

FACILITY CONDITION ASSESSMENT



**BUREAU
VERITAS**

prepared for

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



Shelby Oaks Elementary
6053 Summer Avenue
Memphis, Tennessee 38134

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BV PROJECT #:

163745.23R000-174.354

DATE OF REPORT:

September 30, 2024

ON SITE DATE:

August 14, 2024

Bureau Veritas

TABLE OF CONTENTS

1. Executive Summary	1
Property Overview and Assessment Details	1
Significant/Systemic Findings and Deficiencies	2
Facility Condition Index (FCI)	3
Immediate Needs.....	5
Key Findings	6
Plan Types.....	7
2. Building and Site Information	8
3. Property Space Use and Observed Areas	11
4. ADA Accessibility	12
5. Purpose and Scope	13
6. Opinions of Probable Costs	15
Methodology	15
Definitions	15
7. Certification	17
8. Appendices	18



1. Executive Summary

Property Overview and Assessment Details

General Information	
Property Type	Elementary School
Main Address	6053 Summer Avenue, Memphis, Tennessee 38134
Site Developed	1996
Site Area	20.8 acres (estimated)
Parking Spaces	130 total spaces all in open lots; 4 of which are accessible
Building Area	70,069 SF
Number of Stories	One above
Outside Occupants / Leased Spaces	None
Date(s) of Visit	August 14, 2024
Management Point of Contact	Ms. Mary Taylor, Shelby County Board of Education (901) 416-5376 taylorm15@scsk12.org
On-site Point of Contact (POC)	Mr. Brandon Warr (901) 359-5885
Assessment and Report Prepared By	John Pierman
Reviewed By	Al Diefert Technical Report Reviewer For Andy Hupp Program Manager Andy.Hupp@bureauveritas.com 800.733.0660 x7296632
AssetCalc Link	Full dataset for this assessment can be found at: https://www.assetcalc.net/

Significant/Systemic Findings and Deficiencies

Historical Summary

Shelby Oaks Elementary is a public school constructed in 1996. No major renovations have been carried out since the original construction.

Architectural

The building consists of a steel framed structure with open-web steel joists supporting a metal roof decking with a metal roof system. The foundation system is steel reinforced concrete slab and shallow foundation system. In general, the structure appeared to have been adequately maintained with no significant areas of settlement or structural-related deficiencies observed. The exterior façade consists of EIFS clad walls, storefront system windows and doors. The metal roof system appears to be in fair condition with no significant deficiencies observed. Typical lifecycle based interior and exterior finish replacements are budgeted and anticipated.

Mechanical, Electrical, Plumbing and Fire (MEPF)

The HVAC systems generally consist of boilers, Chiller and cooling tower, as well as unit ventilators and air handlers. Supplemental units located in IT and utilitarian rooms are provided via mini-split ductless units. The boilers, Chiller, and air handlers are dated to 2018 according to the manufacturers data plate and appear to be generally in good condition. The age of the cooling tower could not be identified due to inaccessibility of the manufacturer's data plate, the cooling tower appeared to be in fair condition. The classroom unit ventilators are original to 1996 construction and are generally in fair condition. Typical lifecycle replacements of the majority of the HVAC equipment are anticipated.

Electrical service equipment is original to 1996 construction and appeared to be in fair condition. The majority of the electrical components are anticipated for lifecycle replacement. Interior lighting consists mainly of fluorescent fixtures.

Plumbing systems consist of copper supply piping and PVC waste pipe. There are two natural gas water heaters that were installed in 1998 and appeared to be in fair condition.

The building is protected by both fire alarm and fire sprinkler systems. The fire alarm and suppression systems appear to be in fair condition. Inspection tags are current. Typical lifecycle replacements with annual inspections are anticipated.

Site

The parking lots have been periodically sectionally repaired and patched as needed over the years. The parking lots including drives are in poor condition and has developed numerous potholes and heavy surface wear and should be milled and overlaid. The playgrounds and sport courts are generally in fair condition.

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	
0 – 5%	In new or well-maintained condition, with little or no visual evidence of wear or deficiencies.
5 – 10%	Subjected to wear but is still in a serviceable and functioning condition.
10 – 30%	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.
30% and above	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 Shelby Oaks Elementary(1996)			
Replacement Value	Total SF	Cost/SF	
\$ 29,627,600	74,069	\$ 400	
		Est Reserve Cost	FCI
Current		\$ 7,400	0.0 %
3-Year		\$ 3,864,200	13.0 %
5-Year		\$ 3,864,200	13.0 %
10-Year		\$ 4,805,600	16.2 %



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.

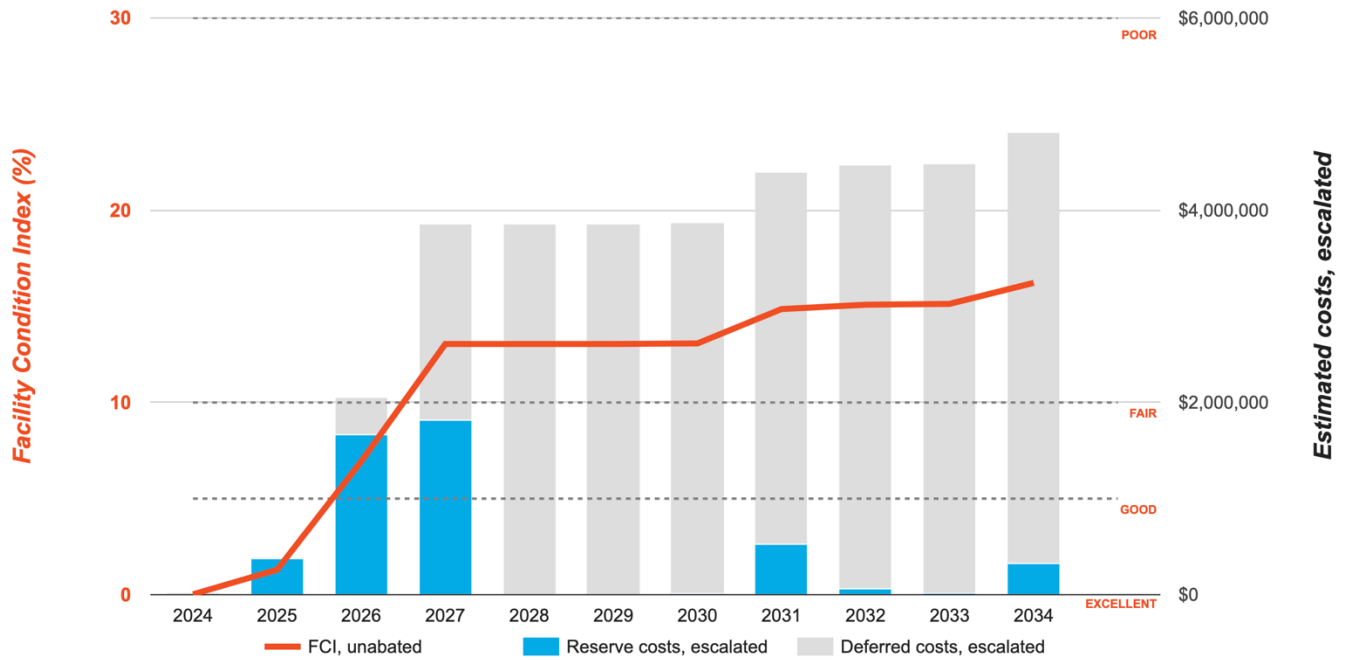
Needs by Year with Unaddressed FCI Over Time

FCI Analysis: Shelby Oaks Elementary

Replacement Value: \$29,627,600

Inflation Rate: 3.0%

Average Needs per Year: \$436,900



Immediate Needs

Facility/Building	Total Items	Total Cost
Shelby Oaks Elementary	1	\$7,400
Total	1	\$7,400

Shelby Oaks Elementary

ID	Location	Location Description	UF Code	Description	Condition	Plan Type	Cost
8030308	Shelby Oaks Elementary	Classroom 137	D3030	Unit Ventilator, approx/nominal 2 Ton, Replace	Poor	Performance/Integrity	\$7,400
Total (1 items)							\$7,400



Key Findings



Sidewalk in Poor condition.

Concrete, Large Areas
Shelby Oaks Elementary Site

Uniformat Code: G2030
Recommendation: **Replace in 2026**

Priority Score: **85.7**

Plan Type:
Performance/Integrity

Cost Estimate: \$73,800

\$\$\$\$

Observe cracks, pocking heaving - AssetCALC ID: 8029317



Parking Lots in Poor condition.

