

# FACILITY CONDITION ASSESSMENT



**BUREAU  
VERITAS**

*prepared for*

**Shelby County Board of Education**  
160 South Hollywood Street  
Memphis, Tennessee 38112-4892  
Michelle Stuart



Robert R. Church Elementary  
4100 Millbranch Road  
Memphis, Tennessee 38116

## **PREPARED BY:**

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## **BV PROJECT #:**

163745.23R000-166.354

## **DATE OF REPORT:**

September 30, 2024

## **ON SITE DATE:**

July 30, 2024

**Bureau Veritas**

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# 1. Executive Summary

## Property Overview and Assessment Details

General Information	
Property Type	Elementary School
Main Address	4100 Millbranch Road, Memphis, Tennessee 38116
Site Developed	2001
Site Area	17.85 acres (estimated)
Parking Spaces	89 total spaces all in open lots; 4 of which are accessible
Building Area	81,500 SF
Number of Stories	1 above grade
Outside Occupants / Leased Spaces	None
Date(s) of Visit	July 30, 2024
Management Point of Contact	Ms. Mary Taylor, Shelby County Board of Education (901) 416-5376 <a href="mailto:taylorm15@scsk12.org">taylorm15@scsk12.org</a>
On-site Point of Contact (POC)	Same as above
Assessment and Report Prepared By	Dalton W Bryan
Reviewed By	Al Diefert Technical Report Reviewer For Andy Hupp Program Manager <a href="mailto:Andy.Hupp@bureauveritas.com">Andy.Hupp@bureauveritas.com</a> 800.733.0660 x7296632
AssetCalc Link	Full dataset for this assessment can be found at: <a href="https://www.assetcalc.net/">https://www.assetcalc.net/</a>

## Significant/Systemic Findings and Deficiencies

### Historical Summary

This site was developed in 2001 as an Elementary School and has remained as such since that time.

### Architectural

The structure is comprised of CMU and steel with a brick veneer and flat roofs. The interiors are typical for a school building with VCT flooring, ACT suspended ceilings, and painted walls. No critical defects were observed during the assessment except for the ACT ceilings, which are badly damaged from condensation and other water intrusion issues. During the assessment the roof was nearing the end of a new EPDM roof installation.

### Mechanical, Electrical, Plumbing and Fire (MEPF)

Most of the fire suppression/ protection, electrical and plumbing systems are contemporary with the construction of the building. Upgrades to the heating and cooling systems, such as a chiller and split systems, have been made in recent years.

### Site

Much of the site is primarily open grassy fields with asphalt parking lots surrounding the building. The parking lots are worn with significant loss to striping and topcoat with webbing and damage to the asphalt. The grounds are illuminated via pole and building mounted lighting.

### Recommended Additional Studies

No additional studies recommended at this time.

## Facility Condition Index (FCI)

One of the major goals of the FCA is to calculate each building's Facility Condition Index (FCI), which provides a theoretical objective indication of a building's overall condition. By definition, the FCI is defined as the ratio of the cost of current needs divided by current replacement value (CRV) of the facility. The chart below presents the industry standard ranges and cut-off points.

### FCI Ranges and Description

<b>0 – 5%</b>	In new or well-maintained condition, with little or no visual evidence of wear or deficiencies.
<b>5 – 10%</b>	Subjected to wear but is still in a serviceable and functioning condition.
<b>10 – 30%</b>	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.
<b>30% and above</b>	Has reached the end of its useful or serviceable life. Renewal is now necessary.

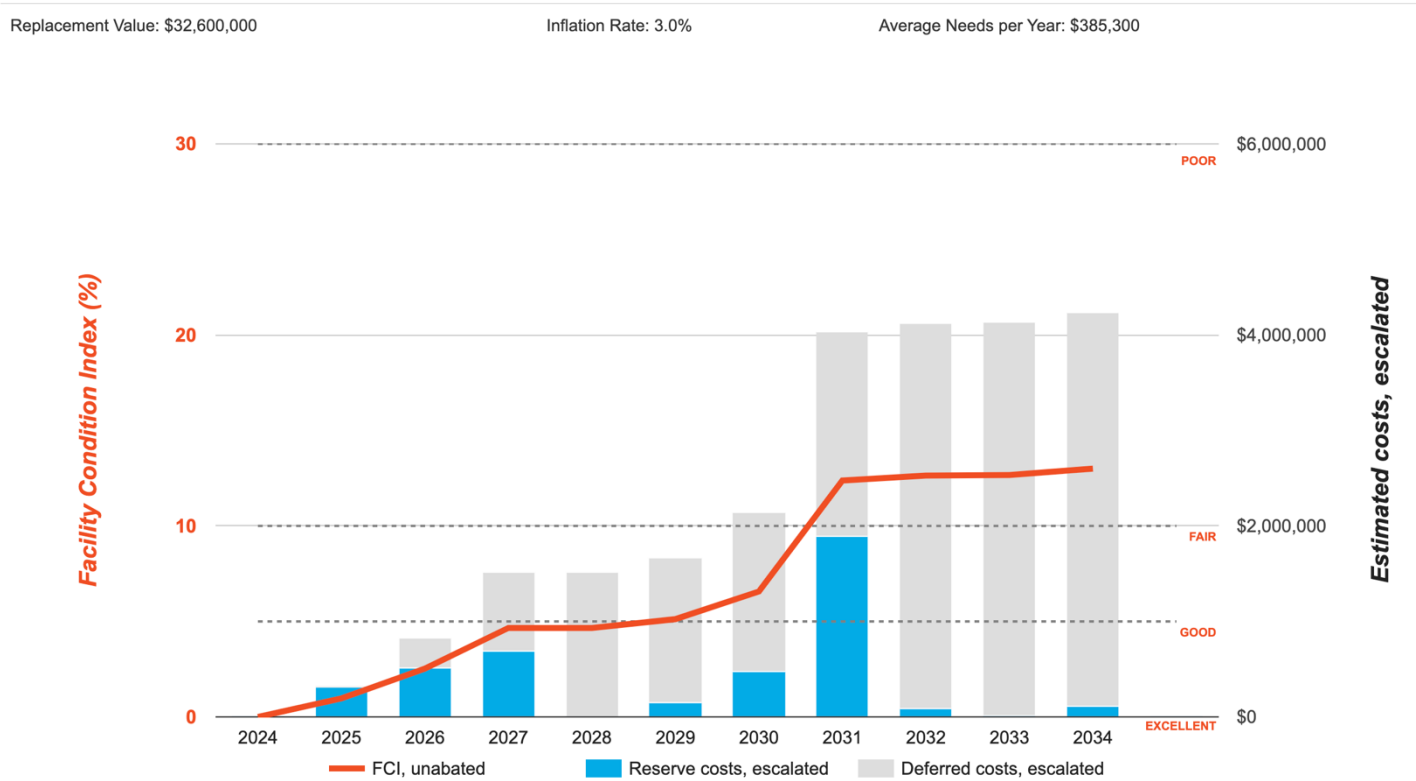
The deficiencies and lifecycle needs identified in this assessment provide the basis for a portfolio-wide capital improvement funding strategy. In addition to the current FCI, extended FCI's have been developed to provide owners the intelligence needed to plan and budget for the "keep-up costs" for their facilities. As such the 3-year, 5-year, and 10-year FCI's are calculated by dividing the anticipated needs of those respective time periods by current replacement value. As a final point, the FCI's ultimately provide more value when used to relatively compare facilities across a portfolio instead of being over-analyzed and scrutinized as stand-alone values. The table below summarizes the individual findings for this FCA:

FCI Analysis   Robert R. Church Elementary(2001)			
Replacement Value \$ 32,600,000	Total SF 81,500	Cost/SF \$ 400	
	Est Reserve Cost		FCI
Current	\$ 0		0.0 %
3-Year	\$ 1,519,500		4.7 %
5-Year	\$ 1,668,700		5.1 %
10-Year	\$ 4,237,600		13.0 %

The vertical bars below represent the year-by-year needs identified for the site. The orange line in the graph below forecasts what would happen to the FCI (left Y axis) over time, assuming zero capital expenditures over the next ten years. The dollar amounts allocated for each year (blue bars) are associated with the values along the right Y axis.

Needs by Year with Unaddressed FCI Over Time



FCI Analysis: Robert R. Church Elementary



## Immediate Needs

There are no immediate needs to report.

