



# FACILITY CONDITION ASSESSMENT

*Campbell ES* | February 2022



## Executive Summary

Campbell ES is located at 2613 Rogers Ave in Austin, Texas. The oldest building is 28 years old (at time of 2020 assessment). It comprises 61,793 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 \$2,405,051. 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 Campbell ES the ten-year need is \$10,496,540.

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 Campbell ES facility has a 5-year FCA score of 67.71%.

## Summary of Findings

The table below summarizes the condition findings at Campbell 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	\$1,435,137	\$442,805	\$0	\$1,877,942	\$1,877,942	\$0	
<b>Permanent Building(s)</b>								
111A	Main building includes Administration Offices, Classrooms, Cafeteria, & Gym.	\$969,914	\$3,704,489	\$3,944,195	\$4,674,403	\$8,618,598	\$20,292,200	76.96%
<b>Sub Total for Permanent Building(s):</b>		<b>\$969,914</b>	<b>\$3,704,489</b>	<b>\$3,944,195</b>	<b>\$4,674,403</b>	<b>\$8,618,598</b>	<b>\$20,292,204</b>	
<b>Total for Site:</b>		<b>\$2,405,051</b>	<b>\$4,147,294</b>	<b>\$3,944,195</b>	<b>\$6,552,345</b>	<b>\$10,496,540</b>	<b>\$20,292,204</b>	<b>67.71%</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	\$0	\$1,435,137	\$1,435,137	59.67 %
Roofing	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Structural	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Exterior	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Interior	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Mechanical	\$0	\$301,645	\$169,591	\$21,584	\$0	\$492,820	20.49 %
Electrical	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Plumbing	\$0	\$2,135	\$0	\$22,257	\$0	\$24,393	1.01 %
Fire and Life Safety	\$452,701	\$0	\$0	\$0	\$0	\$452,701	18.82 %
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Specialties	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Crawlspace	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
<b>Total:</b>	\$452,701	\$303,780	\$169,591	\$43,841	\$1,435,137	\$2,405,051	

