



FACILITY CONDITION ASSESSMENT

St. Martin Upper Elementary | November 2020





Executive Summary

St. Martin Upper Elementary, located at 11000 Yellowjacket Rd in Ocean Springs, Mississippi, oldest building is 22 years old (at time of 2020 assessment). It comprises 75,800 gross square feet.

The findings contained within this report are the result of an assessment of building systems performed by building professionals experienced in disciplines including architecture, mechanical, plumbing and electrical. The total current deficiencies for this site, in 2020 construction cost dollars, are estimated at \$531,085. A ten-year need was developed to provide an understanding of the current need as well as the projected needs in the near future. For St. Martin Upper Elementary the ten-year need is \$6,469,355.

For master planning purposes, the total current deficiencies and the first five years of projected life cycle needs were combined to calculate a Facility Condition Index (FCI). A 5-year FCI was calculated by dividing the 5-year need by the total replacement cost. Costs associated with new construction are not included in the FCI calculation. The St. Martin Upper Elementary facility has a 5-year FCI of 19.34%.

Summary of Findings

The table below summarizes the condition findings at St. Martin Upper Elementary

Table 1: Facility Condition by Building

Number	Building Name	Current Deficiencies	5-Year Life Cycle Cost	Yrs 6-10 Life Cycle Cost	Total 5 Yr Need (Yr 1-5 + Current Defs)	Total 10 Yr Need (Yr 1-10 + Current Defs)	Replacement Cost	5-Year FCI
Exterior Site								
	Exterior Site	\$261,391	\$403,664	\$186,417	\$665,055	\$851,472	\$0	
Permanent Building(s)								
03	Clsroom, Ofc, Café	\$269,694	\$3,083,533	\$2,264,656	\$3,353,227	\$5,617,883	\$20,772,230	16.14%
Sub Total for Permanent Building(s):		\$269,694	\$3,083,533	\$2,264,656	\$3,353,227	\$5,617,883	\$20,772,232	
Total for Site:		\$531,085	\$3,487,197	\$2,451,073	\$4,018,282	\$6,469,355	\$20,772,232	19.34%



Approach and Methodology

A facility condition assessment evaluates each building's overall condition. Two components of the facility condition assessment are combined to total the cost for facility need. The two components of the facility condition assessment are current deficiencies and life cycle forecast.

Current Deficiencies: Deficiencies are items in need of repair or replacement as a result of being broken, obsolete, or beyond useful life. The existing deficiencies that currently require correction are identified and assigned a priority. An example of a current deficiency might include a broken lighting fixture or an inoperable roof top air conditioning unit.

Life Cycle Forecast: Life cycle analysis evaluates the ages of a building's systems to forecast system replacement as they reach the end of serviceable life. An example of a life cycle system replacement is a roof with a 20-year life that has been in place for 15 years and may require replacement in five years.

All members of the survey team recorded existing conditions, identified problems and deficiencies, and documented corrective action and quantities. The team took digital photos at each site to better identify significant deficiencies.

Facility Deficiency Priority Levels

Deficiencies were ranked according to five priority levels, with Priority 1 items being the most critical to address:

Priority 1 – Mission Critical Concerns: Deficiencies or conditions that may directly affect the site's ability to remain open or deliver the educational curriculum. These deficiencies typically relate to building safety, code compliance, severely damaged or failing building components, and other items that require near-term correction. An example of a Priority 1 deficiency is a fire alarm system replacement.

Priority 2 - Indirect Impact to Educational Mission: Items that may progress to a Priority 1 item if not addressed in the near term. Examples of Priority 2 deficiencies include inadequate roofing that could cause deterioration of integral building systems, and conditions affecting building envelopes, such as roof and window replacements.

Priority 3 - Short-Term Conditions: Deficiencies that are necessary to the site's mission but may not require immediate attention. These items should be considered necessary improvements required to maximize facility efficiency and usefulness. Examples of Priority 3 items include site improvements and plumbing deficiencies.

Priority 4 - Long-Term Requirements: Items or systems that may be considered improvements to the instructional environment. The improvements may be aesthetic or provide greater functionality. Examples include cabinets, finishes, paving, removal of abandoned equipment, and educational accommodations associated with special programs.

Priority 5 - Enhancements: Deficiencies aesthetic in nature or considered enhancements. Typical deficiencies in this priority include repainting, replacing carpet, improved signage, or other improvements to the facility environment.