Pavement, Asphalt
Shelby Oaks Elementary Site

Uniformat Code: G2020
Recommendation: **Mill and Overlay in 2025**

Priority Score: **84.8**

Plan Type:
Performance/Integrity

Cost Estimate: \$367,500

\$\$\$\$

Alligator cracking, ponding observed - AssetCALC ID: 8029362



Unit Ventilator in Poor condition.

approx/nominal 2 Ton
Shelby Oaks Elementary Classroom 137

Uniformat Code: D3030
Recommendation: **Replace in 2024**

Priority Score: **81.9**

Plan Type:
Performance/Integrity

Cost Estimate: \$7,400

\$\$\$\$

Down unit - AssetCALC ID: 8030308



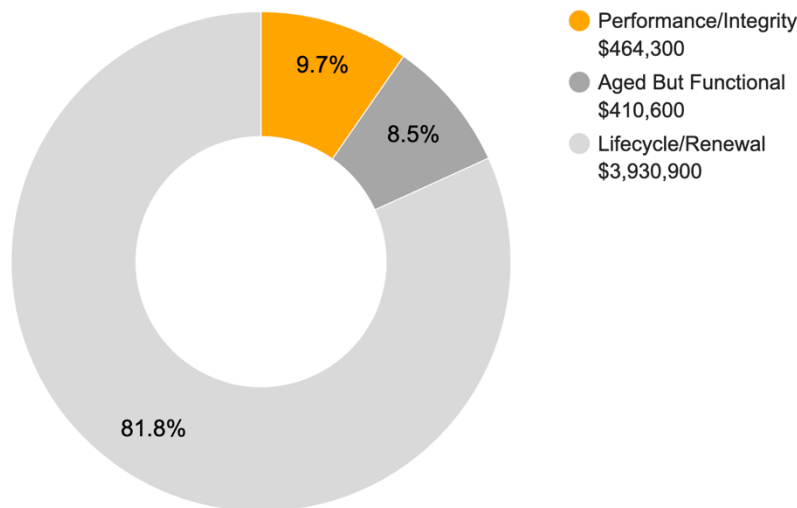
Plan Types

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

Safety	■ An observed or reported unsafe condition that if left unaddressed could result in injury; a system or component that presents potential liability risk.
Performance/Integrity	■ Component or system has failed, is almost failing, performs unreliably, does not perform as intended, and/or poses risk to overall system stability.
Accessibility	■ Does not meet ADA, UFAS, and/or other accessibility requirements.
Environmental	■ Improvements to air or water quality, including removal of hazardous materials from the building or site.
Retrofit/Adaptation	■ Components, systems, or spaces recommended for upgrades in in order to meet current standards, facility usage, or client/occupant needs.
Lifecycle/Renewal	■ 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: \$4,805,800



2. Building and Site Information



Systems Summary

System	Description	Condition
Structure	Steel frame with metal roof deck supported by open-web steel joists and concrete strip/wall footing foundation system.	Good
Façade	Wall Finish: Insulated Finishing System (EIFS) Windows: Aluminum	Fair
Roof	Primary: Intersecting Hip and Gable construction with metal finish roofing	Fair
Interiors	Walls: Painted gypsum board, vinyl Floors: VCT, ceramic tile, quarry tile, unfinished concrete Ceilings: Painted gypsum board, ACT, Unfinished/exposed metal	Fair
Elevators	None	--
Plumbing	Distribution: Copper supply and PVC waste and venting Hot Water: Gas water heaters with integral tanks Fixtures: Toilets, urinals, and sinks in all restrooms	Fair
HVAC	Central System: Boilers, chiller and cooling tower feeding unit ventilators Non-Central System: Ductless split-systems Supplemental components: Suspended unit heaters	Fair
Fire Suppression	Wet-pipe sprinkler system and fire extinguishers, and kitchen hood system	Fair
Electrical	Source and Distribution: Main switchboard with copper wiring Interior Lighting: Linear fluorescent Emergency Power: None	Fair



Systems Summary		
Fire Alarm	Alarm panel with smoke detectors, heat detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs	Fair
Equipment/Special	Commercial kitchen equipment	Fair
Site Pavement	Asphalt lots with limited areas of concrete aprons and pavement and adjacent concrete sidewalks, curbs, ramps, and stairs	Poor
Site Development	Property entrance signage; chain link fencing; CMU wall dumpster enclosures Playgrounds and sports fields Limited park benches, picnic tables, trash receptacles	Fair
Landscaping and Topography	Significant landscaping features including lawns, trees, bushes, and planters Irrigation not present Low to moderate site slopes throughout	Fair
Utilities	Municipal water and sewer Local utility-provided electric and natural gas	Fair
Site Lighting	Pole-mounted: HPS Building-mounted: LED	Fair
Ancillary Structures	Prefabricated modular buildings	Fair
Accessibility	Presently it does not appear an accessibility study is needed for this property. See Appendix D.	
Key Issues and Findings	Down unit ventilator in classroom 137, hHeavy asphalt wear, severe alligator cracking and potholes, significant sidewalk deterioration with possible trip hazards	

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	-	\$841,400	-	-	\$18,000	\$859,400
Roofing	-	-	-	-	\$1,372,900	\$1,372,900
Interiors	-	\$314,600	\$491,100	-	\$1,444,000	\$2,249,600
Plumbing	-	\$97,400	\$17,300	-	\$1,564,800	\$1,679,500
HVAC	\$7,400	\$317,900	\$401,100	\$8,400	\$302,700	\$1,037,500
Fire Protection	-	\$12,500	\$5,200	-	\$528,000	\$545,800
Electrical	-	\$5,300	\$399,200	\$20,500	\$497,500	\$922,600
Fire Alarm & Electronic Systems	-	-	\$161,900	\$322,800	\$252,200	\$736,900
Equipment & Furnishings	-	-	\$100,000	-	\$116,100	\$216,100
Special Construction & Demo	-	-	-	\$1,000	-	\$1,000
Site Development	-	-	-	\$528,800	\$17,500	\$546,300
Site Utilities	-	-	\$183,600	-	-	\$183,600
Site Pavement	-	\$456,800	\$51,600	\$59,900	\$149,800	\$718,100
TOTALS (3% inflation)	\$7,400	\$2,045,900	\$1,810,900	\$941,400	\$6,263,500	\$11,069,100



3. Property Space Use and Observed Areas

Areas Observed

Most of 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

Areas of note that were either inaccessible or not observed for other reasons are listed here:

- Slope roof systems were not accessed due to safety. The roofs were observed from ground level.

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 1996. 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	
Excellent	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.
Good	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.
Fair	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.
Poor	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.
Failed	Component or system has ceased functioning or performing as intended. Replacement, repair, or other significant corrective action is recommended or required.
Not Applicable	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 Shelby Oaks Elementary, 6053 Summer Avenue, Memphis, Tennessee 38134, 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

