



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Fire Alarm

Category: Life Safety  
 Prime System: Electrical Service and Distribution  
 Priority: 1-Currently Critical  
 Action Date: 06/01/2007  
 Inspector Name: Garcia Galuska DeSousa - Electrical  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$412,960.00
Contingency:	10.00%	\$35,600.00
Escalation:	6.00%	\$21,360.00
<b>Total:</b>		<b>\$469,920.00</b>
Soft Costs:	30.00%	\$140,976.00
<b>Total Requirement Cost:</b>		<b>\$610,896.00</b>

**Requirement Description:**

The building is equipped throughout with an automatic fire alarm system with smoke detectors in the corridors. The horn/lights do meet ADA. The fire alarm system is conventional and manufactured by FCI model FC-72 with 8 zones and is in poor condition. The original Edwards system was replaced in the 1980's. Magnetic door holders are present on some corridor fire doors, but are not operational. The fire alarm devices in the gym do not have wire guards installed and stopper covers on the pull stations. Therefore, the equipment is subject to physical damage. There is a Gamewell local energy master box with an obsolete annunciator mounted adjacent to it.

**Action Description:**

A new fire alarm system is recommended for ADA and life safety compliance.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Fully Automatic System	1	Job	\$356,000.00	\$356,000.00
<b>Total of Requirement Items</b>					\$356,000.00
<b>General Conditions:</b>				6.00%	\$21,360.00
<b>Overhead &amp; Profit:</b>				10.00%	\$35,600.00
<b>Total Hard Costs</b>					<b>\$412,960.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Interior Signage

Category: Code Compliance  
 Prime System: Architectural  
 Priority: 1-Currently Critical  
 Action Date: 06/01/2007  
 Inspector Name: Tappe Associates, Inc.  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$1,740.00
Contingency:	10.00%	\$150.00
Escalation:	6.00%	\$90.00
<b>Total:</b>		<b>\$1,980.00</b>
Soft Costs:	30.00%	\$594.00
<b>Total Requirement Cost:</b>		<b>\$2,574.00</b>

**Requirement Description:**

Interior Signage was evident throughout the majority of the building.

**Action Description:**

Provide interior signage to doors that are missing signage or that do not currently comply with MAAB standards.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Provide Interior Singnage to missing areas	20	Job	\$75.00	\$1,500.00
<b>Total of Requirement Items</b>					\$1,500.00
<b>General Conditions:</b>				6.00%	\$90.00
<b>Overhead &amp; Profit:</b>				10.00%	\$150.00
<b>Total Hard Costs</b>					<b>\$1,740.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name: Kitchen Exhaust Hood**

Category: Beyond Service Life  
 Prime System: Other HVAC Systems and Equipment  
 Priority: 1-Currently Critical  
 Action Date: 06/01/2007  
 Inspector Name: Garcia Galuska DeSousa - HVAC  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$42,920.00
Contingency:	10.00%	\$3,700.00
Escalation:	6.00%	\$2,220.00
<b>Total:</b>		<b>\$48,840.00</b>
Soft Costs:	30.00%	\$14,652.00
<b>Total Requirement Cost:</b>		<b>\$63,492.00</b>

**Requirement Description:**

The existing kitchen exhaust hood is approximately 40 years old and is of the single wall design and is provided with a fire protection system, non-vapor tight fluorescent lighting which is non code compliant and removable cleanable cartridge filters. The exhaust fan is vented through a roof mounted exhaust fan also approximately 40 years old. The exhaust hood and fan do operate and maintain adequate exhaust air however, it does not appear to be code compliant with the amount of air actually ventilated. The hood is not of the proper size to completely contain all cooking equipment under the hood. The overall condition considering its age is average and was noted to have slight surface soiling and contamination. Make up air for the kitchen hood is through a separate 100% outside air ventilation unit located in an adjacent storage room. The unit is provided with valve control and is susceptible to freezing during low flow conditions. Air is diffused to the overall kitchen through a single side wall register which was noted to have surface soiling and contamination. The cost of fixing the equipment where possible, considering the extreme antiquated nature of the basic system and the general state of disrepair, would render its future expected life as an uneconomical choice.

**Action Description:**

Replace the kitchen exhaust hood with a properly sized double wall combination exhaust and supply which will provide make up air directly to the exhaust hood itself. The hood will be provided with removable cleanable cartridge filters, fire protection system, and vapor tight incandescent lighting. Located on the roof directly above the exhaust hood will be a combination make up air unit with a gas-fired furnace and exhaust fan sized for building code requirements. A separate heating and ventilating unit will be provided for the kitchen area to maintain general space heating and ventilation.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Kitchen Hood	1	LS	\$15,000.00	\$15,000.00
2	Make-Up / Exhaust Air Fans	1	LS	\$10,000.00	\$10,000.00
3	Exhaust Ductwork	1	LS	\$12,000.00	\$12,000.00
<b>Total of Requirement Items</b>					<b>\$37,000.00</b>
<b>General Conditions:</b>				6.00%	\$2,220.00
<b>Overhead &amp; Profit:</b>				10.00%	\$3,700.00
<b>Total Hard Costs</b>					<b>\$42,920.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name: Media Center**

Category: Functionality  
 Prime System: Other HVAC Systems and Equipment  
 Priority: 1-Currently Critical  
 Action Date: 06/01/2007  
 Inspector Name: Garcia Galuska DeSousa - HVAC  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$56,840.00
Contingency:	10.00%	\$4,900.00
Escalation:	6.00%	\$2,940.00
<b>Total:</b>		<b>\$64,680.00</b>
Soft Costs:	30.00%	\$19,404.00
<b>Total Requirement Cost:</b>		<b>\$84,084.00</b>

**Requirement Description:**

The media center is served by two classroom unit ventilators which introduce outside air through a wall mounted louver which provide full ventilation of the space as well as heating. The unit ventilators are provided with pneumatic automatic control valves controlled by a wall mounted thermostat to maintain comfortable space temperatures. Through a series of valves and dampers located within the unit ventilator adequate ventilation and heating are achieved. All equipment is generally original and approximately 40 years old and have not been upgraded over the years. The general condition is antiquated, slight damage and soiling, failed automatic controls, and the suspicion that proper ventilation may not be adequate to meet building code requirements. The failed dampers and actuators are causing an excessive energy consumption, and the availability of replacement parts and devices is becoming difficult.

The overall volume of total and outside air appears to be undersized for the population of the space and does not appear code compliant.

**Action Description:**

Replace the existing unit ventilators with a single roof mounted heating ventilating air-conditioning unit sized for the population and code required outside ventilation air requirement. Provide new insulated overhead supply ductwork feeding new supply diffusers located within the ceiling, and new return air ductwork drawing from approximately 12 inches above the floor. Replace the existing exhaust fan, all ductwork and exhaust registers.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Rooftop HVAC Unit	1	LS	\$15,000.00	\$15,000.00
2	Exhaust Air Fan	1	LS	\$4,000.00	\$4,000.00
3	Ductwork	1	LS	\$20,000.00	\$20,000.00
4	Paint / Patch Allowance	1	Job	\$10,000.00	\$10,000.00
<b>Total of Requirement Items</b>					<b>\$49,000.00</b>
<b>General Conditions:</b>				6.00%	\$2,940.00
<b>Overhead &amp; Profit:</b>				10.00%	\$4,900.00
<b>Total Hard Costs</b>					<b>\$56,840.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name: Power Plant**

Category: Beyond Service Life  
 Prime System: Energy Supply  
 Priority: 1-Currently Critical  
 Action Date: 06/01/2007  
 Inspector Name: Garcia Galuska DeSousa - HVAC  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$208,800.00
Contingency:	10.00%	\$18,000.00
Escalation:	6.00%	\$10,800.00
<b>Total:</b>		<b>\$237,600.00</b>
Soft Costs:	30.00%	\$71,280.00
<b>Total Requirement Cost:</b>		<b>\$308,880.00</b>

**Requirement Description:**

The existing powerplant includes two Cleaver Brooks low-pressure hot water boilers distributing approximately 200° supply water throughout the building. Hot water is distributed by two the base mounted end suction pumps through a schedule 40 black steel piping system insulated with fiberglass. Expanded water is controlled by ceiling suspended air elimination expansion tanks. Breeching for the boiler combustion gas is through a welded ducting system to a masonry chimney. The breeching insulation could contain asbestos. All components which make up the system including boiler, pumps, piping with insulation, breeching, and chimney are all original and approximately 40 years old and have reached their maximum serviceable life. The cost of fixing the equipment considering its future expected life is an uneconomical choice considering the level of contamination and general state of disrepair.

**Action Description:**

Replace all existing boilers, pumps, piping with insulation, expansion tanks, breeching, chimney, and combustion air system with new cast iron sectional boilers each sized at 50% of the overall building capacity, a primary and standby base mounted end suction hot water pump controlled with a variable frequency drive, diaphragm expansion tanks, double wall positive pressure breeching with chimney, and combustion air louvers provided with motor operated dampers. All piping throughout boiler room will be replaced with new and insulated with fiberglass insulation.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Replace Power Plant (see description above)	1	LS	\$180,000.00	\$180,000.00
<b>Total of Requirement Items</b>					<b>\$180,000.00</b>
<b>General Conditions:</b>				6.00%	\$10,800.00
<b>Overhead &amp; Profit:</b>				10.00%	\$18,000.00
<b>Total Hard Costs</b>					<b>\$208,800.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Replace Classroom Unit Ventilators

**Category:** Code Compliance  
**Prime System:** Other HVAC Systems and Equipment  
**Priority:** 1-Currently Critical  
**Action Date:** 06/01/2007  
**Inspector Name:** Garcia Galuska DeSousa - HVAC  
**Inspection Date:** 9/18/2006  
**Finish Date:**  
**Status:** Open

Requirement Cost Breakdown		
Cost Estimate from below		\$191,400.00
Contingency:	10.00%	\$16,500.00
Escalation:	24.00%	\$39,600.00
<b>Total:</b>		<b>\$247,500.00</b>
Soft Costs:	30.00%	\$74,250.00
<b>Total Requirement Cost:</b>		<b>\$321,750.00</b>

**Requirement Description:**

The individual classrooms are presently served by classroom unit ventilators which introduce outside air through a wall mounted louver which provide full ventilation of the space as well as heating. The classroom unit ventilators are provided with pneumatic automatic control valves controlled by a wall mounted thermostat to maintain comfortable space temperatures. Through a series of valves and dampers located within the classroom unit ventilator adequate ventilation and heating are achieved. All equipment is generally original and approximately 40 years old and has not been upgraded over the years. The general condition is antiquated, slight damage and soiling, failed automatic controls, and the suspicion that proper ventilation may not be adequate to meet building code requirements. The failed dampers and actuators are causing excessive energy consumption, and the availability of replacement parts and devices is becoming difficult.