Key Findings

	<p><b>Parking Lots in Poor condition.</b></p> <p>Pavement, Asphalt Robert R. Church Elementary Site</p> <p>Uniformat Code: G2020 Recommendation: <b>Seal and Stripe in 2025</b></p>	<p>Priority Score: <b>84.8</b></p> <p>Plan Type: Performance/Integrity</p> <p>Cost Estimate: \$36,000</p> <p>\$\$\$\$</p>
<p>Faded - AssetCALC ID: 7956425</p>		
	<p><b>Suspended Ceilings in Poor condition.</b></p> <p>Acoustical Tile (ACT) Robert R. Church Elementary Throughout Building</p> <p>Uniformat Code: C1070 Recommendation: <b>Replace in 2025</b></p>	<p>Priority Score: <b>81.8</b></p> <p>Plan Type: Performance/Integrity</p> <p>Cost Estimate: \$271,300</p> <p>\$\$\$\$</p>
<p>Stained - AssetCALC ID: 7956427</p>		



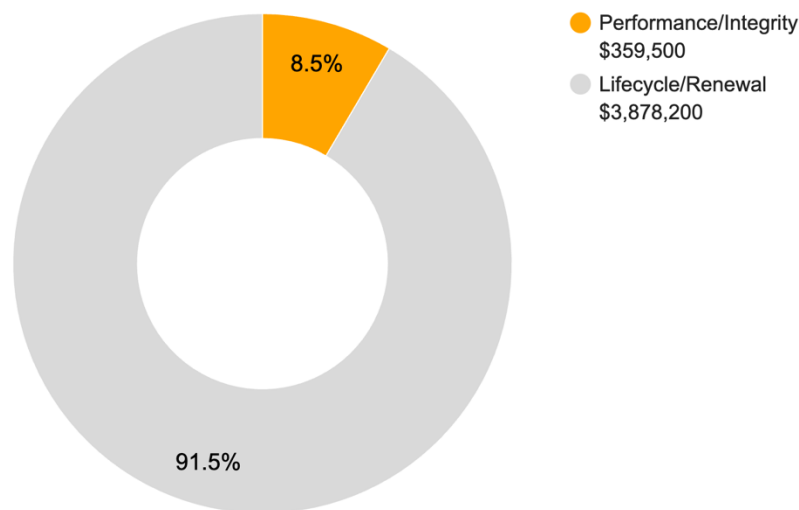
## Plan Types

Each line item in the cost database is assigned a Plan Type, which is the primary reason or rationale for the recommended replacement, repair, or other corrective action. This is the “why” part of the equation. A cost or line item may commonly have more than one applicable Plan Type; however, only one Plan Type will be assigned based on the “best” fit, typically the one with the greatest significance.

### Plan Type Descriptions

<b>Safety</b>	■	An observed or reported unsafe condition that if left unaddressed could result in injury; a system or component that presents potential liability risk.
<b>Performance/Integrity</b>	■	Component or system has failed, is almost failing, performs unreliably, does not perform as intended, and/or poses risk to overall system stability.
<b>Accessibility</b>	■	Does not meet ADA, UFAS, and/or other accessibility requirements.
<b>Environmental</b>	■	Improvements to air or water quality, including removal of hazardous materials from the building or site.
<b>Retrofit/Adaptation</b>	■	Components, systems, or spaces recommended for upgrades in in order to meet current standards, facility usage, or client/occupant needs.
<b>Lifecycle/Renewal</b>	■	Any component or system that is not currently deficient or problematic but for which future replacement or repair is anticipated and budgeted.

### Plan Type Distribution (by Cost)



10-YEAR TOTAL: \$4,237,700

## 2. Building and Site Information



### Systems Summary

System	Description	Condition
<b>Structure</b>	Masonry bearing walls with metal roof deck supported by open-web steel joists and concrete foundation system	Good
<b>Façade</b>	Primary Wall Finish: Brick Windows: Aluminum	Fair
<b>Roof</b>	Flat construction with EPDM finish	Fair
<b>Interiors</b>	Walls: Painted gypsum board, CMU Floors: VCT, tile, Carpet Ceilings: ACT, Unfinished/exposed	Fair
<b>Elevators</b>	None	--
<b>Plumbing</b>	Distribution: Copper supply and cast iron, PVC waste and venting Hot Water: Gas water heaters with integral tanks Fixtures: Toilets, urinals, and sinks in all restrooms	Fair
<b>HVAC</b>	Central System: Boilers, chillers, air handlers feeding VAV and fan coil units Non-Central System: Packaged units, Split-system heat pumps Supplemental components: Make-up air unit	Fair
<b>Fire Suppression</b>	Wet-pipe sprinkler system and fire extinguishers, and kitchen hood system, dedicated computer/server room chemical system	Fair
<b>Electrical</b>	Source and Distribution: Main switchboard with copper wiring Interior Lighting: Linear fluorescent	Fair
<b>Fire Alarm</b>	Alarm panel with smoke detectors, heat detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs	Good

Systems Summary		
<b>Equipment/Special</b>	Commercial kitchen equipment, Commercial laundry equipment	Fair
<b>Site Pavement</b>	Asphalt lots with limited areas of concrete aprons and pavement and adjacent concrete sidewalks, curbs, ramps, and stairs	Poor
<b>Site Development</b>	Property entrance signage Playgrounds Limited areas with park benches, picnic tables, trash receptacles	Fair
<b>Landscaping and Topography</b>	Limited landscaping features including lawns, trees, bushes, and planters Irrigation: Present Low site slopes throughout	Fair
<b>Utilities</b>	Municipal water and sewer Local utility-provided electric and natural gas	Good
<b>Site Lighting</b>	Pole-mounted: HPS Building-mounted: HPS	Fair
<b>Ancillary Structures</b>	None	--
<b>Accessibility</b>	Presently it does not appear an accessibility study is needed for this property. See Appendix D.	
<b>Key Issues and Findings</b>	Stained ceiling tiles, parking lot striping faded	

The table below shows the anticipated costs by trade or building system over the next 20 years.

System Expenditure Forecast						
System	Immediate	Short Term (1-2 yr)	Near Term (3-5 yr)	Med Term (6-10 yr)	Long Term (11-20 yr)	TOTAL
Facade	-	-	\$2,800	\$432,200	\$19,800	\$454,800
Roofing	-	-	-	-	\$1,621,300	\$1,621,300
Interiors	-	\$315,200	\$401,000	\$377,200	\$1,285,300	\$2,378,800
Plumbing	-	-	-	\$214,500	\$1,891,600	\$2,106,100
HVAC	-	\$57,000	\$274,600	\$1,031,200	\$1,340,700	\$2,703,500
Fire Protection	-	\$92,500	-	\$5,300	\$7,200	\$105,000
Electrical	-	-	\$41,500	\$111,000	\$687,600	\$840,100
Fire Alarm & Electronic Systems	-	-	-	\$218,400	-	\$218,400
Equipment & Furnishings	-	\$26,500	\$116,900	\$6,100	\$8,100	\$157,700
Site Utilities	-	-	\$6,600	\$79,800	-	\$86,400
Site Pavement	-	\$334,100	-	\$43,000	\$107,600	\$484,700
Site Development	-	-	-	\$50,100	-	\$50,100
<b>TOTALS (3% inflation)</b>	<b>-</b>	<b>\$825,300</b>	<b>\$843,400</b>	<b>\$2,568,900</b>	<b>\$6,969,300</b>	<b>\$11,206,900</b>

### 3. Property Space Use and Observed Areas

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#### Areas Observed

The interior spaces were observed in order to gain a clear understanding of the property's overall condition. Other areas accessed included the site within the property boundaries, the exterior of the property, and the roofs.

#### Key Spaces Not Observed

All key areas of the property were accessible and observed.

## 4. ADA Accessibility

Generally, Title II of the Americans with Disabilities Act (ADA) prohibits discrimination by entities to access and use of “areas of public accommodations” and “public facilities” on the basis of disability. Regardless of their age, these areas and facilities must be maintained and operated to comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

A public entity (i.e. city governments) shall operate each service, program, or activity so that the service, program, or activity, when viewed in its entirety, is readily accessible to and usable by individuals with disabilities.

However, this does not:

1. Necessarily require a public entity to make each of its existing facilities accessible to and usable by individuals with disabilities;
2. Require a public entity to take any action that would threaten or destroy the historic significance of an historic property; or
3. Require a public entity to take any action that it can demonstrate would result in a fundamental alteration in the nature of a service, program, or activity or in undue financial and administrative burdens. In those circumstances where personnel of the public entity believe that the proposed action would fundamentally alter the service, program, or activity or would result in undue financial and administrative burdens, a public entity has the burden of proving that compliance with 35.150(a) of this part would result in such alteration or burdens. The decision that compliance would result in such alteration or burdens must be made by the head of a public entity or his or her designee after considering all resources available for use in the funding and operation of the service, program, or activity, and must be accompanied by a written statement of the reasons for reaching that conclusion. If an action would result in such an alteration or such burdens, a public entity shall take any other action that would not result in such an alteration or such burdens but would nevertheless ensure that individuals with disabilities receive the benefits or services provided by the public entity.

Removal of barriers to accessibility should be addressed from a liability standpoint in order to comply with federal law, but the barriers may or may not be building code violations. The Americans with Disabilities Act Accessibility Guidelines are part of the ADA federal civil rights law pertaining to the disabled and are not a construction code. State and local jurisdictions have adopted the ADA Guidelines or have adopted other standards for accessibility as part of their construction codes.

During the FCA, Bureau Veritas performed a limited high-level accessibility review of the facility non-specific to any local regulations or codes. The scope of the visual observation was limited to the same areas observed while performing the FCA and the categories set forth in the checklists that are included in the appendix. It is understood by the Client that the limited observations described herein do not comprise a full ADA Compliance Survey, and that such a survey is beyond the scope of this particular assessment. A full measured ADA survey would be required to identify any and all specific potential accessibility issues. Additional clarifications of this limited survey:

- This survey was visual in nature and actual measurements were not taken to verify compliance
- Only a representative sample of areas was observed
- Two overview photos were taken for each subsection regardless of perceived compliance or non-compliance
- Itemized costs for individual non-compliant items are not included in the dataset
- For any “none” boxes checked or reference to “no issues” identified, that alone does not guarantee full compliance

The facility was originally constructed in 2001. The facility has not since been substantially renovated.

No information about complaints or pending litigation associated with potential accessibility issues was provided during the interview process.

No detailed follow-up accessibility study is currently recommended since no major or moderate issues were identified at the subject site. Reference the appendix for specific data, photos, and tables or checklists associated with this limited accessibility survey.

## 5. Purpose and Scope

### Purpose

Bureau Veritas was retained by the client to render an opinion as to the Property's current general physical condition on the day of the site visit.