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

Site	-	\$1,435,137
Mechanical	-	\$492,820
Fire and Life Safety	-	\$452,701

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

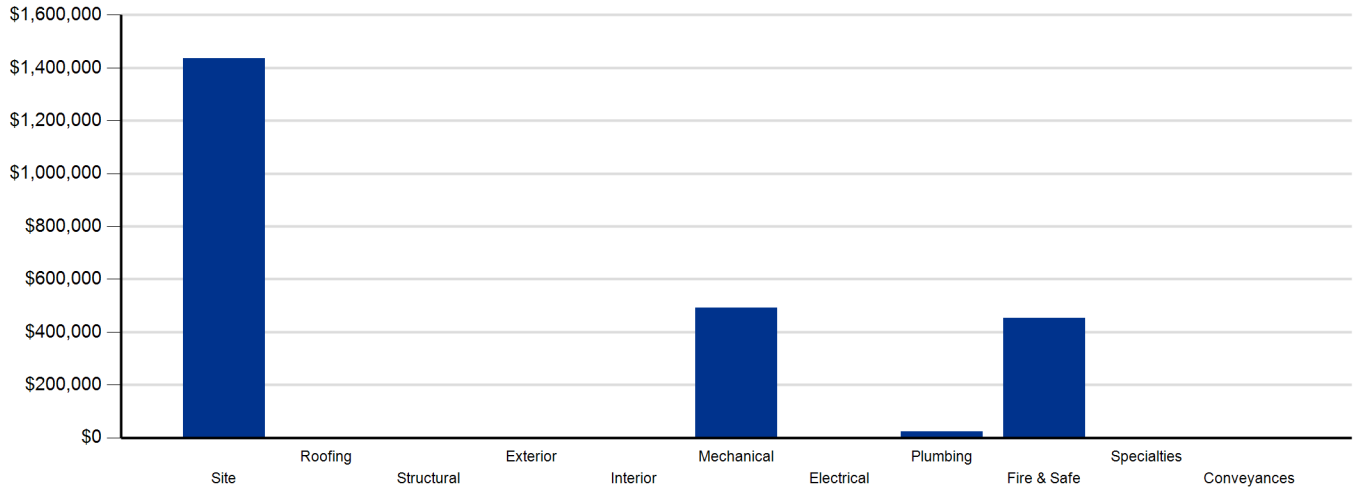


Figure 1: System Deficiencies

## 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	\$216,834	\$0	\$110,253	\$115,718	\$442,805
Roofing	\$0	\$0	\$0	\$0	\$0	\$0
Exterior	\$0	\$0	\$0	\$0	\$130,727	\$130,727
Interior	\$0	\$55,375	\$0	\$253,868	\$1,035,180	\$1,344,423
Mechanical	\$0	\$1,066,198	\$0	\$0	\$513,162	\$1,579,360
Electrical	\$0	\$0	\$0	\$0	\$199,799	\$199,799
Plumbing	\$0	\$0	\$2,809	\$89,069	\$94,886	\$186,764
Fire and Life Safety	\$0	\$0	\$0	\$0	\$104,982	\$104,982
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$158,434	\$158,434
Crawlspace	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$0</b>	<b>\$1,338,407</b>	<b>\$2,809</b>	<b>\$453,190</b>	<b>\$2,352,888</b>	<b>\$4,147,294</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	\$442,805	\$0	\$0	\$0	\$0	\$0	\$0	\$442,805
Roofing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Exterior	\$130,727	\$0	\$0	\$0	\$0	\$149,191	\$149,191	\$279,918
Interior	\$1,344,423	\$0	\$0	\$0	\$55,375	\$66,352	\$121,727	\$1,466,150
Mechanical	\$1,579,360	\$0	\$0	\$106,781	\$0	\$22,383	\$129,164	\$1,708,524
Electrical	\$199,799	\$0	\$0	\$0	\$0	\$1,133,175	\$1,133,175	\$1,332,974
Plumbing	\$186,764	\$0	\$0	\$0	\$0	\$2,452,142	\$2,452,142	\$2,638,906
Fire and Life Safety	\$104,982	\$0	\$0	\$0	\$0	\$0	\$0	\$104,982
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$158,434	\$0	\$0	\$0	\$0	\$0	\$0	\$158,434
Crawlspace	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$4,147,294</b>	<b>\$0</b>	<b>\$0</b>	<b>\$106,781</b>	<b>\$55,375</b>	<b>\$3,823,243</b>	<b>\$3,985,399</b>	<b>\$8,132,693</b>

