



# FACILITY CONDITION ASSESSMENT

*Barton Hills ES* | February 2022



## Executive Summary

Barton Hills ES is located at 2108 Barton Hills Dr in Austin, Texas. The oldest building is 56 years old (at time of 2020 assessment). It comprises 38,170 gross square feet.

The findings contained within this report are the result of an assessment of building systems and the conditions found on the site at the time of the visit. The assessment was 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 \$4,032,915. 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 Barton Hills ES the ten-year need is \$8,431,437.

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 Assessment (FCA) score. A 5-year FCA was calculated by dividing the 5-year need by the total replacement cost. Costs associated with new construction are not included in the FCA calculation. The Barton Hills ES facility has a 5-year FCA score of 54.11%.

## Summary of Findings

The table below summarizes the condition findings at Barton Hills ES

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 FCA
<b>Exterior Site</b>								
	Exterior Site	\$1,587,439	\$11,639	\$165,742	\$1,599,078	\$1,764,820	\$0	
<b>Permanent Building(s)</b>								
103A	Main building includes Administration Offices, Classrooms, Cafeteria.	\$2,373,922	\$1,677,365	\$2,120,878	\$4,051,287	\$6,172,165	\$10,501,910	61.42%
103B	Stand-Alone Gym	\$48,074	\$76,165	\$133,953	\$124,239	\$258,192	\$1,415,875	91.23%
103C	Music Building	\$23,481	\$153,995	\$58,785	\$177,476	\$236,261	\$1,052,490	83.14%
<b>Sub Total for Permanent Building(s):</b>		<b>\$2,445,477</b>	<b>\$1,907,525</b>	<b>\$2,313,616</b>	<b>\$4,353,002</b>	<b>\$6,666,618</b>	<b>\$12,970,278</b>	
<b>Total for Site:</b>		<b>\$4,032,915</b>	<b>\$1,919,164</b>	<b>\$2,479,358</b>	<b>\$5,952,079</b>	<b>\$8,431,437</b>	<b>\$12,970,278</b>	<b>54.11%</b>

## 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	\$0	\$92,837	\$1,488,147	\$1,580,984	39.20 %
Roofing	\$883,286	\$0	\$0	\$0	\$0	\$883,286	21.90 %
Structural	\$6,455	\$0	\$0	\$0	\$0	\$6,455	0.16 %
Exterior	\$0	\$0	\$21,167	\$9,629	\$47,629	\$78,424	1.94 %
Interior	\$0	\$0	\$129,161	\$215,391	\$4,526	\$349,078	8.66 %
Mechanical	\$0	\$11,622	\$0	\$0	\$0	\$11,622	0.29 %
Electrical	\$0	\$27,627	\$0	\$0	\$0	\$27,627	0.69 %
Plumbing	\$0	\$0	\$0	\$28,605	\$0	\$28,605	0.71 %
Fire and Life Safety	\$279,627	\$0	\$0	\$0	\$0	\$279,627	6.93 %
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Specialties	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Crawlspace	\$0	\$0	\$0	\$0	\$787,209	\$787,209	19.52 %
<b>Total:</b>	\$1,169,367	\$39,248	\$150,327	\$346,462	\$2,327,510	\$4,032,915	

