimney is evident. Mr. Lombardo confirmed that the damage to the copper hood has existed for a few years.

- *Recommendation: Replace damaged cap to prevent further decay of chimney brick structure.*

D-EXTERIOR WALLS

1. BRICK: Brick walls show signs of aging and failing mortar. In particular, broken and damaged bricks can be found at building corners. In addition, there are settlement stress diagonal cracks below window sills in a few locations. It was noted that the brick color changes tone at the top floor, evidence that the top floor was constructed at a later date than the original building. Remnants of metal flashing and open joint between bricks outline a previously existing roof structure that appears to be have been removed long ago.

1.1 Efflorescence indicates water penetration behind brick and consequently, potential damage inside the wall. Further investigation inside the building confirmed that the wall had deteriorated due to a roof leak.

- *Recommendation: repair source of leak and clean brick as required. (See also 1.3)*

1.2 Traces of Graffiti are visible on brick around the building. It appears that in some areas an attempt was made to clean it, while in other areas it remains clearly visible.



Spalling Stone Sill



Spalling Stone Head



Failed seal at insulated glass

Recommendation: Clean brick to remove graffiti. (See also 1.3)

1.3 Mortar joints: Mortar joints have eroded from the bottom four courses (most drastically) plus to a lesser extent in other locations in the rear façade. Also observed was a gap in vertical joints at the edge of quoins.

Recommendation: Repoint walls where joints have disintegrated and at locations of moisture penetration. (Cracks) Cleaning of the brick is recommended to eliminate all traces of graffiti and efflorescence; however, special care must be taken to prevent disturbance of existing mortar joints, otherwise further repointing might be required.

2. FOUNDATION: Stone foundation is generally in good condition. May require cleaning.

- *Recommendation: Clean masonry and minor repointing as required.*

3. STONE WINDOW SILLS AND HEADS: Stone sills and heads show signs of spalling, and cracks in many locations are observed. These may be due to freeze-thaw cycles, i.e. water accumulated behind the stone pushes out as if freezes.

E – WINDOWS

The current aluminum double hung windows with insulated panel infill are not original to the building. It appears that these windows were replaced as part of a renovation in the mid-1980s.

It was noted by the users that these windows do not operate properly. Gaskets and sealants have failed and windows leak throughout the facility. Also in a few



Entry Pediment



Main Entry Door



Rusted Exterior Stairs

locations, the windows appear “foggy” i.e. condensation is occurring between the panels of insulated glass most likely due to failure of the glass seal. (Note that the basement openings are blocked with painted plywood panels.)

- *Recommendation: It is recommended that windows be replaced with insulated glass, thermally broken frame windows.*

F – ENTRY PEDIMENT

1. Existing entry pediment shows signs of corrosion, particularly at the lower right hand corner where the damage is most severe and a large portion has rusted away.

- *Recommendation: Paint must be stripped and entire pediment inspected for further rust decay, make necessary repairs, rebuild corner to match existing dentil work, and treat entire pediment with rust inhibitor primer*

G– EXTERIOR DOORS

1. Existing front doors are aluminum storefront system with glass sidelights and half-round transom. Doors at side and rear of the building are metal on metal frames. Front doors are in good condition. Side and rear doors show signs of wear and age.

Recommendation: Refurbish or replace side and rear doors. Install new hardware.

H – EXTERIOR EXIT STAIRS

1. Existing exterior exit stairs at side and rear of the building are severely rusted and generally they are in



Trough Drain at Rear of Coolidge Facility



Rear Concrete area and Grass Field

poor condition.

- *Recommendation: As a temporary measure to prevent further decay, paint must be stripped and entire stair inspected for rust, make necessary repairs, and treat with rust inhibitor primer.*
- *If major renovations are undertaken, a more permanent solution such as new fully Code compliant fire stairs should be considered.*

I – STORM DRAINAGE

1. Existing building has neither gutters /downspouts nor storm water collection system. Roof runoff falls to the ground and finds its way to existing drainage troughs. Soil erosion adjacent to these troughs indicate that they are not adequate to handle heavy downpours.

Recommendation: Install downspouts. Enlarge troughs.



Unit Ventilator



Fin Tube Radiation



Boiler



Window Mounted AC

Systems Overview

The existing building systems are comprised of the following:

A-Heating

The heating system is comprised of Unit Ventilators (UVs) with intake box and louver mounted below windows; plus steam fin tube radiation and boiler. UVs and fin tubing were installed circa 1952. Weil Mc Lain gas-fired boiler was installed in 2001.