The following table summarizes this site's current deficiencies by building system and priority.

Table 2: System by Priority (Site & Permanent Buildings)

System	Priority					Total	% of Total
	1	2	3	4	5		
Site	\$0	\$0	\$56,136	\$206,581	\$4,273	\$266,989	50.27 %
Roofing	\$0	\$0	\$32,678	\$0	\$0	\$32,678	6.15 %
Structural	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Exterior	\$0	\$0	\$0	\$4,971	\$1,728	\$6,699	1.26 %
Interior	\$0	\$0	\$917	\$5,845	\$524	\$7,287	1.37 %
Mechanical	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Electrical	\$0	\$0	\$52,819	\$0	\$0	\$52,819	9.95 %
Plumbing	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Fire and Life Safety	\$155,686	\$0	\$0	\$0	\$0	\$155,686	29.31 %
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Specialties	\$0	\$0	\$288	\$8,640	\$0	\$8,927	1.68 %
Total:	\$155,686	\$0	\$142,838	\$226,036	\$6,525	\$531,085	

The building systems at the site with the most need include:

Site	-	\$266,989
Fire and Life Safety	-	\$155,686
Electrical	-	\$52,819



The chart below represents the building systems and associated deficiency costs.

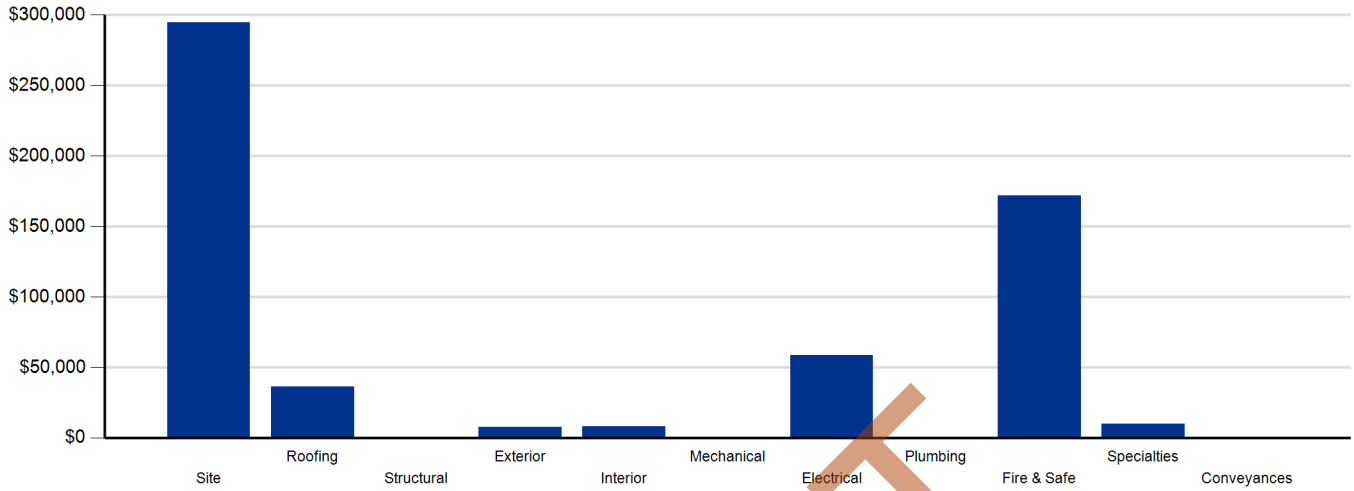


Figure 1: System Deficiencies

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Life Cycle Capital Renewal Forecast

During the facility condition assessment, assessors inspected all major building systems. If an assessor identified a need for immediate replacement, a deficiency was created with the item's repair costs. The identified deficiency contributes to the facility's total current repair costs.

However, capital planning scenarios span multiple years, as opposed to being constrained to immediate repairs. Construction projects may begin several years after the initial facility condition assessment. Therefore, in addition to the current year repair costs, it is necessary to forecast the facility's future costs using a ten-year life cycle renewal forecast model.

Life cycle renewal is the projection of future building system costs based upon each individual system's expected serviceable life. Building systems and components age over time, eventually break down, reach the end of their useful lives, and may require replacement. While an item may be in good condition now, it might reach the end of its life before a planned construction project occurs.

The following tables show current deficiencies and the subsequent ten-year life cycle capital renewal projections. The projections outline costs for major building systems in which a component is expected to reach the end of its useful life and require capital funding for replacement.