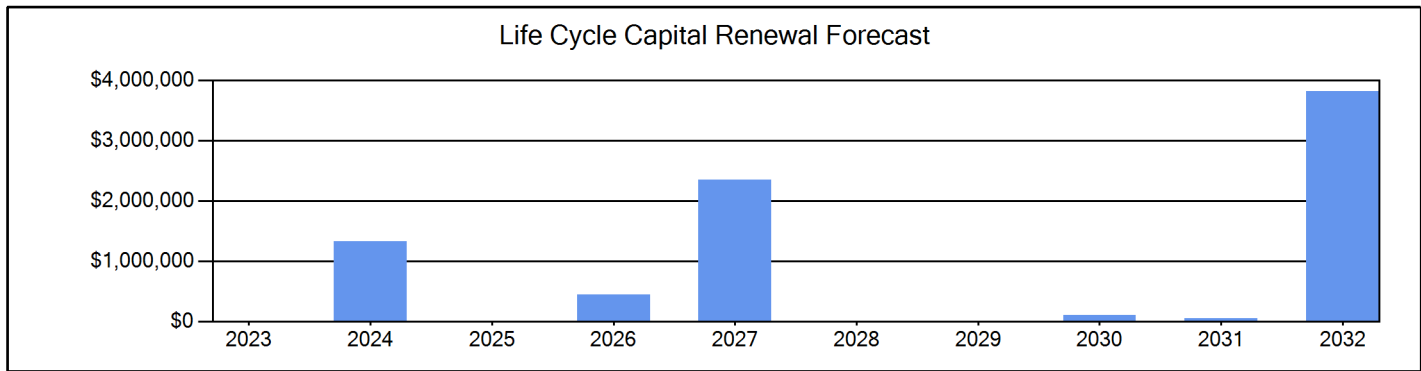


Figure 2: Ten Year Capital Renewal Forecast

## 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 \$20,292,204. For planning purposes, the total 5-year need at the Campbell ES is \$6,552,345 (Life Cycle Years 1-5 plus the FCA deficiency cost). The Campbell ES facility has a 5-year FCA of 67.71%.

5-Year Need vs. Replacement

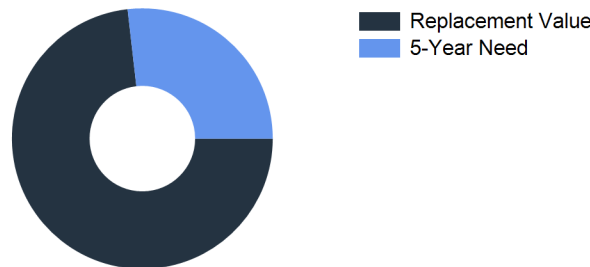


Figure 3: 5-Year FCA



## Campbell ES - Deficiency Summary

### Site Level Deficiencies

#### Site

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
PROGRAM DEFICIENCIES	ADA Compliance	330,410	EACH	5	\$567,308	4759
PUBLIC DEFICIENCIES	ADA Compliance	168,244	EACH	5	\$288,872	4758
TAS ACCESSIBILITY DEFICIENCIES	ADA Compliance	337,195	EACH	5	\$578,957	4760
	<b>Sub Total for System</b>	<b>3</b>	<b>items</b>		<b>\$1,435,137</b>	
	<b>Sub Total for School and Site Level</b>	<b>3</b>	<b>items</b>		<b>\$1,435,137</b>	

### Building: 111A - Main building includes Administration Offices, Classrooms, Cafeteria, & Gym.

#### Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Fan Coil HVAC Component Replacement <b>Note:</b> R-22 refrigerant <b>Location:</b> MDF RM	Capital Renewal	1	Ea.	2	\$2,068	4720
Fan Coil Unit Replacement <b>Note:</b> Cafe	Capital Renewal	2	Ea.	2	\$18,926	4721
Heat Pump HVAC Component Replacement <b>Note:</b> Water source heat pump unit uses R-22 refrigerant and is obsolete <b>Location:</b> Throughout the classroom	Capital Renewal	27	Ea.	2	\$240,506	4722
Package Roof Top Unit Replacement <b>Note:</b> Uses R-22 refrigerant and is obsolete	Capital Renewal	1	Ea.	2	\$24,236	4724
Package Roof Top Unit Replacement	Capital Renewal	1	Ea.	2	\$15,909	4725
Kitchen Exhaust Hood Replacement	Capital Renewal	2	Ea.	3	\$22,383	4730
Large Diameter Exhausts/Hoods Replacement	Capital Renewal	15	Ea.	3	\$120,544	4726
Make Up Air Equipment Replacement	Capital Renewal	3	Ea.	3	\$26,665	4723
Ceiling Exhaust Fan Replacement	Capital Renewal	1	Ea.	4	\$487	4727
Kitchen Air/Exhaust Replacement	Capital Renewal	2	Ea.	4	\$21,097	4728
	<b>Sub Total for System</b>	<b>10</b>	<b>items</b>		<b>\$492,820</b>	

#### Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Water Heater Replacement	Capital Renewal	1	Ea.	2	\$2,135	4717
Custodial Mop Or Service Sink Replacement	Capital Renewal	7	Ea.	4	\$5,571	4718
Non-Refrigerated Drinking Fountain Replacement	Capital Renewal	7	Ea.	4	\$16,686	4719
	<b>Sub Total for System</b>	<b>3</b>	<b>items</b>		<b>\$24,393</b>	

