

FACILITY CONDITION ASSESSMENT



**BUREAU
VERITAS**

prepared for

Shelby County Board of Education
160 South Hollywood Street
Memphis, Tennessee 38112-4892
Mary Taylor



Grahamwood Elementary
School 3950 Summer Avenue
Memphis, Tennessee 38122

PREPARED BY:

Bureau Veritas
6021 University Boulevard, Suite 200
Ellicott City, Maryland 21043
800.733.0660
www.us.bureauveritas.com

BV CONTACT:

Andy Hupp
Program Manager
800.733.0660 x7296632
Andy.Hupp@bureauveritas.com

BV PROJECT #:

163745.23R000-017.354

DATE OF REPORT:

September 30, 2024

ON SITE DATE:

August 13, 2024

Bureau Veritas

6021 University Boulevard, Suite 200 | Ellicott City, Maryland 21043 | www.us.bureauveritas.com | p 800.733.0660

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1. Executive Summary

Property Overview and Assessment Details

General Information	
Property Type	Elementary School
Main Address	3950 Summer Avenue, Memphis, Tennessee 38122
Site Developed	1949
Site Area	18 acres (estimated)
Parking Spaces	142 total spaces all in open lots; 4 of which are accessible.
Building Area	107,806 SF
Number of Stories	Two above grade
Outside Occupants / Leased Spaces	None
Date(s) of Visit	August 13, 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)	same as above
Assessment and Report Prepared By	Chris McCartney
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

Brewster Elementary School was constructed in 1949 and has been renovated since then.

Architectural

General maintenance practices have kept the building in fair condition, but most components are beginning to show wear and are approaching the end of their expected lifespan. No other significant problems were observed. Typical lifecycle based interior and exterior finish replacements are budgeted and anticipated. The facilities consist of brick walls with EPDM rubber membrane and TPO roofing. There is metal roof decking supported by open-web steel joists over a concrete slab and footing foundation system. In general, the structures appear to be sound, with no significant areas of settlement or structural-related deficiencies observed. The flat roofs do not show any failings or deficiencies at the time of assessment. The glazing of the facilities was observed to be free and clear of any major deficiencies.

Mechanical, Electrical, Plumbing and Fire (MEPF)

The HVAC equipment of the building consists of boilers, chillers, air handlers, and cooling tower feeding fan coil and cabinet terminal units. There also packaged unit and exhaust fans present. Electrical service equipment and systems are generally in fair condition and are anticipated for lifecycle replacement. Interior lighting consists mainly of fluorescent lighting. Plumbing systems consist of copper supply piping and PVC waste pipe. There are gas and electric water heaters onsite. No other major issues were observed or reported. The fire alarm and suppression systems appear to be in fair condition. Inspection tags are current. Typical lifecycle replacements and ongoing maintenance will be required.

Site

Site maintenance appears to be in fair condition. However, the sidewalks are pocked and uneven. The asphalt parking lot is in poor condition, with large cracks, and signs of ponding and alligator cracking.

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.

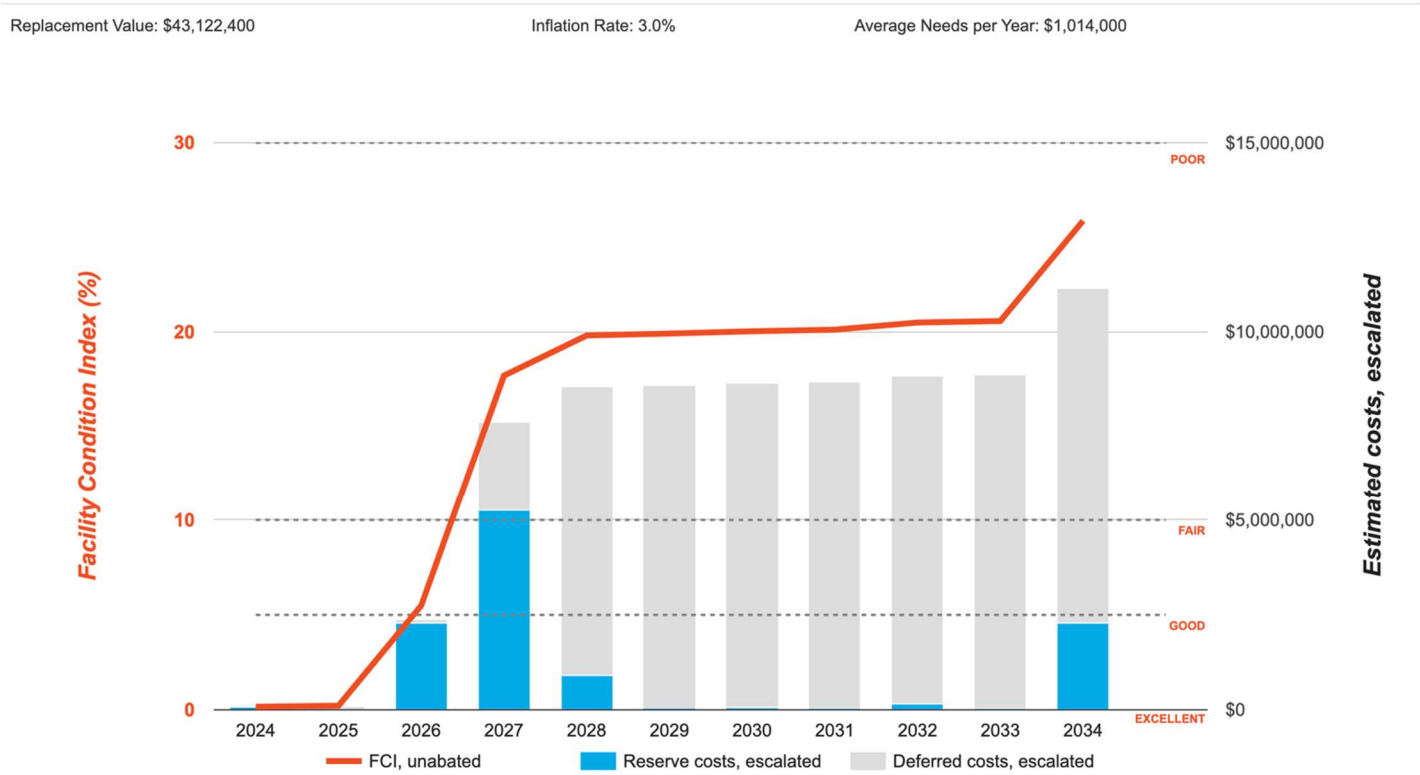
The deficiencies and lifecycle needs identified in this assessment provide the basis for a portfolio-wide capital improvement funding strategy. In addition to the current FCI, extended FCI's have been developed to provide owners the intelligence needed to plan and budget for the "keep-up costs" for their 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 Grahamwood Elementary School(1949)			
Replacement Value \$ 43,122,400	Total SF 107,806	Cost/SF \$ 400	
	Est Reserve Cost		FCI
Current	\$ 73,000		0.2 %
3-Year	\$ 7,621,500		17.7 %
5-Year	\$ 8,583,500		19.9 %
10-Year	\$ 11,153,900		25.9 %

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: Grahamwood Elementary School



Immediate Needs

Facility/Building	Total Items	Total Cost
Grahamwood Elementary School	4	\$73,000
Total	4	\$73,000

Grahamwood Elementary School

ID	Location	Location Description	UF Code	Description	Condition	Plan Type	Cost
8003628	Grahamwood Elementary School	Boiler Room	D3020	Boiler, Gas, HVAC, Replace	NA	Retrofit/Adaptation	\$50,800
8029469	Grahamwood Elementary School	Room 246	D3030	Unit Ventilator, approx/nominal 2 Ton, Replace	Poor	Performance/Integrity	\$7,400
8029482	Grahamwood Elementary School	Classroom 236	D3030	Unit Ventilator, approx/nominal 2 Ton, Replace	Poor	Performance/Integrity	\$7,400
8029470	Grahamwood Elementary School	Classroom 245	D3030	Unit Ventilator, approx/nominal 2 Ton, Replace	Poor	Performance/Integrity	\$7,400
Total (4 items)							\$73,000

Key Findings



Sidewalk in Poor condition.

Concrete, Large Areas
Grahamwood Elementary School Site

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

Priority Score: **85.7**

Plan Type:
Performance/Integrity

Cost Estimate: \$32,400

\$\$\$\$

Large cracks observed, as well as severe parking on surface and a little bit of up - AssetCALC ID: 8003524



Parking Lots in Poor condition.

Pavement, Asphalt
Grahamwood Elementary School Site

Uniformat Code: G2020
Recommendation: **Seal & Stripe in 2025**

Priority Score: **84.8**

Plan Type:
Performance/Integrity

Cost Estimate: \$20,000

\$\$\$\$

Barely visible - AssetCALC ID: 8003526



Parking Lots in Poor condition.