Table 3a: Capital Renewal Forecast (Yrs 1-5)

System	Life Cycle Capital Renewal Projections					Total 1-5
	Year 1 2021	Year 2 2022	Year 3 2023	Year 4 2024	Year 5 2025	
Site	\$0	\$0	\$0	\$403,664	\$0	\$403,664
Roofing	\$0	\$0	\$0	\$0	\$0	\$0
Exterior	\$0	\$0	\$0	\$0	\$115,773	\$115,773
Interior	\$0	\$61,349	\$4,226	\$112,523	\$0	\$178,098
Mechanical	\$0	\$0	\$184,804	\$404,851	\$287,730	\$877,385
Electrical	\$0	\$0	\$0	\$8,851	\$1,260,810	\$1,269,661
Plumbing	\$0	\$0	\$36,918	\$166,147	\$2,288	\$205,353
Fire and Life Safety	\$0	\$0	\$107,395	\$0	\$0	\$107,395
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$329,868	\$0	\$329,868
Total	\$0	\$61,349	\$333,343	\$1,425,904	\$1,666,601	\$3,487,197



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Table 3b: Capital Renewal Forecast (Yrs 6-10)

System	Life Cycle Capital Renewal Projections						Total 6-10	Total 1-10
	Total 1-5	Year 6 2026	Year 7 2027	Year 8 2028	Year 9 2029	Year 10 2030		
Site	\$403,664	\$186,417	\$0	\$0	\$0	\$0	\$186,417	\$590,081
Roofing	\$0	\$0	\$0	\$0	\$0	\$34,362	\$34,362	\$34,362
Exterior	\$115,773	\$0	\$0	\$0	\$0	\$83,292	\$83,292	\$199,065
Interior	\$178,098	\$0	\$0	\$410,384	\$470,149	\$51,699	\$932,232	\$1,110,330
Mechanical	\$877,385	\$535,174	\$0	\$281,729	\$0	\$14,342	\$831,245	\$1,708,630
Electrical	\$1,269,661	\$0	\$0	\$363,873	\$0	\$0	\$363,873	\$1,633,534
Plumbing	\$205,353	\$0	\$0	\$19,652	\$0	\$0	\$19,652	\$225,005
Fire and Life Safety	\$107,395	\$0	\$0	\$0	\$0	\$0	\$0	\$107,395
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$329,868	\$0	\$0	\$0	\$0	\$0	\$0	\$329,868
Total	\$3,487,197	\$721,591	\$0	\$1,075,638	\$470,149	\$183,695	\$2,451,073	\$5,938,270

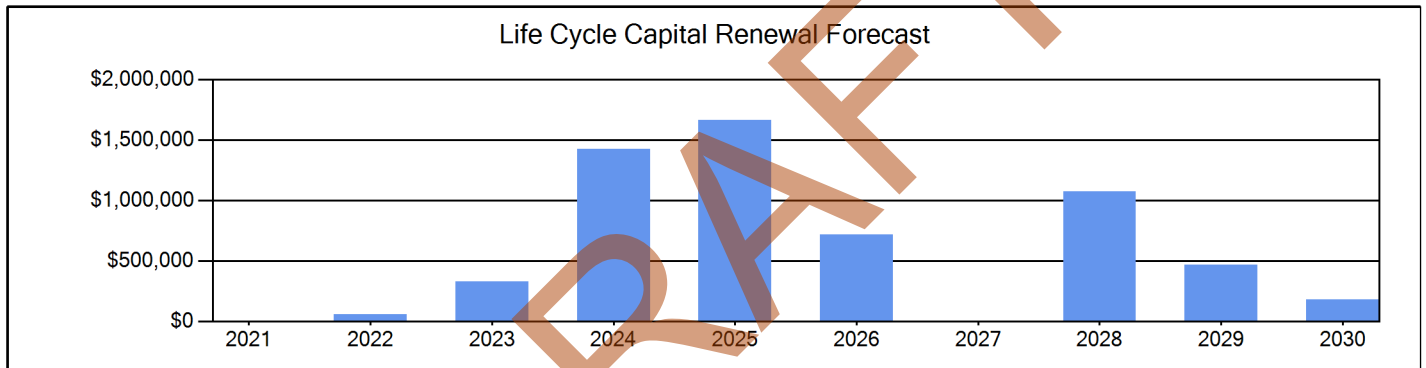
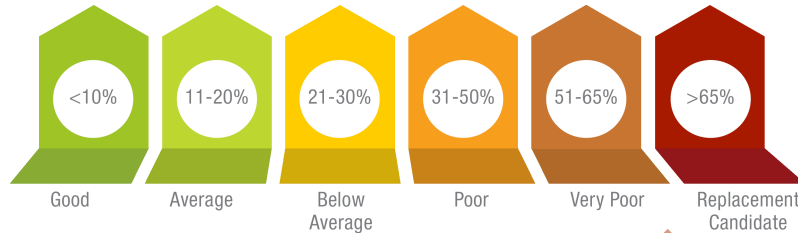