**Action Description:**

Replace all existing classroom unit ventilators with new of similar size and capacity. Balance outside air quantity to meet current building code requirements. Adjust adjacent shelving units and provide fillers as required to provide for seamless installation. Existing intake louver will remain.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Replace Existing CUV	31	Job	\$5,000.00	\$155,000.00
2	Patch / Paint Allowance	1	Job	\$10,000.00	\$10,000.00
<b>Total of Requirement Items</b>					<b>\$165,000.00</b>
<b>General Conditions:</b>				6.00%	\$9,900.00
<b>Overhead &amp; Profit:</b>				10.00%	\$16,500.00
<b>Total Hard Costs</b>					<b>\$191,400.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name: Roof**

Category: Functionality  
 Prime System: Roofing  
 Priority: 1-Currently Critical  
 Action Date: 06/01/2007  
 Inspector Name: Tappe Associates, Inc.  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$463,840.50
Contingency:	10.00%	\$39,986.25
Escalation:	6.00%	\$23,991.75
<b>Total:</b>		<b>\$527,818.50</b>
Soft Costs:	30.00%	\$158,345.55
<b>Total Requirement Cost:</b>		<b>\$686,164.05</b>

**Requirement Description:**

The roof is an early rubber membrane made by Carlyle, approximately 10 to 15 years in age. It has evidence of being patched in several locations. The expansion joints membrane cover is consistently separating from primary roof membrane, with evidence of many repairs. The flashing appears to be 6" above the roof surface and consequently will allow moisture into the masonry from the freeze / thaw of snow build up. The same issue is apparent on several of the louvers. It appears that when this roof was replaced from an original T & G to an insulated rubber membrane the design was for a dead flat insulation with approximately a 1 inch taper up at the roof edge perimeter. The roof drains are set in pockets 3 and 4 inches deep. Because of the lack of slope to drain water and snow melt there are ponds throughout the roof areas. The slightest leak will saturate the roof insulation. Once wet it is of little insulating value.

**Action Description:**

The entire roof is in need of being replaced. A new tapered insulation system should slope back towards the roof drain. Re-flash everywhere with a minimum of 9" above the finished roof deck.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Tapered Insulation Averaging 2" Thick	65050	SqFt	\$2.00	\$130,100.00
2	Fully Adhered Membrane	65050	SqFt	\$2.55	\$165,877.50
3	Roof Edge Metal Coping	2200	LF	\$12.00	\$26,400.00
4	Roof Edge Wood Blocking	2200	LF	\$6.00	\$13,200.00
5	Expansion Joint	375	LF	\$15.00	\$5,625.00
6	Masonry re-flash	666	LF	\$10.00	\$6,660.00
7	Allowance to replace 20% of Existing Flat Insulation 4" thick assumed damp (extent of this can be determined with infra-red photography)	13000	SqFt	\$4.00	\$52,000.00
<b>Total of Requirement Items</b>					\$399,862.50
<b>General Conditions:</b>				6.00%	\$23,991.75
<b>Overhead &amp; Profit:</b>				10.00%	\$39,986.25
<b>Total Hard Costs</b>					\$463,840.50



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name: Roof Fans**

Category: Functionality  
 Prime System: Other HVAC Systems and Equipment  
 Priority: 1-Currently Critical  
 Action Date: 06/01/2007  
 Inspector Name: Garcia Galuska DeSousa - HVAC  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$58,000.00
Contingency:	10.00%	\$5,000.00
Escalation:	6.00%	\$3,000.00
<b>Total:</b>		<b>\$66,000.00</b>
Soft Costs:	30.00%	\$19,800.00
<b>Total Requirement Cost:</b>		<b>\$85,800.00</b>

**Requirement Description:**

The entire building is provided with a series of roof mounted exhaust fans which are intended to remove code required amount of outside air introduced generally at the classroom unit ventilators. The majority of the exhaust fans are original and are approximately 40 years old many of which are not operating. The code required amount of ventilation air is not being provided to the building.

**Action Description:**

Considering the age of the equipment and the minimal cost of replacing with new it is not recommended that the fans be rebuilt however it is recommended all fans be replaced. The existing roof mounted curbs will remain in place and adapters will be installed on the existing curbs to accept the new exhaust fans. The existing wiring will be reused. All fans will be balanced to current building code ventilation requirements.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Rooftop HVAC Unit	25	Job	\$2,000.00	\$50,000.00
<b>Total of Requirement Items</b>					\$50,000.00
<b>General Conditions:</b>				6.00%	\$3,000.00
<b>Overhead &amp; Profit:</b>				10.00%	\$5,000.00
<b>Total Hard Costs</b>					<b>\$58,000.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name: Roof Mounted Exhaust Fans**

Category: Functionality  
 Prime System: Other HVAC Systems and Equipment  
 Priority: 1-Currently Critical  
 Action Date: 06/01/2007  
 Inspector Name: Garcia Galuska DeSousa - HVAC  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$71,920.00
Contingency:	10.00%	\$6,200.00
Escalation:	6.00%	\$3,720.00
<b>Total:</b>		<b>\$81,840.00</b>
Soft Costs:	30.00%	\$24,552.00
<b>Total Requirement Cost:</b>		<b>\$106,392.00</b>

**Requirement Description:**

The classrooms are provided with a series of wall mounted exhaust fans located adjacent to the classroom unit ventilators which are intended to remove code required amount of outside air introduced generally at the classroom unit ventilators. The majority of the exhaust fans are original approximately 40 years old many of which are not operating. The result is that the code required amount of ventilation air is not being provided to the building.

**Action Description:**

Considering the age of the equipment and the minimal cost of replacing with new it is not recommended that the fans be rebuilt however it is recommended all fans be replaced. The existing wall mounted exhaust louvers will remain to accept the new exhaust fans. The existing wiring will be reused. All fans will be balanced to current building code ventilation requirements.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Replace Existing Exhaust Fans	31	Job	\$2,000.00	\$62,000.00
<b>Total of Requirement Items</b>					\$62,000.00
<b>General Conditions:</b>				6.00%	\$3,720.00
<b>Overhead &amp; Profit:</b>				10.00%	\$6,200.00
<b>Total Hard Costs</b>					<b>\$71,920.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Automatic Temperature Control

Category: Beyond Service Life  
 Prime System: Controls and Instrumentation  
 Priority: 2-Potentially Critical  
 Action Date: 06/01/2008  
 Inspector Name: Garcia Galuska DeSousa - HVAC  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$243,890.00
Contingency:	10.00%	\$21,025.00
Escalation:	6.00%	\$12,615.00
<b>Total:</b>		<b>\$277,530.00</b>
Soft Costs:	30.00%	\$83,259.00
<b>Total Requirement Cost:</b>		<b>\$360,789.00</b>

**Requirement Description:**

The existing automatic temperature control system is of the pneumatic design and is generally the original system and approximately 40 years old. The system includes an air storage tank with a single tank mounted compressor and motor, a wall mounted refrigerated air dryer, oil/water separators, and air distribution system providing for day and night control. Thermostats located throughout the building for the most part have been changed over the years presumably due to the presence of oil suspended in the distribution air piping. Once oil contaminates the distribution system the control orifices become clogged which cannot be repaired. The cost of fixing the equipment where possible, considering the extreme antiquated nature of the basic system and the general state of disrepair, would render its future expected life as an uneconomical choice.

**Action Description:**

Replace the entire pneumatic automatic temperature control system with a new system of the direct digital electronic type. The system will include a communicating network of electronic sensors, controllers, and devices which will modulate various dampers and valves, monitor space and discharge air and water temperatures, and adjust supply water temperature circulated to the individual pieces of equipment based on outside temperature. All space thermostats will be of the low voltage electronic type and will communicate to the central network all of which will be monitored through a head end computer for centralized control of the entire HVAC system.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Replace Automatic Temperature Control System	89000	SF	\$2.25	\$200,250.00
2	Patch / Paint Allowance	1	Job	\$10,000.00	\$10,000.00
<b>Total of Requirement Items</b>					<b>\$210,250.00</b>
<b>General Conditions:</b>				6.00%	\$12,615.00
<b>Overhead &amp; Profit:</b>				10.00%	\$21,025.00
<b>Total Hard Costs</b>					<b>\$243,890.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Courtyard Concrete Work

Category: Accessibility  
 Prime System: Architectural  
 Priority: 2-Potentially Critical  
 Action Date: 06/01/2008  
 Inspector Name: Geller DeVellis  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$92,800.00
Contingency:	10.00%	\$8,000.00
Escalation:	12.00%	\$9,600.00
<b>Total:</b>		<b>\$110,400.00</b>
Soft Costs:	30.00%	\$33,120.00
<b>Total Requirement Cost:</b>		<b>\$143,520.00</b>

**Requirement Description:**

The concrete flat work and steps of the courtyard are generally in good condition. Handicapped access is not available to the courtyard. Demolish and re-construct the outdoor inner-courtyard and area to provide Handicapped Accessibility and address safety issues. Drainage systems improvements are needed.

**Action Description:**

Demolish and reconstruct the pavements and landscape areas of the outdoor inner courtyard, remove and replace all pedestrian pavement areas to provide accessibility and install improved drainage systems including drain inlets, catch basins and piping.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Re-condition Inner Courtyard	2000	SqFt	\$40.00	\$80,000.00
<b>Total of Requirement Items</b>					<b>\$80,000.00</b>
<b>General Conditions:</b>				6.00%	\$4,800.00
<b>Overhead &amp; Profit:</b>				10.00%	\$8,000.00
<b>Total Hard Costs</b>					<b>\$92,800.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Exterior Doors

Category: Accessibility  
 Prime System: Exterior Doors  
 Priority: 2-Potentially Critical  
 Action Date: 06/01/2008  
 Inspector Name: Tappe Associates, Inc.  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$17,342.00
Contingency:	10.00%	\$1,495.00
Escalation:	12.00%	\$1,794.00
<b>Total:</b>		<b>\$20,631.00</b>
Soft Costs:	30.00%	\$6,189.30
<b>Total Requirement Cost:</b>		<b>\$26,820.30</b>

**Requirement Description:**

The exterior doors have been replaced with a continuous hinge hollow metal door and appear to be in good condition. The hardware on these doors has also been replaced and is in good condition. The thresholds do not meet current ADA and MAAB requirements. The water shed devices are missing at most door heads.