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

Site	-	\$1,580,984
Roofing	-	\$883,286
Interior	-	\$349,078

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

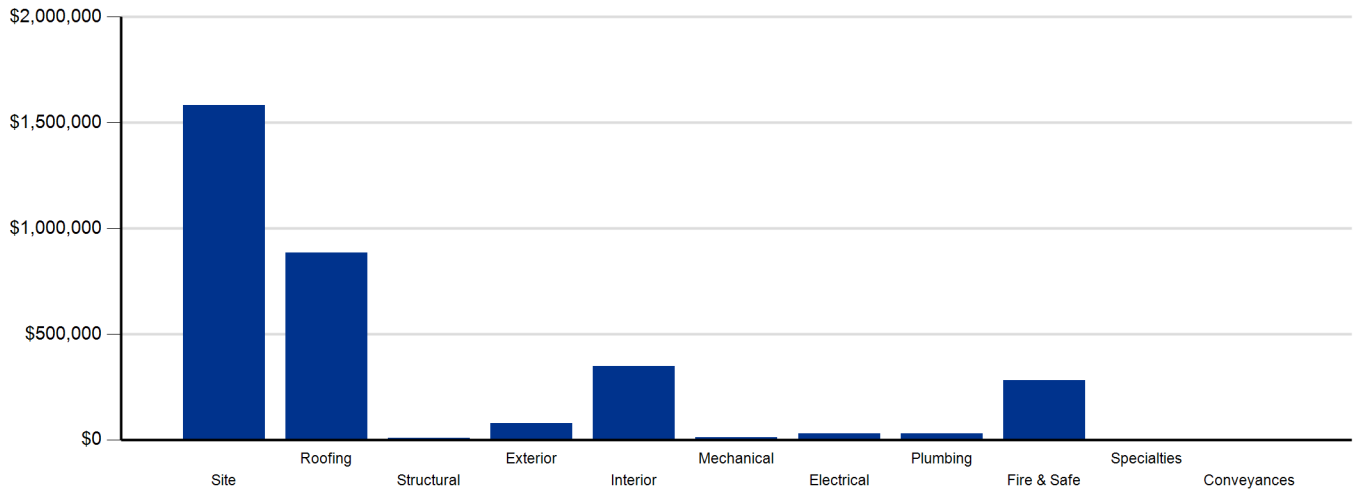


Figure 1: System Deficiencies

## 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 2023	Year 2 2024	Year 3 2025	Year 4 2026	Year 5 2027	
Site	\$0	\$0	\$0	\$0	\$0	\$0
Roofing	\$0	\$0	\$0	\$0	\$0	\$0
Exterior	\$0	\$0	\$0	\$0	\$0	\$0
Interior	\$0	\$0	\$40,487	\$4,033	\$167,160	\$211,680
Mechanical	\$0	\$0	\$135,042	\$28,228	\$478,320	\$641,590
Electrical	\$0	\$0	\$29,944	\$0	\$709,969	\$739,913
Plumbing	\$0	\$0	\$99,263	\$0	\$77,899	\$177,162
Fire and Life Safety	\$0	\$0	\$0	\$0	\$69,602	\$69,602
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$79,217	\$0	\$0	\$0	\$79,217
Crawlspace	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$0</b>	<b>\$79,217</b>	<b>\$304,736</b>	<b>\$32,261</b>	<b>\$1,502,950</b>	<b>\$1,919,164</b>

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 2028	Year 7 2029	Year 8 2030	Year 9 2031	Year 10 2032		
Site	\$0	\$0	\$0	\$0	\$0	\$165,742	\$165,742	\$165,742
Roofing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Exterior	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Interior	\$211,680	\$0	\$0	\$33,827	\$0	\$164,157	\$197,984	\$409,664
Mechanical	\$641,590	\$0	\$0	\$97,342	\$191,385	\$440,892	\$729,619	\$1,371,209
Electrical	\$739,913	\$0	\$0	\$26,387	\$0	\$84,986	\$111,373	\$851,286
Plumbing	\$177,162	\$1,265,692	\$0	\$2,384	\$0	\$28,605	\$1,296,681	\$1,473,843
Fire and Life Safety	\$69,602	\$0	\$0	\$7,377	\$0	\$0	\$7,377	\$76,979
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$79,217	\$0	\$0	\$0	\$0	\$0	\$0	\$79,217
Crawlspace	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$1,919,164</b>	<b>\$1,265,692</b>	<b>\$0</b>	<b>\$167,317</b>	<b>\$191,385</b>	<b>\$884,382</b>	<b>\$2,508,776</b>	<b>\$4,427,940</b>