Pavement, Asphalt
Grahamwood Elementary School Site

Uniformat Code: G2020
Recommendation: **Mill & Overlay in 2026**

Priority Score: **84.7**

Plan Type:
Performance/Integrity

Cost Estimate: \$155,800

\$\$\$\$

Cracking and welling observed - AssetCALC ID: 8003547



Unit Ventilator in Poor condition.

approx/nominal 2 Ton
Grahamwood Elementary School Classroom 245

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

Priority Score: **81.9**

Plan Type:
Performance/Integrity

Cost Estimate: \$7,400

\$\$\$\$

Down unit - AssetCALC ID: 8029470

**Unit Ventilator in Poor condition.**

approx/nominal 2 Ton
Grahamwood Elementary School Classroom
236

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

Priority Score: **81.9**

Plan Type:
Performance/Integrity

Cost Estimate: \$7,400

\$\$\$\$

Down unit - AssetCALC ID: 8029482

**Unit Ventilator in Poor condition.**

approx/nominal 2 Ton
Grahamwood Elementary School Room 246

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

Priority Score: **81.9**

Plan Type:
Performance/Integrity

Cost Estimate: \$7,400

\$\$\$\$

Down unit - AssetCALC ID: 8029469

**Boiler**

Gas, HVAC
Grahamwood Elementary School Boiler Room

Uniformat Code: D3020
Recommendation: **Replace in 2024**

Priority Score: **59.9**

Plan Type:
Retrofit/Adaptation

Cost Estimate: \$50,800

\$\$\$\$

Appears to be not in use - AssetCALC ID: 8003628

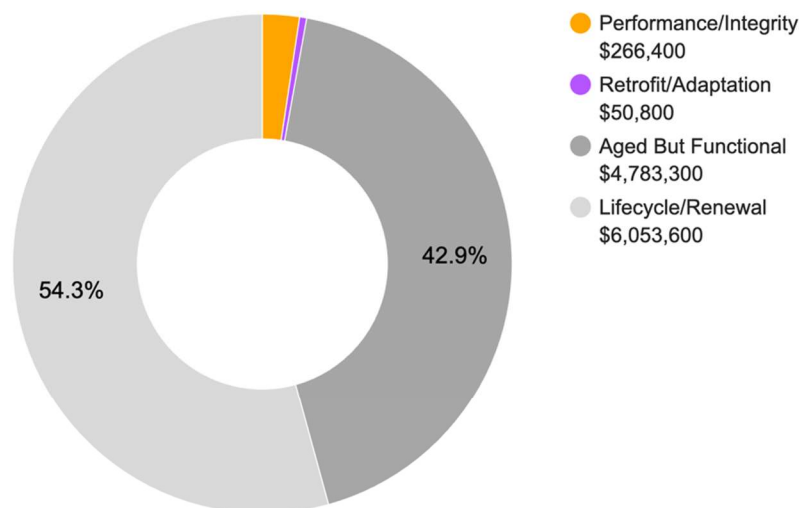
Plan Types

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: \$11,154,100

2. Building and Site Information



Systems Summary

System	Description	Condition
Structure	Masonry bearing walls with metal roof deck supported by open-web steel joists over concrete slab and footing foundation	Fair
Façade	Wall Finish: Brick Windows: Aluminum	Fair
Roof	Primary: Flat construction with single-ply EPDM membrane Secondary: Flat construction with single-ply TPO/PVC membrane	Fair
Interiors	Walls: Painted gypsum board and ceramic tile Floors: VCT, quarry tile Ceilings: Painted gypsum board and ACT	Fair
Elevators	Passenger: two hydraulic cars serving all floors	Fair
Plumbing	Distribution: Copper supply and PVC waste & venting Hot Water: Gas and Electric water heaters with integral tanks Fixtures: Toilets, urinals, and sinks in all restrooms	Fair
HVAC	Central System: Boilers, chillers, air handlers, and cooling tower feeding fan coil and cabinet terminal units Non-Central System: Packaged units Supplemental components: Ductless split-systems	Fair
Fire Suppression	Wet-pipe sprinkler system and fire extinguishers, and kitchen hood system, dedicated computer/server room chemical system	Fair
Electrical	Source & 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 and courts Limited park benches, picnic tables, trash receptacles	Fair
Landscaping and Topography	Limited landscaping features including lawns, trees, bushes Irrigation 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: metal halide	Fair
Ancillary Structures	None	--
Accessibility	Presently it does not appear an accessibility study is needed for this property. See Appendix D.	
Key Issues and Findings	Parking lots and sidewalks are in poor condition. 3 HVAC unit ventilators in poor condition. One nonfunctioning boiler on premises.	

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
Structure	-	-	-	-	-	-
Facade	-	-	\$1,554,600	\$2,266,000	\$10,700	\$3,831,300
Roofing	-	-	\$926,800	-	\$132,400	\$1,059,200
Interiors	-	-	\$1,438,500	-	\$2,898,200	\$4,336,700
Conveying	-	-	\$19,700	-	\$124,600	\$144,300
Plumbing	-	-	\$137,200	\$21,800	\$26,500	\$185,500
HVAC	\$73,000	\$5,400	\$966,900	\$182,100	\$1,170,400	\$2,397,900
Fire Protection	-	-	-	-	\$957,400	\$957,400
Electrical	-	\$2,058,700	\$666,800	\$6,300	\$13,700	\$2,745,400
Fire Alarm & Electronic Systems	-	-	\$369,800	-	\$576,100	\$945,900
Equipment & Furnishings	-	-	\$38,000	\$57,600	\$124,400	\$220,000
Special Construction & Demo	-	-	-	-	-	-
Site Development	-	\$10,600	\$11,600	\$12,700	\$187,500	\$222,400
Site Utilities	-	-	\$85,700	-	-	\$85,700
Site Pavement	-	\$220,200	-	\$23,900	\$64,200	\$308,300
TOTALS (3% inflation)	\$73,000	\$2,294,900	\$6,215,500	\$2,570,400	\$6,286,100	\$17,439,900

3. Property Space Use and Observed Areas

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 1949. The facility was substantially renovated in afterwards and some accessibility improvements appear to have been implemented at that time.

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 Grahamwood Elementary School, 3950 Summer Avenue, Memphis, Tennessee 38122, 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.

Prepared by: Chris McCartney,
Project Manager

Reviewed by:



Al Diefert
Technical Report Reviewer for
Andy Hupp,
Program Manager
Andy.hupp@bureauveritas.com
800.733.0660 x7296632 p