**Action Description:**

Thresholds have to meet the current ADA and MAAB compliance and should be addressed in any renovation project. The water shed devices should be replaced to protect the doors and hardware. Doors and hardware should be serviced to maintain condition.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Replace thresholds	23	Each	\$300.00	\$6,900.00
2	Replace water shed devices	23	Each	\$200.00	\$4,600.00
3	Sercice Hardware - Annual maintenance	23	Each	\$150.00	\$3,450.00
<b>Total of Requirement Items</b>					\$14,950.00
<b>General Conditions:</b>				6.00%	\$897.00
<b>Overhead &amp; Profit:</b>				10.00%	\$1,495.00
<b>Total Hard Costs</b>					<b>\$17,342.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Exterior Masonry

Category: Functionality  
 Prime System: Architectural  
 Priority: 2-Potentially Critical  
 Action Date: 06/01/2008  
 Inspector Name: Tappe Associates, Inc.  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown	
Cost Estimate from below	\$82,360.00
Contingency: 10.00%	\$7,100.00
Escalation: 12.00%	\$8,520.00
<b>Total:</b>	<b>\$97,980.00</b>
Soft Costs: 30.00%	\$29,394.00
<b>Total Requirement Cost:</b>	<b>\$127,374.00</b>

**Requirement Description:**

Exterior masonry is typically in good condition. There is evidence of water stainage and the control and expansion joints need re-caulking. The flashing courses and the window lintel beams at the bearing conditions have spald. The brick chimney from the boiler room is in very poor condition, with heat deterioration and mortar missing. The cap slab has been removed.

**Action Description:**

OPTION 1:

Repair areas of spauled mortar around windows and flashing. Remove the brick chimney and replace with a prefabricated metal stack. This work should be coordinated with the Mechanical work. All control and expansion joints should be cleaned and re-caulked.

OPTION 2:

Leave masonry as is adding AVB, Z girts and 2" of rigid insulation and a new finish material. This option will bring the R value of the exterior envelope into code conformance providing maximum energy efficiency.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Re-point spald mortar	1	Job	\$30,000.00	\$30,000.00
2	Remove brick chimney, prepare roof for new metal studs (replace with prefabricated stack - Mechanical cost)	1	Job	\$26,000.00	\$26,000.00
3	Clean and re-caulk all expansion and control joints	1	Job	\$15,000.00	\$15,000.00
<b>Total of Requirement Items</b>					\$71,000.00
<b>General Conditions:</b> 6.00%					\$4,260.00
<b>Overhead &amp; Profit:</b> 10.00%					\$7,100.00
<b>Total Hard Costs</b>					\$82,360.00



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Exterior Windows and Glazing System

**Category:** Functionality  
**Prime System:** Exterior Windows  
**Priority:** 2-Potentially Critical  
**Action Date:** 06/01/2008  
**Inspector Name:** Tappe Associates, Inc.  
**Inspection Date:** 9/18/2006  
**Finish Date:**  
**Status:** Open

Requirement Cost Breakdown		
Cost Estimate from below		\$1,191,465.00
Contingency:	10.00%	\$102,712.50
Escalation:	12.00%	\$123,255.00
<b>Total:</b>		<b>\$1,417,432.50</b>
Soft Costs:	30.00%	\$425,229.75
<b>Total Requirement Cost:</b>		<b>\$1,842,662.25</b>

**Requirement Description:**

The exterior swing hopper windows are predominately housed within the aluminum curtain wall. They have no thermo break and are single glazed units. The majority of the operating hardware is in very bad condition and does not operate. As a total system these glazing walls and the SGFU spandrels have an R-Value of approximately 25% the value required today in a glass-wall system.

**Action Description:**

Window replacement is economically impractical as standard parts are not readily available. Thoughts to replace the glass with insulating units is economically impractical as the aluminum curtain wall glazing system is not configured to accept more than 1/4" thick glazing. It is therefore recommended to replace the whole of the store front with a new system, including doors, glazing and windows.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Demo Kalwall	5850	SqFt	\$7.50	\$43,875.00
2	Replace Kalwall	5850	SqFt	\$35.00	\$204,750.00
3	Store Front Glazing System w/ 5% Operable Windows	13060	SqFt	\$50.00	\$653,000.00
4	Replace Windows	600	SqFt	\$40.00	\$24,000.00
5	Store Front w/ Doors and Glazing	1310	SqFt	\$50.00	\$65,500.00
6	Exterior Doors	18	Each	\$2,000.00	\$36,000.00
<b>Total of Requirement Items</b>					<b>\$1,027,125.00</b>
<b>General Conditions:</b> 6.00%					<b>\$61,627.50</b>
<b>Overhead &amp; Profit:</b> 10.00%					<b>\$102,712.50</b>
<b>Total Hard Costs</b>					<b>\$1,191,465.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Floor Finishes

Category: Asbestos  
 Prime System: Floor Finishes  
 Priority: 2-Potentially Critical  
 Action Date: 06/01/2008  
 Inspector Name: Tappe Associates, Inc.  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$402,868.00
Contingency:	10.00%	\$34,730.00
Escalation:	12.00%	\$41,676.00
<b>Total:</b>		<b>\$479,274.00</b>
Soft Costs:	30.00%	\$143,782.20
<b>Total Requirement Cost:</b>		<b>\$623,056.20</b>

**Requirement Description:**

The floor finishes vary throughout the building. The corridors have a 12" x 12" asbestos floor tile which appears to be in average to good condition. The majority of classrooms have an 8" x 8" asbestos floor tile. These floors are showing signs of age and wear especially in the doorways. The gymnasium has a wood floor which is in good condition. The art and woodwork classrooms have concrete floors which are in good condition. The Library is carpeted from the renovation in 1988, and is showing signs of wear.

**Action Description:**

Replace all asbestos floor tiles through out the facility with VCT tile. Replace the carpet in the Library

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Demo and Replace all asbestos floor tile with VCT	62000	SqFt	\$5.50	\$341,000.00
2	Remove and Replace the carpet in the Library	1400	SqFt	\$4.50	\$6,300.00
<b>Total of Requirement Items</b>					<b>\$347,300.00</b>
<b>General Conditions:</b> 6.00%					\$20,838.00
<b>Overhead &amp; Profit:</b> 10.00%					\$34,730.00
<b>Total Hard Costs</b>					<b>\$402,868.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Fuel Tank

Category: Beyond Service Life  
 Prime System: Site Mechanical Utilities  
 Priority: 2-Potentially Critical  
 Action Date: 06/01/2008  
 Inspector Name: Garcia Galuska DeSousa - HVAC  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$87,000.00
Contingency:	10.00%	\$7,500.00
Escalation:	12.00%	\$9,000.00
<b>Total:</b>		<b>\$103,500.00</b>
Soft Costs:	30.00%	\$31,050.00
<b>Total Requirement Cost:</b>		<b>\$134,550.00</b>

**Requirement Description:**

The existing fuel oil storage tank appears to be of the single wall steel design which is buried adjacent to the boiler room. The supply and return lines which communicate between the boiler room and the tank are direct buried and also appear to be of the single wall design. The level gauge located within the boiler room is extremely antiquated and the entire system appears to be original and approximately 40 years old. With proper installation techniques applied the maximum serviceable life of the entire system is approximately 25 years. Considering the age and the potential catastrophic loss which could occur relating to contaminated soil if oil leakage is present does suggest a complete replacement and examination of the existing soil conditions.

**Action Description:**

Upgrade the entire fuel-burning system with natural gas assuming it is available at the site. We do not recommend the utilization of dual fuel since the additional cost would not be recovered in a reasonable timeframe as compared to natural gas.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Upgrade the entire fuel burning system with natural gas	1	LS	\$75,000.00	\$75,000.00
<b>Total of Requirement Items</b>					\$75,000.00
<b>General Conditions:</b>				6.00%	\$4,500.00
<b>Overhead &amp; Profit:</b>				10.00%	\$7,500.00
<b>Total Hard Costs</b>					<b>\$87,000.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Kitchen Appliances

Category: Beyond Service Life  
 Prime System: Architectural  
 Priority: 2-Potentially Critical  
 Action Date: 06/01/2008  
 Inspector Name: Tappe Associates, Inc.  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$58,000.00
Contingency:	10.00%	\$5,000.00
Escalation:	12.00%	\$6,000.00
<b>Total:</b>		<b>\$69,000.00</b>
Soft Costs:	30.00%	\$20,700.00
<b>Total Requirement Cost:</b>		<b>\$89,700.00</b>

**Requirement Description:**

The kitchen equipment is old and does not function properly

**Action Description:**

Equipment replacement needs include updated ovens, meat slicer, garbage disposal, a six burner stove, utility carts, serving counter upgrade, panni grill, outside grill.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Replace and upgrade all kitchen equipment	1	Job	\$50,000.00	\$50,000.00
<b>Total of Requirement Items</b>					\$50,000.00
<b>General Conditions:</b>				6.00%	\$3,000.00
<b>Overhead &amp; Profit:</b>				10.00%	\$5,000.00
<b>Total Hard Costs</b>					<b>\$58,000.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Locker Rooms

Category: Beyond Service Life  
 Prime System: Architectural  
 Priority: 2-Potentially Critical  
 Action Date: 06/01/2008  
 Inspector Name: Tappe Associates, Inc.  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$311,605.00
Contingency:	10.00%	\$26,862.50
Escalation:	12.00%	\$32,235.00
<b>Total:</b>		<b>\$370,702.50</b>
Soft Costs:	30.00%	\$111,210.75
<b>Total Requirement Cost:</b>		<b>\$481,913.25</b>

**Requirement Description:**

Both the changing facilities and the bathrooms within the locker room are in poor condition. They do not meet current ADA and MAAB standards. New finishes, fixtures and accessibility requirements.