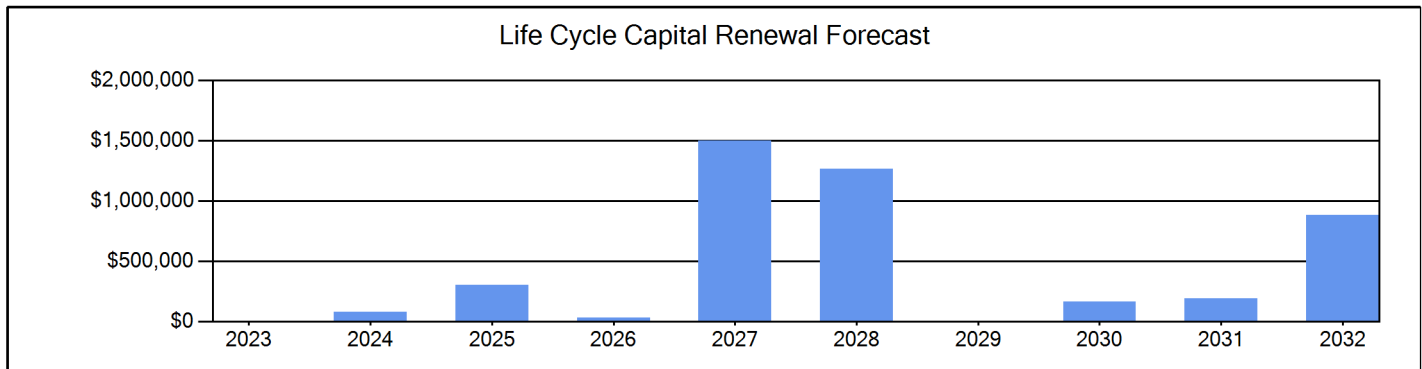


Figure 2: Ten Year Capital Renewal Forecast

## Facility Condition Assessment Score

The Facility Condition Assessment Score (FCAS) is used throughout the facility condition assessment industry as a general indicator of a building’s health. The FCAS is used to benchmark the relative condition of a group of sites. The FCAS is derived by dividing the total repair cost, site-related repairs, by the total replacement cost and subtracting it from 100. A facility with a lower FCAS percentage has more need, or higher priority, than a facility with a lower FCAS. It should be noted that costs in the New Construction category are not included in the FCAS calculation.

$$FCAS = 100 - (\text{Total Repair Cost} / \text{Replacement Cost})$$

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 FCAS was calculated by dividing the 5-year need by the total replacement cost. Costs associated with new construction are not included in the FCAS calculation.

- Very Unsatisfactory (0-35)
- Unsatisfactory (36-50)
- Average (51-65)
- Satisfactory (66-80)
- Very Satisfactory (81-100)

Financial modeling has shown that over a 30-year period, it is more cost effective to replace than repair sites with a FCAS of 35 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 FCAS 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, FCAS 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.

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 Austin area. The estimated replacement cost for this facility is \$12,970,278. For planning purposes, the total 5-year need at the Barton Hills ES is \$5,952,079 (Life Cycle Years 1-5 plus the FCA deficiency cost). The Barton Hills ES facility has a 5-year FCA of 54.11%.