Figure 2: Ten Year Capital Renewal Forecast



Facility Condition Index (FCI)

The Facility Condition Index (FCI) is used throughout the facility condition assessment industry as a general indicator of a building’s health. Since 1991, the facility management industry has used an index called the FCI to benchmark the relative condition of a group of sites. The FCI is derived by dividing the total repair cost, including educational adequacy and site-related repairs, by the total replacement cost. A facility with a higher FCI percentage has more need, or higher priority, than a facility with a lower FCI. It should be noted that costs in the New Construction category are not included in the FCI calculation.



Financial modeling has shown that over a 30-year period, it is more cost effective to replace than repair sites with a FCI of 65 percent or greater. This is due to efficiency gains with facilities that are more modern and the value of the building at the end of the analysis period. It is important to note that the FCI at which a facility should be considered for replacement is typically debated and adjusted based on property owners and facility managers approach to facility management. Of course, FCI is not the only factor used to identify buildings that need renovation, replacement, or even closure. Historical significance, enrollment trends, community sentiment, and the availability of capital are additional factors that are analyzed when making campus facility decisions.

For master planning purposes, the total current deficiencies and the first five years of projected life cycle needs were combined. This provides an understanding of the current needs of a facility as well as the projected needs in the near future. A 5-year FCI was calculated by dividing the 5-year need by the total replacement cost. Costs associated with new construction are not included in the FCI calculation.

The replacement value represents the estimated cost of replacing the current building with another building of like size, based on today’s estimated cost of construction in the Jackson, MS area. The estimated replacement cost for this facility is \$20,772,232. For planning purposes, the total 5-year need at the St. Martin Upper Elementary is \$4,018,282 (Life Cycle Years 1-5 plus the FCI deficiency cost). The St. Martin Upper Elementary facility has a 5-year FCI of 19.34%.

5-Year Need vs. Replacement

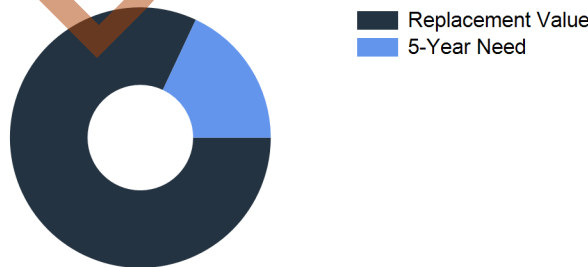


Figure 3: 5-Year FCI



St. Martin Upper Elementary - Deficiency Summary

Site Level Deficiencies

Site

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Concrete Walks Replacement Note: Sidewalk damage to be removed and replaced.	Capital Renewal	5,000	SF	3	\$50,537	775
Asphalt Paving Resurfacing Note: Parking areas cracking.	Deferred Maintenance	50,400	SF	4	\$187,056	778
Site Drainage Needs Installation Of Drainage Piping Note: Piping to be added between north middle wing and northeast wing to facilitate drainage away from building area in southeast corner to be regraded to alleviate holding water. Location: Grassed areas between buildings	Deferred Maintenance	250	LF	4	\$14,136	776
Site Drainage Regrading Note: Area between northwest wing and north middle wing to be graded to facilitate drainage away from the building. Location: Grassed areas between buildings	Deferred Maintenance	4,200	SF	4	\$5,389	777
Paving Restriping Note: Striping throughout site is faded.	Deferred Maintenance	144	CAR	5	\$4,273	779
Sub Total for System		5	items		\$261,391	
Sub Total for School and Site Level		5	items		\$261,391	

Building: 03 - Clsroom,Ofc,Café

Site

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Access Is Not ADA Compliant - ADA Compliant Ramp Installation Note: Not-existing at stage	ADA Compliance	1	Ea.	3	\$5,599	808
Sub Total for System		1	items		\$5,599	