**Action Description:**

Full renovation of locker rooms.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Demo of existing locker rooms	4600	SqFt	\$20.00	\$92,000.00
10	Lavatories	8	Each	\$845.00	\$6,760.00
11	Paint / Patch Allowance	1	Job	\$10,000.00	\$10,000.00
2	Floor finishes	4600	SqFt	\$12.00	\$55,200.00
3	Ceiling Finishes	4600	SqFt	\$3.00	\$13,800.00
4	Wall Finishes	6000	SqFt	\$11.00	\$66,000.00
5	New Bathroom Fixtures and Accessories	50	Each	\$30.00	\$1,500.00
6	Toilet Partitions	8	Each	\$1,050.00	\$8,400.00
7	Toilet Fixtures	8	Each	\$1,030.00	\$8,240.00
8	Urinals	5	Each	\$1,015.00	\$5,075.00
9	Urinal Screens	6	Each	\$275.00	\$1,650.00
<b>Total of Requirement Items</b>					\$268,625.00
<b>General Conditions:</b> 6.00%					\$16,117.50
<b>Overhead &amp; Profit:</b> 10.00%					\$26,862.50
<b>Total Hard Costs</b>					<b>\$311,605.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Access Road and Parking Areas

Category: Code Compliance  
 Prime System: Architectural  
 Priority: 3-Necessary-Not Yet Critical  
 Action Date: 06/01/2009  
 Inspector Name: Geller DeVellis  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$273,470.00
Contingency:	10.00%	\$23,575.00
Escalation:	18.00%	\$42,435.00
<b>Total:</b>		<b>\$339,480.00</b>
Soft Costs:	30.00%	\$101,844.00
<b>Total Requirement Cost:</b>		<b>\$441,324.00</b>

**Requirement Description:**

The existing bituminous concrete pavement of the main parking area is in very poor condition and needs replacement along with associated curbing, walks, drainage and lighting. The existing lot has a mix of curb types and no curbing in some areas. The parking area needs to address Handicapped Accessible parking and access into the building from the parking lot.

**Action Description:**

Pulverize the existing bituminous pavements of the main parking area, and re-pave the entire lot with accessible parking and building access. Provide curbing, lighting and new drainage systems and regulatory/informational signage as necessary.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Reclaim (student parking area) - Pulverize and Re-pave	50000	SqFt	\$4.00	\$200,000.00
2	Overlay / Cold Plain (Access Road)	13000	SqFt	\$2.75	\$35,750.00
<b>Total of Requirement Items</b>					<b>\$235,750.00</b>
<b>General Conditions:</b>				6.00%	\$14,145.00
<b>Overhead &amp; Profit:</b>				10.00%	\$23,575.00
<b>Total Hard Costs</b>					<b>\$273,470.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Elevator - Music Room

Category: Accessibility  
 Prime System: Architectural  
 Priority: 3-Necessary-Not Yet Critical  
 Action Date: 06/01/2009  
 Inspector Name: Tappe Associates, Inc.  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$58,000.00
Contingency:	10.00%	\$5,000.00
Escalation:	18.00%	\$9,000.00
<b>Total:</b>		<b>\$72,000.00</b>
Soft Costs:	30.00%	\$21,600.00
<b>Total Requirement Cost:</b>		<b>\$93,600.00</b>

**Requirement Description:**

The music room and adjoining practice rooms are currently non accessible.

**Action Description:**

Provide lift access to the music room.

**Estimate:**

Number:	Description:
1	Provide lift access through existing storage room 054

Qty	Unit:	Unit Cost	Extended
1	Job	\$50,000.00	\$50,000.00
<b>Total of Requirement Items</b>			\$50,000.00
	<b>General Conditions:</b>	6.00%	\$3,000.00
	<b>Overhead &amp; Profit:</b>	10.00%	\$5,000.00
<b>Total Hard Costs</b>			<b>\$58,000.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name: Interior Doors**

Category: Functionality  
 Prime System: Interior Doors  
 Priority: 3-Necessary-Not Yet Critical  
 Action Date: 06/01/2009  
 Inspector Name: Tappe Associates, Inc.  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$62,698.00
Contingency:	10.00%	\$5,405.00
Escalation:	18.00%	\$9,729.00
<b>Total:</b>		<b>\$77,832.00</b>
Soft Costs:	30.00%	\$23,349.60
<b>Total Requirement Cost:</b>		<b>\$101,181.60</b>

**Requirement Description:**

The majority of interior wood doors are original and have been upgraded with compliant hardware. They are showing signs of wear but are still functioning. There are doors in the administration area that do not have compliant hardware.

**Action Description:**

Replace all interior doors to meet current MAAB and ADA code compliance.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Demo and Removal of exsisting doors and frames	230	Each	\$45.00	\$10,350.00
2	Replace all interior doors and frames	230	Each	\$190.00	\$43,700.00
<b>Total of Requirement Items</b>					\$54,050.00
<b>General Conditions:</b>				6.00%	\$3,243.00
<b>Overhead &amp; Profit:</b>				10.00%	\$5,405.00
<b>Total Hard Costs</b>					<b>\$62,698.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Storm Water Drainage

Category: Environmental  
 Prime System: Rain Water Drainage  
 Priority: 3-Necessary-Not Yet Critical  
 Action Date: 06/01/2009  
 Inspector Name: Geller DeVellis  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$29,000.00
Contingency:	10.00%	\$2,500.00
Escalation:	18.00%	\$4,500.00
<b>Total:</b>		<b>\$36,000.00</b>
Soft Costs:	30.00%	\$10,800.00
<b>Total Requirement Cost:</b>		<b>\$46,800.00</b>

**Requirement Description:**

The existing drainage system is in need of cleaning and general repairs, most of the catch basins are not equipped with hooded outlets to mitigate sediment outflow. The overall system of storm water best management should be reviewed to bring the system in conformance with Massachusetts DEP Storm Water Management Policy.

**Action Description:**

All existing storm water drainage system components are in need of cleaning and reconditioning. To conform with Massachusetts DEP standards for storm water best management practices the site requires the introduction of new catch basins with sediment-trapping sumps and hoods. The installation of a new storm water detention/sediment basin is required for mitigating down stream drainage discharge from the site and impact upon resource areas.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Detention Pond Maintenance	2	Each	\$2,500.00	\$5,000.00
2	New Catch Basins with Sumps and Hoods	5	Each	\$3,000.00	\$15,000.00
3	Cleaning of Existing System	1	LS	\$5,000.00	\$5,000.00
<b>Total of Requirement Items</b>					\$25,000.00
<b>General Conditions:</b>				6.00%	\$1,500.00
<b>Overhead &amp; Profit:</b>				10.00%	\$2,500.00
<b>Total Hard Costs</b>					<b>\$29,000.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Water Service and Sanitary Sewer Service

Category: Functionality  
 Prime System: Architectural  
 Priority: 3-Necessary-Not Yet Critical  
 Action Date: 06/01/2009  
 Inspector Name: Geller DeVellis  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$11,600.00
Contingency:	10.00%	\$1,000.00
Escalation:	18.00%	\$1,800.00
<b>Total:</b>		<b>\$14,400.00</b>
Soft Costs:	30.00%	\$4,320.00
<b>Total Requirement Cost:</b>		<b>\$18,720.00</b>

**Requirement Description:**

There are no known problems with these utility services. Water pressure was not raised as an issue from the school staff.

**Action Description:**

A video inspection of the sewer system would be required to determine the actual condition. The water line may need replacement depending on age and pipe material.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Video inspection of the sewer system	1	Job	\$10,000.00	\$10,000.00
<b>Total of Requirement Items</b>					\$10,000.00
<b>General Conditions:</b>				6.00%	\$600.00
<b>Overhead &amp; Profit:</b>				10.00%	\$1,000.00
<b>Total Hard Costs</b>					<b>\$11,600.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Auditorium Stage

Category: Appearance  
 Prime System: Interior Finishes  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Tappe Associates, Inc.  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$98,600.00
Contingency:	10.00%	\$8,500.00
Escalation:	24.00%	\$20,400.00
<b>Total:</b>		<b>\$127,500.00</b>
Soft Costs:	30.00%	\$38,250.00
<b>Total Requirement Cost:</b>		<b>\$165,750.00</b>

**Requirement Description:**

The Auditorium Stage is in poor condition. The woodwork should be repaired and re-finished.

**Action Description:**

Repair and re-finish wood at Auditorium Stage.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Repair damaged woodwrk	200	SqFt	\$40.00	\$8,000.00
2	Re-finish all woodwork	1400	SqFt	\$55.00	\$77,000.00
<b>Total of Requirement Items</b>					<b>\$85,000.00</b>
<b>General Conditions:</b> 6.00%					\$5,100.00
<b>Overhead &amp; Profit:</b> 10.00%					\$8,500.00
<b>Total Hard Costs</b>					<b>\$98,600.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Branch Circuit Wiring

Category: Functionality  
 Prime System: Electrical Service and Distribution  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Garcia Galuska DeSousa - Electrical  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$487,200.00
Contingency:	10.00%	\$42,000.00
Escalation:	24.00%	\$100,800.00
<b>Total:</b>		<b>\$630,000.00</b>
Soft Costs:	30.00%	\$189,000.00
<b>Total Requirement Cost:</b>		<b>\$819,000.00</b>

**Requirement Description:**

Existing wiring should be replaced as phasing progresses. All existing wiring no longer used would be removed complete. New wiring would generally consist of conduit wire for service and feeders with MC Cable allowed for concealed branch circuits above ceiling, in stud walls where allowed by code. A system of double neutral feeders will be used for computer grade panelboards and dedicated neutrals in branch circuits feeding devices that connect to these panels. An insulated grounding conductor will be provided with every branch circuit or feeder. Surface raceways in finish spaces would be of the wiremold type which house both power and contain a separate compartment for telecommunications wiring and devices. Normal/emergency wiring will be kept entirely separate from normal only power in accordance with code.

**Action Description:**

It is recommended that a system of devices with adequate coverage be provided. Devices for computers and other electronic loads would be circuited to computer grade panelboards and identified as such by having a different finish. Devices installed on existing walls would be on surface type raceways similar to wiremold. It is recommended that an uninterruptible power supply "UPS" be provided for the telecommunications system such as voice mail, data, etc.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	UPS	1	Job	\$20,000.00	\$20,000.00
2	Branch Circuits	1	Job	\$267,000.00	\$267,000.00
3	Remote Panelboard & Feeders	1	Job	\$133,000.00	\$133,000.00
<b>Total of Requirement Items</b>					<b>\$420,000.00</b>
<b>General Conditions:</b> 6.00%					\$25,200.00
<b>Overhead &amp; Profit:</b> 10.00%					\$42,000.00
<b>Total Hard Costs</b>					<b>\$487,200.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Ceilings

Category: Beyond Service Life  
 Prime System: Ceiling Finishes  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Tappe Associates, Inc.  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$290,290.00
Contingency:	10.00%	\$25,025.00
Escalation:	24.00%	\$60,060.00
<b>Total:</b>		<b>\$375,375.00</b>
Soft Costs:	30.00%	\$112,612.50
<b>Total Requirement Cost:</b>		<b>\$487,987.50</b>

**Requirement Description:**

The ceilings are all acoustic panels. Mostly they are from the original construction with the exception of the auditorium, the cafeteria and a section of corridor which have new ceilings because of the fire damage in 1992. The original ceilings are metal acoustic panels which are structural and in average to poor condition. Some of the classrooms show signs of water damage and consequently peeling paint. The gynasium shows significant signs of paint peeling.