**5-Year Need vs. Replacement**

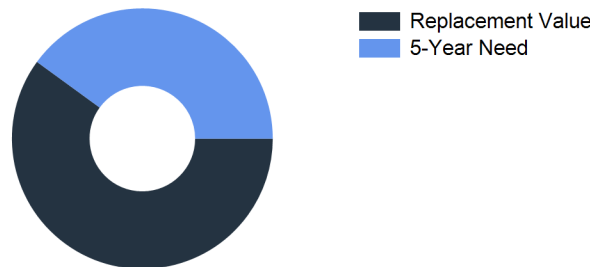


Figure 3: 5-Year FCA



**Barton Hills ES - Deficiency Summary**

**Site Level Deficiencies**

**Site**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Fencing Replacement (4' Chain Link Fence)	Capital Renewal	1,967	LF	4	\$92,837	1516
<b>PROGRAM DEFICIENCIES</b>	ADA Compliance	595,159	EACH	5	\$768,328	1624
<b>Note:</b> Site/Exterior Improvements Estimated Construction Cost for Site Plan Area C \$ 243,031.03 Estimated Construction Cost Subtotal for Site/Exterior Improvements Excluding Division 1 \$ 243,031.03						
<b>Interior Improvements</b> Estimated Construction Cost for Floor Plan Area 5A & 5B (2x) (Building A) \$ 149,012.43 Estimated Construction Cost for Floor Plan Area 6A & 6B (2x) (Building A) \$ 170,845.34 Estimated Construction Cost for Floor Plan Area 7 (Building A) \$ 10,197.86 Estimated Construction Cost for Floor Plan Area 8 (Building A) \$ 22,072.15 Estimated Construction Cost Subtotal for Interior Improvements Excluding Division 1 \$ 352,127.78						
<b>Location:</b> Reference AISD ADA Report						
<b>PUBLIC DEFICIENCIES</b>	ADA Compliance	412,664	EACH	5	\$708,536	1623
<b>Note:</b> Site/Exterior Improvements Estimated Construction Cost for Site Plan Area A \$22,171.93 Estimated Construction Cost for Site Plan Area B \$ 260,328.60 Estimated Construction Cost Subtotal for Site/Exterior Improvements Excluding Division 1 \$ 282,500.53						
<b>Interior Improvements</b> Estimated Construction Cost for Floor Plan Area 1 (Building A) \$ 19,815.07 Estimated Construction Cost for Floor Plan Area 2 (Building A) \$ 32,408.80 Estimated Construction Cost for Floor Plan Area 3 (Building A) \$ 68,457.20 Estimated Construction Cost for Floor Plan Area 4 (Building A) \$ 9,482.63 Estimated Construction Cost Subtotal for Interior Improvements Excluding Division 1 \$ 130,163.71						
<b>Location:</b> Reference AISD ADA Report						
<b>TAS ACCESSIBILITY DEFICIENCIES</b>	ADA Compliance	6,571	EACH	5	\$11,282	1625
<b>Note:</b> Interior Improvements Estimated Construction Cost for Floor Plan Area 9 (Building A) (REVISED: Upgraded for TAS compliance) \$ - Estimated Construction Cost for Floor Plan Area 10 (Building B) \$ 6,570.90 Estimated Construction Cost Subtotal for TAS Improvements Excluding Division 1 \$ 6,570.90 Total Estimated Construction Cost Subtotal for TAS Deficiency Improvements \$6,570.90						
<b>Location:</b> Reference AISD ADA report						
<b>Sub Total for System</b>		<b>4</b>	<b>items</b>		<b>\$1,580,984</b>	

**Structural**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Structural Study Recommended	Deferred Maintenance	1	Job	1	\$6,455	6846
<b>Note:</b> Structural study to detail scope of work based on the 2017 crawlspace deficiencies provided by AISD						
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$6,455</b>	
<b>Sub Total for School and Site Level</b>		<b>5</b>	<b>items</b>		<b>\$1,587,439</b>	

**Building: 103A - Main building includes Administration Offices, Classrooms, Cafeteria.**

**Roofing**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
AISD ROOFING P1	Capital Renewal	71,711	EACH	1	\$71,709	1793
AISD ROOFING P2	Capital Renewal	12,196	EACH	1	\$12,196	1794
AISD ROOFING P3	Capital Renewal	774,633	EACH	1	\$774,616	1795
AISD ROOFING P5	Capital Renewal	24,765	EACH	1	\$24,764	1796
<b>Sub Total for System</b>		<b>4</b>	<b>items</b>		<b>\$883,286</b>	

**Exterior**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Exterior Door Hardware Replacement	Capital Renewal	8	Ea.	3	\$21,167	1518
Exterior Painting (Bldg SF)	Capital Renewal	5,500	SF	4	\$9,629	1519
<b>Note:</b> Interview concern						
Exterior Cleaning	Deferred Maintenance	12,000	SF Wall	5	\$46,475	1520
<b>Sub Total for System</b>		<b>3</b>	<b>items</b>		<b>\$77,270</b>	

**Interior**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Interior Door Hardware Replacement	Capital Renewal	83	Door	3	\$123,222	1517
Acoustical Ceiling Tile Replacement	Capital Renewal	950	SF	4	\$3,208	1521
<b>Note:</b> The ceiling has been leaking again this year throughout the building. The cafeteria leaks bad. There are a few spots in the hallways. Ceiling leaks were fixed around skylight areas						
Vinyl Composition Tile Replacement	Capital Renewal	25,583	SF	4	\$209,210	1522
<b>Sub Total for System</b>		<b>3</b>	<b>items</b>		<b>\$335,641</b>	