Based on the observations, interviews and document review outlined below, this report identifies significant deferred maintenance issues, existing deficiencies, and material code violations of record, which affect the Property's use. Opinions are rendered as to its structural integrity, building system condition and the Property's overall condition. The report also notes building systems or components that have realized or exceeded their typical expected useful lives.

The physical condition of building systems and related components are typically defined as being in one of five condition ratings. For the purposes of this report, the following definitions are used:

Condition Ratings	
<b>Excellent</b>	New or very close to new; component or system typically has been installed within the past year, sound and performing its function. Eventual repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
<b>Good</b>	Satisfactory as-is. Component or system is sound and performing its function, typically within the first third of its lifecycle. However, it may show minor signs of normal wear and tear. Repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
<b>Fair</b>	Showing signs of wear and use but still satisfactory as-is, typically near the median of its estimated useful life. Component or system is performing adequately at this time but may exhibit some signs of wear, deferred maintenance, or evidence of previous repairs. Repair or replacement will be required due to the component or system's condition and/or its estimated remaining useful life.
<b>Poor</b>	Component or system is significantly aged, flawed, functioning intermittently or unreliably; displays obvious signs of deferred maintenance; shows evidence of previous repair or workmanship not in compliance with commonly accepted standards; has become obsolete; or exhibits an inherent deficiency. The present condition could contribute to or cause the deterioration of contiguous elements or systems. Either full component replacement is needed or repairs are required to restore to good condition, prevent premature failure, and/or prolong useful life.
<b>Failed</b>	Component or system has ceased functioning or performing as intended. Replacement, repair, or other significant corrective action is recommended or required.
<b>Not Applicable</b>	Assigning a condition does not apply or make logical sense, most commonly due to the item in question not being present.

## Scope

The standard scope of the Facility Condition Assessment includes the following:

- Visit the Property to evaluate the general condition of the building and site improvements, review available construction documents in order to familiarize ourselves with, and be able to comment on, the in-place construction systems, life safety, mechanical, electrical, and plumbing systems, and the general built environment.
- Identify those components that are exhibiting deferred maintenance issues and provide cost estimates for Immediate Costs and Replacement Reserves based on observed conditions, maintenance history and industry standard useful life estimates. This will include the review of documented capital improvements completed within the last five-year period and work currently contracted for, if applicable.
- Provide a full description of the Property with descriptions of in-place systems and commentary on observed conditions.
- Provide a high-level categorical general statement regarding the subject Property's compliance to Title III of the Americans with Disabilities Act. This will not constitute a full ADA survey, but will help identify exposure to issues and the need for further review.
- Obtain background and historical information about the facility from a building engineer, property manager, maintenance staff, or other knowledgeable source. The preferred methodology is to have the client representative or building occupant complete a Pre-Survey Questionnaire (PSQ) in advance of the site visit. Common alternatives include a verbal interview just prior to or during the walk-through portion of the assessment.
- Review maintenance records and procedures with the in-place maintenance personnel.
- Observe a representative sample of the interior spaces/units, including vacant spaces/units, to gain a clear understanding of the property's overall condition. Other areas to be observed include the exterior of the property, the roofs, interior common areas, and the significant mechanical, electrical and elevator equipment rooms.
- Provide recommendations for additional studies, if required, with related budgetary information.
- Provide an Executive Summary at the beginning of this report, which highlights key findings and includes a Facility Condition Index as a basis for comparing the relative conditions of the buildings within the portfolio.



## 6. Opinions of Probable Costs

Cost estimates are attached throughout this report, with the Replacement Reserves in the appendix.

These estimates are based on Invoice or Bid Document/s provided either by the Owner/facility and construction costs developed by construction resources such as *R.S. Means*, *CBRE Whitestone*, and *Marshall & Swift*, Bureau Veritas's experience with past costs for similar properties, city cost indexes, and assumptions regarding future economic conditions.

Opinions of probable costs should only be construed as preliminary, order of magnitude budgets. Actual costs most probably will vary from the consultant's opinions of probable costs depending on such matters as type and design of suggested remedy, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, whether a physical deficiency is repaired or replaced in whole, phasing or bundling of the work (if applicable), quality of contractor, quality of project management exercised, market conditions, use of subcontractors, and whether competitive pricing is solicited, etc. Certain opinions of probable costs cannot be developed within the scope of this guide without further study. Opinions of probable cost for further study should be included in the FCA.

### Methodology

Based upon site observations, research, and judgment, along with referencing Expected Useful Life (EUL) tables from various industry sources, Bureau Veritas opines as to when a system or component will most probably necessitate replacement. Accurate historical replacement records, if provided, are typically the best source of information. Exposure to the elements, initial quality and installation, extent of use, the quality and amount of preventive maintenance exercised, etc., are all factors that impact the effective age of a system or component. As a result, a system or component may have an effective age that is greater or less than its actual chronological age. The Remaining Useful Life (RUL) of a component or system equals the EUL less its *effective age*, whether explicitly or implicitly stated. Projections of Remaining Useful Life (RUL) are based primarily on age and condition with the presumption of continued use and maintenance of the Property similar to the observed and reported past use and maintenance practices, in conjunction with the professional judgment of Bureau Veritas's assessors. Significant changes in occupants and/or usage may affect the service life of some systems or components.

Where quantities could not be or were not derived from an actual construction document take-off or facility walk-through, and/or where systemic costs are more applicable or provide more intrinsic value, budgetary square foot and gross square foot costs are used. Estimated costs are based on professional judgment and the probable or actual extent of the observed defect, inclusive of the cost to design, procure, construct and manage the corrections.

### Definitions

#### Immediate Needs

Immediate Needs are line items that require immediate action as a result of: (1) material existing or potential unsafe conditions, (2) failed or imminent failure of mission critical building systems or components, or (3) conditions that, if not addressed, have the potential to result in, or contribute to, critical element or system failure within one year or will most probably result in a significant escalation of its remedial cost.

For database and reporting purposes the line items with RUL=0, and commonly associated with *Safety* or *Performance/Integrity* Plan Types, are considered Immediate Needs.

## Replacement Reserves

Cost line items traditionally called Replacement Reserves (equivalently referred to as Lifecycle/Renewals) are for recurring probable renewals or expenditures, which are not classified as operation or maintenance expenses. The replacement reserves should be budgeted for in advance on an annual basis. Replacement Reserves are reasonably predictable both in terms of frequency and cost. However, Replacement Reserves may also include components or systems that have an indeterminable life but, nonetheless, have a potential for failure within an estimated time period.

Replacement Reserves generally exclude systems or components that are estimated to expire after the reserve term and are not considered material to the structural and mechanical integrity of the subject property. Furthermore, systems and components that are not deemed to have a material effect on the use of the Property are also excluded. Costs that are caused by acts of God, accidents, or other occurrences that are typically covered by insurance, rather than reserved for, are also excluded.

Replacement costs are solicited from ownership/property management, Bureau Veritas's discussions with service companies, manufacturers' representatives, and previous experience in preparing such schedules for other similar facilities. Costs for work performed by the ownership's or property management's maintenance staff are also considered.

Bureau Veritas's reserve methodology involves identification and quantification of those systems or components requiring capital reserve funds within the assessment period. The assessment period is defined as the effective age plus the reserve term. Additional information concerning system's or component's respective replacement costs (in today's dollars), typical expected useful lives, and remaining useful lives were estimated so that a funding schedule could be prepared. The Replacement Reserves Schedule presupposes that all required remedial work has been performed or that monies for remediation have been budgeted for items defined as Immediate Needs.

For the purposes of 'bucketizing' the System Expenditure Forecasts in this report, the Replacement Reserves have been subdivided and grouped as follows: Short Term (years 1-3), Near Term (years 4-5), Medium Term (years 6-10), and Long Term (years 11-20).

## Key Findings

In an effort to highlight the most significant cost items and not be overwhelmed by the Replacement Reserves report in its totality, a subsection of Key Findings is included within the Executive Summary section of this report. Key Findings typically include repairs or replacements of deficient items within the first five-year window, as well as the most significant high-dollar line items that fall anywhere within the ten-year term. Note that while there is some subjectivity associated with identifying the Key Findings, the Immediate Needs are always included as a subset.

## Exceedingly Aged

A fairly common scenario encountered during the assessment process, and a frequent source of debate, occurs when classifying and describing "very old" systems or components that are still functioning adequately and do not appear nor were reported to be in any way deficient. To help provide some additional intelligence on these items, such components will be tagged in the database as Exceedingly Aged. This designation will be reserved for mechanical or electrical systems or components that have aged well beyond their industry standard lifecycles, typically at least 15 years beyond and/or twice their Estimated Useful Life (EUL). In tandem with this designation, these items will be assigned a Remaining Useful Life (RUL) not less than two years but not greater than 1/3 of their standard EUL. As such the recommended replacement time for these components will reside outside the typical Short Term window but will not be pushed 'irresponsibly' (too far) into the future.

## 7. Certification

Shelby County Board of Education (the Client) retained Bureau Veritas to perform this Facility Condition Assessment in connection with its continued operation of Robert R. Church Elementary, 4100 Millbranch Road, Memphis, Tennessee 38116, the "Property". It is our understanding that the primary interest of the Client is to locate and evaluate materials and building system defects that might significantly affect the value of the property and to determine if the present Property has conditions that will have a significant impact on its continued operations.

The conclusions and recommendations presented in this report are based on the brief review of the plans and records made available to our Project Manager during the site visit, interviews of available property management personnel and maintenance contractors familiar with the Property, appropriate inquiry of municipal authorities, our Project Manager's walk-through observations during the site visit, and our experience with similar properties.