**Action Description:**

It is recommended that all metal structural ceilings that are from the original construction be prepared and re-finished.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Prepare and re-finish metal structural acoustical ceilings	71500	SqFt	\$3.50	\$250,250.00
<b>Total of Requirement Items</b>					\$250,250.00
<b>General Conditions:</b> 6.00%					\$15,015.00
<b>Overhead &amp; Profit:</b> 10.00%					\$25,025.00
<b>Total Hard Costs</b>					<b>\$290,290.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name: Domestic Water Heater**

Category: Functionality  
 Prime System: Domestic Water Distribution  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Garcia Galuska DeSousa - Plumbing & Fire Pr  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$34,800.00
Contingency:	10.00%	\$3,000.00
Escalation:	24.00%	\$7,200.00
<b>Total:</b>		<b>\$45,000.00</b>
Soft Costs:	30.00%	\$13,500.00
<b>Total Requirement Cost:</b>		<b>\$58,500.00</b>

**Requirement Description:**

Domestic hot water is generated from two sources located in the boiler room. There exists a domestic water storage tank connected to the heating boilers; the tank is original to the construction. There also exists two (2) natural gas-fired water heaters, both with 360,000 btuh input and a total of 137 gallon storage. There are no thermostatic mixing valves at the heaters.

**Action Description:**

Due to the age of the systems it is recommended that the water heating systems be replaced with a new gas fired, atmospheric domestic water heater and storage tank.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended	
1	New Domestic Water Heater & Storage Tank connected to the Existing Piping System	1	Job	\$30,000.00	\$30,000.00	
					<b>Total of Requirement Items</b>	\$30,000.00
				<b>General Conditions:</b> 6.00%	\$1,800.00	
				<b>Overhead &amp; Profit:</b> 10.00%	\$3,000.00	
<b>Total Hard Costs</b>					<b>\$34,800.00</b>	



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name: Domestic Water Piping**

Category: Functionality  
 Prime System: Domestic Water Piping  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Garcia Galuska DeSousa - Plumbing & Fire Pr  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$145,000.00
Contingency:	10.00%	\$12,500.00
Escalation:	24.00%	\$30,000.00
<b>Total:</b>		<b>\$187,500.00</b>
Soft Costs:	30.00%	\$56,250.00
<b>Total Requirement Cost:</b>		<b>\$243,750.00</b>

**Requirement Description:**

Building has a 6" cast iron water service with 3" compound meter which is located in the boiler room. Piping where exposed appears to be predominantly copper with sweat joints.

**Action Description:**

In the event of a major building renovation a complete new water piping system is recommended.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Replace Domestic Water (Hot & Cold) in original Construction	1	Job	\$125,000.00	\$125,000.00
<b>Total of Requirement Items</b>					\$125,000.00
<b>General Conditions:</b> 6.00%					\$7,500.00
<b>Overhead &amp; Profit:</b> 10.00%					\$12,500.00
<b>Total Hard Costs</b>					<b>\$145,000.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Dumpster Pad, Enclosure and Service Area

Category: Functionality  
 Prime System: Civil and Landscape  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Geller DeVellis  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$4,060.00
Contingency:	10.00%	\$350.00
Escalation:	24.00%	\$840.00
<b>Total:</b>		<b>\$5,250.00</b>
Soft Costs:	30.00%	\$1,575.00
<b>Total Requirement Cost:</b>		<b>\$6,825.00</b>

**Requirement Description:**

The dumpster is located near the building with no screening, security or enclosure. Delivery and maintenance access to the building should be defined with a new concrete apron.

**Action Description:**

Remove and replace the existing dumpster pad with a new reinforced concrete apron and provide new vinyl coated chain link fencing and security locks. Provide dumpster screening slats. Provide a paved area and signage for truck deliveries away from student areas. Provide steel and concrete bollards to protect dumpster enclosure and building.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Dumpster Pad and Enclosure	1	Each	\$3,500.00	\$3,500.00
<b>Total of Requirement Items</b>					<b>\$3,500.00</b>
<b>General Conditions:</b>				6.00%	\$210.00
<b>Overhead &amp; Profit:</b>				10.00%	\$350.00
<b>Total Hard Costs</b>					<b>\$4,060.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Electrical Service

Category: Functionality  
 Prime System: Electrical Service and Distribution  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Garcia Galuska DeSousa - Electrical  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$150,800.00
Contingency:	10.00%	\$13,000.00
Escalation:	24.00%	\$31,200.00
<b>Total:</b>		<b>\$195,000.00</b>
Soft Costs:	30.00%	\$58,500.00
<b>Total Requirement Cost:</b>		<b>\$253,500.00</b>

**Requirement Description:**

The existing electrical service is located below the boiler room entrance. The service rating is 100 amps, 120/208 volt, 3Ø, 4 wire. It is manufactured by General Electric equipment and is in poor condition.

The room was flooded. There is a waterline that measures approximately 12 inches above finished floor.

The demand reading from the meter appears to be (0.97 mult. @ 120) = 116.4Kw.

The electrical service capacity is rated at 640 amps or 230 Kw. The existing service yields approximately 2.6 watts/square foot. New service standards are typically designed for 10 watts/square foot.

**Action Description:**

System upgrade to 1200 amp, 277/480V, 3Ø, 4 wire service.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Switch Board	1	Job	\$40,000.00	\$40,000.00
2	Pad mounted transformer	1	Job	\$10,000.00	\$10,000.00
3	100 ft Primary Cable (Including Excavation)	1	Job	\$20,000.00	\$20,000.00
4	100 ft Secondary Cable (Including Excavation)	1	Job	\$30,000.00	\$30,000.00
5	New Electric Room Required	1	Job	\$20,000.00	\$20,000.00
6	Patch / Paint Allowance	1	Job	\$10,000.00	\$10,000.00
<b>Total of Requirement Items</b>					<b>\$130,000.00</b>
<b>General Conditions:</b>				6.00%	\$7,800.00
<b>Overhead &amp; Profit:</b>				10.00%	\$13,000.00
<b>Total Hard Costs</b>					<b>\$150,800.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Emergency Generator, Lighting and Exit Signs

Category: Life Safety  
 Prime System: Electrical Service and Distribution  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Garcia Galuska DeSousa - Electrical  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$122,960.00
Contingency:	10.00%	\$10,600.00
Escalation:	24.00%	\$25,440.00
<b>Total:</b>		<b>\$159,000.00</b>
Soft Costs:	30.00%	\$47,700.00
<b>Total Requirement Cost:</b>		<b>\$206,700.00</b>

**Requirement Description:**

The existing facility is equipped with emergency battery units. The emergency lighting systems appears to be well maintained. Maintenance tags were present on equipment. The existing facility is equipped with emergency battery units. The emergency lighting systems appears to be well maintained. Maintenance tags were present on equipment. Some exit signs have been replaced with "LED" type. Some exit signs are not illuminated."LED" type. Some exit signs are not illuminated.

**Action Description:**

It is recommended that a new generator fired with natural gas or diesel be provided for the entire facility. Emergency lighting will be by the same normal/emergency luminaries used for general lighting. These fixtures may be utilized for night/light purposes when power is available and automatically switch to emergency power when normal power fails.

Exit signs would be of the long life, energy efficient "LED" type.

Two automatic transfer switches would be provided, one for the life safety systems and the other for essential loads that are not life safety including kitchen coolers and freezers, freeze protection including boilers and pumps, sump pumps, telecommunications systems, lifts and elevator, etc.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	150 KW Emergency Generator and Transfer Switch	1	Job	\$80,000.00	\$80,000.00
2	Emergency Panels and 2 hr. Rated Feeder	1	Job	\$20,000.00	\$20,000.00
3	Exit Signs (20 total)	1	Job	\$6,000.00	\$6,000.00
<b>Total of Requirement Items</b>					<b>\$106,000.00</b>
<b>General Conditions:</b>				6.00%	\$6,360.00
<b>Overhead &amp; Profit:</b>				10.00%	\$10,600.00
<b>Total Hard Costs</b>					<b>\$122,960.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Fencing and guard rails

Category: Security and Safety  
 Prime System: Civil and Landscape  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Geller DeVellis  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$50,460.00
Contingency:	10.00%	\$4,350.00
Escalation:	24.00%	\$10,440.00
<b>Total:</b>		<b>\$65,250.00</b>
Soft Costs:	30.00%	\$19,575.00
<b>Total Requirement Cost:</b>		<b>\$84,825.00</b>

**Requirement Description:**

There is limited fencing on site which is in satisfactory condition. The site has some wood guard rails which is in need of some repair.

**Action Description:**

Existing chain-link fencing should be removed and replaced with new vinyl coated fencing, new footings, posts and rails. Wood guardrails should be installed as necessary for safety separation between pedestrians and autos.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	New Fence - Vinyl Chain Link Fence with 2 rails	500	LF	\$75.00	\$37,500.00
2	Install new wood Guardrail Along Access Road - allowance	200	LF	\$30.00	\$6,000.00
<b>Total of Requirement Items</b>					<b>\$43,500.00</b>
<b>General Conditions:</b>				6.00%	\$2,610.00
<b>Overhead &amp; Profit:</b>				10.00%	\$4,350.00
<b>Total Hard Costs</b>					<b>\$50,460.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** HVAC - Auditorium

Category: Air and Water Quality  
 Prime System: Terminal and Package Units  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Garcia Galuska DeSousa - HVAC  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$55,680.00
Contingency:	10.00%	\$4,800.00
Escalation:	24.00%	\$11,520.00
<b>Total:</b>		<b>\$72,000.00</b>
Soft Costs:	30.00%	\$21,600.00
<b>Total Requirement Cost:</b>		<b>\$93,600.00</b>

**Requirement Description:**

The existing auditorium is provided with two individual air handling units located above the ceiling over the auditorium. The air handling units are provided with supply fans, hot water coils with valve control, filters, and outside air drawn in through a roof hood. Return air is drawn from two individual wall mounted return grills located at the side of the space. Supply air is provided to the auditorium through a series of ceiling diffusers located overhead in the ceiling. The air handling equipment is approximately 40 years old however, it appears that the ceiling diffusers may have been replaced as they were noted to be in very good condition and well-maintained. The overall volume of total and outside air appears to be undersized for the population of the space and does not appear code compliant. The exhaust fans within the space do operate and were noted to be well-maintained. All equipment within the space was noted to be noisy.