TAI spoke with Ed Smith at Combustion Service, contact person for the heating system. He indicated that there is a silty rust (he described it as “mud”) which accumulates in the system due to the old radiators, which requires frequent flushing of the system to prevent clogging of pipes. Mr. Smith also indicated that they are currently flushing the system twice or three times per year.

Recommendations: Existing Unit ventilators are at the end of their useful life. UVs, fin tubes and associated piping should be replaced. The boiler is in good condition. Life expectancy for this type of equipment is about 15 to 20 years. Since the existing boiler is only seven years old it is reasonable to anticipate still several years of service. Continue flushing the heating system as frequently as recommended by the service company.

B-Cooling

There is NO central air conditioning in the building. There are numerous individual window mounted air conditioners, which tend to tax the electrical service capacity in the summer.

Recommendations: Upgrade electrical service to provide enough capacity for Acs. If major renovation is undertaken, central AC maybe considered in areas of full time occupancy.





Overhead Electric Service

C- Electrical

Electrical service is provided via overhead wire adjacent to main entrance.

TAI spoke with Richard Cosetta from Cosetta Electric, contact person for electrical. He indicated that currently the service is a 200 AMP single phase, which is not adequate for the functions in this type of building. (Computers, copiers, window ACs, portable heaters, etc.). According to Mr. Cosetta, no major work has been done recently, only incidental relocation of outlets, installing lighting and other minor electrical work.

The power distribution is via a main panel and four sub panels. Mr. Cosetta also indicated that the wiring in some locations is old knob and tube.

Recommendations: Existing system is outdated and insufficient. Install new 400 AMP minimum electric service, and replace all obsolete panels and wiring.



Electrical Panel



Boiler Room Controls



Water Heater in Boiler Room

D- Hot Water

40 gallon hot water heater located in the boiler room provides hot water for toilet rooms and sink. Staff indicated that hot water takes some time to arrive to the faucet, but otherwise is OK. This tank seems to satisfy the current hot water needs.

Recommendation: None.

E- Fire Alarm System

Document provided by town staff indicates that the fire alarm was installed as per Town of Maynard Fire Department requirements during the 1984 renovation.

Recommendation: None



Surface mounted Wiring

F- Fire Suppression System

Currently the building DOES NOT have a sprinkler system.

Recommendation: Extensive renovation may trigger the need for a fire protection system.



Technology Wiring and Outlets

G- Technology

Presently, technology needs are met by a network, which has been installed in an “as needed” basis, with surface mounted conduit and outlets.

Recommendation: Although it appears that the existing system satisfies the basic current needs, a major renovation may consider evaluation of future needs and upgrading the system to modern standards.



Door with Non- compliant knob type hardware



Non-compliant handrails at stair

A – Building Accessibility for persons with Disabilities (MAAB)

The intent of the Massachusetts Architectural Access Board regulations (MAAB) 521 CMR is “to provide persons with disabilities full, free and safe use of all buildings and facilities so that all such persons may have the educational, living and recreational opportunities necessary to be as self-sufficient as possible and to assume full responsibilities as citizens.” to this effect, the following observations point out to items that are at variance with MAAB compliance:

1. **Elevator:** Building does not have an elevator or handicap accessible lift.
2. **Hardware:** Interior door hardware is non-compliant. (Knob type)
3. **Stairs:** Stairs do not meet Code requirements for handrails and handrail extensions as well as exceeding maximum allowed nosing projection at treads.
4. **Toilet rooms:** It appears that the toilet rooms were recently renovated and an attempt was made to size them to accommodate a wheelchair. However items such as grab bars and mirror, plus clearances around the toilet are non-compliant.
5. **Building entrance:** wood HC accessible ramp and steps built over existing original stone and brick steps provide accessibility at the front entrance, although not in full compliance with current code. (Single handrail instead of High/low; bottom of ramp exceed ½” vertical where the ramp meets the ground.)





Toilet room



Wooden Ramp at Main Entry

6. **Signage:** Currently there is only one sign for the visually impaired (Braille). ADA compliant signage is required at all rooms or spaces.