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



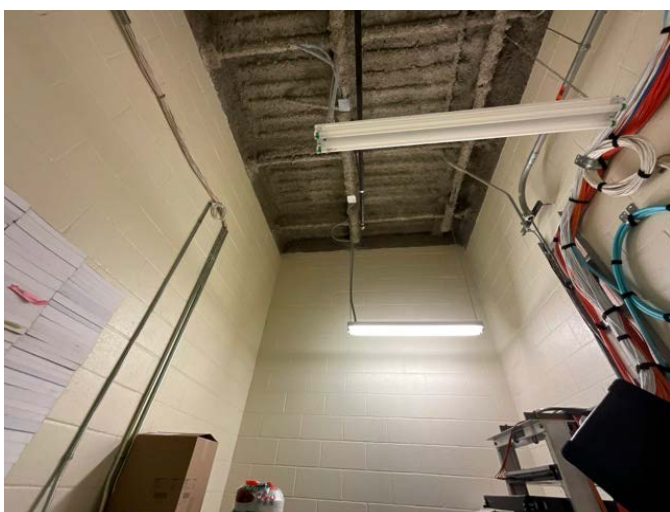
2 - LEFT ELEVATION



3 - REAR ELEVATION



4 - RIGHT ELEVATION



5 - STRUCTURAL ELEMENTS



6 - BUILDING FACADE

Photographic Overview



7 - BUILDING FACADE



8 - MAIN ENTRANCE



9 - PRIMARY ROOF OVERVIEW



10 - SECONDARY ROOF OVERVIEW



11 - PRIMARY ROOF OVERVIEW BLDG 705



12 - PERIMETER ELEMENTS AND DRAINAGE

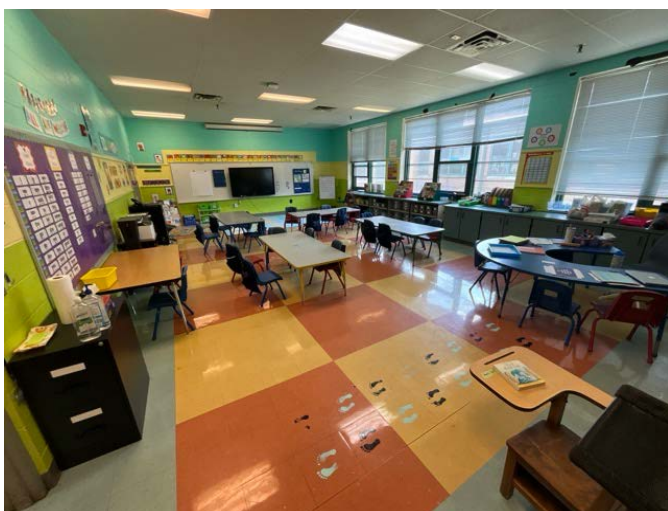
Photographic Overview



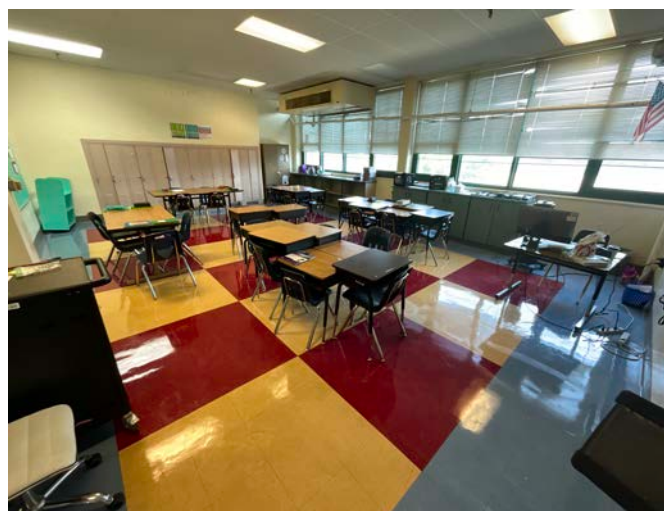
13 - ELEVATOR LOBBY, GROUND FLOOR



14 - LOBBY



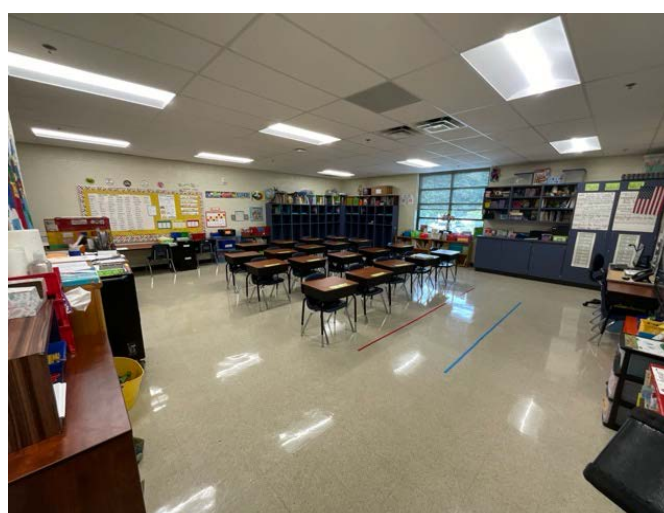
15 - CLASSROOM



16 - CLASSROOM



17 - HALLWAY



18 - CLASSROOM BUILDING 705

Photographic Overview



19 - CAFETERIA



20 - HALLWAY



21 - CAB FINISHES



22 - IN-CAB CONTROLS



23 - ELEVATOR MACHINERY



24 - DOMESTIC HOT WATER SUPPLY

Photographic Overview



25 - DOMESTIC HOT WATER SUPPLY



26 - RESTROOM FIXTURES



27 - MAIN MECHANICAL ROOM



28 - HVAC EQUIPMENT



29 - ROOFTOP MECHANICAL EQUIPMENT



30 - ROOFTOP MECHANICAL EQUIPMENT

Photographic Overview



31 - HVAC EQUIPMENT



32 - FIRE SPRINKLER RISERS



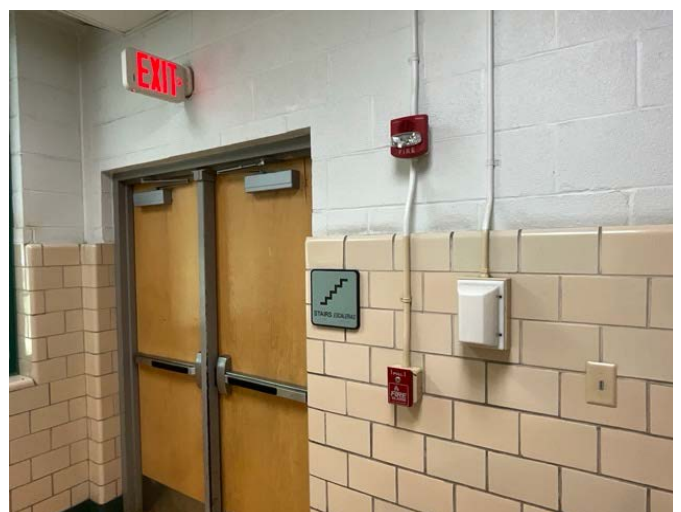
33 - MAIN ELECTRICAL ROOM



34 - SECONDARY ELECTRICAL ROOM



35 - ELECTRICAL DISTRIBUTION PANEL



36 - FIRE ALARM DEVICES

Photographic Overview



37 - COMMERCIAL KITCHEN



38 - MAIN PARKING AREA



39 - SECONDARY PARKING AREA



40 - SIDEWALKS AND LANDSCAPING



41 - PLAYGROUND





42 - PROPERTY SIGNAGE

Appendix B:

Site Plan

Site Plan



 BUREAU VERITAS	Project Number	Project Name	
	163745.23R000-017.354	Grahamwood Elementary School	
	Source	On-Site Date	
	Google	August 13th, 2024	

Appendix C:

Pre-Survey Questionnaire

BV FACILITY CONDITION ASSESSMENT: PRE-SURVEY QUESTIONNAIRE

Building / Facility Name: Grahamwood Elementary School

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 Checklist - 2010 ADA Standards for Accessible Design

Property Name: Grahamwood Elementary School

BV Project Number: 163745.23R000-017.354

Abbreviated Accessibility Checklist

Facility History & Interview

Question		Yes	No	Unk	Comments
1	Has an ADA survey previously been completed for this property? If so, indicate when.			X	
2	Have any ADA improvements been made to the property since original construction? Elaborate, especially if fully or partially addressed as the result of a previous study.			X	
3	Has building ownership/management reported any ADA complaints or litigation?			X	

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 ?	✗			

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

Abbreviated Accessibility Checklist

Building Entrances



ACCESSIBLE ENTRANCE



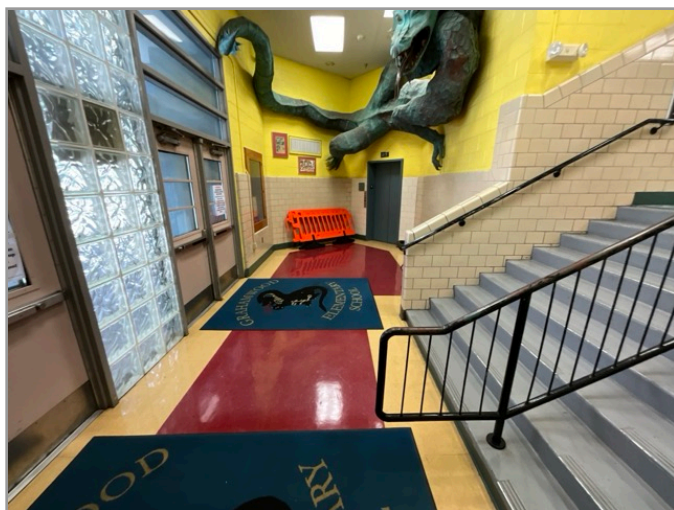
MAIN ENTRANCE

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 ?	✗			

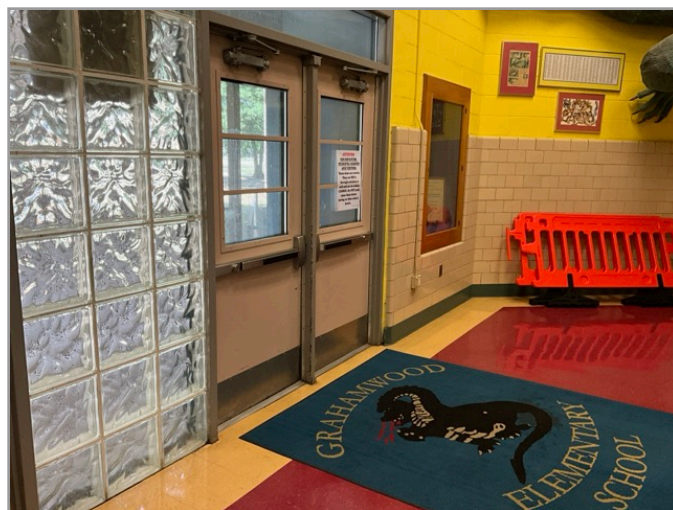
7	Do pairs of accessible entrance doors in series appear to have the minimum clear space between them ?	✕			
8	Do thresholds at accessible entrances appear to have a compliant height ?	✕			

Abbreviated Accessibility Checklist

Interior Accessible Route



ACCESSIBLE INTERIOR PATH



DOOR HARDWARE

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 ?			✗	

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

Abbreviated Accessibility Checklist

Elevators



LOBBY LOOKING AT CABS (WITH DOORS OPEN)



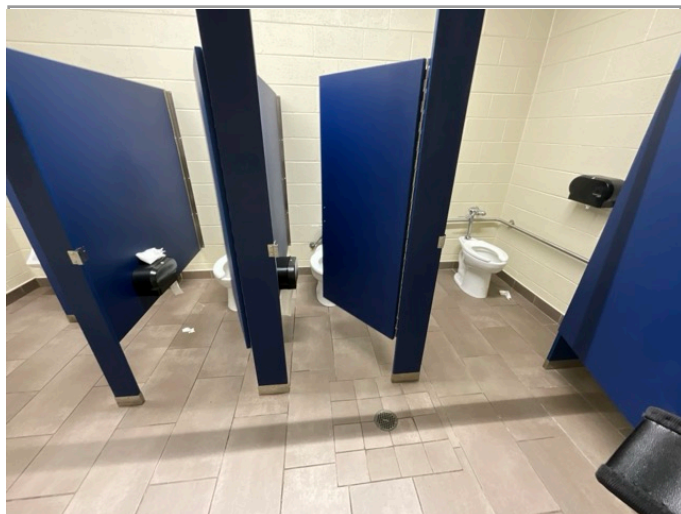
IN-CAB CONTROLS

Question		Yes	No	NA	Comments
1	Are hallway call buttons configured with the "UP" button above the "DOWN" button?	✗			
2	Is accessible floor identification signage present on the hoistway sidewalls on each level ?	✗			
3	Do the elevators have audible and visual arrival indicators at the lobby and hallway entrances?	✗			
4	Do the elevator hoistway and car interior appear to have a minimum compliant clear floor area ?	✗			
5	Do the elevator car doors have automatic re-opening devices to prevent closure on obstructions?	✗			
6	Do elevator car control buttons appear to be mounted at a compliant height ?	✗			