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



Photographic Overview



1 - FRONT ELEVATION



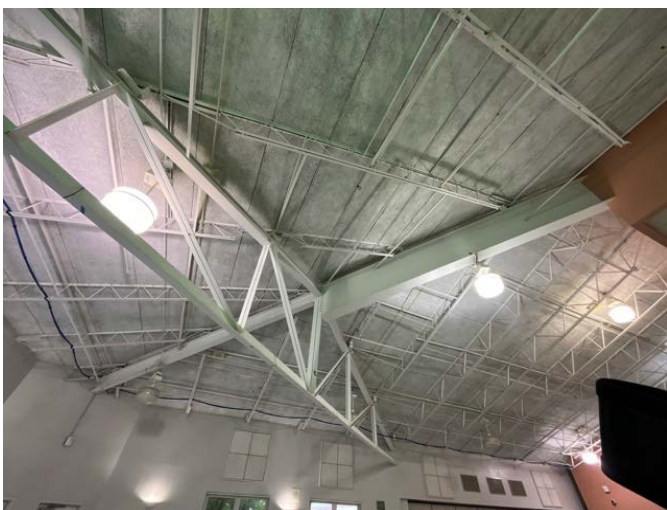
2 - LEFT ELEVATION



3 - REAR ELEVATION



4 - RIGHT ELEVATION



5 - STRUCTURAL ELEMENTS



6 - STRUCTURAL ELEMENTS

Photographic Overview



7 - MAIN ENTRANCE



8 - BUILDING FACADE



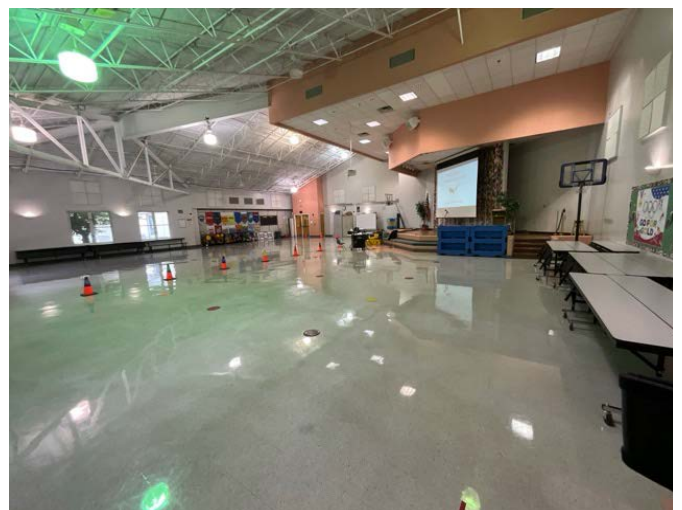
9 - PRIMARY ROOF OVERVIEW



10 - MAIN LOBBY

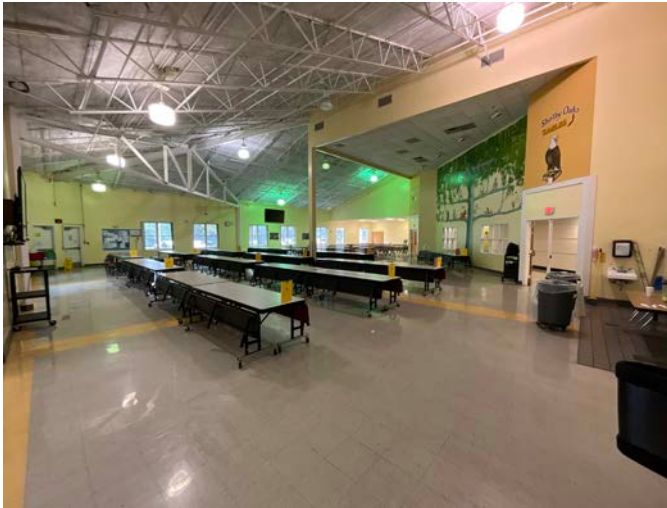


11 - HALLWAY



12 - GYMNASIUM

Photographic Overview



13 - CAFETERIA



14 - LIBRARY



15 - CLASSROOM



16 - CLASSROOM



17 - DOMESTIC HOT WATER SUPPLY



18 - MAIN MECHANICAL ROOM

Photographic Overview



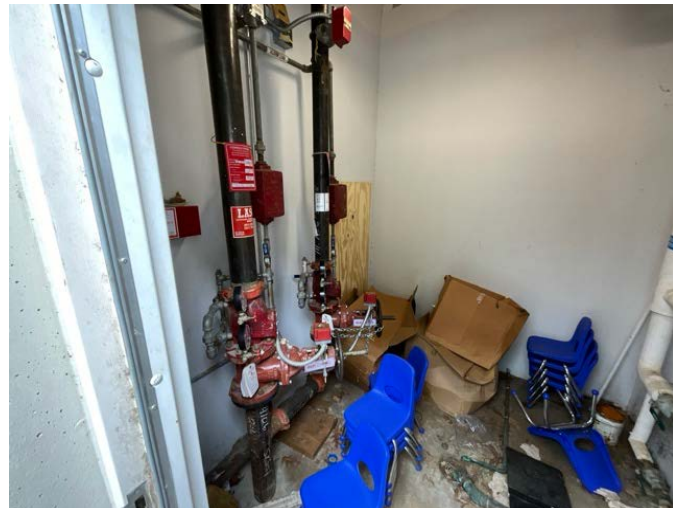
19 - SECONDARY MECHANICAL ROOM



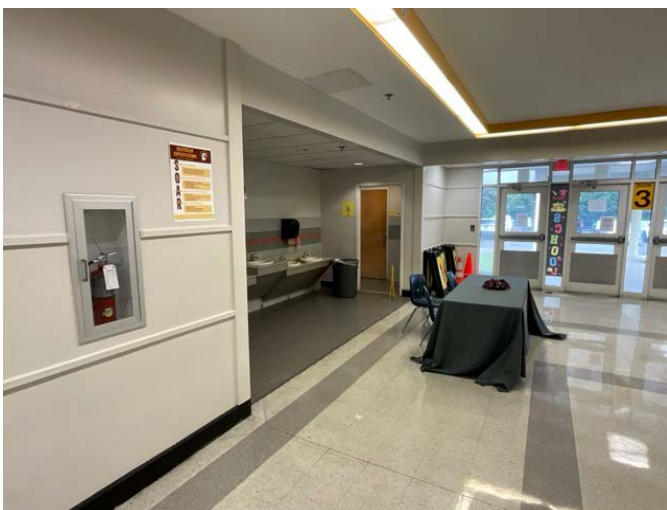
20 - HVAC EQUIPMENT



21 - MAIN ELECTRICAL ROOM



22 - FIRE SPRINKLER RISERS



23 - FIRE EXTINGUISHER AND ALARM DEVICE



24 - FIRE ALARM PANEL

Photographic Overview



25 - MAIN PARKING AREA



26 - SECONDARY PARKING AREA



27 - SIDEWALKS AND LANDSCAPING



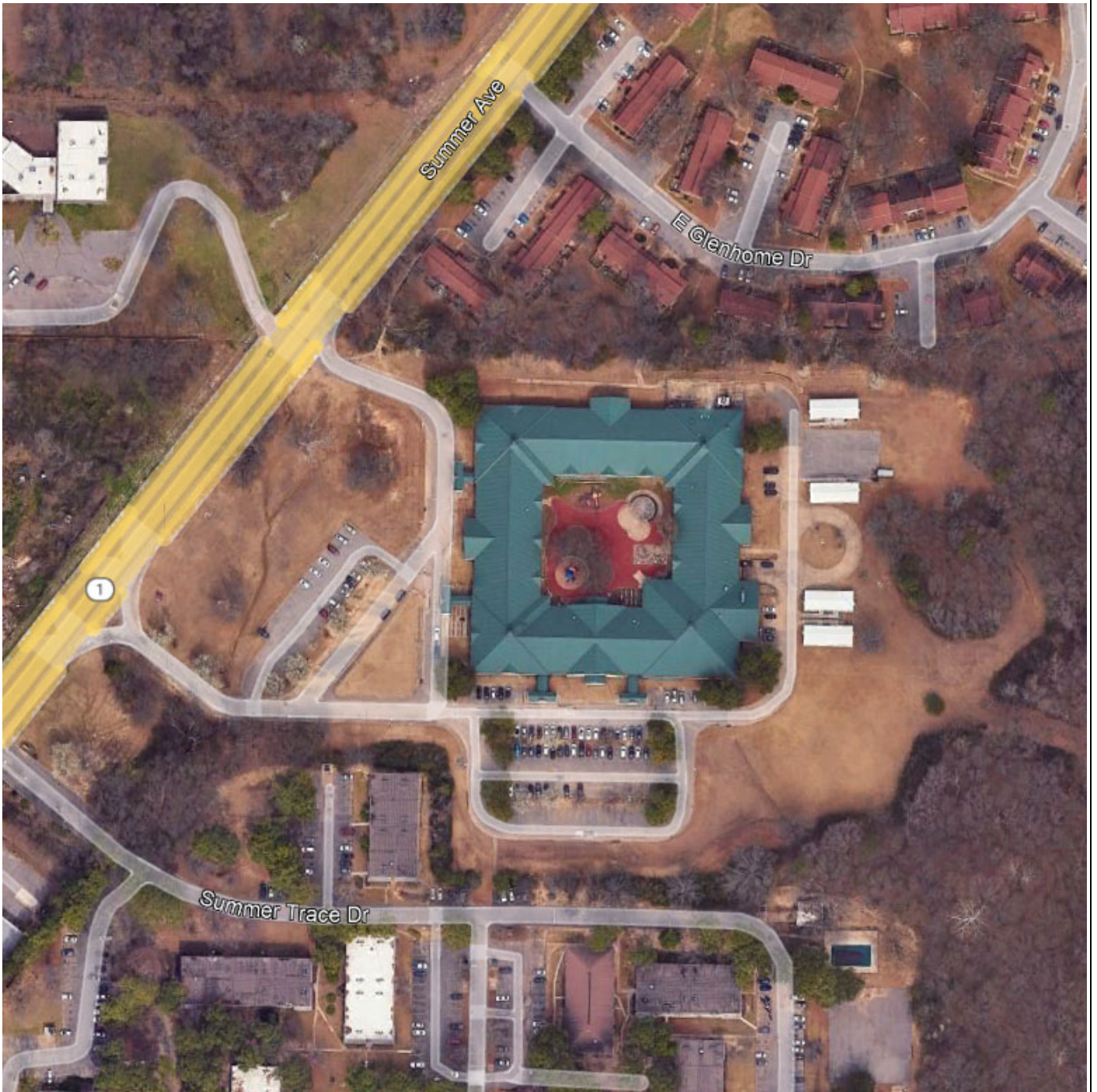
28 - PROPERTY SIGNAGE

Appendix B:

Site Plan



Site Plan



**BUREAU
VERITAS**

Project Number

163745.23R000-174.354

Source

Google

Project Name

Shelby Oaks Elementary

On-Site Date

August 14, 2024



Appendix C:

Pre-Survey Questionnaire



BV FACILITY CONDITION ASSESSMENT: PRE-SURVEY QUESTIONNAIRE

Building / Facility Name: Shelby Oaks 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

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



Visual Survey - 2010 ADA Standards for Accessible Design

Property Name: Shelby Oaks Elementary

BV Project Number: 163745.23R000-174.354

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

Shelby Oaks Elementary: Accessibility Issues				
Category	Major Issues (ADA study recommended)	Moderate Issues (ADA study recommended)	Minor Issues	None*
Parking				X
Exterior Accessible Route				X
Building Entrances				X
Interior Accessible Route				X
Elevators	NA			
Public Restrooms				X
Kitchens/Kitchenettes		NA		
Playgrounds & Swimming Pools				X
Other				

**be cognizant that if the "None" box is checked that does not guarantee full compliance; this study is limited in nature*

Shelby Oaks Elementary: Photographic Overview



OVERVIEW OF ACCESSIBLE PARKING AREA



CLOSE-UP OF STALL



ACCESSIBLE PATH



ACCESSIBLE RAMP



MAIN ENTRANCE



DOOR HARDWARE

Shelby Oaks Elementary: Photographic Overview



ACCESSIBLE INTERIOR PATH



DOOR HARDWARE



TOILET STALL OVERVIEW



SINK, FAUCET HANDLES AND ACCESSORIES

Appendix E: Component Condition Report



Component Condition Report | Shelby Oaks Elementary

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Facade						
B2010	Building Exterior	Fair	Exterior Walls, Insulated Finishing System (EIFS)	16,700 SF	2	8029334
B2020	Building Exterior	Fair	Storefront, Glazing & Framing	1,400 SF	2	8029278
B2020	Building Exterior	Fair	Glazing, any type, by SF	5,800 SF	2	8029346
B2050	Building Exterior	Fair	Exterior Door, Steel, Standard	21	12	8029299
B2050	Building Exterior	Fair	Exterior Door, Aluminum-Framed & Glazed, Standard Swing	10	2	8029309
Roofing						
B3010	Roof	Fair	Roofing, Metal	74,069 SF	12	8029354
Interiors						
C1020	Throughout Building	Fair	Interior Window, Fixed, 24 SF	2	12	8030318
C1030	Throughout Building	Fair	Interior Door, Wood, Solid-Core	131	12	8030341
C1030	Throughout Building	Fair	Interior Door, Aluminum-Framed & Glazed, Standard Swing	6	12	8030364
C1070	Throughout Building	Fair	Suspended Ceilings, Acoustical Tile (ACT)	59,255 SF	3	8030349
C1090	Restrooms	Fair	Toilet Partitions, Wood	28	3	8030342
C2010	Restrooms	Fair	Wall Finishes, Ceramic Tile	14,800 SF	12	8029330
C2010	Throughout Building	Fair	Wall Finishes, any surface, Prep & Paint	133,300 SF	3	8030323
C2030	Throughout Building	Fair	Flooring, Vinyl Tile (VCT)	59,300 SF	2	8030327
C2030		Fair	Flooring, Quarry Tile	11,100 SF	21	8030672
C2030	Restrooms	Fair	Flooring, Ceramic Tile	3,700 SF	12	8029340
C2050	Throughout Building	Fair	Ceiling Finishes, any flat surface, Prep & Paint	14,033 SF	3	8030346
Plumbing						
D2010		Fair	Plumbing System, Supply & Sanitary, Medium Density (includes fixtures)	74,069 SF	11	8031077
D2010	Boiler Room	Fair	Water Heater, Gas, Residential	1	3	8029360
D2010	Restrooms	Fair	Sink/Lavatory, Vanity Top, Solid Surface or Vitreous China	26	2	8030303

Component Condition Report | Shelby Oaks Elementary

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D2010	Throughout Building	Fair	Drinking Fountain, Wall-Mounted, Bi-Level	8	3	8030315
D2010	Restrooms	Fair	Urinal, Standard	12	2	8030344
D2010	Boiler Room	Fair	Backflow Preventer, Domestic Water	1	2	8029357
D2010	Boiler Room	Fair	Water Heater, Gas, Residential	1	3	8029327
D2010	Boiler Room	Fair	Backflow Preventer, Domestic Water	1	2	8029286
D2010	Boiler Room	Fair	Backflow Preventer, Domestic Water	1	2	8029302
D2010	Boiler Room	Fair	Backflow Preventer, Domestic Water	1	2	8029289
D2010	Restrooms	Fair	Toilet, Commercial Water Closet	30	2	8030311
HVAC						
D3020	Boiler Room	Fair	Boiler Supplemental Components, Expansion Tank	1	12	8029352
D3020	Boiler Room	Good	Boiler, Gas, HVAC	1	24	8029306
D3020	Electrical Room	Fair	Unit Heater, Hydronic	1	3	8029341
D3020	Electrical Room	Fair	Unit Heater, Hydronic	1	3	8029339
D3020	Boiler Room	Good	Boiler, Gas, HVAC	1	24	8029293
D3020	Electrical Room	Fair	Unit Heater, Hydronic	1	3	8029301
D3020	Mezzanine	Fair	Unit Heater, Hydronic	1	2	8029343
D3020	Mezzanine	Fair	Unit Heater, Hydronic	1	2	8029280
D3030	Classroom 137	Poor	Unit Ventilator, approx/nominal 2 Ton	1	0	8030308
D3030	Library	Fair	Split System Ductless, Single Zone	1	6	8029356
D3030	Site General	Fair	Split System Ductless, Single Zone	1	3	8029288
D3030	Library	Fair	Split System Ductless, Single Zone	1	6	8029307
D3030	Boiler Room	Good	Chiller, Water-Cooled	1	19	8029322
D3030	Site General	Fair	Cooling Tower, (Typical) Open Circuit	1	16	8029366
D3030	Library IT room	Fair	Split System, Fan Coil Unit, DX	1	3	8030326
D3030	Library IT room	Fair	Split System, Fan Coil Unit, DX	1	3	8030316

Component Condition Report | Shelby Oaks Elementary

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D3030	Classrooms	Fair	Unit Ventilator, approx/nominal 2 Ton	46	3	8030301
D3050	Boiler Room	Good	Pump, Distribution, HVAC Chilled or Condenser Water	1	19	8029276
D3050	Boiler Room	Good	Pump, Distribution, HVAC Chilled or Condenser Water	1	19	8029331
D3050	Mezzanine	Good	Air Handler, Interior AHU, Easy/Moderate Access	1	20	8029279
D3050	Mezzanine	Good	Air Handler, Interior AHU, Easy/Moderate Access	1	19	8029333
D3050	Throughout Building	Fair	HVAC System, Ductwork, Medium Density	74,069 SF	2	8029292
D3050	Mechanical Room	Good	Air Handler, Interior AHU, Easy/Moderate Access	1	19	8029324
D3050	Mechanical Room	Good	Air Handler, Interior AHU, Easy/Moderate Access	1	19	8029277
D3050	Mezzanine	Fair	Air Handler, Interior AHU, Easy/Moderate Access	1	3	8029329
D3050	Boiler Room	Good	Pump, Distribution, HVAC Chilled or Condenser Water	1	19	8029332
D3050	Mechanical Room	Good	Air Handler, Interior AHU, Easy/Moderate Access	1	18	8029290
D3050	Mezzanine	Good	Air Handler, Interior AHU, Easy/Moderate Access	1	19	8029338
D3050	Throughout Building	Good	HVAC System, Hydronic Piping, 2-Pipe	74,069 SF	26	8029311
D3050	Mezzanine	Fair	Air Handler, Interior AHU, Easy/Moderate Access	1	15	8029283
D3050	Boiler Room	Good	Pump, Distribution, HVAC Chilled or Condenser Water	1	19	8029365
D3050	Boiler Room	Good	Pump, Distribution, HVAC Chilled or Condenser Water	1	19	8029291
D3060	Mechanical Room	Fair	Exhaust Fan, Roof or Wall-Mounted, 28" Damper	1	3	8029298
Fire Protection						
D4010	Fire riser room	Fair	Backflow Preventer, Fire Suppression	1	2	8029316
D4010	Throughout Building	Fair	Fire Suppression System, Full System Install/Retrofit, Medium Density/Complexity, Renovate	74,069 SF	12	8029353
D4010	Fire riser room	Fair	Backflow Preventer, Fire Suppression	1	2	8029326
D4010	Cafeteria	Fair	Fire Suppression System, Commercial Kitchen, per LF of Hood	12 LF	3	8030357
Electrical						
D5020	Electrical Room	Fair	Distribution Panel, 120/208 V	1	2	8029315
D5020	Electrical Room	Fair	Distribution Panel, 277/480 V, 200 AMP	1	11	8029282