No testing, exploratory probing, dismantling or operating of equipment or in-depth studies were performed unless specifically required under the *Purpose and Scope* section of this report. This assessment did not include engineering calculations to determine the adequacy of the Property's original design or existing systems. Although walk-through observations were performed, not all areas may have been observed (see Section 1 for specific details). There may be defects in the Property, which were in areas not observed or readily accessible, may not have been visible, or were not disclosed by management personnel when questioned. The report describes property conditions at the time that the observations and research were conducted.

This report has been prepared for and is exclusively for the use and benefit of the Client identified on the cover page of this report. The purpose for which this report shall be used shall be limited to the use as stated in the contract between the client and Bureau Veritas.

This report, or any of the information contained therein, is not for the use or benefit of, nor may it be relied upon by any other person or entity, for any purpose without the advance written consent of Bureau Veritas. Any reuse or distribution without such consent shall be at the client's or recipient's sole risk, without liability to Bureau Veritas.

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## 8. Appendices

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Appendix A: Photographic Record

Appendix B: Site Plan

Appendix C: Pre-Survey Questionnaire

Appendix D: Accessibility Review and Photos

Appendix E: Component Condition Report

Appendix F: Replacement Reserves

Appendix G: Equipment Inventory List

## Appendix A:

### Photographic Record

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## Photographic Overview



1 - FRONT ELEVATION



2 - LEFT ELEVATION



3 - REAR ELEVATION



4 - RIGHT ELEVATION



5 - ROOFING



6 - CEILING FINISHES



## Photographic Overview



7 - INTERIOR DOOR



8 - INTERIOR FINISHES



9 - PLUMBING SYSTEM



10 - WATER HEATER



11 - BOILER



12 - CHILLER



## Photographic Overview



13 - HVAC SYSTEM



14 - AIR HANDLER



15 - PACKAGED UNIT



16 - MAKE-UP AIR UNIT



17 - FAN COIL UNIT



18 - TERMINAL UNITS - VAV/FCU



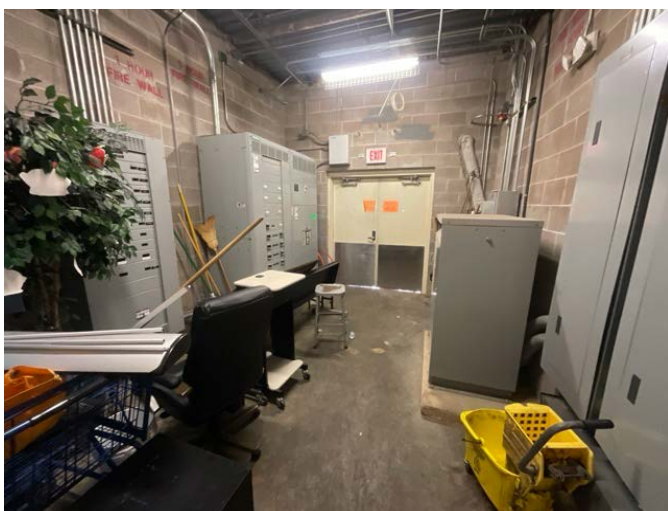
## Photographic Overview



19 - FIRE SUPPRESSION SYSTEM



20 - FIRE ALARM PANEL



21 - ELECTRICAL SYSTEM



22 - PLAY STRUCTURE



23 - PARKING LOTS



24 - PARKING LOTS

## Appendix B:



### Site Plan

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# Site Plan



 <b>BUREAU VERITAS</b>	Project Number	Project Name	
	163745.23R000-166.354	Robert R. Church Elementary	
	Source	On-Site Date	
	Google	July 30, 2024	

## Appendix C:

### Pre-Survey Questionnaire

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## BV FACILITY CONDITION ASSESSMENT: PRE-SURVEY QUESTIONNAIRE

**Building / Facility Name:** Robert R. Church Elementary

**Name of person completing form:**

**Title / Association w/ property:**

**Length of time associated w/ property:**

**Date Completed:**

**Phone Number:**

**Method of Completion:** INCOMPLETE - client/POC unwilling or unable to complete

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The Pre-Survey Questionnaire was not filled out either prior to or during the assessment.



*Signature of Assessor*

*Signature of POC*

## **Appendix D:**

### Accessibility Review and Photos

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## Visual Checklist - 2010 ADA Standards for Accessible Design

Property Name: Robert R. Church Elementary

BV Project Number: 163745.23R000-166.354

### Abbreviated Accessibility Checklist

#### Facility History & Interview

Question		Yes	No	Unk	Comments
1	Has an accessibility study been previously performed? If so, when?			✗	
2	Have any ADA improvements been made to the property since original construction? Describe.			✗	
3	Has building management reported any accessibility-based complaints or litigation?			✗	



## Abbreviated Accessibility Checklist

### Parking



OVERVIEW OF ACCESSIBLE PARKING AREA

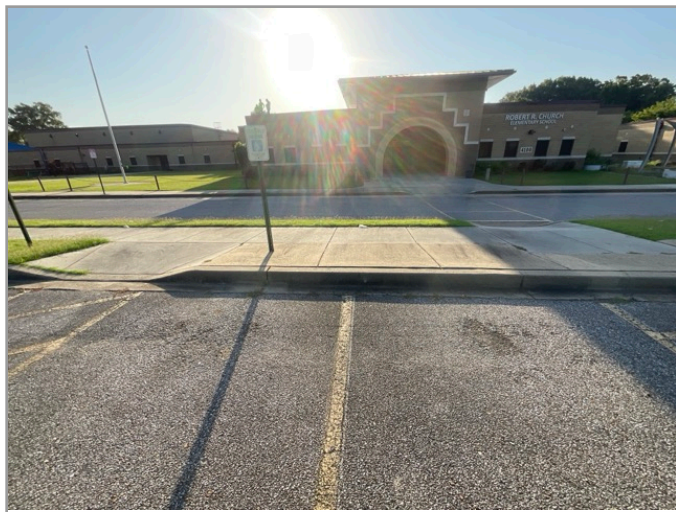


CLOSE-UP OF STALL

Question		Yes	No	NA	Comments
1	Does the required number of standard ADA designated spaces appear to be provided ?	✗			
2	Does the required number of van-accessible designated spaces appear to be provided ?	✗			
3	Are accessible spaces on the shortest accessible route to an accessible building entrance ?	✗			
4	Does parking signage include the International Symbol of Accessibility ?	✗			
5	Does each accessible space have an adjacent access aisle ?	✗			
6	Do parking spaces and access aisles appear to be relatively level and without obstruction ?	✗			

## Abbreviated Accessibility Checklist

### Exterior Accessible Route



ACCESSIBLE PATH



CURB CUT

Question		Yes	No	NA	Comments
1	Is an accessible route present from public transportation stops and municipal sidewalks on or immediately adjacent to the property ?	✗			
2	Does a minimum of one accessible route appear to connect all public areas on the exterior, such as parking and other outdoor amenities, to accessible building entrances ?	✗			
3	Are curb ramps present at transitions through raised curbs on all accessible routes?	✗			
4	Do curb ramps appear to have compliant slopes for all components ?	✗			
5	Do ramp runs on an accessible route appear to have compliant slopes ?	✗			
6	Do ramp runs on an accessible route appear to have a compliant rise and width ?	✗			

<b>7</b>	Do ramps on an accessible route appear to have compliant end and intermediate landings ?			×	
<b>8</b>	Do ramps and stairs on an accessible route appear to have compliant handrails?			×	
<b>9</b>	For stairways that are open underneath, are permanent barriers present that prevent or discourage access?			×	



## Abbreviated Accessibility Checklist

### Building Entrances



MAIN ENTRANCE



DOOR HARDWARE

Question		Yes	No	NA	Comments
1	Do a sufficient number of accessible entrances appear to be provided ?	✗			
2	If the main entrance is not accessible, is an alternate accessible entrance provided?	✗			
3	Is signage provided indicating the location of alternate accessible entrances ?	✗			
4	Do doors at accessible entrances appear to have compliant maneuvering clearance area on each side ?	✗			
5	Do doors at accessible entrances appear to have compliant hardware ?	✗			
6	Do doors at accessible entrances appear to have a compliant clear opening width ?	✗			

7	Do pairs of accessible entrance doors in series appear to have the minimum clear space between them ?	X			
8	Do thresholds at accessible entrances appear to have a compliant height ?	X			

## Abbreviated Accessibility Checklist

### Interior Accessible Route



ACCESSIBLE INTERIOR PATH



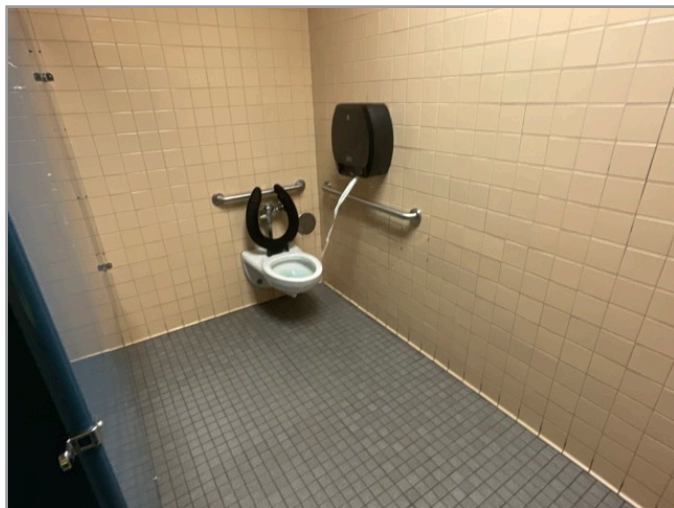
ACCESSIBLE INTERIOR RAMP

Question		Yes	No	NA	Comments
1	Does an accessible route appear to connect all public areas inside the building ?	✗			
2	Do accessible routes appear free of obstructions and/or protruding objects ?	✗			
3	Do ramps on accessible routes appear to have compliant slopes ?	✗			
4	Do ramp runs on an accessible route appear to have a compliant rise and width ?	✗			
5	Do ramps on accessible routes appear to have compliant end and intermediate landings ?	✗			
6	Do ramps on accessible routes appear to have compliant handrails ?	✗			