- *Recommendations: 521 CMR indicates to which extent compliance is required for existing buildings depending on the amount of work performed. Extensive renovation will trigger the need for accessibility compliance. Below is excerpt from section 3.3 to determine compliance for existing buildings:*

521 CMR 3:00 JURISDICTION

3.3 EXISTING BUILDINGS

All additions to, reconstruction, remodeling, and alterations or repairs of existing public buildings or facilities, which require a building permit or which are so defined by a state or local inspector, shall be governed by all applicable subsections in **521 CMR 3.00: JURISDICTION.**

For specific applicability of 521 CMR to existing multiple dwellings undergoing renovations, see **521 CMR 9.2.1.**

- 3.3.1 If the work being performed amounts to less than 30% of the *full and fair cash value* of the building and
 - a. if the work costs less than \$100,000, then only the work being performed is required to comply with 521 CMR
 - b. if the work costs \$100,000 or more, then the work being performed is required to comply with 521 CMR. In addition, an *accessible public entrance* and an *accessible toilet room, telephone, drinking fountain* (if toilets, telephones and drinking fountains are provided) shall also be provided in compliance with 521 CMR.
- 3.3.2 If the work performed, including the exempted work, amounts to 30% or more of the *full and fair cash value* (see **521 CMR 5.00**) of the building the entire building is required to comply with 521 CMR.
 - a. Where the cost of constructing an *addition* to a building amounts to 30% or more of the *full and fair cash value* of the existing building, both the *addition* and the existing building must be fully accessible.



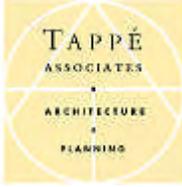
Project: A082100 Maynard Study
CampusName: Town of Maynard
AssetName: Administrative Offices, Classrooms and Food Pantry

**Requirements Summary
 Report By Priority**

Requirements

Name:	Category:	Prime System:	Cost:
Priority 1-Currently Critical			
Chimney and fascia repairs	Functionality	Roofing	\$25,482.60
Paint Existing Exterior Stairs	Functionality	Architectural	\$8,580.00
Plaster Ceiling Repair	Integrity	Architectural	\$8,580.00
Refurbish Entry Pediment	Integrity	Architectural	\$4,804.80
Repair and Clean Exterior brick walls	Integrity	Architectural	\$30,462.43
Replace Electrical Distribution System	Code Compliance	Electrical Service and Distribution	\$64,350.00
Total of 1-Currently Critical			\$142,259.83
Priority 2-Potentially Critical			
Replace entire HVAC system except boiler	Environmental	HVAC Systems and Equipment	\$823,680.00
Roof Replacement -Slate	Functionality	Roofing	\$298,069.20
Window Replacement	Beyond Service Life	Architectural	\$146,546.40
Total of 2-Potentially Critical			\$1,268,295.60
Priority 3-Necessary-Not Yet Critical			
Accessibility Upgrades	Accessibility	Architectural	\$311,110.80
Fire Suppression System	Code Compliance-Life Safety	Sprinklers	\$128,700.00
Refurbish / Replace Exterior doors	Beyond Service Life	Architectural	\$15,787.20
Repair Plaster Walls	Integrity	Architectural	\$6,767.90
Wood Floor Refinishing	Beyond Service Life	Architectural	\$73,135.92
Total of 3-Necessary-Not Yet Critical			\$535,501.82
Priority 4-Recommended			
Paint Interior Walls	Appearance	Architectural	\$27,112.80
Repaint Basement Floor	Appearance	Architectural	\$13,041.60
Replace Window Shades	Appearance	Architectural	\$21,879.00
Total of 4-Recommended			\$62,033.40
Total of Requirements For Administrative Offices, Classrooms and Food Pantry			\$2,008,090.65

Project Total \$2,008,090.65



Requirement Description

Project: A082100 Maynard Study
CampusName: Town of Maynard
AssetName: Administrative Offices, Classrooms and Food Pantry

Requirement Name: Chimney and fascia repairs

Category: Functionality
Prime System: Roofing
Priority: 1-Currently Critical
Action Date:
Inspector Name: Tappe Associates, Inc.
Inspection Date: 8/26/2008
Finish Date:
Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$17,226.00
Contingency:	10.00%	\$1,485.00
Escalation:	6.00%	\$891.00
Total:		\$19,602.00
Soft Costs:	30.00%	\$5,880.60
Total Requirement Cost:		\$25,482.60

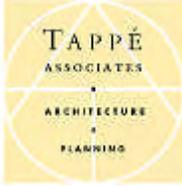
Requirement Description:

Repair chimney caps and wood fascia around roof Edge.