**Electrical**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Panelboard Replacement	Capital Renewal	4	Ea.	2	\$11,128	1053
Panelboard Replacement	Capital Renewal	3	Ea.	2	\$16,499	1054
<b>Sub Total for System</b>		<b>2</b>	<b>items</b>		<b>\$27,627</b>	

**Plumbing**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Non-Refrigerated Drinking Fountain Replacement	Capital Renewal	12	Ea.	4	\$28,605	1515
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$28,605</b>	

**Fire and Life Safety**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Install Fire Sprinklers	Functional Deficiency	31,979	SF	1	\$234,285	1055
<b>Note:</b> no fire sprinkler in place						
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$234,285</b>	

**Crawlspace**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	155,650	Ea.	5	\$182,866	6847
<b>Note:</b> CRAWL SPACE ACCESS/VENTILATION - improve ventilation - 27956 GSF						
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	38,913	Ea.	5	\$45,717	6848
<b>Note:</b> STANDARD FOUNDATIONS - minor honeycombing - 27956 GSF						
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	38,913	Ea.	5	\$45,717	6849
<b>Note:</b> SUSPENDED FLOOR BEAMS - moderate honeycombing - 27956 GSF						
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	233,476	Ea.	5	\$274,300	6850
<b>Note:</b> SUSPENDED FLOOR SLABS - repair cracks, spalling & reinforcement - 27956 GSF						
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	125,273	Ea.	5	\$147,177	6851
<b>Note:</b> CRAWL SPACE, EXPOSED PIPES - Repair pipe leaks, replace degraded pipe insulation and corroded piping - 1 LS						
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	77,825	Ea.	5	\$91,433	6852
<b>Note:</b> CRAWL SPACE, INSULATION - replace insulation. 20% - 27956 GSF						
<b>Sub Total for System</b>		<b>6</b>	<b>items</b>		<b>\$787,209</b>	
<b>Sub Total for Building 103A - Main building includes Administration Offices, Classrooms, Cafeteria.</b>		<b>20</b>	<b>items</b>		<b>\$2,373,922</b>	

**Building: 103B - Stand-Alone Gym**
**Exterior**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Exterior Cleaning	Deferred Maintenance	298	SF Wall	5	\$1,154	1052
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$1,154</b>	

**Interior**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Interior Door Hardware Replacement	Capital Renewal	4	Door	3	\$5,938	1528
Acoustical Ceiling Tile Replacement	Capital Renewal	149	SF	4	\$503	1526
Ceiling Grid Replacement	Capital Renewal	149	SF	4	\$620	1525
Interior CMU Walls Repainting	Capital Renewal	1,790	SF	4	\$1,849	1051
<b>Location:</b> gym						

**Interior**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Interior Ceiling Repainting	Deferred Maintenance	149	SF	5	\$310	1527
Interior Ceramic Wall Repainting	Deferred Maintenance	1,194	SF Wall	5	\$4,216	1050
<b>Note:</b> re-paint gym						
<b>Location:</b> gym						
<b>Sub Total for System</b>		<b>6</b>	<b>items</b>		<b>\$13,437</b>	

**Mechanical**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
HVAC VAV Box Replacement	Capital Renewal	3	Ea.	2	\$11,622	1524
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$11,622</b>	

**Fire and Life Safety**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Install Fire Sprinklers	Functional Deficiency	2,984	SF	1	\$21,861	1056
<b>Note:</b> no system in place						
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$21,861</b>	
<b>Sub Total for Building 103B - Stand-Alone Gym</b>		<b>9</b>	<b>items</b>		<b>\$48,074</b>	

**Building: 103C - Music Building**

**Fire and Life Safety**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Install Fire Sprinklers	Functional Deficiency	3,205	SF	1	\$23,481	1057
<b>Note:</b> no fire sprinkler system in place						
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$23,481</b>	
<b>Sub Total for Building 103C - Music Building</b>		<b>1</b>	<b>items</b>		<b>\$23,481</b>	
<b>Total for Campus</b>		<b>35</b>	<b>items</b>		<b>\$4,032,915</b>	

**Barton Hills ES - Life Cycle Summary Yrs 1-10**

**Site Level Life Cycle Items**

**Site**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Parking Lot Pavement	Asphalt	45	CAR	\$65,286	10
Roadway Pavement	Concrete Driveways	8,047	SF	\$100,456	10
<b>Sub Total for System</b>		<b>2</b>	<b>items</b>	<b>\$165,742</b>	