**Action Description:**

Replace the existing air handling equipment with a single roof mounted heating ventilating air-conditioning unit sized for the population and code required outside ventilation air requirement. Provide new insulated overhead supply ductwork feeding new supply diffusers located within the ceiling, and new return air ductwork drawing from existing registers approximately 12 inches above the floor. Replace the existing roof mounted exhaust fans, all ductwork and exhaust registers.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Rooftop HVAC Unit	1	LS	\$15,000.00	\$15,000.00
2	Exhaust Air Fans	2	LS	\$4,000.00	\$8,000.00
3	Ductwork	1	LS	\$25,000.00	\$25,000.00
<b>Total of Requirement Items</b>					<b>\$48,000.00</b>
<b>General Conditions:</b> 6.00%					\$2,880.00
<b>Overhead &amp; Profit:</b> 10.00%					\$4,800.00
<b>Total Hard Costs</b>					<b>\$55,680.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** HVAC - Cafeteria

Category: Air and Water Quality  
 Prime System: Terminal and Package Units  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Garcia Galuska DeSousa - HVAC  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$45,240.00
Contingency:	10.00%	\$3,900.00
Escalation:	24.00%	\$9,360.00
<b>Total:</b>		<b>\$58,500.00</b>
Soft Costs:	30.00%	\$17,550.00
<b>Total Requirement Cost:</b>		<b>\$76,050.00</b>

**Requirement Description:**

The existing cafeteria is provided with two individual air handling units located above the ceiling over the cafeteria. The air handling units are provided with supply fans, hot water coils with valve control, filters, and outside air drawn in through a roof hood. Return air is generally drawn from the ceiling plenum above the cafeteria however, no grills were provided in the ceiling allowing the transfer of the air from the cafeteria to the air handling unit. Supply air is provided to the cafeteria through a series of ceiling diffusers located overhead in the ceiling. The air handling equipment was approximately 40 years old however, it appears that the ceiling diffusers may have been replaced as they were noted to be in very good condition and well-maintained. The overall volume of total and outside air appears to be undersized for the population of the space and does not appear code compliant. The large glass area within the space was not provided with supplementary heat and could be extremely drafty during winter months. The exhaust fans within the space do not operate and were noted to be extremely soiled.

**Action Description:**

Replace the existing air handling equipment with a single roof mounted heating ventilating air-conditioning unit sized for the population and code required outside ventilation air requirement. Provide new insulated overhead supply ductwork feeding new supply diffusers located within the ceiling, and new return air ductwork drawing from approximately 12 inches above the floor. Replace the existing roof mounted exhaust fan, all ductwork and exhaust registers.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Rooftop HVAC Unit	1	LS	\$15,000.00	\$15,000.00
2	Exhaust Air Fans	1	LS	\$4,000.00	\$4,000.00
3	Ductwork	1	LS	\$20,000.00	\$20,000.00
<b>Total of Requirement Items</b>					<b>\$39,000.00</b>
<b>General Conditions:</b>				6.00%	\$2,340.00
<b>Overhead &amp; Profit:</b>				10.00%	\$3,900.00
<b>Total Hard Costs</b>					<b>\$45,240.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** HVAC - Gymnasium

Category: Air and Water Quality  
 Prime System: Terminal and Package Units  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Garcia Galuska DeSousa - HVAC  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$49,880.00
Contingency:	10.00%	\$4,300.00
Escalation:	24.00%	\$10,320.00
<b>Total:</b>		<b>\$64,500.00</b>
Soft Costs:	30.00%	\$19,350.00
<b>Total Requirement Cost:</b>		<b>\$83,850.00</b>

**Requirement Description:**

The existing gymnasium is provided with two individual air handling units which free below into the space. The air handling units are provided with supply fans, hot water coil with valve control, filters, and outside air drawn in through a wall mounted louver. Return air is drawn directly at the base of the air handling unit. Supply air discharges directly at the air handling unit and the close proximity to the return is short cycling a percentage of the total ventilation air. The air handling equipment is approximately 40 years old and was noted to have extensive surface contamination and generally in poor condition. The overall volume of total and outside air appears to be undersized for the population of the space and does not appear code compliant. There was no means to allow excess pressure relief during economizer control. The exhaust fans within the space do operate and presently are maintaining adequate ventilation control.

**Action Description:**

Replace the existing air handling equipment with two new horizontal discharge heating ventilating units sized for the population and code required outside ventilation air requirement. The units will tie into the existing hot water piping. Provide new overhead supply ductwork feeding new supply diffusers exposed within the space located within the ceiling joists. New return air ductwork should be installed drawing from new registers approximately 12 inches above the floor. Replace the existing roof mounted exhaust fans, all ductwork and exhaust registers.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Heating and Ventilation Units	2	LS	\$10,000.00	\$20,000.00
2	Exhaust Air Fans	2	LS	\$4,000.00	\$8,000.00
3	Ductwork	1	LS	\$15,000.00	\$15,000.00
<b>Total of Requirement Items</b>					<b>\$43,000.00</b>
<b>General Conditions:</b> 6.00%					\$2,580.00
<b>Overhead &amp; Profit:</b> 10.00%					\$4,300.00
<b>Total Hard Costs</b>					<b>\$49,880.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Interior Walls

Category: Appearance  
 Prime System: Interior Finishes  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Tappe Associates, Inc.  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$330,600.00
Contingency:	10.00%	\$28,500.00
Escalation:	24.00%	\$68,400.00
<b>Total:</b>		<b>\$427,500.00</b>
Soft Costs:	30.00%	\$128,250.00
<b>Total Requirement Cost:</b>		<b>\$555,750.00</b>

**Requirement Description:**

Interior walls vary from masonry, tile and GWB. Typically the wall surfaces need painting and cleaning but are in good condition.

**Action Description:**

Clean and paint all interior surfaces.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Clean and paint existing interior GWB walls	1	Job	\$250,000.00	\$250,000.00
2	Clean and repair all interior tile walls	1	Job	\$25,000.00	\$25,000.00
3	Clean all interior masonry walls	1	Job	\$10,000.00	\$10,000.00
<b>Total of Requirement Items</b>					<b>\$285,000.00</b>
<b>General Conditions:</b>				6.00%	\$17,100.00
<b>Overhead &amp; Profit:</b>				10.00%	\$28,500.00
<b>Total Hard Costs</b>					<b>\$330,600.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Lighting System

Category: Functionality  
 Prime System: Electrical Service and Distribution  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Garcia Galuska DeSousa - Electrical  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$372,940.00
Contingency:	10.00%	\$32,150.00
Escalation:	24.00%	\$77,160.00
<b>Total:</b>		<b>\$482,250.00</b>
Soft Costs:	30.00%	\$144,675.00
<b>Total Requirement Cost:</b>		<b>\$626,925.00</b>

**Requirement Description:**

The existing lighting system consists of various types of fixtures. The lighting system has recently been upgraded with T-8 lamps and electronic ballasts. Incandescent fixtures are still present in all areas. The lighting upgrade only addressed T-12 lamps.

The fixtures in kitchen hood do not have the lamps covered as is required by Board of Health in food prep area.

Generally the types of fixtures is as follows:

- Cafeteria: 2' x 4' acrylic lensed fixtures renovated in the 1980's.
- Display Areas: Incandescent accent fixtures.
- Team Rooms: Light level is extremely low with incandescent "jelly jar" fixtures.
- Classrooms/Instructional Spaces/Offices: Fluorescent fixtures with either wraparound lenses.
- Weight Room: Ballasts in fixtures and in poor condition.

**Action Description:**

Provide new light fixtures with 10 ft of wiring

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Lighting System - Gymnasium	1	Job	\$29,600.00	\$29,600.00
2	Lighting System - Cafeteria	1	Job	\$20,100.00	\$20,100.00
3	Lighting System - Classroom and Admin	1	Job	\$261,800.00	\$261,800.00
4	Allowance New Ceiling Tiles	1	Job	\$10,000.00	\$10,000.00
<b>Total of Requirement Items</b>					<b>\$321,500.00</b>
<b>General Conditions:</b>				6.00%	\$19,290.00
<b>Overhead &amp; Profit:</b>				10.00%	\$32,150.00
<b>Total Hard Costs</b>					<b>\$372,940.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Local Area Network System

Category: Functionality  
 Prime System: Communications and Security  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Garcia Galuska DeSousa - Electrical  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$350,320.00
Contingency:	10.00%	\$30,200.00
Escalation:	24.00%	\$72,480.00
<b>Total:</b>		<b>\$453,000.00</b>
Soft Costs:	30.00%	\$135,900.00
<b>Total Requirement Cost:</b>		<b>\$588,900.00</b>

**Requirement Description:**

There is a local area network (LAN) present. The wiring consists of CAT 5 cable. There is 24 strand fiber present from the Fowler School. Typically, there is one computer drop per classroom. There is a DSL line present in the head end room that connects the High School to the administration building.

**Action Description:**

We recommend that each classroom be equipped with (4) student drops and (1) teachers work station. In addition a wireless access point drop should be provided in each classroom. Each classroom should be equipped with "LCD" project outlet at ceiling with patch connection at teacher's work station for video and sound.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	IDF's (Intermediate Distributer Frame)	3	Each	\$10,000.00	\$30,000.00
2	MDF (Main Distributer Frame)	1	Job	\$20,000.00	\$20,000.00
3	Computer Drops - Classroom and Admin.	1	Job	\$141,500.00	\$141,500.00
4	Computer Drops - Auditorium	1	Job	\$3,000.00	\$3,000.00
5	Computer Drops - Gymnasium	1	Job	\$3,000.00	\$3,000.00
6	Fiber Backbone	1	Job	\$25,000.00	\$25,000.00
7	Classroom VGA / Audio Patch	1	Job	\$49,500.00	\$49,500.00
8	CATV - Broadband Distributor	1	Job	\$15,000.00	\$15,000.00
9	Patch / Paint Allowance	1	Job	\$15,000.00	\$15,000.00
<b>Total of Requirement Items</b>					\$302,000.00
<b>General Conditions:</b> 6.00%					\$18,120.00
<b>Overhead &amp; Profit:</b> 10.00%					\$30,200.00
<b>Total Hard Costs</b>					\$350,320.00



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Locker Room - Unit Ventilators

Category: Air and Water Quality  
 Prime System: Terminal and Package Units  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Garcia Galuska DeSousa - HVAC  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$112,520.00
Contingency:	10.00%	\$9,700.00
Escalation:	24.00%	\$23,280.00
<b>Total:</b>		<b>\$145,500.00</b>
Soft Costs:	30.00%	\$43,650.00
<b>Total Requirement Cost:</b>		<b>\$189,150.00</b>

**Requirement Description:**

The existing locker rooms are provided with individual classroom unit ventilators suspended within storage areas within the space. The units are provided with supply fans, hot water coils with valve control, filters, and outside air drawn in through a wall mounted louver. Return air is drawn directly at the base of the unit. Supply air discharge is through a small sectional ductwork which terminates a single wall mounted diffuser. The equipment is approximately 40 years old and was noted to have extensive surface contamination and generally in poor condition. The overall volume of total and outside air appears to be undersized for the population of the space and does not appear code compliant. There was no means to allow excess pressure relief during economizer control. The exhaust fans within the space do appear to operate and presently are maintaining adequate ventilation control. In the team locker areas however, the exhaust fans were not operating and very poor ventilation control is being achieved.