Roofing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Gutter Replacement Note: Entire perimeter of gutter needs to be replaced. Gutters are rusted out at every downspout and at every seam/joint.	Deferred Maintenance	1,800	LF	3	\$32,678	64
Sub Total for System		1	items		\$32,678	

Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Window Repainting Note: All exterior window sills need to be repainted.	Deferred Maintenance	52	Ea.	4	\$4,971	66
Exterior Cleaning Note: Approximately 1,000 LF metal downspouts need to be cleaned.	Deferred Maintenance	500	SF Wall	5	\$1,728	65
Sub Total for System		2	items		\$6,699	

Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Rubber Flooring Replacement Note: Cracking in concrete beneath rubber flooring in Gym.	Capital Renewal	68	SF	3	\$917	69
Acoustical Ceiling Tile Replacement Note: Ceiling tiles are damaged due to water and need to be replaced. Location: In various locations including Assistant Principal's office, storage room in Assistant Principal's office, Room 508, Storage room in 100 Hall, 100 Hall, Rooms 428, 425, dressing rooms in the gym, and storage in the gym	Capital Renewal	100	SF	4	\$301	67
Toilet Partition Replacement Note: Chipped veneer in boy's and girl's restrooms	Capital Renewal	3	Stall	4	\$5,398	68
Vinyl Composition Tile Replacement Note: At entry to gym, VCT is damaged and needs to be replaced.	Capital Renewal	20	SF	4	\$146	70



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Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Concrete Flooring Repair Or Repainting	Deferred Maintenance	68	SF	5	\$524	193
Note: Crack in concrete underneath rubber flooring in Gym.						
Sub Total for System		5	items		\$7,287	

Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Lightning Protection System Installation	Functional Deficiency	75,800	SF	3	\$52,819	63
Sub Total for System		1	items		\$52,819	

Fire and Life Safety

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Security Alarm Is Missing	Functional Deficiency	75,800	SF	1	\$155,686	62
Note: Nothing currently installed						
Sub Total for System		1	items		\$155,686	

Specialties

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Counter Heights Exceed Maximum ADA Height Requirements (Modify Full)	ADA Compliance	5	LF	3	\$288	807
Note: No ADA counter height present.						
Repair Cabinetry In Classes/Labs	Deferred Maintenance	10	Room	4	\$8,640	71
Note: Casework is chipped and damaged and needs to be repaired.						
Location: Rooms 402, 406, 407, 405, 403, 508, Library, 421, 423, 424						
Sub Total for System		2	items		\$8,927	
Sub Total for Building 03 - Clsroom,Ofc,Café		13	items		\$269,694	
Total for Campus		18	items		\$531,085	

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St. Martin Upper Elementary - Life Cycle Summary Yrs 1-10

Site Level Life Cycle Items

Site

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Roadway Pavement	Asphalt Driveways	70,350	SF	\$403,664	4
Parking Lot Pavement	Asphalt	144	CAR	\$186,417	6
		Sub Total for System	2 items	\$590,081	
		Sub Total for Building -	2 items	\$590,081	

Building: 03 - Clsroom,Ofc,Café

Roofing

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Canopy Roofing	Metal Awning	950	SF	\$34,362	10
		Sub Total for System	1 items	\$34,362	

Exterior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Exterior Entrance Doors	Steel - Insulated and Painted	35	Door	\$115,773	5
Exterior Operating Windows	Aluminum - Windows per SF	936	SF	\$83,292	10
		Sub Total for System	2 items	\$199,065	

Interior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Resilient Flooring	Rubber Tile Flooring	4,548	SF	\$61,349	2
Suspended Plaster and	Painted ceilings	2,274	SF	\$4,226	3
Wall Painting and Coating	Painting/Staining (Bldg SF)	17,434	SF	\$69,708	4
Carpeting	Carpet	3,790	SF	\$42,815	4
Acoustical Suspended Ceilings	Ceilings - Acoustical Tiles	72,010	SF	\$216,974	8
Interior Door Supplementary Components	Door Hardware	146	Door	\$193,410	8
Resilient Flooring	Vinyl Composition Tile Flooring	64,430	SF	\$470,149	9
Interior Swinging Doors	Storefront door (Aluminum/Glass)	16	Door	\$51,699	10
		Sub Total for System	8 items	\$1,110,330	