<b>7</b>	Are accessible areas of refuge and the accessible means of egress to those areas identified with accessible signage ?	✕			
<b>8</b>	Do public transaction areas have an accessible, lowered service counter section ?	✕			
<b>9</b>	Do public telephones appear mounted with an accessible height and location ?	✕			
<b>10</b>	Do doors at interior accessible routes appear to have compliant maneuvering clearance area on each side ?	✕			
<b>11</b>	Do doors at interior accessible routes appear to have compliant hardware ?	✕			
<b>12</b>	Do non-fire hinged, sliding, or folding doors on interior accessible routes appear to have compliant opening force ?	✕			
<b>13</b>	Do doors on interior accessible routes appear to have a compliant clear opening width ?	✕			

## Abbreviated Accessibility Checklist

### Public Restrooms



TOILET STALL OVERVIEW



SINK, FAUCET HANDLES AND ACCESSORIES

Question		Yes	No	NA	Comments
1	Do publicly accessible toilet rooms appear to have a minimum compliant floor area ?	✗			
2	Does the lavatory appear to be mounted at a compliant height and with compliant knee area ?	✗			
3	Does the lavatory faucet have compliant handles ?	✗			
4	Is the plumbing piping under lavatories configured to protect against contact ?	✗			
5	Are grab bars provided at compliant locations around the toilet ?	✗			
6	Do toilet stall doors appear to provide the minimum compliant clear width ?	✗			



7	Do toilet stalls appear to provide the minimum compliant clear floor area ?	X			
8	Where more than one urinal is present in a multi-user restroom, does minimum one urinal appear to be mounted at a compliant height and with compliant approach width ?	X			
9	Do accessories and mirrors appear to be mounted at a compliant height ?	X			

## Abbreviated Accessibility Checklist

### Playgrounds & Swimming Pools



ACCESSIBLE ROUTE TO PLAYGROUND



OVERVIEW OF PLAYGROUND

Question		Yes	No	NA	Comments
1	Is there an accessible route to the play area / s?	✗			
2	Has the play area been reviewed for accessibility ?	✗			
3	Are publicly accessible swimming pools equipped with an entrance lift ?	✗			

## Appendix E:

### Component Condition Report

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Component Condition Report | Robert R. Church Elementary

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Facade						
B2010	Building Exterior	Fair	Exterior Walls, Brick Veneer	55,400 SF	27	7956476
B2020	Building Exterior	Fair	Glazing, any type, by SF	6,200 SF	7	7956411
B2020	Cafeteria	Fair	Screens & Shutters, Rolling Security Shutter, 10 to 50 SF	2	5	7956481
B2050	Courtyard	Fair	Exterior Door, Aluminum-Framed & Glazed, Standard Swing	8	7	7956477
B2050	Building Exterior	Fair	Exterior Door, Steel, Standard	20	17	7956446
Roofing						
B3010	Roof	Excellent	Roofing, Single-Ply Membrane, EPDM	80,169 SF	20	7956493
B3010	Roof	Fair	Roofing, Metal	1,331 SF	17	7956435
Interiors						
C1010	Cafeteria	Fair	Movable Partition, Movable Partitions, Fabric 6' Height	600 SF	2	7956450
C1030	Entrances	Fair	Interior Door, Steel, Standard	27	17	7956431
C1030	Throughout Building	Fair	Interior Door, Wood, Solid-Core	86	17	7956436
C1070	Throughout Building	Poor	Suspended Ceilings, Acoustical Tile (ACT)	77,500 SF	1	7956427
C2010	Throughout Building	Fair	Wall Finishes, any surface, Prep & Paint	203,750 SF	6	7956423
C2030	Commercial Kitchen	Fair	Flooring, Quarry Tile	4,000 SF	27	7956444
C2030	Throughout Building	Fair	Flooring, Vinyl Tile (VCT)	73,400 SF	3	7956434
C2030	Library	Fair	Flooring, Carpet, Commercial Standard	4,100 SF	2	7956478
C2050	Commercial Kitchen	Fair	Ceiling Finishes, Vinyl	4,000 SF	7	7956474
Plumbing						
D2010	Boiler Room	Fair	Backflow Preventer, Domestic Water	1	7	7956488
D2010	Boiler Room	Fair	Water Heater, Gas, Commercial (600 MBH)	1	6	7956490
D2010	Main Office	Fair	Shower, Valve & Showerhead	1	7	7956463
D2010	Main Office	Fair	Sink/Lavatory, Wall-Hung, Vitreous China	15	7	7956497

Component Condition Report | Robert R. Church Elementary

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D2010	Restrooms	Fair	Urinal, Standard	10	7	7956407
D2010	Throughout Building	Fair	Plumbing System, Supply & Sanitary, High Density (excludes fixtures)	81,500 SF	17	7956442
D2010	Throughout Building	Good	Drinking Fountain, Wall-Mounted, Single-Level	14	10	7956428
D2010	Restrooms	Fair	Sink/Lavatory, Vanity Top, Solid Surface or Vitreous China	18	7	7956448
D2010	Utility Rooms/Areas	Fair	Sink/Lavatory, Service Sink, Floor	5	12	7956409
D2010	Faculty Break Rooms	Fair	Sink/Lavatory, Vanity Top, Stainless Steel	6	7	7956438
D2010	Boiler Room	Fair	Backflow Preventer, Domestic Water	1	7	7956412
D2010	Throughout Building	Fair	Toilet, Commercial Water Closet	41	7	7956501
HVAC						
D3020	Boiler Room	Fair	Boiler, Gas, HVAC	1	7	7956496
D3020	Boiler Room	Fair	Unit Heater, Hydronic	1	5	7956426
D3030	Building Exterior	Good	Chiller, Air-Cooled	1	20	7956422
D3030	Roof	Good	Split System, Condensing Unit/Heat Pump	1	10	7956441
D3030	Roof	Good	Split System, Condensing Unit/Heat Pump	1	10	7956458
D3030	Roof	Fair	Split System, Condensing Unit/Heat Pump	1	7	7956502
D3030	Roof	Good	Split System, Condensing Unit/Heat Pump	1	10	7956418
D3030	Roof	Good	Split System, Condensing Unit/Heat Pump	1	10	7956453
D3030	Roof	Fair	Split System, Condensing Unit/Heat Pump	1	7	7956455
D3030	Roof	Good	Split System, Condensing Unit/Heat Pump	1	10	7956472
D3030	Roof	Good	Split System, Condensing Unit/Heat Pump	1	10	7956433
D3030	Roof	Good	Split System, Condensing Unit/Heat Pump	1	10	7956447
D3030	Roof	Fair	Split System, Condensing Unit/Heat Pump	1	9	7956499
D3030	Roof	Good	Split System, Condensing Unit/Heat Pump	1	10	7956492
D3030	Roof	Good	Split System, Condensing Unit/Heat Pump	1	10	7956494
D3030	Roof	Good	Split System, Condensing Unit/Heat Pump	1	10	7956469

Component Condition Report | Robert R. Church Elementary

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D3030	Roof	Fair	Split System, Condensing Unit/Heat Pump	1	7	7956430
D3050	Roof	Fair	Air Handler, Exterior AHU	1	3	7956486
D3050	Roof	Good	Packaged Unit, RTU, Pad or Roof-Mounted	1	19	7956462
D3050	Roof	Fair	Air Handler, Exterior AHU	1	3	7956489
D3050	Throughout Building	Fair	HVAC System, Ductwork w/ VAV/FCU, High Density	81,500 SF	7	7956500
D3050	Boiler Room	Fair	Pump, Distribution, HVAC Chilled or Condenser Water	1	2	7956410
D3050	Throughout Building	Fair	HVAC System, Hydronic Piping, 2-Pipe	81,500 SF	17	7956452
D3050	Roof	Fair	Air Handler, Exterior AHU	1	3	7956471
D3050	Roof	Fair	Air Handler, Exterior AHU	1	3	7956475
D3050	Roof	Fair	Make-Up Air Unit, MUA or MAU	1	5	7956437
D3050	Boiler Room	Fair	Pump, Distribution, HVAC Heating Water	1	2	7956439
D3050	Boiler Room	Fair	Pump, Distribution, HVAC Heating Water	1	2	7956480
D3050	Restrooms	Fair	Fan Coil Unit, Hydronic Terminal	14	3	7956482
D3050	Boiler Room	Fair	Pump, Distribution, HVAC Chilled or Condenser Water	1	2	7956421
D3050	Roof	Fair	Air Handler, Interior AHU, Easy/Moderate Access	1	2	7956465
D3050	Boiler Room	Fair	Pump, Distribution, HVAC Chilled or Condenser Water	1	2	7956443
D3060	Kitchen	Fair	Supplemental Components, Air Curtain, 5' Wide Non-Heated	1	3	7956460
D3060	Kitchen	Fair	Supplemental Components, Air Curtain, 5' Wide Non-Heated	1	3	7956484
Fire Protection						
D4010	Throughout Building	Fair	Fire Suppression System, Existing Sprinkler Heads, by SF	81,500 SF	2	7956479
D4030	Throughout Building	Good	Fire Extinguisher, Type ABC, up to 20 LB	28	8	7956468
Electrical						
D5020	N/A	Fair	Secondary Transformer, Dry, Stepdown	1	7	7956491
D5020	B116M	Fair	Secondary Transformer, Dry, Stepdown	1	7	7956473
D5020	Electrical Room	Fair	Secondary Transformer, Dry, Stepdown	1	7	7956408