Component Condition Report | Shelby Oaks Elementary

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D5020	Electrical Room	Fair	Distribution Panel, 120/208 V	1	11	8029337
D5020	Electrical Room	Fair	Distribution Panel, 277/480 V, 400 AMP	1	11	8029295
D5020	Electrical Room	Fair	Distribution Panel, 120/208 V	1	11	8029321
D5020	Electrical Room	Fair	Distribution Panel, 120/208 V	1	11	8029350
D5020	Electrical Room	Fair	Distribution Panel, 277/480 V, 200 AMP	1	2	8029349
D5020	Electrical Room	Fair	Secondary Transformer, Dry, Stepdown	1	18	8029297
D5020	Electrical Room	Fair	Distribution Panel, 120/208 V	1	11	8029364
D5020	Electrical Room	Fair	Switchboard, 277/480 V	1	12	8029347
D5020	Electrical Room	Fair	Distribution Panel, 120/208 V	1	11	8029284
D5020	Electrical Room	Fair	Distribution Panel, 120/208 V	1	11	8029363
D5020	Electrical Room	Fair	Distribution Panel, 120/208 V	1	11	8029359
D5020	Electrical Room	Fair	Distribution Panel, 120/208 V	1	11	8029323
D5020	Electrical Room	Fair	Secondary Transformer, Dry, Stepdown	1	18	8029313
D5020	Electrical Room	Fair	Secondary Transformer, Dry, Stepdown	1	17	8029303
D5020	Electrical Room	Fair	Secondary Transformer, Dry, Stepdown	1	14	8029344
D5020	Electrical Room	Fair	Distribution Panel, 120/208 V	1	12	8029345
D5020	Electrical Room	Fair	Secondary Transformer, Dry, Stepdown	1	18	8029300
D5020	Electrical Room	Fair	Distribution Panel, 277/480 V, 400 AMP	1	11	8029325
D5020	Electrical Room	Fair	Distribution Panel, 277/480 V, 200 AMP	1	11	8029305
D5020	Electrical Room	Fair	Distribution Panel, 120/208 V	1	11	8029318
D5030	Boiler Room	Fair	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	1	9	8029351
D5030	Throughout Building	Fair	Electrical System, Wiring & Switches, Average or Low Density/Complexity	74,069 SF	12	8029358
D5030	Boiler Room	Fair	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	1	9	8029342
D5030	Boiler Room	Fair	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	1	8	8029294
D5030	Boiler Room	Good	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	1	17	8029335

Component Condition Report | Shelby Oaks Elementary

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D5040	Cafeteria	Fair	Special Fixture w/ Lamp, High Pressure Sodium (HPS), Warehouse/Manufacturing	16	3	8029314
D5040	Site General	Fair	Exterior Fixture w/ Lamp, any type, w/ LED Replacement	16	3	8029281
D5040	Throughout Building	Fair	Interior Lighting System, Full Upgrade, Medium Density & Standard Fixtures	74,069 SF	3	8029355
Fire Alarm & Electronic Systems						
D7030	Throughout Building	Fair	Security/Surveillance System, Full System Upgrade, Average Density	74,069 SF	3	8030321
D7050	Main faculty office	Fair	Fire Alarm Panel, Fully Addressable	1	10	8030304
D7050	Office Areas	Fair	Fire Alarm Panel, Fully Addressable	1	10	8029287
D7050	Throughout	Fair	Fire Alarm System, Full System Upgrade, Standard Addressable, Upgrade	70,069 SF	10	8088395
Equipment & Furnishings						
E1030	Cafeteria	Fair	Foodservice Equipment, Walk-In, Freezer	1	3	8030329
E1030	Cafeteria	Fair	Foodservice Equipment, Dairy Cooler/Wells	1	3	8030368
E1030	Kitchen	Fair	Foodservice Equipment, Walk-In, Condenser for Refrigerator/Freezer	1	3	8029361
E1030	Cafeteria	Fair	Foodservice Equipment, Walk-In, Evaporator for Refrigerator/Freezer	1	3	8030325
E1030	Cafeteria	Fair	Foodservice Equipment, Refrigerator, 2-Door Reach-In	1	3	8030314
E1030	Cafeteria	Fair	Foodservice Equipment, Dairy Cooler/Wells	1	3	8030363
E1030	Cafeteria	Fair	Foodservice Equipment, Range, 2-Burner	1	3	8030310
E1030	Cafeteria	Good	Foodservice Equipment, Icemaker, Freestanding	1	14	8030380
E1030	Cafeteria	Fair	Foodservice Equipment, Convection Oven, Single	1	3	8030379
E1030	Cafeteria	Fair	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels	1	3	8030313
E1030	Cafeteria	Fair	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels	1	3	8030339
E1030	Cafeteria	Fair	Foodservice Equipment, Convection Oven, Single	1	3	8030340
E1030	Cafeteria	Fair	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels	1	3	8030324
E1030	Cafeteria	Fair	Foodservice Equipment, Convection Oven, Single	1	3	8030343
E1030	Cafeteria	Fair	Foodservice Equipment, Convection Oven, Single	1	3	8030384
E1030	Cafeteria	Fair	Foodservice Equipment, Convection Oven, Double	1	3	8030322

Component Condition Report | Shelby Oaks Elementary

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
E1030	Kitchen	Fair	Foodservice Equipment, Walk-In, Condenser for Refrigerator/Freezer	1	3	8029308
Special Construction & Demo						
F1020	Site	Fair	Ancillary Building, Classroom/Office Module, Standard/Permanent	4 SF	7	8029285
Pedestrian Plazas & Walkways						
G2020	Site	Poor	Parking Lots, Pavement, Asphalt, Mill & Overlay	105,000 SF	1	8029362
G2020	Site	Fair	Parking Lots, Pavement, Asphalt, Seal & Stripe	105,000 SF	3	8029310
G2030	Site	Poor	Sidewalk, Concrete, Large Areas	8,200 SF	2	8029317
Athletic, Recreational & Playfield Areas						
G2050		Fair	Play Structure, Multipurpose, Medium	2	7	8031236
G2050		Fair	Playground Surfaces, Rubber, Poured-in-Place	15,000 SF	7	8031243
Sitework						
G2060	Site	Fair	Fences & Gates, Fence, Chain Link 4'	300 LF	12	8029319
G2060	Site	Fair	Bike Rack, Fixed 6-10 Bikes	1	12	8029296
G2060	Site	Fair	Flagpole, Metal	1	19	8029348
G2060	Site	Fair	Signage, Property, Monument, Replace/Install	1	12	8029328
G4050	Site	Fair	Pole Light Fixture w/ Lamps, any type 30' High, w/ LED Replacement, Replace/Install	24	3	8029320