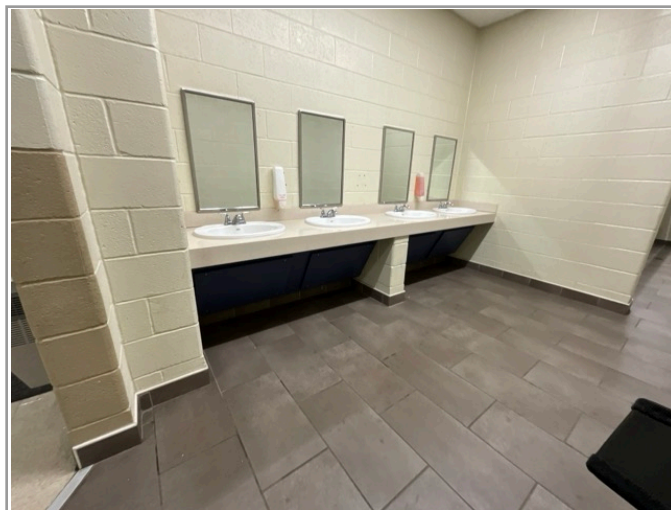
7	Are tactile and Braille characters mounted to the left of each elevator car control button ?	✕			
8	Are audible and visual floor position indicators provided in the elevator car?	✕			
9	Is the emergency call system on or adjacent to the control panel and does it not require voice communication ?	✕			

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



ACCESS ROUTE TO PLAYGROUND



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

Component Condition Report | Grahamwood Elementary School

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Structure						
B1080	Site	Fair	Stairs, Metal or Pan-Filled, Interior	500 SF	25	8029369
B1080	Site	Good	Stairs, Concrete, Exterior	150 SF	25	8003489
Facade						
B2010	Building Exterior	Fair	Exterior Walls, Brick	31,800 SF	10	8003544
B2010	Building Exterior	Fair	Exterior Walls, Concrete	6,400 SF	22	8003644
B2020	Building Exterior	Fair	Glazing, any type, by SF	25,400 SF	3	8003601
B2050	Building Exterior	Fair	Exterior Door, Steel, Standard	32	3	8003502
B2080	Site	Fair	Awning, Metal, per SF of awning	1,800 SF	25	8003645
B2080	Site	Fair	Awning, Metal, per SF of awning, Refinish	2,500 SF	4	8003520
B2080	Site	Fair	Awning, Fabric, per SF of awning	100 SF	6	8003570
Roofing						
B3010	Roof	Fair	Roofing, Single-Ply Membrane, EPDM	38,850 SF	4	8003546
B3010	Roof	Fair	Roofing, Single-Ply Membrane, TPO/PVC	24,000 SF	3	8003493
B3010	Roof bldg 705	Good	Roofing, Modified Bitumen	8,500 SF	15	8029474
B3060	Roof bldg 705	Good	Roof Hatch, Metal	1	25	8029460
Interiors						
C1030	Throughout Building	Fair	Interior Door, Wood, Solid-Core	185	3	8029463
C1030	Throughout Building 705	Fair	Interior Door, Steel, Standard	42	3	8029436
C1030	Throughout Building 705	Fair	Interior Door, Aluminum-Framed & Glazed, Standard Swing	2	3	8029407
C1070	Throughout Building	Fair	Suspended Ceilings, Acoustical Tile (ACT)	80,900 SF	3	8029461
C1090	Restrooms building 705	Good	Toilet Partitions, Plastic/Laminate	18	14	8029383
C1090	Restrooms	Fair	Toilet Partitions, Plastic/Laminate	42	3	8029411
C2010	Commercial Kitchen	Fair	Wall Finishes, Ceramic Tile	53,900 SF	15	8003535
C2010	Throughout Building 705	Fair	Wall Finishes, any surface, Prep & Paint	161,700 SF	4	8029424
C2030	Commercial Kitchen	Fair	Flooring, Quarry Tile	10,800 SF	30	8003599
C2030	Throughout Building	Fair	Flooring, Vinyl Tile (VCT)	107,806 SF	3	8029430
C2050	Throughout Building	Fair	Ceiling Finishes, any flat surface, Prep & Paint	27,000 SF	4	8029441
Conveying						
D1010	Building 705	Good	Passenger Elevator, Hydraulic, 2 Floors, 1500 to 2500 LB, Renovate	1	25	8029445
D1010	Utility room Building 705	Good	Elevator Controls, Automatic, 1 Car	1	15	8029400
D1010	Building 705	Good	Elevator Controls, Automatic, 1 Car	1	15	8029464
D1010	Building 705	Fair	Passenger Elevator, Hydraulic, 2 Floors, Renovate	1	12	8029381
D1010	Elevator Shafts/Utility	Fair	Elevator Cab Finishes, Standard	2	3	8003639
Plumbing						
D2010	Restrooms	Fair	Urinal, Standard	23	3	8029399

Component Condition Report | Grahamwood Elementary School

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D2010	Boiler Room	Fair	Backflow Preventer, Domestic Water	1	15	8003649
D2010	Restrooms	Fair	Toilet, Commercial Water Closet	42	3	8029398
D2010	Boiler Room	Fair	Water Heater, Electric, Residential	1	4	8003574
D2010	Hallways & Common Areas	Good	Drinking Fountain, Wall-Mounted, Single-Level	10	10	8029433
D2010	Throughout Building 705	Good	Drinking Fountain, Wall-Mounted, Bi-Level	2	10	8029422
D2010	Utility room Building 705	Good	Water Heater, Gas, Commercial (125 MBH)	1	15	8029419
D2010	Restrooms bldg 705	Good	Sink/Lavatory, Vanity Top, Solid Surface or Vitreous China	18	25	8029374
D2010	Restrooms bldg 705	Good	Urinal, Standard	4	25	8029408
D2010	Restrooms	Fair	Sink/Lavatory, Wall-Hung, Vitreous China	25	3	8029443
D2010	Boiler Room	Fair	Water Heater, Gas, Residential	1	8	8003626
D2010	Commercial Kitchen	Fair	Storage Tank, Domestic Water	1	12	8003595
D2010	Restrooms bldg 705	Good	Toilet, Commercial Water Closet	18	25	8029415
D2060	Boiler Room	Fair	Air Compressor, Tank-Style	1	3	8003522
HVAC						
D3020	Commercial Kitchen	Fair	Boiler, Gas, HVAC	1	3	8003515
D3020	Boiler Room	NA	Boiler, Gas, HVAC	1	0	8003628
D3020	Boiler Room	Good	Boiler, Gas, HVAC	1	24	8003650
D3020	Boiler Room	Good	Boiler, Gas, HVAC	1	24	8003508
D3020	Boiler Room	Fair	Boiler Supplemental Components, Expansion Tank	1	12	8003516
D3020	Boiler Room	Good	Boiler, Gas, HVAC	1	25	8003556
D3020	Boiler Room	Fair	Boiler, Gas, HVAC	1	8	8003498
D3020	Boiler Room	Good	Boiler, Gas, HVAC	1	24	8003583
D3020	Boiler Room	Good	Boiler, Gas, HVAC	1	24	8003637
D3020	Boiler Room	Fair	Boiler, Gas, HVAC	1	8	8003514
D3030	Classroom 203	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029467
D3030	Classroom 321	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029452
D3030	Classroom 214	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029476
D3030	Classroom 314	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029384
D3030	Classroom 320	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029414
D3030	Classroom 308	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029426
D3030	Classroom 213	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029413
D3030	Classroom 305, no access	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029471
D3030	Boiler Room	Fair	Split System Ductless, Single Zone	1	4	8003587
D3030	Classroom 206	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029373
D3030	Room 246	Poor	Unit Ventilator, approx/nominal 2 Ton	1	0	8029469
D3030	Classroom 303	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029387
D3030	Roof bldg 705	Fair	Split System Ductless, Single Zone	1	9	8029437
D3030	Classroom 207	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029468