Action Description:

Estimate:

Number:	Description:	Qty	Unit:	Unit Cost	Extended
01	Repair Chimney caps	2	Each	\$1,000.00	\$2,000.00
02	Patch, repair, replace fascia as required	1	Job	\$10,000.00	\$10,000.00
03	Paint wood fascia	950	SqFt	\$3.00	\$2,850.00
Total of Requirement Items					\$14,850.00
General Conditions:				6.00%	\$891.00
Overhead & Profit:				10.00%	\$1,485.00
Total Hard Costs					\$17,226.00



Requirement Description

Project: A082100 Maynard Study
CampusName: Town of Maynard
AssetName: Administrative Offices, Classrooms and Food Pantry

Requirement Name: Paint Existing Exterior Stairs

Category: Functionality
Prime System: Architectural
Priority: 1-Currently Critical
Action Date:
Inspector Name:
Inspection Date:
Finish Date:
Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$5,800.00
Contingency:	10.00%	\$500.00
Escalation:	6.00%	\$300.00
Total:		\$6,600.00
Soft Costs:	30.00%	\$1,980.00
Total Requirement Cost:		\$8,580.00

Requirement Description:

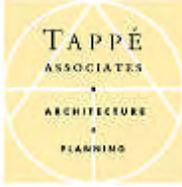
Paint Exterior Stairs. (Incidental repair)

Action Description:

Estimate:

Number:	Description:
01	Scrape and Paint Exterior Stairs

Qty	Unit:	Unit Cost	Extended
2	Each	\$2,500.00	\$5,000.00
Total of Requirement Items			\$5,000.00
General Conditions:		6.00%	\$300.00
Overhead & Profit:		10.00%	\$500.00
Total Hard Costs			\$5,800.00



Requirement Description

Project: A082100 Maynard Study
CampusName: Town of Maynard
AssetName: Administrative Offices, Classrooms and Food Pantry

Requirement Name: Plaster Ceiling Repair

Category: Integrity
Prime System: Architectural
Priority: 1-Currently Critical
Action Date:
Inspector Name: Tappe Associates, Inc.
Inspection Date: 8/26/2008
Finish Date:
Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$5,800.00
Contingency:	10.00%	\$500.00
Escalation:	6.00%	\$300.00
Total:		\$6,600.00
Soft Costs:	30.00%	\$1,980.00
Total Requirement Cost:		\$8,580.00

Requirement Description:

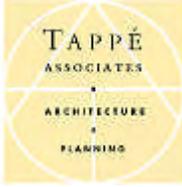
Repair plaster ceiling at failing areas

Action Description:

Estimate:

Number:	Description:
01	Patch and paint plaster ceiling where failed (Allowance)

Qty	Unit:	Unit Cost	Extended
1	Job	\$5,000.00	\$5,000.00
Total of Requirement Items			\$5,000.00
General Conditions:		6.00%	\$300.00
Overhead & Profit:		10.00%	\$500.00
Total Hard Costs			\$5,800.00



Requirement Description

Project: A082100 Maynard Study
CampusName: Town of Maynard
AssetName: Administrative Offices, Classrooms and Food Pantry

Requirement Name: Refurbish Entry Pediment

Category: Integrity
Prime System: Architectural
Priority: 1-Currently Critical
Action Date:
Inspector Name:
Inspection Date:
Finish Date:
Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$3,248.00
Contingency:	10.00%	\$280.00
Escalation:	6.00%	\$168.00
Total:		\$3,696.00
Soft Costs:	30.00%	\$1,108.80
Total Requirement Cost:		\$4,804.80

Requirement Description:

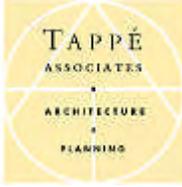
Repair damaged corner at entry pediment. Prime and Paint.

Action Description:

Estimate:

Number:	Description:
	Prime and Paint
01	Repair damaged corner and misc. locations

Qty	Unit:	Unit Cost	Extended
1	Job	\$800.00	\$800.00
1	Job	\$2,000.00	\$2,000.00
Total of Requirement Items			\$2,800.00
General Conditions:		6.00%	\$168.00
Overhead & Profit:		10.00%	\$280.00
Total Hard Costs			\$3,248.00



Requirement Description

Project: A082100 Maynard Study
CampusName: Town of Maynard
AssetName: Administrative Offices, Classrooms and Food Pantry

Requirement Name: Repair and Clean Exterior brick walls

Category: Integrity
Prime System: Architectural
Priority: 1-Currently Critical
Action Date:
Inspector Name: Tappe Associates, Inc.
Inspection Date: 8/26/2008
Finish Date:
Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$20,592.32
Contingency:	10.00%	\$1,775.20
Escalation:	6.00%	\$1,065.12
Total:		\$23,432.64
Soft Costs:	30.00%	\$7,029.79
Total Requirement Cost:		\$30,462.43

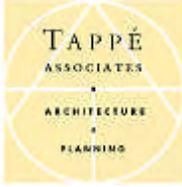
Requirement Description:

Mortar joint repointing at various locations , Clean brick all walls and repair stone sills / heads.