Appendix F: Replacement Reserves



Replacement Reserves Report

Shelby Oaks Elementary

9/30/2024

Uniformat Code	Location Description	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
D5020	Electrical Room	8029313	Secondary Transformer, Dry, Stepdown, Replace	30	12	18	1	EA	\$10,000.00	\$10,000											
D5020	Electrical Room	8029300	Secondary Transformer, Dry, Stepdown, Replace	30	12	18	1	EA	\$10,000.00	\$10,000											
D5020	Electrical Room	8029349	Distribution Panel, 277/480 V, 200 AMP, Replace	30	28	2	1	EA	\$3,000.00	\$3,000			\$3,000								
D5020	Electrical Room	8029315	Distribution Panel, 120/208 V, Replace	30	28	2	1	EA	\$2,000.00	\$2,000			\$2,000								
D5020	Electrical Room	8029318	Distribution Panel, 120/208 V, Replace	30	19	11	1	EA	\$2,000.00	\$2,000											
D5020	Electrical Room	8029305	Distribution Panel, 277/480 V, 200 AMP, Replace	30	19	11	1	EA	\$3,000.00	\$3,000											
D5020	Electrical Room	8029325	Distribution Panel, 277/480 V, 400 AMP, Replace	30	19	11	1	EA	\$5,300.00	\$5,300											
D5020	Electrical Room	8029363	Distribution Panel, 120/208 V, Replace	30	19	11	1	EA	\$2,000.00	\$2,000											
D5020	Electrical Room	8029359	Distribution Panel, 120/208 V, Replace	30	19	11	1	EA	\$2,000.00	\$2,000											
D5020	Electrical Room	8029323	Distribution Panel, 120/208 V, Replace	30	19	11	1	EA	\$2,000.00	\$2,000											
D5020	Electrical Room	8029337	Distribution Panel, 120/208 V, Replace	30	19	11	1	EA	\$2,000.00	\$2,000											
D5020	Electrical Room	8029295	Distribution Panel, 277/480 V, 400 AMP, Replace	30	19	11	1	EA	\$5,300.00	\$5,300											
D5020	Electrical Room	8029321	Distribution Panel, 120/208 V, Replace	30	19	11	1	EA	\$2,000.00	\$2,000											
D5020	Electrical Room	8029364	Distribution Panel, 120/208 V, Replace	30	19	11	1	EA	\$2,000.00	\$2,000											
D5020	Electrical Room	8029284	Distribution Panel, 120/208 V, Replace	30	19	11	1	EA	\$2,000.00	\$2,000											
D5020	Electrical Room	8029350	Distribution Panel, 120/208 V, Replace	30	19	11	1	EA	\$2,000.00	\$2,000											
D5020	Electrical Room	8029282	Distribution Panel, 277/480 V, 200 AMP, Replace	30	19	11	1	EA	\$3,000.00	\$3,000											
D5020	Electrical Room	8029345	Distribution Panel, 120/208 V, Replace	30	18	12	1	EA	\$2,000.00	\$2,000											
D5030	Throughout Building	8029358	Electrical System, Wiring & Switches, Average or Low Density/Complexity, Replace	40	28	12	74069	SF	\$2.50	\$185,173											
D5030	Boiler Room	8029294	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	20	12	8	1	EA	\$5,300.00	\$5,300									\$5,300		
D5030	Boiler Room	8029351	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	20	11	9	1	EA	\$5,300.00	\$5,300										\$5,300	
D5030	Boiler Room	8029342	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	20	11	9	1	EA	\$5,300.00	\$5,300										\$5,300	
D5030	Boiler Room	8029335	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	20	3	17	1	EA	\$5,300.00	\$5,300											
D5040	Throughout Building	8029355	Interior Lighting System, Full Upgrade, Medium Density & Standard Fixtures, Replace	20	17	3	74069	SF	\$4.50	\$333,311				\$333,311							
D5040	Site General	8029281	Exterior Fixture w/ Lamp, any type, w/ LED Replacement, Replace	20	17	3	16	EA	\$600.00	\$9,600				\$9,600							
D5040	Cafeteria	8029314	Special Fixture w/ Lamp, High Pressure Sodium (HPS), Warehouse/Manufacturing, Replace	20	17	3	16	EA	\$1,400.00	\$22,400				\$22,400							
D7030	Throughout Building	8030321	Security/Surveillance System, Full System Upgrade, Average Density, Replace	15	12	3	74069	SF	\$2.00	\$148,138				\$148,138							
D7050	Main faculty office	8030304	Fire Alarm Panel, Fully Addressable, Replace	15	5	10	1	EA	\$15,000.00	\$15,000											\$15,000
D7050	Office Areas	8029287	Fire Alarm Panel, Fully Addressable, Replace	15	5	10	1	EA	\$15,000.00	\$15,000											\$15,000
D7050	Throughout	8088395	Fire Alarm System, Full System Upgrade, Standard Addressable, Upgrade	20	10	10	70069	SF	\$3.00	\$210,207											\$210,207
E1030	Cafeteria	8030384	Foodservice Equipment, Convection Oven, Single, Replace	10	7	3	1	EA	\$5,600.00	\$5,600				\$5,600							
E1030	Kitchen	8029308	Foodservice Equipment, Walk-In, Condenser for Refigerator/Freezer, Replace	15	12	3	1	EA	\$6,300.00	\$6,300				\$6,300							
E1030	Cafeteria	8030322	Foodservice Equipment, Convection Oven, Double, Replace	10	7	3	1	EA	\$8,280.00	\$8,280				\$8,280							
E1030	Cafeteria	8030324	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels, Replace	15	12	3	1	EA	\$1,700.00	\$1,700				\$1,700							
E1030	Kitchen	8029361	Foodservice Equipment, Walk-In, Condenser for Refigerator/Freezer, Replace	15	12	3	1	EA	\$6,300.00	\$6,300				\$6,300							

Replacement Reserves Report

Shelby Oaks Elementary

9/30/2024

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	
E1030	Cafeteria	8030368	Foodservice Equipment, Dairy Cooler/Wells, Replace	15	12	3	1	EA	\$3,600.00	\$3,600				\$3,600								
E1030	Cafeteria	8030329	Foodservice Equipment, Walk-In, Freezer, Replace	20	17	3	1	EA	\$25,000.00	\$25,000				\$25,000								
E1030	Cafeteria	8030310	Foodservice Equipment, Range, 2-Burner, Replace	15	12	3	1	EA	\$1,700.00	\$1,700				\$1,700								
E1030	Cafeteria	8030363	Foodservice Equipment, Dairy Cooler/Wells, Replace	15	12	3	1	EA	\$3,600.00	\$3,600				\$3,600								
E1030	Cafeteria	8030340	Foodservice Equipment, Convection Oven, Single, Replace	10	7	3	1	EA	\$5,600.00	\$5,600				\$5,600								
E1030	Cafeteria	8030339	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels, Replace	15	12	3	1	EA	\$1,700.00	\$1,700				\$1,700								
E1030	Cafeteria	8030313	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels, Replace	15	12	3	1	EA	\$1,700.00	\$1,700				\$1,700								
E1030	Cafeteria	8030379	Foodservice Equipment, Convection Oven, Single, Replace	10	7	3	1	EA	\$5,600.00	\$5,600				\$5,600								
E1030	Cafeteria	8030314	Foodservice Equipment, Refrigerator, 2-Door Reach-In, Replace	15	12	3	1	EA	\$4,600.00	\$4,600				\$4,600								
E1030	Cafeteria	8030325	Foodservice Equipment, Walk-In, Evaporator for Refigerator/Freezer, Replace	15	12	3	1	EA	\$4,600.00	\$4,600				\$4,600								
E1030	Cafeteria	8030343	Foodservice Equipment, Convection Oven, Single, Replace	10	7	3	1	EA	\$5,600.00	\$5,600				\$5,600								
E1030	Cafeteria	8030380	Foodservice Equipment, Icemaker, Freestanding, Replace	15	1	14	1	EA	\$6,700.00	\$6,700												
F1020	Site	8029285	Ancillary Building, Classroom/Office Module, Standard/Permanent, Replace	35	28	7	4	SF	\$200.00	\$800								\$800				
G2020	Site	8029362	Parking Lots, Pavement, Asphalt, Mill & Overlay	25	24	1	105000	SF	\$3.50	\$367,500		\$367,500										
G2020	Site	8029310	Parking Lots, Pavement, Asphalt, Seal & Stripe	5	2	3	105000	SF	\$0.45	\$47,250				\$47,250					\$47,250			
G2030	Site	8029317	Sidewalk, Concrete, Large Areas, Replace	50	48	2	8200	SF	\$9.00	\$73,800			\$73,800									
G2050	Shelby Oaks Elementary	8031243	Playground Surfaces, Rubber, Poured-in-Place, Replace	20	13	7	15000	SF	\$26.00	\$390,000								\$390,000				
G2050	Shelby Oaks Elementary	8031236	Play Structure, Multipurpose, Medium, Replace	20	13	7	2	EA	\$20,000.00	\$40,000								\$40,000				
G2060	Site	8029296	Bike Rack, Fixed 6-10 Bikes, Replace	20	8	12	1	EA	\$800.00	\$800												
G2060	Site	8029319	Fences & Gates, Fence, Chain Link 4', Replace	40	28	12	300	LF	\$18.00	\$5,400												
G2060	Site	8029328	Signage, Property, Monument, Replace/Install	20	8	12	1	EA	\$3,000.00	\$3,000												
G2060	Site	8029348	Flagpole, Metal, Replace	30	11	19	1	EA	\$2,500.00	\$2,500												
G4050	Site	8029320	Pole Light Fixture w/ Lamps, any type 30' High, w/ LED Replacement, Replace/Install	20	17	3	24	EA	\$7,000.00	\$168,000				\$168,000								
Totals, Unescalated											\$7,400	\$367,500	\$1,571,676	\$1,657,287	\$0	\$0	\$7,000	\$430,800	\$52,550	\$10,600	\$240,207	
Totals, Escalated (3.0% inflation, compounded annually)											\$7,400	\$378,525	\$1,667,391	\$1,810,962	\$0	\$0	\$8,358	\$529,830	\$66,569	\$13,831	\$322,818	