Component Condition Report | Grahamwood Elementary School

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D3030	Classroom 239	Fair	Unit Ventilator, approx/nominal 2 Ton	1	4	8029451
D3030	Classroom 244	Fair	Unit Ventilator, approx/nominal 2 Ton	1	4	8029417
D3030	Classroom 317	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029462
D3030	Classroom 311	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029389
D3030	Room 224	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029429
D3030	Site General	Fair	Chiller, Air-Cooled	1	7	8003620
D3030	Classroom 237	Fair	Unit Ventilator, approx/nominal 2 Ton	1	4	8029448
D3030	Classroom 220	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029466
D3030	Classroom 316	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029439
D3030	Classroom 238	Fair	Unit Ventilator, approx/nominal 2 Ton	1	4	8029455
D3030	Roof	Fair	Split System, Condensing Unit/Heat Pump	1	7	8003558
D3030	Classroom 216	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029386
D3030	Classroom 204	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029412
D3030	Room 226A School Coordinator	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029368
D3030	Classroom 211	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029396
D3030	Classroom 319	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029370
D3030	Classroom 304	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029431
D3030	Nurses Office in Media Center 2nd floor	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029449
D3030	Classroom 312	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029481
D3030	Classroom 205	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029380
D3030	Classroom 234	Fair	Unit Ventilator, approx/nominal 2 Ton	1	4	8029388
D3030	Room 223 instructional facilitator office	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029421
D3030	Classroom 243	Fair	Unit Ventilator, approx/nominal 2 Ton	1	4	8029440
D3030	Classroom 242	Fair	Unit Ventilator, approx/nominal 2 Ton	1	4	8029402
D3030	Classroom 315	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029475
D3030	Classroom 236	Poor	Unit Ventilator, approx/nominal 2 Ton	1	0	8029482
D3030	Roof	Fair	Split System, Condensing Unit/Heat Pump	1	6	8003473
D3030	Classroom 215	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029432
D3030	Classroom 218	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029435
D3030	Classroom 241	Fair	Unit Ventilator, approx/nominal 2 Ton	1	4	8029450
D3030	Room 225	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029394
D3030	Roof	Fair	Split System, Condensing Unit/Heat Pump	1	3	8003609
D3030	Classroom 313	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029378
D3030	Classroom 307	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029372
D3030	Classroom 306	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029410
D3030	Media Center 2nd floor-219	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029456
D3030	Site General	Fair	Split System, Condensing Unit/Heat Pump	1	3	8003550
D3030	Site General	Fair	Chiller, Air-Cooled	1	5	8003509

Component Condition Report | Grahamwood Elementary School

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D3030	Classroom 245	Poor	Unit Ventilator, approx/nominal 2 Ton	1	0	8029470
D3030	Room 226 intervention office	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029480
D3030	Classroom 309	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029472
D3030	Classroom 318	Fair	Unit Ventilator, approx/nominal 2 Ton	1	3	8029391
D3050	Boiler Room	Fair	Pump, Distribution, HVAC Chilled or Condenser Water	1	12	8003652
D3050	Boiler Room	Good	Pump, Distribution, HVAC Chilled or Condenser Water	1	11	8003485
D3050	Roof bldg 705	Good	Packaged Unit, RTU, Pad or Roof-Mounted	1	14	8029382
D3050	Boiler Room	Fair	Pump, Distribution, HVAC Chilled or Condenser Water	1	12	8003541
D3050	Boiler Room	Fair	Pump, Distribution, HVAC Chilled or Condenser Water	1	9	8003518
D3050	Roof	Fair	Packaged Unit, RTU, Pad or Roof-Mounted	1	3	8003641
D3050	Roof bldg 705	Good	Packaged Unit, RTU, Pad or Roof-Mounted	1	14	8029458
D3050	Boiler Room	Fair	Pump, Distribution, HVAC Chilled or Condenser Water	1	2	8003630
D3050	Roof	Fair	Packaged Unit, RTU, Pad or Roof-Mounted	1	3	8003643
D3050	Roof	Fair	Air Handler, Interior AHU, Easy/Moderate Access	1	3	8003629
D3050	Boiler Room	Good	Pump, Distribution, HVAC Chilled or Condenser Water	1	20	8003593
D3050	Roof	Fair	Packaged Unit, RTU, Pad or Roof-Mounted	1	3	8003613
D3050	Boiler Room	Good	Pump, Distribution, HVAC Chilled or Condenser Water	1	9	8003494
D3050	Roof	Fair	Packaged Unit, RTU, Pad or Roof-Mounted	1	3	8003549
D3050	Roof bldg 705	Good	Packaged Unit, RTU, Pad or Roof-Mounted	1	14	8029425
D3050	Roof	Fair	Packaged Unit, RTU, Pad or Roof-Mounted	1	3	8003478
D3050	Roof bldg 705	Good	Packaged Unit, RTU, Pad or Roof-Mounted	1	14	8029447
D3050	Roof bldg 705	Good	Packaged Unit, RTU, Pad or Roof-Mounted	1	14	8029403
D3050	Roof bldg 705	Good	Packaged Unit, RTU, Pad or Roof-Mounted	1	14	8029392
D3050	Roof bldg 705	Good	Packaged Unit, RTU, Pad or Roof-Mounted	1	14	8029401
D3050	Throughout Building	Fair	HVAC System, Ductwork, Low Density	107,806 SF	3	8029477
D3050	Roof bldg 705	Good	Packaged Unit, RTU, Pad or Roof-Mounted	1	14	8029418
D3050	Boiler Room	Fair	Pump, Distribution, HVAC Chilled or Condenser Water	1	12	8003575
D3050	Roof bldg 705	Good	Packaged Unit, RTU, Pad or Roof-Mounted	1	14	8029416
D3050	Roof bldg 705	Good	Packaged Unit, RTU, Pad or Roof-Mounted	1	14	8029405
D3050	Boiler Room	Good	Pump, Distribution, HVAC Chilled or Condenser Water	1	11	8003632
D3050	Roof	Fair	Packaged Unit, RTU, Pad or Roof-Mounted	1	3	8003610
D3050	Roof	Fair	Air Handler, Interior AHU, Easy/Moderate Access	1	8	8003537
D3050	Boiler Room	Good	Pump, Distribution, HVAC Chilled or Condenser Water	1	20	8003482
D3050	Throughout Building	Fair	HVAC System, Hydronic Piping, 2-Pipe	107,806 SF	15	8003554
D3050	Roof bldg 705	Good	Packaged Unit, RTU, Pad or Roof-Mounted	1	14	8029404
D3050	Roof	Fair	Packaged Unit, RTU, Pad or Roof-Mounted	1	3	8003646
D3050	Boiler Room	Fair	Pump, Distribution, HVAC Chilled or Condenser Water	1	9	8003505
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	1	3	8003533

Component Condition Report | Grahamwood Elementary School

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 24" Damper	1	3	8003592
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	1	3	8003486
D3060	Roof bldg 705	Good	Exhaust Fan, Roof or Wall-Mounted, 10" Damper	1	14	8029454
D3060	Roof bldg 705	Good	Exhaust Fan, Roof or Wall-Mounted, 10" Damper	1	14	8029406
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	1	3	8003495
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 42" Damper	1	3	8003548
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 24" Damper	1	3	8003590
D3060	Roof	Fair	Exhaust Fan, Centrifugal, 28" Damper	1	3	8003480
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	1	3	8003481
D3060	Roof bldg 705	Good	Exhaust Fan, Roof or Wall-Mounted, 10" Damper	1	14	8029390
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 42" Damper	1	3	8003573
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	1	3	8003586
D3060	Roof bldg 705	Good	Exhaust Fan, Roof or Wall-Mounted, 10" Damper	1	14	8029427
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	1	3	8003606
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	1	3	8003561
Fire Protection						
D4010	Throughout Building	Fair	Fire Suppression System, Full System Install/Retrofit, Medium Density/Complexity, Renovate	107,806 SF	18	8003491
D4010	Commercial Kitchen	Fair	Fire Suppression System, Commercial Kitchen, per LF of Hood	50 LF	12	8003655
D4010	Utility Rooms/Areas	Fair	Backflow Preventer, Fire Suppression	1	18	8003503
Electrical						
D5020	Electrical Room	Good	Distribution Panel, 120/208 V	1	24	8029478
D5020	Boiler Room	Fair	Distribution Panel, 120/208 V	1	3	8003635
D5020		Fair	Electrical System, Full System Renovation/Upgrade, Medium Density/Complexity	107,806 SF	2	8046556
D5020	Boiler Room	Fair	Distribution Panel, 120/208 V	1	3	8003529
D5020	Boiler Room	Fair	Distribution Panel, 120/208 V	1	3	8003618
D5020	Electrical room Building 705	Good	Switchboard, 120/208 V	1	34	8029385
D5020	Boiler Room	Fair	Distribution Panel, 120/208 V	1	3	8003513
D5020	Electrical Room	Good	Distribution Panel, 120/208 V	1	24	8029473
D5020	Electrical Room	Good	Distribution Panel, 120/208 V	1	24	8029409
D5020	Boiler Room	Fair	Switchboard, 120/208 V	1	3	8003487
D5020	Commercial Kitchen	Fair	Distribution Panel, 120/208 V	1	3	8003470
D5020	Boiler Room	Fair	Distribution Panel, 120/208 V	1	3	8003562
D5020	Boiler Room	Fair	Distribution Panel, 120/208 V	1	3	8003477
D5020	Electrical Room bldg 705	Good	Distribution Panel, 120/208 V	1	24	8029376
D5020	Boiler Room	Fair	Distribution Panel, 120/208 V	1	3	8003511
D5030	Boiler Room	Fair	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	1	3	8003500
D5030	Boiler Room	Fair	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	1	3	8003572