## Component Condition Report | Robert R. Church Elementary

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D5020	142M	Fair	Secondary Transformer, Dry, Stepdown	1	7	7956487
D5020	Electrical Room	Fair	Distribution Panel, 277/480 V	1	7	7956432
D5020	142M	Fair	Secondary Transformer, Dry, Stepdown	1	7	7956495
D5020	Electrical Room	Fair	Switchboard, 277/480 V	1	17	7956424
D5020	B118M	Fair	Secondary Transformer, Dry, Stepdown	1	7	7956498
D5020	Electrical Room	Fair	Distribution Panel, 120/208 V	2	7	7956456
D5030	Boiler Room	Fair	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	1	3	7956459
D5030	Boiler Room	Fair	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	1	3	7956414
D5030	Throughout Building	Fair	Electrical System, Wiring & Switches, High Density/Complexity	81,500 SF	17	7956417
D5030	Boiler Room	Fair	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	1	3	7956467
D5030	Boiler Room	Fair	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	1	3	7956413
D5040	Building Exterior	Fair	Exterior Fixture w/ Lamp, any type, w/ LED Replacement	22	3	7956485
D5040	Building Exterior	Fair	Exterior Fixture w/ Lamp, any type, w/ LED Replacement	12	6	7956416
Fire Alarm & Electronic Systems						
D7030	Throughout Building	Fair	Security/Surveillance System, Full System Upgrade, Average Density	81,500 SF	7	7956429
D7050	Main Office	Fair	Fire Alarm Panel, Fully Addressable	1	6	7956483
Equipment & Furnishings						
E1030	Kitchen	Fair	Commercial Kitchen Line, Dishwashing Equipment	15 LF	5	7956419
E1030	Kitchen	Fair	Commercial Kitchen Line, Cooking Equipment	15 LF	5	7956449
E1030	Kitchen	Fair	Foodservice Equipment, Walk-In, Freezer	1	2	7956457
E1030	Kitchen	Fair	Foodservice Equipment, Walk-In, Refrigerator	1	3	7956454
E1030	Kitchen	Fair	Sink/Lavatory, Commercial Kitchen, 3-Bowl	2	7	7956440
E1030	Kitchen	Fair	Foodservice Equipment, Exhaust Hood, 8 to 10 LF	1	5	7956415
E1030	Kitchen	Fair	Commercial Kitchen Line, Preparation Tables/Areas	24 LF	5	7956445
Pedestrian Plazas & Walkways						

Component Condition Report | Robert R. Church Elementary

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
G2020	Site	Fair	Parking Lots, Pavement, Asphalt, Mill & Overlay	80,000 SF	2	7956461
G2020	Site	Poor	Parking Lots, Pavement, Asphalt, Seal & Stripe	80,000 SF	1	7956425
Athletic, Recreational & Playfield Areas						
G2050	Site	Fair	Play Structure, Multipurpose, Large	1	10	7956451
Sitework						
G2060	Site	Fair	Flagpole, Metal	1	7	7956470
G4050	Site	Fair	Pole Light Fixture w/ Lamps, any type 30' High, w/ LED Replacement, Replace/Install	9	8	7956420
G4050	Site	Fair	Site Walkway Fixture, Bollard Style, Concrete-Based, Replace/Install	4	3	7956464

## Appendix F:

### Replacement Reserves

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## Replacement Reserves Report

## Robert R. Church Elementary

**9/30/2024**

Location	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Robert R. Church Elementary	\$0	\$316,468	\$508,866	\$694,231	\$0	\$149,199	\$472,636	\$1,893,022	\$85,127	\$9,264	\$108,857	\$49,832	\$49,545	\$0	\$0	\$0	\$548,208
Grand Total	\$0	\$316,468	\$508,866	\$694,231	\$0	\$149,199	\$472,636	\$1,893,022	\$85,127	\$9,264	\$108,857	\$49,832	\$49,545	\$0	\$0	\$0	\$548,208

Uniformat Code	Location	Description	ID	Cost Description	Lifespan (EUL)	EA	RUL	Quantity	Unit	Unit Cost *	Subtotal	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
B2020	Building Exterior	7956411	Glazing, any type, by SF, Replace			30	23	7	6200	SF	\$55.00	\$341,000							\$341,000				
B2020	Cafeteria	7956481	Screens & Shutters, Rolling Security Shutter, 10 to 50 SF, Replace			20	15	5	2	EA	\$1,200.00	\$2,400					\$2,400						
B2050	Courtyard	7956477	Exterior Door, Aluminum-Framed & Glazed, Standard Swing, Replace			30	23	7	8	EA	\$1,300.00	\$10,400							\$10,400				
B2050	Building Exterior	7956446	Exterior Door, Steel, Standard, Replace			30	13	17	20	EA	\$600.00	\$12,000											
B3010	Roof	7956435	Roofing, Metal, Replace			40	23	17	1331	SF	\$13.00	\$17,303											
B3010	Roof	7956493	Roofing, Single-Ply Membrane, EPDM, Replace			20	0	20	80169	SF	\$11.00	\$881,859											
C1010	Cafeteria	7956450	Movable Partition, Movable Partitions, Fabric 6' Height, Replace			25	23	2	600	SF	\$5.00	\$3,000			\$3,000								
C1030	Entrances	7956431	Interior Door, Steel, Standard, Replace			40	23	17	27	EA	\$600.00	\$16,200											
C1030	Throughout Building	7956436	Interior Door, Wood, Solid-Core, Replace			40	23	17	86	EA	\$700.00	\$60,200											
C1070	Throughout Building	7956427	Suspended Ceilings, Acoustical Tile (ACT), Replace			25	24	1	77500	SF	\$3.50	\$271,250		\$271,250									
C2010	Throughout Building	7956423	Wall Finishes, any surface, Prep & Paint			10	4	6	203750	SF	\$1.50	\$305,625							\$305,625				
C2030	Throughout Building	7956434	Flooring, Vinyl Tile (VCT), Replace			15	12	3	73400	SF	\$5.00	\$367,000				\$367,000							
C2030	Library	7956478	Flooring, Carpet, Commercial Standard, Replace			10	8	2	4100	SF	\$7.50	\$30,750			\$30,750								
C2050	Commercial Kitchen	7956474	Ceiling Finishes, Vinyl, Replace			30	23	7	4000	SF	\$2.50	\$10,000								\$10,000			
D2010	Boiler Room	7956490	Water Heater, Gas, Commercial (600 MBH), Replace			20	14	6	1	EA	\$32,000.00	\$32,000						\$32,000					
D2010	Boiler Room	7956412	Backflow Preventer, Domestic Water, Replace			30	23	7	1	EA	\$5,200.00	\$5,200								\$5,200			
D2010	Boiler Room	7956488	Backflow Preventer, Domestic Water, Replace			30	23	7	1	EA	\$5,200.00	\$5,200								\$5,200			
D2010	Throughout Building	7956442	Plumbing System, Supply & Sanitary, High Density (excludes fixtures), Replace			40	23	17	81500	SF	\$14.00	\$1,141,000											
D2010	Main Office	7956463	Shower, Valve & Showerhead, Replace			30	23	7	1	EA	\$800.00	\$800								\$800			
D2010	Faculty Break Rooms	7956438	Sink/Lavatory, Vanity Top, Stainless Steel, Replace			30	23	7	6	EA	\$1,200.00	\$7,200								\$7,200			
D2010	Restrooms	7956407	Urinal, Standard, Replace			30	23	7	10	EA	\$1,100.00	\$11,000								\$11,000			
D2010	Main Office	7956497	Sink/Lavatory, Wall-Hung, Vitreous China, Replace			30	23	7	15	EA	\$1,500.00	\$22,500								\$22,500			
D2010	Restrooms	7956448	Sink/Lavatory, Vanity Top, Solid Surface or Vitreous China, Replace			30	23	7	18	EA	\$1,100.00	\$19,800								\$19,800			
D2010	Throughout Building	7956501	Toilet, Commercial Water Closet, Replace			30	23	7	41	EA	\$1,300.00	\$53,300								\$53,300			
D2010	Throughout Building	7956428	Drinking Fountain, Wall-Mounted, Single-Level, Replace			15	5	10	14	EA	\$1,200.00	\$16,800										\$16,800	
D2010	Utility Rooms/Areas	7956409	Sink/Lavatory, Service Sink, Floor, Replace			35	23	12	5	EA	\$800.00	\$4,000											
D3020	Boiler Room	7956496	Boiler, Gas, HVAC, Replace			30	23	7	1	EA	\$135,000.00	\$135,000								\$135,000			
D3020	Boiler Room	7956426	Unit Heater, Hydronic, Replace			20	15	5	1	EA	\$4,600.00	\$4,600						\$4,600					
D3030	Building Exterior	7956422	Chiller, Air-Cooled, Replace			25	5	20	1	EA	\$350,000.00	\$350,000											
D3030	Roof	7956430	Split System, Condensing Unit/Heat Pump, Replace			15	8	7	1	EA	\$4,000.00	\$4,000								\$4,000			