Action Description:

Estimate:

Number:	Description:	Qty	Unit:	Unit Cost	Extended
01	Mortar Joint Repointing most urgent areas (Allowance 800 sf)	800	SqFt	\$10.00	\$8,000.00
02	Surface Cleanup (Wand wash facade)	9600	SqFt	\$0.12	\$1,152.00
03	Graffiti removal	1	Job	\$600.00	\$600.00
04	Repair masonry window sills / heads	1	Job	\$5,000.00	\$5,000.00
05	Repair broken and missing bricks at various locations	1	Job	\$3,000.00	\$3,000.00
Total of Requirement Items					\$17,752.00
General Conditions:				6.00%	\$1,065.12
Overhead & Profit:				10.00%	\$1,775.20
Total Hard Costs					\$20,592.32



Requirement Description

Project: A082100 Maynard Study
CampusName: Town of Maynard
AssetName: Administrative Offices, Classrooms and Food Pantry

Requirement Name: Replace Electrical Distribution System

Category: Code Compliance
Prime System: Electrical Service and Distribution
Priority: 1-Currently Critical
Action Date:
Inspector Name: Tappe Associates, Inc.
Inspection Date: 8/26/2008
Finish Date:
Status: Open

Requirement Cost Breakdown	
Cost Estimate from below	\$43,500.00
Contingency: 10.00%	\$3,750.00
Escalation: 6.00%	\$2,250.00
Total:	\$49,500.00
Soft Costs: 30.00%	\$14,850.00
Total Requirement Cost:	\$64,350.00

Requirement Description:

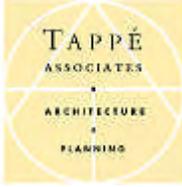
Replace all electrical wiring and distribution panels. Upgrade service to 400 AMPs.

Action Description:

Estimate:

Number:	Description:
01	Building Area

Qty	Unit:	Unit Cost	Extended
15000	SqFt	\$2.50	\$37,500.00
Total of Requirement Items			\$37,500.00
General Conditions:		6.00%	\$2,250.00
Overhead & Profit:		10.00%	\$3,750.00
Total Hard Costs			\$43,500.00



Requirement Description

Project: A082100 Maynard Study
CampusName: Town of Maynard
AssetName: Administrative Offices, Classrooms and Food Pantry

Requirement Name: Replace entire HVAC system except boiler

Category: Environmental
Prime System: HVAC Systems and Equipment
Priority: 2-Potentially Critical
Action Date:
Inspector Name: Tappe Associates, Inc.
Inspection Date:
Finish Date:
Status: Open

Requirement Cost Breakdown	
Cost Estimate from below	\$556,800.00
Contingency: 10.00%	\$48,000.00
Escalation: 6.00%	\$28,800.00
Total:	\$633,600.00
Soft Costs: 30.00%	\$190,080.00
Total Requirement Cost:	\$823,680.00

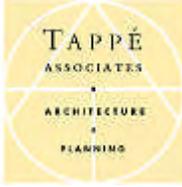
Requirement Description:

Replace existing heating system and wall mounted ACs with new central HVAC system, except boiler

Action Description:

Estimate:

Number:	Description:	Qty	Unit:	Unit Cost	Extended	
01	Building Area (three floors) New piping, Unit Ventilators, Fin tube radiation. (Including associated electrical work)	15000	SqFt	\$32.00	\$480,000.00	
					Total of Requirement Items	\$480,000.00
					General Conditions: 6.00%	\$28,800.00
					Overhead & Profit: 10.00%	\$48,000.00
					Total Hard Costs	\$556,800.00



Requirement Description

Project: A082100 Maynard Study
CampusName: Town of Maynard
AssetName: Administrative Offices, Classrooms and Food Pantry

Requirement Name: Roof Replacement -Slate

Category: Functionality
Prime System: Roofing
Priority: 2-Potentially Critical
Action Date:
Inspector Name: Tappe Associates, Inc.
Inspection Date: 8/26/2008
Finish Date:
Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$201,492.00
Contingency:	10.00%	\$17,370.00
Escalation:	6.00%	\$10,422.00
Total:		\$229,284.00
Soft Costs:	30.00%	\$68,785.20
Total Requirement Cost:		\$298,069.20