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UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D5040	Throughout Building	Fair	Interior Lighting System, Full Upgrade, Medium Density & Standard Fixtures	107,806 SF	3	8029420
D5040	Roof	Fair	Exterior Fixture w/ Lamp, any type, w/ LED Replacement	8	9	8003517
D5040	Site General	Fair	Exterior Fixture w/ Lamp, any type, w/ LED Replacement	16	12	8003581
Fire Alarm & Electronic Systems						
D7030	Throughout Building	Fair	Security/Surveillance System, Full System Installation, Average Density, Install	107,806 SF	3	8003598
D7050	Main faculty office	Fair	Fire Alarm Panel, Fully Addressable	1	3	8029483
Equipment & Furnishings						
E1030	Kitchen	Fair	Foodservice Equipment, Refrigerator, 3-Door Reach-In	1	8	8003602
E1030	Kitchen	Fair	Foodservice Equipment, Dairy Cooler/Wells	2	8	8003579
E1030	Kitchen	Good	Foodservice Equipment, Ice maker, Freestanding	1	11	8003553
E1030	Kitchen	Fair	Foodservice Equipment, Range, 2-Burner	1	6	8003647
E1030	Kitchen	Fair	Commercial Kitchen Line, Serving/Warming Equipment	12 LF	8	8003552
E1030	Kitchen	Fair	Foodservice Equipment, Walk-In, Condenser for Refrigerator/Freezer	1	3	8003560
E1030	Kitchen	Good	Foodservice Equipment, Freezer, 2-Door Reach-In	1	11	8003497
E1030	Kitchen	Fair	Foodservice Equipment, Dishwasher Commercial	1	4	8003471
E1030	Kitchen	Fair	Foodservice Equipment, Convection Oven, Double	1	6	8003531
E1030	Kitchen	Fair	Foodservice Equipment, Refrigerator, 1-Door Reach-In	1	8	8003564
E1030	Kitchen	Fair	Foodservice Equipment, Walk-In, Condenser for Refrigerator/Freezer	1	3	8003617
E1030	Kitchen	Fair	Foodservice Equipment, Convection Oven, Double	1	6	8003624
E1030	Kitchen	Good	Foodservice Equipment, Freezer, 2-Door Reach-In	1	11	8003539
E1070	Site	Fair	Basketball Backboard, Wall-Mounted, Fixed	4	12	8003589
Special Construction & Demo						
F1020	Site	Good	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Basic/Minimal	100 SF	21	8003656
F1020	Site	Good	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Standard	2,500 SF	21	8003651
Pedestrian Plazas & Walkways						
G2020	Site	Poor	Parking Lots, Pavement, Asphalt, Mill & Overlay	44,500 SF	2	8003547
G2020	Site	Poor	Parking Lots, Pavement, Asphalt, Seal & Stripe	44,500 SF	1	8003526
G2030	Site	Fair	Sidewalk, Asphalt	550 SF	12	8003543
G2030	Site	Poor	Sidewalk, Concrete, Large Areas	3,600 SF	2	8003524
Athletic, Recreational & Playfield Areas						
G2050	Site	Good	Athletic Surfaces & Courts, Skate Park, Concrete Pavement, Replace/Install	2,500 SF	21	8003475
G2050	Site	Fair	Play Structure, Swing Set, 4 Seats	2	12	8003622
G2050	Site	Good	Playfield Surfaces, Chips Engineered Wood, 6" Depth	5,000 SF	2	8003584
G2050	Site	Good	Play Structure, Multipurpose, Large	2	13	8003648
Sitework						
G2060	Site	Fair	Fences & Gates, Fence, Chain Link 4'	3,200 LF	24	8003555
G2060	Site	Good	Signage, Property, Monument, Replace/Install	1	15	8003604

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UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
G2060	Site	Fair	Dumpster Enclosure, Gates, Wood/Metal, Replace/Install	2	12	8003559
G2060	Site	Good	Dumpster Enclosure, Masonry (CMU) Walls, 8' High (per LF), Replace/Install	18 LF	28	8003576
G2060	Site	Good	Flagpole, Metal	1	20	8003476
G2060	Site	Good	Fences & Gates, Fence, Metal Tube 6'	160 LF	30	8003640
G4050	Site	Fair	Parking/Roadway Lighting, Pole-Mounted, any type w/ LED	12	3	8003568
G4050	Site	Fair	Pole Light Fixture w/ Lamps, any type 30' High, w/ LED Replacement, Replace/Install	8	3	8003571
G4050	Site General	Fair	Exterior Site Lighting, Wall Pack, 13 to 26 W	20	3	8003615

Appendix F:

Replacement Reserves

Replacement Reserves Report


Grahamwood Elementary School


9/30/2024



Location	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	Total Escalated Estimate
Grahamwood Elementary School	\$73,000	\$20,626	\$2,274,313	\$5,253,621	\$917,571	\$44,400	\$50,729	\$38,987	\$162,907	\$32,619	\$2,285,195	\$79,074	\$207,370	\$102,797	\$658,128	\$2,525,512	\$59,992	\$24,958	\$2,533,353	\$7,715	\$87,235	\$17,440,103
Grand Total	\$73,000	\$20,626	\$2,274,313	\$5,253,621	\$917,571	\$44,400	\$50,729	\$38,987	\$162,907	\$32,619	\$2,285,195	\$79,074	\$207,370	\$102,797	\$658,128	\$2,525,512	\$59,992	\$24,958	\$2,533,353	\$7,715	\$87,235	\$17,440,103