Appendix G: Equipment Inventory List



D20 Plumbing													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	8029360	D2010	Water Heater	Gas, Residential	120 GAL	Shelby Oaks Elementary	Boiler Room	A. O. Smith	BTR 120 118	9280981000	1998		
2	8029327	D2010	Water Heater	Gas, Residential	75 GAL	Shelby Oaks Elementary	Boiler Room	A. O. Smith	BTC 120	MC96-0505532-960 C			
3	8029357	D2010	Backflow Preventer	Domestic Water	3 IN	Shelby Oaks Elementary	Boiler Room	Watts	No dataplate	No dataplate	1996		
4	8029286	D2010	Backflow Preventer	Domestic Water	2 IN	Shelby Oaks Elementary	Boiler Room	Watts	No dataplate	No dataplate	1996		
5	8029302	D2010	Backflow Preventer	Domestic Water	2 IN	Shelby Oaks Elementary	Boiler Room	Watts	No dataplate	No dataplate	1996		
6	8029289	D2010	Backflow Preventer	Domestic Water	1 IN	Shelby Oaks Elementary	Boiler Room	No dataplate	No dataplate	No dataplate	1996		
D30 HVAC													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	8029306	D3020	Boiler	Gas, HVAC	1680 MBH	Shelby Oaks Elementary	Boiler Room	Lochinvar	FBN1751	1811 109597241	2018		
2	8029293	D3020	Boiler	Gas, HVAC	1750 MBH	Shelby Oaks Elementary	Boiler Room	Lochinvar	FBN1751	1811 109597243	2018		
3	8029341	D3020	Unit Heater	Hydronic	15 MBH	Shelby Oaks Elementary	Electrical Room	Sterling	Inaccessible	Inaccessible			
4	8029339	D3020	Unit Heater	Hydronic	15 MBH	Shelby Oaks Elementary	Electrical Room	Inaccessible	Inaccessible	Inaccessible			
5	8029301	D3020	Unit Heater	Hydronic	10 MBH	Shelby Oaks Elementary	Electrical Room	Inaccessible	Inaccessible	Inaccessible			
6	8029343	D3020	Unit Heater	Hydronic	24 MBH	Shelby Oaks Elementary	Mezzanine	Mcquay	No dataplate	No dataplate			
7	8029280	D3020	Unit Heater	Hydronic	24 MBH	Shelby Oaks Elementary	Mezzanine	Mcquay	No dataplate	No dataplate	2006		
8	8029352	D3020	Boiler Supplemental Components	Expansion Tank	80 GAL	Shelby Oaks Elementary	Boiler Room	Taco	No dataplate	No dataplate	1996		
9	8029322	D3030	Chiller	Water-Cooled	12 TON	Shelby Oaks Elementary	Boiler Room	Daikin Industries	WSC063MAN23R	STNU180400060	2018		
10	8029366	D3030	Cooling Tower	(Typical) Open Circuit	24 TON	Shelby Oaks Elementary	Site General	Evapco	Inaccessible	Inaccessible			
11	8030326	D3030	Split System	Fan Coil Unit, DX	1 TON	Shelby Oaks Elementary	Library IT room	Daikin Industries	Inaccessible	Inaccessible	1996		

12	8030316	D3030	Split System	Fan Coil Unit, DX	1 TON	Shelby Oaks Elementary	Library IT room	Daikin Industries	Inaccessible	Inaccessible	1996	
13	8029356	D3030	Split System Ductless	Single Zone	1 TON	Shelby Oaks Elementary	Library	Inverter	Inaccessible	Inaccessible		
14	8029288	D3030	Split System Ductless	Single Zone	1.5 TON	Shelby Oaks Elementary	Site General	Mitsubishi	Illegible	Illegible		
15	8029307	D3030	Split System Ductless	Single Zone	1 TON	Shelby Oaks Elementary	Library	Inverter	Inaccessible	Inaccessible		
16	8030308	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Shelby Oaks Elementary	Classroom 137	Inaccessible	Inaccessible	Inaccessible	1996	
17	8030301	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Shelby Oaks Elementary	Classrooms	Inaccessible	Inaccessible	Inaccessible	1996	46
18	8029276	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	10 HP	Shelby Oaks Elementary	Boiler Room	Baldor Reliance	EM3313T	37F6141853	2018	
19	8029331	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	20 HP	Shelby Oaks Elementary	Boiler Room	Baldor Reliance	EM2515T	39K057X952	2018	
20	8029332	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	20 HP	Shelby Oaks Elementary	Boiler Room	Baldor Reliance	EM2515T	39K057X952	2018	
21	8029365	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	5 HP	Shelby Oaks Elementary	Boiler Room	Baldor Reliance	EM3218T	36G548S270G1	2018	
22	8029291	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	15 HP	Shelby Oaks Elementary	Boiler Room	Baldor Reliance	EM2513T	39K057Y375	2018	
23	8029279	D3050	Air Handler	Interior AHU, Easy/Moderate Access	2000 CFM	Shelby Oaks Elementary	Mezzanine	Daikin Industries	Inaccessible	FB0U180202049		
24	8029333	D3050	Air Handler	Interior AHU, Easy/Moderate Access	700 CFM	Shelby Oaks Elementary	Mezzanine	Daikin Industries	CAH007GDPCM	U180202046		
25	8029324	D3050	Air Handler	Interior AHU, Easy/Moderate Access	1200 CFM	Shelby Oaks Elementary	Mechanical Room	Magic Aire	Illegible	Illegible		
26	8029277	D3050	Air Handler	Interior AHU, Easy/Moderate Access	1200 CFM	Shelby Oaks Elementary	Mechanical Room	Magic Aire	BVE12ASAAH2RB8GB5AABBBM	W180404341		
27	8029329	D3050	Air Handler	Interior AHU, Easy/Moderate Access	900 CFM	Shelby Oaks Elementary	Mezzanine	Daikin Industries	CAH009GDPCM	180202045	2002	
28	8029290	D3050	Air Handler	Interior AHU, Easy/Moderate Access	2000 CFM	Shelby Oaks Elementary	Mechanical Room	Magic Aire	BVE20ASAAH2RB6AB5AABBBM	W180404345		
29	8029338	D3050	Air Handler	Interior AHU, Easy/Moderate Access	700 CFM	Shelby Oaks Elementary	Mezzanine	Daikin Industries	CAH007GDPCM	FB0U180202044		
30	8029283	D3050	Air Handler	Interior AHU, Easy/Moderate Access	2000 CFM	Shelby Oaks Elementary	Mezzanine	Daikin Industries	Inaccessible	Inaccessible		
31	8029298	D3060	Exhaust Fan	Roof or Wall-Mounted, 28" Damper	7500 CFM	Shelby Oaks Elementary	Mechanical Room	Greenheck	Inaccessible	Inaccessible		

D40 Fire Protection

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
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1	8029316	D4010	Backflow Preventer	Fire Suppression	3 IN	Shelby Oaks Elementary	Fire riser room				1996		
2	8029326	D4010	Backflow Preventer	Fire Suppression	4 IN	Shelby Oaks Elementary	Fire riser room				1996		
3	8030357	D4010	Fire Suppression System	Commercial Kitchen, per LF of Hood		Shelby Oaks Elementary	Cafeteria	Greenheck	GHCW-5.1667-S	96812802	1996		12