**Action Description:**

Replace the existing unit ventilator equipment with new roof mounted heating ventilating units sized for the population and code required outside ventilation air requirement. The units will tie into the existing hot water piping. Provide new overhead supply ductwork feeding new supply diffusers exposed within the space located. New return air ductwork should be installed drawing from new registers approximately 12 inches above the floor. Replaced the existing roof mounted exhaust fans, all ductwork and exhaust registers.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	H & V Units	3	Each	\$10,000.00	\$30,000.00
2	Exhaust Air Fans	3	Each	\$4,000.00	\$12,000.00
3	Ductwork	3	LS	\$15,000.00	\$45,000.00
4	Patch / Paint Allowance	1	Job	\$10,000.00	\$10,000.00
<b>Total of Requirement Items</b>					<b>\$97,000.00</b>
<b>General Conditions:</b>				6.00%	\$5,820.00
<b>Overhead &amp; Profit:</b>				10.00%	\$9,700.00
<b>Total Hard Costs</b>					<b>\$112,520.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Mechanical System Wiring

Category: Functionality  
 Prime System: Electrical Service and Distribution  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Garcia Galuska DeSousa - Electrical  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$166,460.00
Contingency:	10.00%	\$14,350.00
Escalation:	24.00%	\$34,440.00
<b>Total:</b>		<b>\$215,250.00</b>
Soft Costs:	30.00%	\$64,575.00
<b>Total Requirement Cost:</b>		<b>\$279,825.00</b>

**Requirement Description:**

The existing mechanical system wiring consisting of conduit and Romex in areas renovated in the 1980's.

**Action Description:**

It is recommended that new wiring be installed throughout, as HVAC equipment is upgraded.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Mechanical System Wiring	1	Job	\$133,500.00	\$133,500.00
2	Patch / Paint Allowance	1	Job	\$10,000.00	\$10,000.00
<b>Total of Requirement Items</b>					<b>\$143,500.00</b>
<b>General Conditions:</b>				6.00%	\$8,610.00
<b>Overhead &amp; Profit:</b>				10.00%	\$14,350.00
<b>Total Hard Costs</b>					<b>\$166,460.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name: Plumbing Fixtures**

Category: Functionality  
 Prime System: Domestic Water Distribution  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Garcia Galuska DeSousa - Plumbing & Fire Pr  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$8,700.00
Contingency:	10.00%	\$750.00
Escalation:	24.00%	\$1,800.00
<b>Total:</b>		<b>\$11,250.00</b>
Soft Costs:	30.00%	\$3,375.00
<b>Total Requirement Cost:</b>		<b>\$14,625.00</b>

**Requirement Description:**

Plumbing fixtures are in good condition, but are generally non-accessible and non-water conserving. There are two renovated bathrooms one adjacent to the administration area and one in the two-story classroom wing which appear to meet current MAAB standards.

Predominantly, the water closets are flush valve type, wall mounted, and vitreous china. Urinals are wall hung, flush valve, vitreous china; lavatories are wall hung vitreous china, two handle type faucets. Drinking fountains are wall hung type, generally stainless steel bowls with vinyl covers. In the Gymnasium there are two recessed stainless steel fountains. Janitor's sink are generally floor mounted, cast iron slop sinks equipped with faucets with vacuum breakers. Locker room areas contain a thermostatic mixing valve. A recent mixing valve update exists in the Team Locker Room. Showers are wall mounted with lever control. It was noted that the showers are rarely used. Shower floor drains are to the center and are non-compliant with sanitary code.

**Action Description:**

If the total work is less than \$100,000.00 and if this work were to include any Plumbing, then the Plumbing Work would need to comply. If the total work is over \$100,000.00 and less than 30% of the full and fair cash value of the building, then an accessible toilet and drinking fountain must be part of the work. If the cost of the work exceeds 30%, then all of the existing and new Plumbing Facilities need to be accessible. This would require accessible facilities at every toilet room and sink including all the classrooms. The school plumbing systems could continue to be used with maintenance and replacement of failed components; however other non-dependent decisions will likely force the plumbing upgrade.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Replace Fixture Including Trim	1	Each Fixt	\$2,500.00	\$2,500.00
2	Replace Shower Mixing Valves	1	Job	\$5,000.00	\$5,000.00
<b>Total of Requirement Items</b>					<b>\$7,500.00</b>
<b>General Conditions:</b>				6.00%	\$450.00
<b>Overhead &amp; Profit:</b>				10.00%	\$750.00
<b>Total Hard Costs</b>					<b>\$8,700.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Science Classrooms - Gas / Water / Drainer

Category: Functionality  
 Prime System: Controls and Instrumentation  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Garcia Galuska DeSousa - Plumbing & Fire Pr  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$139,200.00
Contingency:	10.00%	\$12,000.00
Escalation:	24.00%	\$28,800.00
<b>Total:</b>		<b>\$180,000.00</b>
Soft Costs:	30.00%	\$54,000.00
<b>Total Requirement Cost:</b>		<b>\$234,000.00</b>

**Requirement Description:**

The Science areas do not have dedicated water systems. Science labs require a dedicated water system for proper cross connection protection. Emergency showers do not have tempered water supplies as required by current code. Instructor's sink faucets are not equipped with vacuum breakers. The special waste piping from the Science labs connects untreated to the sanitary piping. A neutralizer is required to meet code and the system shall extend to exterior. Classrooms are piped with natural gas however do not have a manual shutoff valve accessible in the lab as required by code.

**Action Description:**

In the event of science classroom renovations it is required that systems be upgraded to current code. This would include providing a dedicated water system, providing tempered water to the shower, adding manual shut-off valves for the gas and installing an acid neutralization system.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Provide dedicated water system	1	Job	\$20,000.00	\$20,000.00
2	Provide tempered water to shower	1	Job	\$25,000.00	\$25,000.00
3	Add manual gas shutoff valve	1	Job	\$15,000.00	\$15,000.00
4	Install acid neutralization system	1	Job	\$50,000.00	\$50,000.00
5	Patch / Painting allowance	1	Job	\$10,000.00	\$10,000.00
<b>Total of Requirement Items</b>					<b>\$120,000.00</b>
<b>General Conditions:</b> 6.00%					\$7,200.00
<b>Overhead &amp; Profit:</b> 10.00%					\$12,000.00
<b>Total Hard Costs</b>					<b>\$139,200.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Security System

Category: Functionality  
 Prime System: Electrical Service and Distribution  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Garcia Galuska DeSousa - Electrical  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$115,420.00
Contingency:	10.00%	\$9,950.00
Escalation:	24.00%	\$23,880.00
<b>Total:</b>		<b>\$149,250.00</b>
Soft Costs:	30.00%	\$44,775.00
<b>Total Requirement Cost:</b>		<b>\$194,025.00</b>

**Requirement Description:**

There is an existing security system present and is manufactured by Radionics. The system is not however operational. The system consists of door contacts at exterior doors and motion sensors in the corridors.

**Action Description:**

It is recommended that the existing security system be provided with contacts at roof access hatches, overhead doors, etc. Also passive infrared/motion sensors be provided in grade level perimeter rooms with windows. The system would be zoned strategically to meet the Owner's needs. The system would remain connected to a remote monitoring service. Panic stations should be provided at the main reception area. Other auxiliary functions would be provided such as automatically turn "on" all lighting in public spaces upon alarm.

It is recommended that a solid state system with high resolution cameras be provided with digital storage into a hard drive. This eliminates the need for VCR and changing of tapes. Recording would be into a computer hard drive with network accessibility.

It is recommended that a card access system be provided at all exterior doors.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Security System - Motion Sensors	33	Each	\$500.00	\$16,500.00
2	Security System - Additional Contacts	1	Job	\$3,000.00	\$3,000.00
3	Security System - Programming Interface	1	Job	\$3,000.00	\$3,000.00
4	CCTV System - PTZ Cameras	8	Each	\$2,500.00	\$20,000.00
5	CCTV System - DVR	1	Job	\$5,000.00	\$5,000.00
6	CCTV System - Wiring	1	Job	\$20,000.00	\$20,000.00
7	Access Control System - Card Readers	10	Each	\$2,200.00	\$22,000.00
8	Access Control System - Software / Computer	1	Job	\$10,000.00	\$10,000.00
<b>Total of Requirement Items</b>					<b>\$99,500.00</b>
<b>General Conditions:</b>				6.00%	\$5,970.00
<b>Overhead &amp; Profit:</b>				10.00%	\$9,950.00
<b>Total Hard Costs</b>					<b>\$115,420.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Site Lighting

Category: Functionality  
 Prime System: Electrical Service and Distribution  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Garcia Galuska DeSousa - Electrical  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$70,180.00
Contingency:	10.00%	\$6,050.00
Escalation:	24.00%	\$14,520.00
<b>Total:</b>		<b>\$90,750.00</b>
Soft Costs:	30.00%	\$27,225.00
<b>Total Requirement Cost:</b>		<b>\$117,975.00</b>

**Requirement Description:**

The existing site lighting consists of utility pole mounted fixtures with flood lights. The system appears to be owned by the Utility Company and monthly charged to the Owner. The quantity of lighting does not appear to be in accordance with IFS-NA recommendations (0.5 fc).