Uniform 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	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	Deficiency Repair Estimate	
B2010	Building Exterior	8003544	Exterior Walls, Brick, Replace	50	40	10	31800	SF	\$53.00	\$1,685,400											\$1,685,400										\$1,685,400		
B2020	Building Exterior	8003601	Glazing, any type, by SF, Replace	30	27	3	25400	SF	\$55.00	\$1,397,000				\$1,397,000																		\$1,397,000	
B2050	Building Exterior	8003502	Exterior Door, Steel, Standard, Replace	30	27	3	32	EA	\$600.00	\$19,200				\$19,200																		\$19,200	
B2080	Site	8003520	Awning, Metal, per SF of awning, Refinish	10	6	4	2500	SF	\$2.50	\$6,250					\$6,250										\$6,250							\$6,250	
B2080	Site	8003570	Awning, Fabric, per SF of awning, Replace	10	4	6	100	SF	\$8.00	\$800							\$800										\$800					\$800	
B3010	Roof	8003493	Roofing, Single-Ply Membrane, TPO/PVC, Replace	20	17	3	24000	SF	\$17.00	\$408,000				\$408,000																		\$408,000	
B3010	Roof	8003546	Roofing, Single-Ply Membrane, EPDM, Replace	20	16	4	38850	SF	\$11.00	\$427,350					\$427,350																	\$427,350	
B3010	Roof bldg 705	8029474	Roofing, Modified Bitumen, Replace	20	5	15	8500	SF	\$10.00	\$85,000																\$85,000						\$85,000	
C1030	Throughout Building	8029463	Interior Door, Wood, Solid-Core, Replace	40	37	3	185	EA	\$700.00	\$129,500				\$129,500																		\$129,500	
C1030	Throughout Building 705	8029407	Interior Door, Aluminum-Framed & Glazed, Standard Swing, Replace	40	37	3	2	EA	\$1,300.00	\$2,600				\$2,600																		\$2,600	
C1030	Throughout Building 705	8029436	Interior Door, Steel, Standard, Replace	40	37	3	42	EA	\$600.00	\$25,200				\$25,200																		\$25,200	
C1070	Throughout Building	8029461	Suspended Ceilings, Acoustical Tile (ACT), Replace	25	22	3	80900	SF	\$3.50	\$283,150				\$283,150																		\$283,150	
C1090	Restrooms	8029411	Toilet Partitions, Plastic/Laminate, Replace	20	17	3	42	EA	\$750.00	\$31,500				\$31,500																		\$31,500	
C1090	Restrooms building 705	8029383	Toilet Partitions, Plastic/Laminate, Replace	20	6	14	18	EA	\$750.00	\$13,500															\$13,500							\$13,500	
C2010	Commercial Kitchen	8003535	Wall Finishes, Ceramic Tile, Replace	40	25	15	53900	SF	\$18.00	\$970,200																	\$970,200					\$970,200	
C2010	Throughout Building 705	8029424	Wall Finishes, any surface, Prep & Paint	10	6	4	161700	SF	\$1.50	\$242,550					\$242,550										\$242,550							\$242,550	
C2030	Throughout Building	8029430	Flooring, Vinyl Tile (VCT), Replace	15	12	3	107806	SF	\$5.00	\$539,030				\$539,030															\$539,030			\$539,030	
C2050	Throughout Building	8029441	Ceiling Finishes, any flat surface, Prep & Paint	10	6	4	27000	SF	\$2.00	\$54,000					\$54,000										\$54,000							\$54,000	
D1010	Elevator Shafts/Utility	8003639	Elevator Cab Finishes, Standard, Replace	15	12	3	2	EA	\$9,000.00	\$18,000				\$18,000															\$18,000			\$36,000	
D1010	Building 705	8029381	Passenger Elevator, Hydraulic, 2 Floors, Renovate	30	18	12	1	EA	\$55,000.00	\$55,000													\$55,000									\$55,000	
D1010	Utility room Building 705	8029400	Elevator Controls, Automatic, 1 Car, Replace	20	5	15	1	EA	\$5,000.00	\$5,000																\$5,000						\$5,000	
D1010	Building 705	8029464	Elevator Controls, Automatic, 1 Car, Replace	20	5	15	1	EA	\$5,000.00	\$5,000																\$5,000						\$5,000	
D2010	Commercial Kitchen	8003595	Storage Tank, Domestic Water, Replace	30	18	12	1	EA	\$2,400.00	\$2,400													\$2,400									\$2,400	
D2010	Boiler Room	8003574	Water Heater, Electric, Residential, Replace	15	11	4	1	EA	\$900.00	\$900					\$900				\$1,300											\$900		\$1,800	
D2010	Boiler Room	8003626	Water Heater, Gas, Residential, Replace	15	7	8	1	EA	\$1,300.00	\$1,300									\$1,300													\$1,300	
D2010	Utility room Building 705	8029419	Water Heater, Gas, Commercial (125 MBH), Replace	20	5	15	1	EA	\$12,400.00	\$12,400																\$12,400						\$12,400	
D2010	Boiler Room	8003649	Backflow Preventer, Domestic Water, Replace	30	15	15	1	EA	\$1,400.00	\$1,400																\$1,400						\$1,400	
D2010	Restrooms	8029399	Urinal, Standard, Replace	30	27	3	23	EA	\$1,100.00	\$25,300				\$25,300																		\$25,300	
D2010	Restrooms	8029398	Toilet, Commercial Water Closet, Replace	30	27	3	42	EA	\$1,300.00	\$54,600				\$54,600																		\$54,600	
D2010	Restrooms	8029443	Sink/Lavatory, Wall-Hung, Vitreous China, Replace	30	27	3	25	EA	\$1,500.00	\$37,500				\$37,500																		\$37,500	
D2010	Hallways & Common Areas	8029433	Drinking Fountain, Wall-Mounted, Single-Level, Replace	15	5	10	10	EA	\$1,200.00	\$12,000										\$12,000												\$12,000	
D2010	Throughout Building 705	8029422	Drinking Fountain, Wall-Mounted, BI-Level, Replace	15	5	10	2	EA	\$1,500.00	\$3,000										\$3,000												\$3,000	
D2060	Boiler Room	8003522	Air Compressor, Tank-Style, Replace	20	17	3	1	EA	\$7,270.00	\$7,270				\$7,270																		\$7,270	
D3020	Boiler Room	8003628	Boiler, Gas, HVAC, Replace	30	30	0	1	EA	\$50,800.00	\$50,800	\$50,800																					\$50,800	
D3020	Commercial Kitchen	8003515	Boiler, Gas, HVAC, Replace	30	27	3	1	EA	\$26,200.00	\$26,200				\$26,200																		\$26,200	
D3020	Boiler Room	8003498	Boiler, Gas, HVAC, Replace	30	22	8	1	EA	\$20,000.00	\$20,000									\$20,000													\$20,000	
D3020	Boiler Room	8003514	Boiler, Gas, HVAC, Replace	30	22	8	1	EA	\$20,000.00	\$20,000									\$20,000													\$20,000	
D3020	Boiler Room	8003516	Boiler Supplemental Components, Expansion Tank, Replace	40	28	12	1	EA	\$13,000.00	\$13,000												\$13,000										\$13,000	
D3030	Site General	8003509	Chiller, Air-Cooled, Replace	25	20	5	1	EA	\$28,300.00	\$28,300					\$28,300																	\$28,300	
D3030	Site General	8003620	Chiller, Air-Cooled, Replace	25	18	7	1	EA	\$28,300.00	\$28,300								\$28,300														\$28,300	
D3030	Room 246	8029469	Unit Ventilator, approx/nominal 2 Ton, Replace	20	20	0	1	EA	\$7,400.00	\$7,400	\$7,400																			\$7,400		\$14,800	
D3030	Classroom 236	8029482	Unit Ventilator, approx/nominal 2 Ton, Replace	20	20	0	1	EA	\$7,400.00	\$7,400	\$7,400																				\$7,400		\$14,800
D3030	Classroom 245	8029470	Unit Ventilator, approx/nominal 2 Ton, Replace	20	20	0	1	EA	\$7,400.00	\$7,400	\$7,400																				\$7,400		\$14,800
D3030	Classroom 203	8029467	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00	\$7,400				\$7,400																		\$7,400	
D3030	Classroom 321	8029452	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00	\$7,400				\$7,400																		\$7,400	
D3030	Classroom 214	8029476	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00	\$7,400				\$7,400																		\$7,400	
D3030	Classroom 314	8029384	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00	\$7,400				\$7,400																		\$7,400	
D3030	Classroom 320	8029414	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00	\$7,400				\$7,400																		\$7,400	
D3030	Classroom 308	8029426	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00	\$7,400				\$7,400																		\$7,400	

Replacement Reserves Report																																			
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9/30/2024																																			
Unifor mat 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	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	Deficiency Repair Estimate				
D3030	Classroom 213	8029413	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 305, no access	8029471	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 206	8029373	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 303	8029387	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 207	8029468	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 317	8029462	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 311	8029389	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Room 224	8029429	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 220	8029466	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 316	8029439	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 216	8029386	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 204	8029412	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 211	8029396	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 319	8029370	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 304	8029431	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Nurses Office in Media Center 2nd floor	8029449	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 312	8029481	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 205	8029380	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Room 223 instructional facilitator office	8029421	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 315	8029475	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 215	8029432	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 218	8029435	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Room 225	8029394	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 313	8029378	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 307	8029372	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 306	8029410	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Media Center 2nd floor-219	8029456	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Room 226 intervention office	8029480	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 309	8029472	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 318	8029391	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Roof	8003609	Split System, Condensing Unit/Heat Pump, Replace	15	12	3	1	EA	\$17,200.00 \$17,200				\$17,200															\$17,200			\$34,400				
D3030	Site General	8003550	Split System, Condensing Unit/Heat Pump, Replace	15	12	3	1	EA	\$17,200.00 \$17,200				\$17,200															\$17,200			\$34,400				
D3030	Room 226A School Coordinator	8029368	Unit Ventilator, approx/nominal 2 Ton, Replace	20	17	3	1	EA	\$7,400.00 \$7,400				\$7,400																		\$7,400				
D3030	Classroom 239	8029451	Unit Ventilator, approx/nominal 2 Ton, Replace	20	16	4	1	EA	\$7,400.00 \$7,400					\$7,400																					