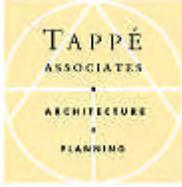
Requirement Description:

Replace existing roofing with slate to match existing. Install gutters and downspouts

Action Description:

Estimate:

Number:	Description:	Qty	Unit:	Unit Cost	Extended
01	Replace with Slate	5500	SqFt	\$30.00	\$165,000.00
02	Zinc Coated Copper Gutters	300	Lf	\$17.00	\$5,100.00
03	Zinc Coated Copper Downspouts	240	Lf	\$15.00	\$3,600.00
Total of Requirement Items					\$173,700.00
General Conditions:				6.00%	\$10,422.00
Overhead & Profit:				10.00%	\$17,370.00
Total Hard Costs					\$201,492.00



Requirement Description

Project: A082100 Maynard Study
CampusName: Town of Maynard
AssetName: Administrative Offices, Classrooms and Food Pantry

Requirement Name: Window Replacement

Category: Beyond Service Life
Prime System: Architectural
Priority: 2-Potentially Critical
Action Date:
Inspector Name: Tappe Associates, Inc.
Inspection Date: 8/26/2008
Finish Date:
Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$99,064.00
Contingency:	10.00%	\$8,540.00
Escalation:	6.00%	\$5,124.00
Total:		\$112,728.00
Soft Costs:	30.00%	\$33,818.40
Total Requirement Cost:		\$146,546.40

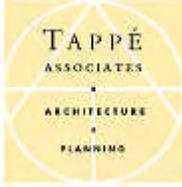
Requirement Description:

Replace existing windows with new insulated, thermally broken double hung windows with screens.

Action Description:

Estimate:

Number:	Description:	Qty	Unit:	Unit Cost	Extended
01	Window Type A	44	Each	\$1,600.00	\$70,400.00
02	Window Type B	16	Each	\$750.00	\$12,000.00
03	Window Type C	6	Each	\$500.00	\$3,000.00
Total of Requirement Items					\$85,400.00
General Conditions:				6.00%	\$5,124.00
Overhead & Profit:				10.00%	\$8,540.00
Total Hard Costs					\$99,064.00



Requirement Description

Project: A082100 Maynard Study
CampusName: Town of Maynard
AssetName: Administrative Offices, Classrooms and Food Pantry

Requirement Name: Accessibility Upgrades

Category: Accessibility
Prime System: Architectural
Priority: 3-Necessary-Not Yet Critical
Action Date:
Inspector Name: Tappe Associates, Inc.
Inspection Date: 8/26/2008
Finish Date:
Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$210,308.00
Contingency:	10.00%	\$18,130.00
Escalation:	6.00%	\$10,878.00
Total:		\$239,316.00
Soft Costs:	30.00%	\$71,794.80
Total Requirement Cost:		\$311,110.80

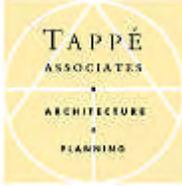
Requirement Description:

Work exceeding 30% of fair cash value will trigger full accessibility upgrades, which includes the items below. Each door would require evaluation based on program to determine whether clearances are met at entry and exit.

Action Description:

Estimate:

Number:	Description:	Qty	Unit:	Unit Cost	Extended
01	New elevator equipment, controls, hoistway (Exact location to be determined)	1	Each	\$100,000.00	\$100,000.00
02	Provide ADA compliant signage	7600	SqFt	\$0.50	\$3,800.00
03	Modify Stair tread nosings and handrails	3	Job	\$6,000.00	\$18,000.00
04	Add handrails at Exterior Ramp	220	lf	\$50.00	\$11,000.00
05	Replace non- ADA compliant hardware at interior doors	33	Each	\$500.00	\$16,500.00
06	Modify and replace grab bars in existing accessible toilet as required	1	Job	\$2,000.00	\$2,000.00
07	New fully accessible toilet at third floor (Exact location to be determined)	1	Job	\$30,000.00	\$30,000.00
Total of Requirement Items					\$181,300.00
General Conditions:				6.00%	\$10,878.00
Overhead & Profit:				10.00%	\$18,130.00
Total Hard Costs					\$210,308.00



Requirement Description

Project: A082100 Maynard Study
CampusName: Town of Maynard
AssetName: Administrative Offices, Classrooms and Food Pantry

Requirement Name: Fire Suppression System

Category: Code Compliance-Life Safety
Prime System: Sprinklers
Priority: 3-Necessary-Not Yet Critical
Action Date:
Inspector Name: Tappe Associates, Inc.
Inspection Date: 8/26/2008
Finish Date:
Status: Open

Requirement Cost Breakdown	
Cost Estimate from below	\$87,000.00
Contingency: 10.00%	\$7,500.00
Escalation: 6.00%	\$4,500.00
Total:	\$99,000.00
Soft Costs: 30.00%	\$29,700.00
Total Requirement Cost:	\$128,700.00

Requirement Description:

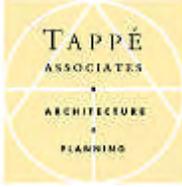
Extensive renovation work may trigger the need for a fire protection system.