Replacement Reserves Report

Robert R. Church Elementary

9/30/2024

Uniformat Code	Location	DescriptionID	Cost Description	Lifespan (EUL)	EA	RUL	Quantity	Unit	Unit Cost *	Subtotal	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
D3030	Roof	7956502	Split System, Condensing Unit/Heat Pump, Replace	15	8	7	1	EA	\$4,000.00	\$4,000								\$4,000				
D3030	Roof	7956455	Split System, Condensing Unit/Heat Pump, Replace	15	8	7	1	EA	\$4,000.00	\$4,000								\$4,000				
D3030	Roof	7956499	Split System, Condensing Unit/Heat Pump, Replace	15	6	9	1	EA	\$7,100.00	\$7,100										\$7,100		
D3030	Roof	7956433	Split System, Condensing Unit/Heat Pump, Replace	15	5	10	1	EA	\$2,300.00	\$2,300											\$2,300	
D3030	Roof	7956447	Split System, Condensing Unit/Heat Pump, Replace	15	5	10	1	EA	\$4,000.00	\$4,000											\$4,000	
D3030	Roof	7956492	Split System, Condensing Unit/Heat Pump, Replace	15	5	10	1	EA	\$2,300.00	\$2,300											\$2,300	
D3030	Roof	7956494	Split System, Condensing Unit/Heat Pump, Replace	15	5	10	1	EA	\$2,300.00	\$2,300											\$2,300	
D3030	Roof	7956469	Split System, Condensing Unit/Heat Pump, Replace	15	5	10	1	EA	\$4,000.00	\$4,000											\$4,000	
D3030	Roof	7956441	Split System, Condensing Unit/Heat Pump, Replace	15	5	10	1	EA	\$2,300.00	\$2,300											\$2,300	
D3030	Roof	7956458	Split System, Condensing Unit/Heat Pump, Replace	15	5	10	1	EA	\$2,300.00	\$2,300											\$2,300	
D3030	Roof	7956453	Split System, Condensing Unit/Heat Pump, Replace	15	5	10	1	EA	\$3,400.00	\$3,400											\$3,400	
D3030	Roof	7956472	Split System, Condensing Unit/Heat Pump, Replace	15	5	10	1	EA	\$2,300.00	\$2,300											\$2,300	
D3030	Roof	7956418	Split System, Condensing Unit/Heat Pump, Replace	15	5	10	1	EA	\$4,000.00	\$4,000											\$4,000	
D3050	Boiler Room	7956443	Pump, Distribution, HVAC Chilled or Condenser Water, Replace	25	23	2	1	EA	\$6,100.00	\$6,100			\$6,100									
D3050	Boiler Room	7956410	Pump, Distribution, HVAC Chilled or Condenser Water, Replace	25	23	2	1	EA	\$6,500.00	\$6,500			\$6,500									
D3050	Boiler Room	7956439	Pump, Distribution, HVAC Heating Water, Replace	25	23	2	1	EA	\$6,500.00	\$6,500			\$6,500									
D3050	Boiler Room	7956480	Pump, Distribution, HVAC Heating Water, Replace	25	23	2	1	EA	\$6,500.00	\$6,500			\$6,500									
D3050	Boiler Room	7956421	Pump, Distribution, HVAC Chilled or Condenser Water, Replace	25	23	2	1	EA	\$6,100.00	\$6,100			\$6,100									
D3050	Throughout Building	7956452	HVAC System, Hydronic Piping, 2-Pipe, Replace	40	23	17	81500	SF	\$5.00	\$407,500												
D3050	Roof	7956465	Air Handler, Interior AHU, Easy/Moderate Access, Replace	25	23	2	1	EA	\$22,000.00	\$22,000			\$22,000									
D3050	Roof	7956489	Air Handler, Exterior AHU, Replace	20	17	3	1	EA	\$48,000.00	\$48,000				\$48,000								
D3050	Roof	7956471	Air Handler, Exterior AHU, Replace	20	17	3	1	EA	\$37,200.00	\$37,200				\$37,200								
D3050	Roof	7956475	Air Handler, Exterior AHU, Replace	20	17	3	1	EA	\$26,400.00	\$26,400				\$26,400								
D3050	Roof	7956486	Air Handler, Exterior AHU, Replace	20	17	3	1	EA	\$26,400.00	\$26,400				\$26,400								
D3050	Restrooms	7956482	Fan Coil Unit, Hydronic Terminal, Replace	20	17	3	14	EA	\$4,880.00	\$68,320				\$68,320								
D3050	Roof	7956437	Make-Up Air Unit, MUA or MAU, Replace	20	15	5	1	EA	\$35,000.00	\$35,000						\$35,000						
D3050	Throughout Building	7956500	HVAC System, Ductwork w/ VAV/FCU, High Density, Replace	30	23	7	81500	SF	\$8.00	\$652,000								\$652,000				
D3050	Roof	7956462	Packaged Unit, RTU, Pad or Roof-Mounted, Replace	20	1	19	1	EA	\$20,000.00	\$20,000												
D3060	Kitchen	7956460	Supplemental Components, Air Curtain, 5' Wide Non-Heated, Replace	20	17	3	1	EA	\$1,500.00	\$1,500				\$1,500								
D3060	Kitchen	7956484	Supplemental Components, Air Curtain, 5' Wide Non-Heated, Replace	20	17	3	1	EA	\$1,500.00	\$1,500				\$1,500								
D4010	Throughout Building	7956479	Fire Suppression System, Existing Sprinkler Heads, by SF, Replace	25	23	2	81500	SF	\$1.07	\$87,205			\$87,205									
D4030	Throughout Building	7956468	Fire Extinguisher, Type ABC, up to 20 LB, Replace	10	2	8	28	EA	\$150.00	\$4,200									\$4,200			
D5020	N/A	7956491	Secondary Transformer, Dry, Stepdown, Replace	30	23	7	1	EA	\$10,000.00	\$10,000								\$10,000				
D5020	B118M	7956498	Secondary Transformer, Dry, Stepdown, Replace	30	23	7	1	EA	\$10,000.00	\$10,000								\$10,000				
D5020	B116M	7956473	Secondary Transformer, Dry, Stepdown, Replace	30	23	7	1	EA	\$10,000.00	\$10,000								\$10,000				

Replacement Reserves Report																						
Robert R. Church Elementary																						
9/30/2024																						
Uniformat Code	Location	DescriptionID	Cost Description	Lifespan (EUL)	EA	RUL	Quantity	Unit	Unit Cost *	Subtotal	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
D5020	Electrical Room	7956408	Secondary Transformer, Dry, Stepdown, Replace	30	23	7	1	EA	\$16,000.00	\$16,000								\$16,000				
D5020	142M	7956487	Secondary Transformer, Dry, Stepdown, Replace	30	23	7	1	EA	\$10,000.00	\$10,000								\$10,000				
D5020	142M	7956495	Secondary Transformer, Dry, Stepdown, Replace	30	23	7	1	EA	\$10,000.00	\$10,000								\$10,000				
D5020	Electrical Room	7956424	Switchboard, 277/480 V, Replace	40	23	17	1	EA	\$90,000.00	\$90,000												
D5020	Electrical Room	7956432	Distribution Panel, 277/480 V, Replace	30	23	7	1	EA	\$5,300.00	\$5,300								\$5,300				
D5020	Electrical Room	7956456	Distribution Panel, 120/208 V, Replace	30	23	7	2	EA	\$6,000.00	\$12,000								\$12,000				
D5030	Throughout Building	7956417	Electrical System, Wiring & Switches, High Density/Complexity, Replace	40	23	17	81500	SF	\$4.00	\$326,000												
D5030	Boiler Room	7956467	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	20	17	3	1	EA	\$6,200.00	\$6,200				\$6,200								
D5030	Boiler Room	7956413	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	20	17	3	1	EA	\$6,200.00	\$6,200				\$6,200								
D5030	Boiler Room	7956459	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	20	17	3	1	EA	\$6,200.00	\$6,200				\$6,200								
D5030	Boiler Room	7956414	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	20	17	3	1	EA	\$6,200.00	\$6,200				\$6,200								
D5040	Building Exterior	7956485	Exterior Fixture w/ Lamp, any type, w/ LED Replacement, Replace	20	17	3	22	EA	\$600.00	\$13,200				\$13,200								
D5040	Building Exterior	7956416	Exterior Fixture w/ Lamp, any type, w/ LED Replacement, Replace	20	14	6	12	EA	\$600.00	\$7,200							\$7,200					
D7030	Throughout Building	7956429	Security/Surveillance System, Full System Upgrade, Average Density, Replace	15	8	7	81500	SF	\$2.00	\$163,000								\$163,000				
D7050	Main Office	7956483	Fire Alarm Panel, Fully Addressable, Replace	15	9	6	1	EA	\$15,000.00	\$15,000							\$15,000					
E1030	Kitchen	7956457	Foodservice Equipment, Walk-In, Freezer, Replace	20	18	2	1	EA	\$25,000.00	\$25,000			\$25,000									
E1030	Kitchen	7956454	Foodservice Equipment, Walk-In, Refrigerator, Replace	20	17	3	1	EA	\$15,000.00	\$15,000				\$15,000								
E1030	Kitchen	7956415	Foodservice Equipment, Exhaust Hood, 8 to 10 LF, Replace	15	10	5	1	EA	\$4,500.00	\$4,500						\$4,500						
E1030	Kitchen	7956419	Commercial Kitchen Line, Dishwashing Equipment, Replace	20	15	5	15	LF	\$3,000.00	\$45,000						\$45,000						
E1030	Kitchen	7956449	Commercial Kitchen Line, Cooking Equipment, Replace	20	15	5	15	LF	\$2,000.00	\$30,000						\$30,000						
E1030	Kitchen	7956445	Commercial Kitchen Line, Preparation Tables/Areas, Replace	20	15	5	24	LF	\$300.00	\$7,200						\$7,200						
E1030	Kitchen	7956440	Sink/Lavatory, Commercial Kitchen, 3-Bowl, Replace	30	23	7	2	EA	\$2,500.00	\$5,000								\$5,000				
G2020	Site	7956425	Parking Lots, Pavement, Asphalt, Seal & Stripe	5	4	1	80000	SF	\$0.45	\$36,000		\$36,000					\$36,000					\$36,000
G2020	Site	7956461	Parking Lots, Pavement, Asphalt, Mill & Overlay	25	23	2	80000	SF	\$3.50	\$280,000			\$280,000									
G2050	Site	7956451	Play Structure, Multipurpose, Large, Replace	20	10	10	1	EA	\$35,000.00	\$35,000											\$35,000	
G2060	Site	7956470	Flagpole, Metal, Replace	30	23	7	1	EA	\$2,500.00	\$2,500								\$2,500				
G4050	Site	7956464	Site Walkway Fixture, Bollard Style, Concrete-Based, Replace/Install	20	17	3	4	EA	\$1,500.00	\$6,000				\$6,000								
G4050	Site	7956420	Pole Light Fixture w/ Lamps, any type 30' High, w/ LED Replacement, Replace/Install	20	12	8	9	EA	\$7,000.00	\$63,000									\$63,000			
Totals, Unescalated											\$0	\$307,250	\$479,655	\$635,320	\$0	\$128,700	\$395,825	\$1,539,200	\$67,200	\$7,100	\$81,000	\$36,000
Totals, Escalated (3.0% inflation, compounded annually)											\$0	\$316,468	\$508,866	\$694,231	\$0	\$149,199	\$472,636	\$1,893,022	\$85,127	\$9,264	\$108,857	\$49,832