**Electrical**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Parking Lot Lighting	Pole Lighting	2	Ea.	\$11,639	5
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>	<b>\$11,639</b>	
<b>Sub Total for Building -</b>		<b>3</b>	<b>items</b>	<b>\$177,381</b>	

**Building: 103A - Main building includes Administration Offices, Classrooms, Cafeteria.**

**Interior**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Carpeting	Carpet	3,198	SF	\$40,487	3
Wall Painting and Coating	Painting/Staining (Bldg SF)	1,599	SF	\$7,165	5
Acoustical Suspended Ceilings	Ceilings - Acoustical Tiles	28,781	SF	\$97,186	5
Suspended Plaster and	Painted ceilings	3,198	SF	\$6,660	8
Compartments and Cubicles	Toilet Partitions	12	Stall	\$24,198	8
Acoustical Suspended Ceilings	Ceilings - Acoustical Grid System	28,781	SF	\$119,851	10
<b>Sub Total for System</b>		<b>6</b>	<b>items</b>	<b>\$295,547</b>	

**Mechanical**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Heat Generation	Boiler - Electric (2778 MBH)	1	Ea.	\$85,559	3
Heating System Supplementary Components	Controls - Electronic (Bldg.SF)	31,979	SF	\$49,483	3
Other HVAC Distribution Systems	VFD (10 HP)	2	Ea.	\$11,415	5
Other HVAC Distribution Systems	VFD (10 HP)	2	Ea.	\$11,415	5
	<b>Note:</b> VFD AHU2, 3. ROOM AHU 2, 3.				
Other HVAC Distribution Systems	VFD (15 HP)	2	Ea.	\$15,117	5
	<b>Note:</b> VFD CHWP #1.2, MAIN MECH.				
Facility Hydronic Distribution	4-Pipe System	31,979	SF	\$77,379	5
	<b>Note:</b> HWB1, HWB#2-06, main mech				
Facility Hydronic Distribution	Pump- 10HP (Ea.)	1	Ea.	\$11,561	5
	<b>Note:</b> HWP#1-06, main mech				
Facility Hydronic Distribution	Pump- 25HP (Ea.)	2	Ea.	\$28,763	5
	<b>Note:</b> CHP#1, 2-06, main mech				
HVAC Air Distribution	Ductwork (Bldg.SF)	31,979	SF	\$253,032	5
Exhaust Air	Roof Exhaust Fan - Small	3	Ea.	\$5,879	5
Exhaust Air	Roof Exhaust Fan - Large	4	Ea.	\$32,145	5
Heat Generation	Boiler - Electric (758 MBH)	1	Ea.	\$44,603	8
Decentralized Cooling	Condenser - Outside Air Cooled (3 Tons)	1	Ea.	\$6,423	8
Decentralized Cooling	Fan Coil - DX Cool w/Electric Heat (3 Ton)	1	Ea.	\$1,970	8
	<b>Note:</b> FCU3-06				
Decentralized Cooling	Heat Pump (10 Ton)	1	Ea.	\$24,044	8
	<b>Note:</b> OPH-3, ROOF				
Central Cooling	Chiller - Outdoor Air Cooled (175 Tons)	1	Ea.	\$191,385	9
HVAC Air Distribution	AHU 10,000 CFM Interior	2	Ea.	\$171,918	10
	<b>Note:</b> AHU#2, 3-06, ROOM AHU 2/3				
HVAC Air Distribution	AHU 2,000 CFM Interior	2	Ea.	\$58,029	10
	<b>Note:</b> BCU#3, 4-05, MAIN MECH, AHU3				
HVAC Air Distribution	AHU 5,000 CFM Interior	1	Ea.	\$43,163	10
	<b>Note:</b> BCU#5-05, STO ADM				
HVAC Air Distribution	VAV Boxes / Terminal Device	32	Ea.	\$123,963	10
	<b>Note:</b> Sometimes heat and AC do not work in the building.				
<b>Sub Total for System</b>		<b>20</b>	<b>items</b>	<b>\$1,247,244</b>	