#### Fire and Life Safety

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Install Fire Sprinklers <b>Note:</b> Missing	Functional Deficiency	61,792	SF	1	\$452,701	4729
	<b>Sub Total for System</b>	<b>1</b>	<b>items</b>		<b>\$452,701</b>	
	<b>Sub Total for Building 111A - Main building includes Administration Offices, Classrooms, Cafeteria, &amp; Gym</b>	<b>14</b>	<b>items</b>		<b>\$969,914</b>	
	<b>Total for Campus</b>	<b>17</b>	<b>items</b>		<b>\$2,405,051</b>	

## Campbell ES - 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	33,720	SF	\$216,834	2
Fences and Gates	Fencing - Chain Link (4 Ft)	2,336	LF	\$110,253	4
Playfield Areas	ES Playgrounds	1	Ea.	\$22,348	5
Parking Lot Pavement	Asphalt	36	CAR	\$52,229	5
Pedestrian Pavement	Sidewalks - Concrete	3,632	SF	\$41,141	5
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>	<b>\$442,804</b>	
<b>Sub Total for Building -</b>		<b>5</b>	<b>items</b>	<b>\$442,804</b>	

### Building: 111A - Main building includes Administration Offices, Classrooms, Cafeteria, & Gym.

#### Exterior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Exterior Wall Veneer	Exterior Painting - Bldg SF basis	55,613	SF	\$97,364	5
Exterior Entrance Doors	Steel - Insulated and Painted	9	Door	\$33,363	5
Exterior Operating Windows	Aluminum - Windows per SF	1,335	SF	\$133,135	10
Exterior Operating Windows	Aluminum - Windows per SF	111	SF	\$11,070	10
Exterior Operating Windows	Aluminum - Windows per SF	50	SF	\$4,986	10
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>	<b>\$279,918</b>	

#### Interior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Wall Painting and Coating	Painting/Staining (Bldg SF)	12,358	SF	\$55,375	2
Interior Door Supplementary Components	Door Hardware	171	Door	\$253,868	4
Acoustical Suspended Ceilings	Ceilings - Acoustical Grid System	46,344	SF	\$192,988	5
Acoustical Suspended Ceilings	Ceilings - Acoustical Tiles	46,344	SF	\$156,492	5
Suspended Plaster and	Painted ceilings	6,179	SF	\$12,868	5
Resilient Flooring	Vinyl Composition Tile Flooring	49,434	SF	\$404,257	5
Wood Flooring	Wood Flooring - All Types	1,236	SF	\$26,623	5
Interior Swinging Doors	Wooden Door	129	Door	\$241,952	5
Wall Painting and Coating	Painting/Staining (Bldg SF)	12,358	SF	\$55,375	9
Athletic Flooring	Athletic/Sport Flooring	4,325	SF	\$66,352	10
<b>Sub Total for System</b>		<b>10</b>	<b>items</b>	<b>\$1,466,151</b>	

#### Mechanical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Hydronic Distribution Systems	Ground Source Loop Field Pipe	82	Ton	\$1,066,198	2
<b>Note:</b> 40% of building is Ground Source and 60% are RTU's. No chillers or Boilers were in building					
HVAC Air Distribution	Roof Top Unit - DX Gas (10 Ton)	1	Ea.	\$24,236	5
HVAC Air Distribution	Ductwork (Bldg.SF)	61,792	SF	\$488,926	5
Heat Generation	Boiler - Copper Tube (100 MBH)	1	Ea.	\$11,167	8
<b>Note:</b> Kitchen mechanical room, large water heater					
Heating System Supplementary Components	Controls - Electronic (Bldg.SF)	61,792	SF	\$95,614	8
Exhaust Air	Kitchen Exhaust Hoods	2	Ea.	\$22,383	10
<b>Sub Total for System</b>		<b>6</b>	<b>items</b>	<b>\$1,708,523</b>	