Mechanical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Heat Generation	Boiler - Cast Iron - Water (4488 MBH)	1	Ea.	\$80,146	3
Heating System Supplementary Components	Controls - Electronic (Bldg.SF)	75,800	SF	\$104,658	3
Decentralized Cooling	Condenser - Inside Water Cooled (15 tons)	1	Ea.	\$84,581	4
Decentralized Cooling	Fan Coil - Water Cool/Water Heat (3 Ton)	26	Ea.	\$78,650	4
Decentralized Cooling	Heat Pump (10 Ton)	2	Ea.	\$42,910	4
Decentralized Cooling	Heat Pump (3 Ton)	18	Ea.	\$143,071	4
Decentralized Cooling	Heat Pump (3 Ton)	3	Ea.	\$23,845	4
Decentralized Cooling	Heat Pump (3 Ton)	4	Ea.	\$31,794	4
Facility Hydronic Distribution	2-Pipe Water System (Hot)	75,800	SF	\$287,730	5
HVAC Air Distribution	Ductwork (Bldg.SF)	75,800	SF	\$535,174	6
Decentralized Cooling	Ductless Split System (3 Ton)	4	Ea.	\$19,362	8
Decentralized Cooling	Heat Pump (3 Ton)	17	Ea.	\$135,122	8
Decentralized Cooling	Package DX Unit (50 Ton)	1	Ea.	\$73,677	8
HVAC Air Distribution	Roof Top Unit - DX Gas (10 Ton)	2	Ea.	\$43,252	8
Facility Hydronic Distribution	Pump- 10HP (Ea.)	1	Ea.	\$10,316	8
Exhaust Air	Roof Exhaust Fan - Large	2	Ea.	\$14,342	10
		Sub Total for System	16 items	\$1,708,629	

Electrical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Lighting Fixtures	Building Mounted Fixtures (Ea.)	11	Ea.	\$8,851	4
Lighting Fixtures	Canopy Mounted Fixtures (Ea.)	11	Ea.	\$20,445	5
Lighting Fixtures	Light Fixtures (Bldg SF)	75,800	SF	\$1,240,365	5
Electrical Service	Switchgear - Main Dist Panel (2000 Amps)	2	Ea.	\$116,853	8
Power Distribution	Distribution Panels (600 Amps)	6	Ea.	\$95,311	8
Power Distribution	Distribution Panels (400 Amps)	2	Ea.	\$30,169	8



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Electrical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Power Distribution	Panelboard - 120/208 225A	10	Ea.	\$49,073	8
Power Distribution	Panelboard - 120/208 125A	2	Ea.	\$2,603	8
Power Distribution	Panelboard - 120/208 100A	1	Ea.	\$2,482	8
Electrical Service	Exterior Dry Type Transformer (225 KVA)	1	Ea.	\$17,918	8
Electrical Service	Exterior Dry Type Transformer (75 KVA)	2	Ea.	\$37,219	8
Electrical Service	Exterior Dry Type Transformer (45 KVA)	2	Ea.	\$12,245	8
Sub Total for System		12	items	\$1,633,536	

Plumbing

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Domestic Water Equipment	Water Heater - Gas - 200 Gallon	3	Ea.	\$36,918	3
Plumbing Fixtures	Restroom Lavatory	22	Ea.	\$53,323	4
Plumbing Fixtures	Sink - Service / Mop Sink	2	Ea.	\$1,420	4
Plumbing Fixtures	Toilets	22	Ea.	\$99,320	4
Plumbing Fixtures	Urinals	10	Ea.	\$12,084	4
Plumbing Fixtures	Classroom Lavatory	1	Ea.	\$2,288	5
Plumbing Fixtures	Refrigerated Drinking Fountain	10	Ea.	\$19,652	8
Sub Total for System		7	items	\$225,006	

Fire and Life Safety

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Fire Detection and Alarm	Fire Alarm	75,800	SF	\$107,395	3
Sub Total for System		1	items	\$107,395	

Specialties

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Casework	Fixed Cabinetry	42	Room	\$329,868	4
Sub Total for System		1	items	\$329,868	
Sub Total for Building 03 - Clsroom,Ofc,Café		48	items	\$5,348,190	
Total for: St. Martin Upper Elementary		50	items	\$5,938,271	

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Supporting Photos



Cracked sidewalks



Area around southeast building corner ponding



Driveway pavement failure



Area around downspout to be cleaned



Rusted out gutters



St. Martin Upper ES