Action Description:

Estimate:

Number:	Description:
01	Sprinklers Throughout Entire Building

Qty	Unit:	Unit Cost	Extended
1	Job	\$75,000.00	\$75,000.00
Total of Requirement Items			\$75,000.00
General Conditions:		6.00%	\$4,500.00
Overhead & Profit:		10.00%	\$7,500.00
Total Hard Costs			\$87,000.00



Requirement Description

Project: A082100 Maynard Study
CampusName: Town of Maynard
AssetName: Administrative Offices, Classrooms and Food Pantry

Requirement Name: Refurbish / Replace Exterior doors

Category: Beyond Service Life
Prime System: Architectural
Priority: 3-Necessary-Not Yet Critical
Action Date:
Inspector Name: Tappe Associates, Inc.
Inspection Date: 8/26/2008
Finish Date:
Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$10,672.00
Contingency:	10.00%	\$920.00
Escalation:	6.00%	\$552.00
Total:		\$12,144.00
Soft Costs:	30.00%	\$3,643.20
Total Requirement Cost:		\$15,787.20

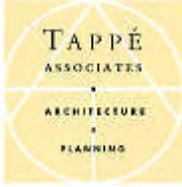
Requirement Description:

Replace hardware at front entrance doors. Replace doors and hardware at side and rear door locations.

Action Description:

Estimate:

Number:	Description:	Qty	Unit:	Unit Cost	Extended
01	New hardware at front doors	1	Each	\$800.00	\$800.00
02	New HM doors and hardware	7	Each	\$1,200.00	\$8,400.00
Total of Requirement Items					\$9,200.00
General Conditions:				6.00%	\$552.00
Overhead & Profit:				10.00%	\$920.00
Total Hard Costs					\$10,672.00



Requirement Description

Project: A082100 Maynard Study
CampusName: Town of Maynard
AssetName: Administrative Offices, Classrooms and Food Pantry

Requirement Name: Repair Plaster Walls

Category: Integrity
Prime System: Architectural
Priority: 3-Necessary-Not Yet Critical
Action Date:
Inspector Name: Tappe Associates, Inc.
Inspection Date: 8/26/2008
Finish Date:
Status: Open

Requirement Cost Breakdown	
Cost Estimate from below	\$4,575.04
Contingency: 10.00%	\$394.40
Escalation: 6.00%	\$236.64
Total:	\$5,206.08
Soft Costs: 30.00%	\$1,561.82
Total Requirement Cost:	\$6,767.90

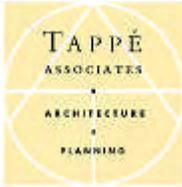
Requirement Description:

Repair cracks at plaster Walls (Throughout building)

Action Description:

Estimate:

Number:	Description:	Qty	Unit:	Unit Cost	Extended
01	Plasterer -32 Hours	32	Each	\$92.00	\$2,944.00
02	Materials and Equipment	1	Job	\$1,000.00	\$1,000.00
Total of Requirement Items					\$3,944.00
General Conditions:				6.00%	\$236.64
Overhead & Profit:				10.00%	\$394.40
Total Hard Costs					\$4,575.04



Requirement Description

Project: A082100 Maynard Study
CampusName: Town of Maynard
AssetName: Administrative Offices, Classrooms and Food Pantry

Requirement Name: Wood Floor Refinishing

Category: Beyond Service Life
Prime System: Architectural
Priority: 3-Necessary-Not Yet Critical
Action Date:
Inspector Name: Tappe Associates, Inc.
Inspection Date: 8/26/2008
Finish Date:
Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$49,439.20
Contingency:	10.00%	\$4,262.00
Escalation:	6.00%	\$2,557.20
Total:		\$56,258.40
Soft Costs:	30.00%	\$16,877.52
Total Requirement Cost:		\$73,135.92