**Electrical**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Distributed Systems	Public Address System Head End Unit	1	Ea.	\$7,307	3
Audio-Video Systems	PA Communications No Head Unit (Bldg SF)	31,979	SF	\$22,637	3
	<b>Note:</b> Intercom through phone system				
Power Distribution	Panelboard - 120/208 225A	1	Ea.	\$5,500	5
Lighting Fixtures	Light Fixtures (Bldg SF)	31,979	SF	\$586,448	5
Power Distribution	Power Wiring	31,979	SF	\$37,981	5
Power Distribution	Distribution Panels (400 Amps)	1	Ea.	\$16,905	8
Lighting Fixtures	Building Mounted Fixtures (Ea.)	6	Ea.	\$5,410	8
Lighting Fixtures	Canopy Mounted Fixtures (Ea.)	8	Ea.	\$16,664	10
	<b>Sub Total for System</b>	<b>8</b>	<b>items</b>	<b>\$698,852</b>	

**Plumbing**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Plumbing Fixtures	Restroom Lavatory	4	Ea.	\$10,865	3
Plumbing Fixtures	Sink - Service / Mop Sink	3	Ea.	\$2,388	3
Plumbing Fixtures	Toilets	17	Ea.	\$86,010	3
Domestic Water Equipment	Water Heater - Gas - 50 gallon	1	Ea.	\$3,491	5
Plumbing Fixtures	Classroom Lavatory	20	Ea.	\$51,290	5
Domestic Water Equipment	Water Heater - Gas - 100 Gallon	1	Ea.	\$6,384	6
Domestic Water Equipment	Gas Piping System (BldgSF)	31,979	SF	\$1,108,880	6
Domestic Water Piping	Domestic Water Piping System (Bldg.SF)	31,979	SF	\$114,924	6
Sanitary Sewerage Piping	Sanitary Sewer Piping	31,979	SF	\$35,504	6
Plumbing Fixtures	Non-Refrigerated Drinking Fountain	12	Ea.	\$28,605	10
	<b>Sub Total for System</b>	<b>10</b>	<b>items</b>	<b>\$1,448,340</b>	

**Fire and Life Safety**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Fire Detection and Alarm	Fire Alarm	31,979	SF	\$50,777	5
Fire Detection and Alarm	Fire Alarm Panel	1	Ea.	\$6,868	5
	<b>Sub Total for System</b>	<b>2</b>	<b>items</b>	<b>\$57,645</b>	

**Specialties**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Casework	Fixed Cabinetry	9	Room	\$79,217	2
	<b>Sub Total for System</b>	<b>1</b>	<b>items</b>	<b>\$79,217</b>	
	<b>Sub Total for Building 103A - Main building includes Administration Offices, Classrooms, Cafeteria.</b>	<b>47</b>	<b>items</b>	<b>\$3,826,845</b>	

**Building: 103B - Stand-Alone Gym**
**Interior**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Compartments and Cubicles	Toilet Partitions	2	Stall	\$4,033	4
Acoustical Suspended Ceilings	Ceilings - Acoustical Tiles	149	SF	\$503	10
Suspended Plaster and	Painted ceilings	149	SF	\$310	10
Athletic Flooring	Athletic/Sport Flooring	2,835	SF	\$43,493	10
	<b>Sub Total for System</b>	<b>4</b>	<b>items</b>	<b>\$48,339</b>	

**Mechanical**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Heating System Supplementary Components	Controls - Electronic (Bldg.SF)	2,984	SF	\$4,617	4
HVAC Air Distribution	Ductwork (Bldg.SF)	2,984	SF	\$23,611	4
Decentralized Cooling	Fan Coil - DX Cool w/Electric Heat (3 Ton)	2	Ea.	\$3,940	5
	<b>Note:</b> BCU#1-06, BCU#2-06				
Facility Hydronic Distribution	4-Pipe System	2,984	SF	\$7,220	5
	<b>Note:</b> gym				
Exhaust Air	Roof Exhaust Fan - Small	2	Ea.	\$3,919	10
Exhaust Air	Roof Exhaust Fan - Large	3	Ea.	\$24,109	10
	<b>Sub Total for System</b>	<b>6</b>	<b>items</b>	<b>\$67,416</b>	