## Appendix G:

### Equipment Inventory List

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D20 Plumbing													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7956490	D2010	Water Heater	Gas, Commercial (600 MBH)	250 GAL	Robert R. Church Elementary	Boiler Room	Ventura	72 V 250	0800101940	2001		
2	7956488	D2010	Backflow Preventer	Domestic Water	3 IN	Robert R. Church Elementary	Boiler Room	Watts	909	161816	2001		
3	7956412	D2010	Backflow Preventer	Domestic Water	3 IN	Robert R. Church Elementary	Boiler Room	Watts	909	161819	2001		
D30 HVAC													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7956496	D3020	Boiler	Gas, HVAC	3000 MBH	Robert R. Church Elementary	Boiler Room	Bryan Boilers	RV300-W-FDG	85907	2001		
2	7956426	D3020	Unit Heater	Hydronic	245 MBH	Robert R. Church Elementary	Boiler Room	AIRTHERM	VR-245	9244106	2001		
3	7956422	D3030	Chiller	Air-Cooled	208 TON	Robert R. Church Elementary	Building Exterior	Daikin Industries	AGZ226ETSEMNN00	STNU190700046	2019		
4	7956441	D3030	Split System	Condensing Unit/Heat Pump	1.5 TON	Robert R. Church Elementary	Roof	Lennox	EL16XC1-018-230A01	5819F06712	2019		
5	7956458	D3030	Split System	Condensing Unit/Heat Pump	1.5 TON	Robert R. Church Elementary	Roof	Lennox	EL16XC1-018-230A01	5819F06714	2019		
6	7956502	D3030	Split System	Condensing Unit/Heat Pump	3 TON	Robert R. Church Elementary	Roof	Lennox	SSB036H4S44Y	5816E13839	2016		
7	7956418	D3030	Split System	Condensing Unit/Heat Pump	3 TON	Robert R. Church Elementary	Roof	Lennox	EL16XC1SO36230B03	5819D10339	2019		
8	7956453	D3030	Split System	Condensing Unit/Heat Pump	2 TON	Robert R. Church Elementary	Roof	Lennox	EL16XC1-024-230A01	15819E23393	2019		
9	7956455	D3030	Split System	Condensing Unit/Heat Pump	3 TON	Robert R. Church Elementary	Roof	Lennox	SSB036H4S44Y	5816E13850	2016		
10	7956472	D3030	Split System	Condensing Unit/Heat Pump	1.5 TON	Robert R. Church Elementary	Roof	Lennox	EL16XC1-018-230A01	5819F06709	2019		
11	7956433	D3030	Split System	Condensing Unit/Heat Pump	1.5 TON	Robert R. Church Elementary	Roof	Lennox	EL16XC1-018-230A01	5819F06717	2019		
12	7956447	D3030	Split System	Condensing Unit/Heat Pump	3 TON	Robert R. Church Elementary	Roof	Lennox	EL16XC1S036-230B03	5819D10537	2019		
13	7956499	D3030	Split System	Condensing Unit/Heat Pump	3 TON	Robert R. Church Elementary	Roof	Lennox	SSB060H4S44Y	5818J07007	2018		
14	7956492	D3030	Split System	Condensing Unit/Heat Pump	1.5 TON	Robert R. Church Elementary	Roof	Lennox	EL16XC1-018-230A01	5819F06716	2019		
15	7956494	D3030	Split System	Condensing Unit/Heat Pump	1.5 TON	Robert R. Church Elementary	Roof	Lennox	EL16XC1-018-230A01	5819F06719	2019		
16	7956469	D3030	Split System	Condensing Unit/Heat Pump	3 TON	Robert R. Church Elementary	Roof	Lennox	EL16XC1S036-230B03	5819D10536	2019		
17	7956430	D3030	Split System	Condensing Unit/Heat Pump	3 TON	Robert R. Church Elementary	Roof	Lennox	SSB036H4S44Y	5816E13840	2016		

18	7956410	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	7.5 HP	Robert R. Church Elementary	Boiler Room	Bell & Gossett	1510	2229656	2001		
19	7956421	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	5 HP	Robert R. Church Elementary	Boiler Room	Bell & Gossett	AD77A	No dataplate	2001		
20	7956443	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	5 HP	Robert R. Church Elementary	Boiler Room	Bell & Gossett	1510	2227150	2001		
21	7956439	D3050	Pump	Distribution, HVAC Heating Water	7.5 HP	Robert R. Church Elementary	Boiler Room	Bell & Gossett	1510	2229655	2001		
22	7956480	D3050	Pump	Distribution, HVAC Heating Water	7.5 HP	Robert R. Church Elementary	Boiler Room	Bell & Gossett	AD79A	2227	2001		
23	7956486	D3050	Air Handler	Exterior AHU	4000 CFM	Robert R. Church Elementary	Roof	York	CP 24 FC 7.5.0 460	ALJM 008756	2001		
24	7956489	D3050	Air Handler	Exterior AHU	8000 CFM	Robert R. Church Elementary	Roof	York	CP 44 FC 7.5 0 460	ALJM 008760	2001		
25	7956471	D3050	Air Handler	Exterior AHU	6000 CFM	Robert R. Church Elementary	Roof	York	CP 43 FC 5 0 460	ALJM 008759	2001		
26	7956475	D3050	Air Handler	Exterior AHU	4000 CFM	Robert R. Church Elementary	Roof	York	CP 24 DWDI AF 3 0 460	ALJM 008757 2	2001		
27	7956465	D3050	Air Handler	Interior AHU, Easy/Moderate Access	4000 CFM	Robert R. Church Elementary	Roof	York	CP 24 FC 5 0 460	ALJM 008758	2001		
28	7956482	D3050	Fan Coil Unit	Hydronic Terminal	2400 CFM	Robert R. Church Elementary	Restrooms	Inaccessible	Inaccessible	Inaccessible	2001		14
29	7956437	D3050	Make-Up Air Unit	MUA or MAU	2000 CFM	Robert R. Church Elementary	Roof	CaptiveAire Systems	CNU165RG	128844-1	2001		
30	7956462	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	10 TON	Robert R. Church Elementary	Roof	York	ZJ120N18R4A1AAA1A3	N2M3979987	2023		
31	7956460	D3060	Supplemental Components	Air Curtain, 5' Wide Non-Heated		Robert R. Church Elementary	Kitchen	Mars Air Systems	36CH-0	0105PF36CH-L (F3)	2001		
32	7956484	D3060	Supplemental Components	Air Curtain, 5' Wide Non-Heated		Robert R. Church Elementary	Kitchen	Mars Air Systems	36CH-0	0010PF36CH-L (F3)	2001		
D40 Fire Protection													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7956468	D4030	Fire Extinguisher	Type ABC, up to 20 LB		Robert R. Church Elementary	Throughout Building						28
D50 Electrical													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7956491	D5020	Secondary Transformer	Dry, Stepdown	75 KVA	Robert R. Church Elementary	N/A	Siemens	3F3Y075K13B		2001		
2	7956473	D5020	Secondary Transformer	Dry, Stepdown	75 KVA	Robert R. Church Elementary	B116M	Siemens	3F3Y075K13B	No dataplate	2001		
3	7956408	D5020	Secondary Transformer	Dry, Stepdown	112.5 KVA	Robert R. Church Elementary	Electrical Room	Siemens	3F3Y112K13B	No dataplate	2001		