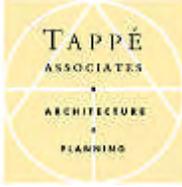
Requirement Description:

Sand and refinish existing wood floor

Action Description:

Estimate:

Number:	Description:	Qty	Unit:	Unit Cost	Extended
01	Floor Area (Assumes wood flooring under existing carpet)	7600	SqFt	\$4.95	\$37,620.00
02	Patch isolated areas (allowance)	1	Job	\$5,000.00	\$5,000.00
Total of Requirement Items					\$42,620.00
General Conditions:				6.00%	\$2,557.20
Overhead & Profit:				10.00%	\$4,262.00
Total Hard Costs					\$49,439.20



Requirement Description

Project: A082100 Maynard Study
CampusName: Town of Maynard
AssetName: Administrative Offices, Classrooms and Food Pantry

Requirement Name: Paint Interior Walls

Category: Appearance
Prime System: Architectural
Priority: 4-Recommended
Action Date:
Inspector Name: Tappe Associates, Inc.
Inspection Date: 8/26/2008
Finish Date:
Status: Open

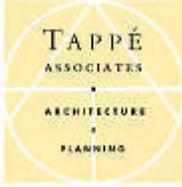
Requirement Cost Breakdown		
Cost Estimate from below		\$18,328.00
Contingency:	10.00%	\$1,580.00
Escalation:	6.00%	\$948.00
Total:		\$20,856.00
Soft Costs:	30.00%	\$6,256.80
Total Requirement Cost:		\$27,112.80

Requirement Description:

Action Description:

Estimate:

Number:	Description:	Qty	Unit:	Unit Cost	Extended
01	Paint Interior Masonry Walls (Wall Surface)	6000	SqFt	\$0.80	\$4,800.00
02	Paint Interior Gypsum wall board Walls Wall Surface)	12000	SqFt	\$0.50	\$6,000.00
03	Allowance for scraping and surface preparation (where required)	1	Job	\$5,000.00	\$5,000.00
Total of Requirement Items					\$15,800.00
General Conditions:				6.00%	\$948.00
Overhead & Profit:				10.00%	\$1,580.00
Total Hard Costs					\$18,328.00



Requirement Description

Project: A082100 Maynard Study
CampusName: Town of Maynard
AssetName: Administrative Offices, Classrooms and Food Pantry

Requirement Name: Repaint Basement Floor

Category: Appearance
Prime System: Architectural
Priority: 4-Recommended
Action Date:
Inspector Name: Tappe Associates, Inc.
Inspection Date: 8/26/2008
Finish Date:
Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$8,816.00
Contingency:	10.00%	\$760.00
Escalation:	6.00%	\$456.00
Total:		\$10,032.00
Soft Costs:	30.00%	\$3,009.60
Total Requirement Cost:		\$13,041.60

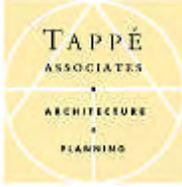
Requirement Description:

Repaint basement floor to match existing finish.
 Note: If VCT is desired in lieu of paint ADD \$ 6520 to Total Cost.

Action Description:

Estimate:

Number:	Description:	Qty	Unit:	Unit Cost	Extended
01	Repaint Basement Floor (Match existing Finish)	3800	SqFt	\$2.00	\$7,600.00
Total of Requirement Items					\$7,600.00
General Conditions:				6.00%	\$456.00
Overhead & Profit:				10.00%	\$760.00
Total Hard Costs					\$8,816.00



Requirement Description

Project: A082100 Maynard Study
CampusName: Town of Maynard
AssetName: Administrative Offices, Classrooms and Food Pantry

Requirement Name: Replace Window Shades

Category: Appearance
Prime System: Architectural
Priority: 4-Recommended
Action Date:
Inspector Name: Tappe Associates, Inc.
Inspection Date: 8/26/2008
Finish Date:
Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$14,790.00
Contingency:	10.00%	\$1,275.00
Escalation:	6.00%	\$765.00
Total:		\$16,830.00
Soft Costs:	30.00%	\$5,049.00
Total Requirement Cost:		\$21,879.00

Requirement Description:

Replace Window Shades with New Solar Shades

Action Description:

Estimate:

Number:	Description:
01	Replace Window Shades with New Solar Shades

Qty	Unit:	Unit Cost	Extended
51	Each	\$250.00	\$12,750.00
Total of Requirement Items			\$12,750.00
General Conditions:		6.00%	\$765.00
Overhead & Profit:		10.00%	\$1,275.00
Total Hard Costs			\$14,790.00