**Electrical**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Lighting Fixtures	Building Mounted Fixtures (Ea.)	2	Ea.	\$1,803	5
Power Distribution	Panelboard - 120/240 225A	1	Ea.	\$7,823	5
Lighting Fixtures	Canopy Mounted Fixtures (Ea.)	2	Ea.	\$4,166	10

**Electrical**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Lighting Fixtures	Light Fixtures (Bldg SF)	2,984	SF	\$54,722	10
Power Distribution	Power Wiring	2,984	SF	\$3,544	10
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>	<b>\$72,059</b>	

**Plumbing**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Sanitary Sewerage Piping	Sanitary Sewer Piping	2,984	SF	\$3,313	5
Domestic Water Piping	Domestic Water Piping System (Bldg.SF)	2,984	SF	\$10,724	5
Plumbing Fixtures	Restroom Lavatory	1	Ea.	\$2,716	5
Plumbing Fixtures	Showers	1	Ea.	\$1,306	5
Plumbing Fixtures	Toilets	1	Ea.	\$5,059	5
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>	<b>\$23,119</b>	
<b>Sub Total for Building 103B - Stand-Alone Gym</b>		<b>20</b>	<b>items</b>	<b>\$210,933</b>	

**Building: 103C - Music Building**
**Interior**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Acoustical Suspended Ceilings	Ceilings - Acoustical Tiles	3,045	SF	\$10,282	5
Suspended Plaster and	Painted ceilings	160	SF	\$333	5
Wall Painting and Coating	Painting/Staining (Bldg SF)	3,045	SF	\$13,644	5
Carpeting	Carpet	3,045	SF	\$38,550	5
Interior Door Supplementary Components	Door Hardware	2	Door	\$2,969	8
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>	<b>\$65,779</b>	

**Mechanical**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Heating System Supplementary Components	Controls - Electronic (Bldg.SF)	3,205	SF	\$4,959	5
HVAC Air Distribution	VAV Boxes / Terminal Device	4	Ea.	\$15,495	5
Other HVAC Distribution Systems	VFD (5 HP)	1	Ea.	\$4,393	8
HVAC Air Distribution	Roof Top Unit - DX Gas (5 Ton)	1	Ea.	\$15,909	8
Facility Hydronic Distribution	4-Pipe System	3,205	SF	\$7,755	10
Exhaust Air	Roof Exhaust Fan - Large	1	Ea.	\$8,036	10
<b>Sub Total for System</b>		<b>6</b>	<b>items</b>	<b>\$56,548</b>	

**Electrical**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Lighting Fixtures	Light Fixtures (Bldg SF)	3,205	SF	\$58,775	5
Audio-Video Systems	PA Communications No Head Unit (Bldg SF)	3,205	SF	\$2,269	8
	<b>Note:</b> provided by main building A				
Lighting Fixtures	Building Mounted Fixtures (Ea.)	2	Ea.	\$1,803	8
Lighting Fixtures	Canopy Mounted Fixtures (Ea.)	1	Ea.	\$2,083	10
Power Distribution	Power Wiring	3,205	SF	\$3,807	10
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>	<b>\$68,737</b>	

**Plumbing**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Plumbing Fixtures	Non-Refrigerated Drinking Fountain	1	Ea.	\$2,384	8
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>	<b>\$2,384</b>	

**Fire and Life Safety**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Fire Detection and Alarm	Fire Alarm Panel	1	Ea.	\$6,868	5
Fire Detection and Alarm	Fire Alarm	3,205	SF	\$5,089	5
	<b>Note:</b> provided in building A				
Security System Component	Security Alarm System	3,205	SF	\$7,377	8
	<b>Note:</b> provided by main building A				
<b>Sub Total for System</b>		<b>3</b>	<b>items</b>	<b>\$19,334</b>	
<b>Sub Total for Building 103C - Music Building</b>		<b>20</b>	<b>items</b>	<b>\$212,782</b>	
<b>Total for: Barton Hills ES</b>		<b>90</b>	<b>items</b>	<b>\$4,427,942</b>	

## Supporting Photos

### General Site Photos



Broken classroom interior lighting and ceiling tiles



Aged aluminum windows



Aged floor tiles



Peeling wall paint