**Action Description:**

Exterior lighting would be replaced with new where required in parking and circulation areas. A new system of building mounted perimeter luminaires would be provided for general security and at exit discharges. Luminaires will be of the high intensity discharge "HID" type, more than likely metal halide. Luminaires at exit discharge areas will contain a quartz restrike feature for instant "on" during cold or hot restrikes. The fixtures at exit discharge areas will be connected to normal/emergency panelboards. All exterior lighting will be controlled via photocell "on" and timed "off". The timing "off" of these luminaires will be by zone to allow flexibility and energy conservation. The schedule will be coordinated with the end user and programmed by the contractor.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Wall Packs	12	Job	\$500.00	\$6,000.00
2	Entry Fixtures	9	Job	\$500.00	\$4,500.00
3	Pole Fixtures	20	Job	\$2,500.00	\$50,000.00
<b>Total of Requirement Items</b>					<b>\$60,500.00</b>
<b>General Conditions:</b>				6.00%	\$3,630.00
<b>Overhead &amp; Profit:</b>				10.00%	\$6,050.00
<b>Total Hard Costs</b>					<b>\$70,180.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Site Signage

Category: Accessibility  
 Prime System: Architectural  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Geller DeVellis  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$11,020.00
Contingency:	10.00%	\$950.00
Escalation:	24.00%	\$2,280.00
<b>Total:</b>		<b>\$14,250.00</b>
Soft Costs:	30.00%	\$4,275.00
<b>Total Requirement Cost:</b>		<b>\$18,525.00</b>

**Requirement Description:**

Provide site signage for accessibility routes and informational and regulatory information.

**Action Description:**

Provide new site signage installations including concrete footings, poles and signs. Provide wall mounted signs where needed to identify access/egress doorways and walks.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	New Signs, Base and Posts	10	Each	\$800.00	\$8,000.00
2	Re-set Existing Signs as Needed	5	Each	\$300.00	\$1,500.00
<b>Total of Requirement Items</b>					<b>\$9,500.00</b>
<b>General Conditions:</b>				6.00%	\$570.00
<b>Overhead &amp; Profit:</b>				10.00%	\$950.00
<b>Total Hard Costs</b>					<b>\$11,020.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Telephone System/Paging System

Category: Functionality  
 Prime System: Communications and Security  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Garcia Galuska DeSousa - Electrical  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$57,072.00
Contingency:	10.00%	\$4,920.00
Escalation:	24.00%	\$11,808.00
<b>Total:</b>		<b>\$73,800.00</b>
Soft Costs:	30.00%	\$22,140.00
<b>Total Requirement Cost:</b>		<b>\$95,940.00</b>

**Requirement Description:**

There is an existing telephone system present. There is a Panasonic key switch present in the boiler room. There are approximately 12 trunk lines present. The system appears to have been recently upgraded. Each classroom is equipped with a telephone hand set. The system is in good condition but should be relocated to head room. The existing paging system consists of a Dukane amplified rack end located at the administration with microphone in put. The current paging system in the Auditorium is not operational.

**Action Description:**

Relocate Telephone System to head end room

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Relocate Telephone System	1	Job	\$10,000.00	\$10,000.00
2	New Paging System - Classrooms and Admin.	1	Job	\$11,700.00	\$11,700.00
3	New Paging System - Cafeteria	1	Job	\$5,000.00	\$5,000.00
4	New Paging System - Gymnasium	1	Job	\$7,500.00	\$7,500.00
5	New Paging System - Auditorium	1	Job	\$15,000.00	\$15,000.00
<b>Total of Requirement Items</b>					<b>\$49,200.00</b>
<b>General Conditions:</b>				6.00%	\$2,952.00
<b>Overhead &amp; Profit:</b>				10.00%	\$4,920.00
<b>Total Hard Costs</b>					<b>\$57,072.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:**      **Theatrical Lighting**

Category:                    Functionality  
 Prime System:              Electrical Service and Distribution  
 Priority:                      4-Recommended  
 Action Date:                06/01/2010  
 Inspector Name:            Garcia Galuska DeSousa - Electrical  
 Inspection Date:            9/18/2006  
 Finish Date:  
 Status:                        Open

Requirement Cost Breakdown		
Cost Estimate from below		\$266,800.00
Contingency:	10.00%	\$23,000.00
Escalation:	24.00%	\$55,200.00
<b>Total:</b>		<b>\$345,000.00</b>
Soft Costs:	30.00%	\$103,500.00
<b>Total Requirement Cost:</b>		<b>\$448,500.00</b>

**Requirement Description:**

The existing dimming system is manufactured by EDI. The system appears to have been installed in the 1980's. There are border lights present and theatrical lighting in the auditorium space, general illumination is recessed incandescent for house lighting. The lighting is in poor/fair condition.

**Action Description:**

A new system for stage theatrical lighting, should be provided. A new dimming system for theatrical and general auditorium house lights with remote controls should be provided.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Dimming	1	Job	\$100,000.00	\$100,000.00
2	Theater Lighting	1	Job	\$100,000.00	\$100,000.00
3	House Lighting	1	Job	\$30,000.00	\$30,000.00
<b>Total of Requirement Items</b>					<b>\$230,000.00</b>
<b>General Conditions:</b> 6.00%					\$13,800.00
<b>Overhead &amp; Profit:</b> 10.00%					\$23,000.00
<b>Total Hard Costs</b>					<b>\$266,800.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Toilet Rooms

Category: Accessibility  
 Prime System: Architectural  
 Priority: 4-Recommended  
 Action Date: 06/01/2010  
 Inspector Name: Tappe Associates, Inc.  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$161,182.00
Contingency:	10.00%	\$13,895.00
Escalation:	24.00%	\$33,348.00
<b>Total:</b>		<b>\$208,425.00</b>
Soft Costs:	30.00%	\$62,527.50
<b>Total Requirement Cost:</b>		<b>\$270,952.50</b>

**Requirement Description:**

The toilet rooms throughout the facility with the exception of two renovated restrooms do not ADA and MAAB. They are in average to poor condition and show signs of substantial wear.

**Action Description:**

Full Renovation.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	Demo	1025	SqFt	\$20.00	\$20,500.00
10	Handicap Toilet Partitions	6	Each	\$1,200.00	\$7,200.00
2	Floor Finishes	1025	SqFt	\$12.00	\$12,300.00
3	Ceiling Finishes	1025	SqFt	\$3.00	\$3,075.00
4	Wall Finishes	3350	SqFt	\$11.00	\$36,850.00
5	Toilet Partitions	11	Each	\$1,050.00	\$11,550.00
6	Toilet Fixtures	18	Each	\$1,030.00	\$18,540.00
7	Urinals	10	Each	\$1,015.00	\$10,150.00
8	Urinal Screens	13	Each	\$275.00	\$3,575.00
9	Lavatories	18	Each	\$845.00	\$15,210.00
<b>Total of Requirement Items</b>					<b>\$138,950.00</b>
<b>General Conditions:</b> 6.00%					<b>\$8,337.00</b>
<b>Overhead &amp; Profit:</b> 10.00%					<b>\$13,895.00</b>
<b>Total Hard Costs</b>					<b>\$161,182.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Automatic Sprinkler System

Category: Functionality  
 Prime System: Sprinklers  
 Priority: 5-Does Not Meet Codes / Standards  
 Action Date: 06/01/2011  
 Inspector Name: Garcia Galuska DeSousa - Plumbing & Fire Pr  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$487,780.00
Contingency:	10.00%	\$42,050.00
Escalation:	30.00%	\$126,150.00
<b>Total:</b>		<b>\$655,980.00</b>
Soft Costs:	30.00%	\$196,794.00
<b>Total Requirement Cost:</b>		<b>\$852,774.00</b>

**Requirement Description:**

The Building contains no automatic fire protection systems.

Massachusetts code requires that any new school building or substantially renovated school building, 12,000 square feet or more must be sprinklered. This building will meet those thresholds and will need sprinklers. The wood framed stage in the auditorium and any concealed combustible spaces will require sprinklers.

**Action Description:**

If proposed scope is deemed a substantial renovation, the entire building must be protected with an automatic sprinkler system.

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	New Fire Service to Building	1	Job	\$5,000.00	\$5,000.00
2	Double Check Valve Assembly and Alarm Valve	1	Job	\$15,000.00	\$15,000.00
3	Sprinkler Building	1	Sf	\$400,500.00	\$400,500.00
<b>Total of Requirement Items</b>					\$420,500.00
<b>General Conditions:</b> 6.00%					\$25,230.00
<b>Overhead &amp; Profit:</b> 10.00%					\$42,050.00
<b>Total Hard Costs</b>					<b>\$487,780.00</b>



## Requirement Description

**Project:** A060800 Town of Maynard  
**CampusName:** Maynard High School  
**AssetName:** Maynard High School

**Requirement Name:** Walkways and Ramps (Accessibility)

Category: Accessibility  
 Prime System: Architectural  
 Priority: 5-Does Not Meet Codes / Standards  
 Action Date: 06/01/2011  
 Inspector Name: Geller DeVellis  
 Inspection Date: 9/18/2006  
 Finish Date:  
 Status: Open

Requirement Cost Breakdown		
Cost Estimate from below		\$48,720.00
Contingency:	10.00%	\$4,200.00
Escalation:	30.00%	\$12,600.00
<b>Total:</b>		<b>\$65,520.00</b>
Soft Costs:	30.00%	\$19,656.00
<b>Total Requirement Cost:</b>		<b>\$85,176.00</b>

**Requirement Description:**

The majority of pedestrian walkways are not Handicapped Accessible or are in need of replacement and in some cases may require Accessible Ramps with handrails. Walks are in disrepair or provide unacceptable longitudinal and traverse cross-slopes and need replacement. Egress doors around the building must be provided with Handicapped Accessible exits and walks.

**Action Description:**

Nearly all walkways around the school and those serving the outdoor inner-courtyard area (see below) need to be removed and replaced. Some building access/egress doors will require Accessible ramps and handrails. Signage for Accessible routes must be provide

**Estimate:**

Number:	Description:	Qty	Unit:	Unit Cost	Extended
1	New Concrete Landings and Walkways from door with railings as needed	8	Each	\$1,500.00	\$12,000.00
2	Full Concrete Ramps to Doors with Railings	5	Each	\$5,000.00	\$25,000.00
3	Misc Concrete Ramps around Site	2	Each	\$2,500.00	\$5,000.00
<b>Total of Requirement Items</b>					\$42,000.00
<b>General Conditions:</b> 6.00%					\$2,520.00
<b>Overhead &amp; Profit:</b> 10.00%					\$4,200.00
<b>Total Hard Costs</b>					<b>\$48,720.00</b>