D50 Electrical

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	8029297	D5020	Secondary Transformer	Dry, Stepdown	10 KVA	Shelby Oaks Elementary	Electrical Room	Siemens	3F3Y030	A-3-701600-LS			
2	8029313	D5020	Secondary Transformer	Dry, Stepdown	75 KVA	Shelby Oaks Elementary	Electrical Room	Siemens	3F3Y075	A-1-701600-LS			
3	8029303	D5020	Secondary Transformer	Dry, Stepdown	75 KVA	Shelby Oaks Elementary	Electrical Room	Siemens	3F3Y045	A-2-701600-LS			
4	8029344	D5020	Secondary Transformer	Dry, Stepdown	75 KVA	Shelby Oaks Elementary	Electrical Room	Siemens	3F 3R015	A-29-701600-GS			
5	8029300	D5020	Secondary Transformer	Dry, Stepdown	75 KVA	Shelby Oaks Elementary	Electrical Room	Siemens	3F3Y075	A-1-701600-Ls			
6	8029347	D5020	Switchboard	277/480 V	1600 AMP	Shelby Oaks Elementary	Electrical Room	Siemens	SB3	17-92166-D10	1996		
7	8029315	D5020	Distribution Panel	120/208 V	250 AMP	Shelby Oaks Elementary	Electrical Room	Siemens	S1	No dataplate	1996		
8	8029337	D5020	Distribution Panel	120/208 V	250 AMP	Shelby Oaks Elementary	Electrical Room	Siemens	S1	No dataplate			
9	8029321	D5020	Distribution Panel	120/208 V	150 AMP	Shelby Oaks Elementary	Electrical Room	Siemens	S1	No dataplate			
10	8029350	D5020	Distribution Panel	120/208 V	250 AMP	Shelby Oaks Elementary	Electrical Room	Siemens	S1	No dataplate			
11	8029364	D5020	Distribution Panel	120/208 V	250 AMP	Shelby Oaks Elementary	Electrical Room	Siemens	S1	No dataplate			
12	8029284	D5020	Distribution Panel	120/208 V	250 AMP	Shelby Oaks Elementary	Electrical Room	Siemens	S1	No dataplate			
13	8029363	D5020	Distribution Panel	120/208 V	250 AMP	Shelby Oaks Elementary	Electrical Room	Siemens	S1	No dataplate			
14	8029359	D5020	Distribution Panel	120/208 V	250 AMP	Shelby Oaks Elementary	Electrical Room	Siemens	S1	No dataplate			
15	8029323	D5020	Distribution Panel	120/208 V	250 AMP	Shelby Oaks Elementary	Electrical Room	Siemens	S1	No dataplate			
16	8029345	D5020	Distribution Panel	120/208 V	250 AMP	Shelby Oaks Elementary	Electrical Room	Siemens	S1	No dataplate			
17	8029318	D5020	Distribution Panel	120/208 V	250 AMP	Shelby Oaks Elementary	Electrical Room	Siemens	S1	No dataplate			

18	8029282	D5020	Distribution Panel	277/480 V, 200 AMP	250 AMP	Shelby Oaks Elementary	Electrical Room	Siemens	No dataplate	No dataplate	
19	8029349	D5020	Distribution Panel	277/480 V, 200 AMP	250 AMP	Shelby Oaks Elementary	Electrical Room	Siemens	S3	No dataplate	1996
20	8029305	D5020	Distribution Panel	277/480 V, 200 AMP	250 AMP	Shelby Oaks Elementary	Electrical Room	Siemens	S2	No dataplate	
21	8029295	D5020	Distribution Panel	277/480 V, 400 AMP	400 AMP	Shelby Oaks Elementary	Electrical Room	Siemens	S2	No dataplate	
22	8029325	D5020	Distribution Panel	277/480 V, 400 AMP	400 AMP	Shelby Oaks Elementary	Electrical Room	Siemens	S3	No dataplate	
23	8029351	D5030	Variable Frequency Drive	VFD, by HP of Motor	5 HP	Shelby Oaks Elementary	Boiler Room	Nidec Motor Corporation	No dataplate	No dataplate	
24	8029342	D5030	Variable Frequency Drive	VFD, by HP of Motor	5 HP	Shelby Oaks Elementary	Boiler Room	Nidec Motor Corporation	No dataplate	No dataplate	
25	8029294	D5030	Variable Frequency Drive	VFD, by HP of Motor	5 HP	Shelby Oaks Elementary	Boiler Room	Nidec Motor Corporation	No dataplate	No dataplate	
26	8029335	D5030	Variable Frequency Drive	VFD, by HP of Motor	5 HP	Shelby Oaks Elementary	Boiler Room	Nidec Motor Corporation	No dataplate	No dataplate	2021
27	8029314	D5040	Special Fixture w/ Lamp	High Pressure Sodium (HPS), Warehouse/Manufacturing	100 W	Shelby Oaks Elementary	Cafeteria				16

D70 Electronic Safety & Security

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	8030304	D7050	Fire Alarm Panel	Fully Addressable		Shelby Oaks Elementary	Main faculty office	Notifier	AFP-200	No dataplate			
2	8029287	D7050	Fire Alarm Panel	Fully Addressable		Shelby Oaks Elementary	Office Areas	Notifier	Inaccessible	Inaccessible			

E10 Equipment

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	8030322	E1030	Foodservice Equipment	Convection Oven, Double		Shelby Oaks Elementary	Cafeteria	Doyon	JA12SLG	08680001C511	1996		
2	8030379	E1030	Foodservice Equipment	Convection Oven, Single		Shelby Oaks Elementary	Cafeteria	ACCUTEMP	N6120106000200	58187	1996		
3	8030340	E1030	Foodservice Equipment	Convection Oven, Single		Shelby Oaks Elementary	Cafeteria	Duke	5002-31	20ABJA0036	1996		
4	8030343	E1030	Foodservice Equipment	Convection Oven, Single		Shelby Oaks Elementary	Cafeteria	Duke	5002-31	20ABJA0035	1996		
5	8030384	E1030	Foodservice Equipment	Convection Oven, Single		Shelby Oaks Elementary	Cafeteria	ACCUTEMP	N6120106000200	58249	1996		
6	8030368	E1030	Foodservice Equipment	Dairy Cooler/Wells		Shelby Oaks Elementary	Cafeteria	MasterBuilt	Inaccessible	Inaccessible	1996		

7	8030363	E1030	Foodservice Equipment	Dairy Cooler/Wells	Shelby Oaks Elementary	Cafeteria	MasterBuilt	Inaccessible	Inaccessible	1996
8	8030313	E1030	Foodservice Equipment	Food Warmer, Proofing Cabinet on Wheels	Shelby Oaks Elementary	Cafeteria	FWE	ETC-UA-12HD	249056601	1996
9	8030339	E1030	Foodservice Equipment	Food Warmer, Proofing Cabinet on Wheels	Shelby Oaks Elementary	Cafeteria	FWE	UHS-12	123465807	1996
10	8030324	E1030	Foodservice Equipment	Food Warmer, Proofing Cabinet on Wheels	Shelby Oaks Elementary	Cafeteria	FWE	UHS-12	123465406	1996
11	8030380	E1030	Foodservice Equipment	Icemaker, Freestanding	Shelby Oaks Elementary	Cafeteria	Manitowoc	SPA162161	1120974548	2023
12	8030310	E1030	Foodservice Equipment	Range, 2-Burner	Shelby Oaks Elementary	Cafeteria	No dataplate	No dataplate	No dataplate	1996
13	8030314	E1030	Foodservice Equipment	Refrigerator, 2-Door Reach-In	Shelby Oaks Elementary	Cafeteria	Endura	No dataplate	No dataplate	1996
14	8029361	E1030	Foodservice Equipment	Walk-In, Condenser for Refigerator/Freezer	Shelby Oaks Elementary	Kitchen	Inaccessible	Inaccessible	Inaccessible	
15	8029308	E1030	Foodservice Equipment	Walk-In, Condenser for Refigerator/Freezer	Shelby Oaks Elementary	Kitchen	Inaccessible	Inaccessible	Inaccessible	
16	8030325	E1030	Foodservice Equipment	Walk-In, Evaporator for Refigerator/Freezer	Shelby Oaks Elementary	Cafeteria	Heatcraft	LSCO90AL	D96D 12552	1996
17	8030329	E1030	Foodservice Equipment	Walk-In, Freezer	Shelby Oaks Elementary	Cafeteria		Inaccessible	Inaccessible	1996