#### Electrical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Electrical Service	Transformer (45 KVA)	1	Ea.	\$5,919	5
Electrical Service	Transformer (75 KVA)	1	Ea.	\$7,287	5
Electrical Service	Transformer (112.5 KVA)	1	Ea.	\$9,908	5
Power Distribution	Panelboard - 120/208 400A	4	Ea.	\$49,366	5
Power Distribution	Panelboard - 120/208 225A	2	Ea.	\$10,999	5
Power Distribution	Panelboard - 277/480 400A	2	Ea.	\$27,782	5
Power Distribution	Panelboard - 277/480 225A	4	Ea.	\$37,490	5
Audio-Video Systems	PA Communications No Head Unit (Bldg SF)	61,792	SF	\$43,741	5
Distributed Systems	Public Address System Head End Unit	1	Ea.	\$7,307	5

**Electrical**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Lighting Fixtures	Light Fixtures (Bldg SF)	61,792	SF	\$1,133,175	10
<b>Sub Total for System</b>		<b>10</b>	<b>items</b>	<b>\$1,332,974</b>	

**Plumbing**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Domestic Water Equipment	Water Heater - Instant 3.2 GPM	2	Ea.	\$2,809	3
Plumbing Fixtures	Restroom Lavatory	22	Ea.	\$59,758	4
Plumbing Fixtures	Showers	1	Ea.	\$1,306	4
Plumbing Fixtures	Toilets	5	Ea.	\$25,297	4
Plumbing Fixtures	Urinals	2	Ea.	\$2,708	4
Plumbing Fixtures	Classroom Lavatory	37	Ea.	\$94,886	5
Domestic Water Equipment	Water Heater - Electric - 30 gallon	1	Ea.	\$2,135	10
Domestic Water Equipment	Gas Piping System (BldgSF)	61,792	SF	\$2,142,654	10
Domestic Water Piping	Domestic Water Piping System (Bldg.SF)	61,792	SF	\$222,064	10
Sanitary Sewerage Piping	Sanitary Sewer Piping	61,792	SF	\$68,603	10
Plumbing Fixtures	Non-Refrigerated Drinking Fountain	7	Ea.	\$16,686	10
<b>Sub Total for System</b>		<b>11</b>	<b>items</b>	<b>\$2,638,908</b>	

**Fire and Life Safety**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Fire Detection and Alarm	Fire Alarm	61,792	SF	\$98,114	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>\$104,982</b>	

**Specialties**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Casework	Fixed Cabinetry	18	Room	\$158,434	5
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>	<b>\$158,434</b>	
<b>Sub Total for Building 111A - Main building includes Administration Offices, Classrooms, Cafeteria, &amp; Gym</b>		<b>45</b>	<b>items</b>	<b>\$7,689,891</b>	
<b>Total for: Campbell ES</b>		<b>50</b>	<b>items</b>	<b>\$8,132,695</b>	

## Supporting Photos

### General Site Photos



Main Entry



Condensing Unit



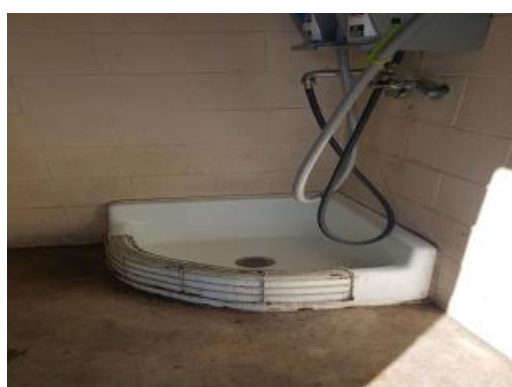
Roof Top Unit



Aged air conditioning unit



Roof Top Unit



Mop Sink



Drinking Fountains



Theater Stage



Library Space