Replacement Reserves Report																																	
Grahamwood Elementary School																																	
9/30/2024																																	
Unifor mat 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	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	Deficiency Repair Estimate	
D5030	Boiler Room	8003572	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	20	17	3	1	EA	\$5,300.00	\$5,300				\$5,300																	\$5,300		
D5040	Throughout Building	8029420	Interior Lighting System, Full Upgrade, Medium Density & Standard Fixtures, Replace	20	17	3	107806	SF	\$4.50	\$485,127				\$485,127																	\$485,127		
D5040	Roof	8003517	Exterior Fixture w/ Lamp, any type, w/ LED Replacement, Replace	20	11	9	8	EA	\$600.00	\$4,800										\$4,800											\$4,800		
D5040	Site General	8003581	Exterior Fixture w/ Lamp, any type, w/ LED Replacement, Replace	20	8	12	16	EA	\$600.00	\$9,600												\$9,600									\$9,600		
D7030	Throughout Building	8003598	Security/Surveillance System, Full System Installation, Average Density, Install	15	12	3	107806	SF	\$3.00	\$323,418				\$323,418															\$323,418		\$646,836		
D7050	Main faculty office	8029483	Fire Alarm Panel, Fully Addressable, Replace	15	12	3	1	EA	\$15,000.00	\$15,000				\$15,000														\$15,000			\$30,000		
E1030	Kitchen	8003560	Foodservice Equipment, Walk-In, Condenser for Refrigerator/Freezer, Replace	15	12	3	1	EA	\$6,300.00	\$6,300				\$6,300														\$6,300			\$12,600		
E1030	Kitchen	8003617	Foodservice Equipment, Walk-In, Condenser for Refrigerator/Freezer, Replace	15	12	3	1	EA	\$6,300.00	\$6,300				\$6,300														\$6,300			\$12,600		
E1030	Kitchen	8003471	Foodservice Equipment, Dishwasher Commercial, Replace	10	6	4	1	EA	\$21,500.00	\$21,500					\$21,500										\$21,500						\$43,000		
E1030	Kitchen	8003531	Foodservice Equipment, Convection Oven, Double, Replace	10	4	6	1	EA	\$8,280.00	\$8,280						\$8,280											\$8,280				\$16,560		
E1030	Kitchen	8003647	Foodservice Equipment, Range, 2-Burner, Replace	15	9	6	1	EA	\$1,700.00	\$1,700						\$1,700															\$1,700		
E1030	Kitchen	8003624	Foodservice Equipment, Convection Oven, Double, Replace	10	4	6	1	EA	\$8,280.00	\$8,280						\$8,280											\$8,280				\$16,560		
E1030	Kitchen	8003602	Foodservice Equipment, Refrigerator, 3-Door Reach-In, Replace	15	7	8	1	EA	\$6,400.00	\$6,400									\$6,400												\$6,400		
E1030	Kitchen	8003579	Foodservice Equipment, Dairy Cooler/Wells, Replace	15	7	8	2	EA	\$3,600.00	\$7,200									\$7,200												\$7,200		
E1030	Kitchen	8003564	Foodservice Equipment, Refrigerator, 1-Door Reach-In, Replace	15	7	8	1	EA	\$2,700.00	\$2,700									\$2,700												\$2,700		
E1030	Kitchen	8003552	Commercial Kitchen Line, Serving/Warming Equipment, Replace	20	12	8	12	LF	\$1,000.00	\$12,000									\$12,000												\$12,000		
E1030	Kitchen	8003553	Foodservice Equipment, Icemaker, Freestanding, Replace	15	4	11	1	EA	\$6,700.00	\$6,700											\$6,700										\$6,700		
E1030	Kitchen	8003539	Foodservice Equipment, Freezer, 2-Door Reach-In, Replace	15	4	11	1	EA	\$5,100.00	\$5,100											\$5,100										\$5,100		
E1030	Kitchen	8003497	Foodservice Equipment, Freezer, 2-Door Reach-In, Replace	15	4	11	1	EA	\$5,100.00	\$5,100											\$5,100										\$5,100		
E1070	Site	8003589	Basketball Backboard, Wall-Mounted, Fixed	30	18	12	4	EA	\$3,580.00	\$14,320												\$14,320									\$14,320		
G2020	Site	8003526	Parking Lots, Pavement, Asphalt, Seal & Stripe	5	4	1	44500	SF	\$0.45	\$20,025		\$20,025					\$20,025				\$20,025						\$20,025				\$80,100		
G2020	Site	8003547	Parking Lots, Pavement, Asphalt, Mill & Overlay	25	23	2	44500	SF	\$3.50	\$155,750			\$155,750																		\$155,750		
G2030	Site	8003524	Sidewalk, Concrete, Large Areas, Replace	50	48	2	3600	SF	\$9.00	\$32,400			\$32,400																		\$32,400		
G2030	Site	8003543	Sidewalk, Asphalt, Replace	25	13	12	550	SF	\$5.50	\$3,025												\$3,025									\$3,025		
G2050	Site	8003584	Playfield Surfaces, Chips Engineered Wood, 6" Depth, Replace	3	1	2	5000	SF	\$2.00	\$10,000			\$10,000		\$10,000			\$10,000			\$10,000			\$10,000			\$10,000		\$10,000		\$70,000		
G2050	Site	8003622	Play Structure, Swing Set, 4 Seats, Replace	20	8	12	2	EA	\$2,500.00	\$5,000											\$5,000										\$5,000		
G2050	Site	8003648	Play Structure, Multipurpose, Large, Replace	20	7	13	2	EA	\$35,000.00	\$70,000												\$70,000									\$70,000		
G2060	Site	8003604	Signage, Property, Monument, Replace/Install	20	5	15	1	EA	\$3,000.00	\$3,000															\$3,000						\$3,000		
G2060	Site	8003476	Flagpole, Metal, Replace	30	10	20	1	EA	\$2,500.00	\$2,500																			\$2,500		\$2,500		
G2060	Site	8003559	Dumpster Enclosure, Gates, Wood/Metal, Replace/Install	20	8	12	2	EA	\$1,700.00	\$3,400											\$3,400										\$3,400		
G4050	Site	8003568	Parking/Roadway Lighting, Pole-Mounted, any type w/ LED, Replace	20	17	3	12	EA	\$1,200.00	\$14,400				\$14,400																	\$14,400		
G4050	Site	8003571	Pole Light Fixture w/ Lamps, any type 30' High, w/ LED Replacement, Replace/Install	20	17	3	8	EA	\$7,000.00	\$56,000				\$56,000																	\$56,000		
G4050	Site General	8003615	Exterior Site Lighting, Wall Pack, 13 to 26 W, Replace	20	17	3	20	EA	\$400.00	\$8,000				\$8,000																	\$8,000		
Totals, Unescalated											\$73,000	\$20,025	\$2,143,758	\$4,807,807	\$815,250	\$38,300	\$42,485	\$31,700	\$128,600	\$25,000	\$1,700,400	\$57,125	\$145,445	\$70,000	\$435,100	\$1,621,030	\$37,385	\$15,100	\$1,488,078	\$4,400	\$48,300	\$13,748,288	
Totals, Escalated (3.0% inflation, compounded annually)											\$73,000	\$20,626	\$2,274,313	\$5,253,621	\$917,571	\$44,400	\$50,729	\$38,987	\$162,907	\$32,619	\$2,285,195	\$79,074	\$207,370	\$102,797	\$658,128	\$2,525,512	\$59,992	\$24,958	\$2,533,353	\$7,715	\$87,235	\$17,440,103	

Appendix G:

Equipment Inventory List

D10 Conveying													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	8029400	D1010	Elevator Controls	Automatic, 1 Car	2500 LB	Grahamwood Elementary School	Utility room Building 705						
2	8029464	D1010	Elevator Controls	Automatic, 1 Car		Grahamwood Elementary School	Building 705						
3	8029381	D1010	Passenger Elevator	Hydraulic, 2 Floors		Grahamwood Elementary School	Building 705						
4	8029445	D1010	Passenger Elevator	Hydraulic, 2 Floors, 1500 to 2500 LB		Grahamwood Elementary School	Building 705						
D20 Plumbing													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	8003595	D2010	Storage Tank	Domestic Water	80 GAL	Grahamwood Elementary School	Commercial Kitchen	A. O. Smith	TJ 80A 000	1521M000914			
2	8003574	D2010	Water Heater	Electric, Residential	40 GAL	Grahamwood Elementary School	Boiler Room	Lochinvar	ETT040KD 110	1952117601210			
3	8029419	D2010	Water Heater	Gas, Commercial (125 MBH)	55 GAL	Grahamwood Elementary School	Utility room Building 705	State	PCE-52-2ORTA100	2424139534601	2019		
4	8003626	D2010	Water Heater	Gas, Residential	50 GAL	Grahamwood Elementary School	Boiler Room	A. O. Smith	G62-50T60 250	2307132877327			
5	8003649	D2010	Backflow Preventer	Domestic Water	1 IN	Grahamwood Elementary School	Boiler Room						
6	8003522	D2060	Air Compressor	Tank-Style	2 HP	Grahamwood Elementary School	Boiler Room	SpeedAire	4XX28	G005A1150308453			
D30 HVAC													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	8003515	D3020	Boiler	Gas, HVAC	579 MBH	Grahamwood Elementary School	Commercial Kitchen	Teledyne Laars	109501	8892131			
2	8003628	D3020	Boiler	Gas, HVAC	1846 MBH	Grahamwood Elementary School	Boiler Room	Cleaver-Brooks	Illegible	Illegible	1963		
3	8003650	D3020	Boiler	Gas, HVAC	825 MBH	Grahamwood Elementary School	Boiler Room	Lochinvar	FTX850N	1910 113902746	2018		
4	8003508	D3020	Boiler	Gas, HVAC	825 MBH	Grahamwood Elementary School	Boiler Room	Lochinvar	FTX850N	Illegible	2018		
5	8003556	D3020	Boiler	Gas, HVAC	825 MBH	Grahamwood Elementary School	Boiler Room	Lochinvar	FTX850N	1913 114260744			
6	8003498	D3020	Boiler	Gas, HVAC	400 MBH	Grahamwood Elementary School	Boiler Room	Bryan Boilers	No dataplate	No dataplate			
7	8003583	D3020	Boiler	Gas, HVAC	825 MBH	Grahamwood Elementary School	Boiler Room	Lochinvar	FTX850N	1911 114060190	2018		
8	8003637	D3020	Boiler	Gas, HVAC	825 MBH	Grahamwood Elementary School	Boiler Room	Lochinvar	FTX850N	1915 114440453	2018		
9	8003514	D3020	Boiler	Gas, HVAC	400 MBH	Grahamwood Elementary School	Boiler Room	Bryan Boilers	No dataplate	No dataplate			
10	8003516	D3020	Boiler Supplemental Components	Expansion Tank	300 GAL	Grahamwood Elementary School	Boiler Room	Asme	1200	39804.			
11	8003620	D3030	Chiller	Air-Cooled	20 TON	Grahamwood Elementary School	Site General	Daikin Industries	AGZ191ETSEMNN00	STNU190600122			
12	8003509	D3030	Chiller	Air-Cooled	6 TON	Grahamwood Elementary School	Site General	York	YCAL0074EC17XBASXTXXXXXL	RMLM004453			
13	8003558	D3030	Split System	Condensing Unit/Heat Pump	2 TON	Grahamwood Elementary School	Roof	Mitsubishi Electric	AUH24EK	Illegible			
14	8003473	D3030	Split System	Condensing Unit/Heat Pump	2 TON	Grahamwood Elementary School	Roof	Mitsubishi Electric	Illegible	Illegible			
15	8003609	D3030	Split System	Condensing Unit/Heat Pump	10 TON	Grahamwood Elementary School	Roof	Ducane	AC10B60T	2563220105			
16	8003550	D3030	Split System	Condensing Unit/Heat Pump	10 TON	Grahamwood Elementary School	Site General	Goodman	G0C43060388	1207203850			
17	8003587	D3030	Split System Ductless	Single Zone	1 TON	Grahamwood Elementary School	Boiler Room	Mitsubishi Electric	No dataplate	No dataplate			

18	8029437	D3030	Split System Ductless	Single Zone	1 TON	Grahamwood Elementary School	Roof bldg 705	Daikin Industries	RXB12AXVJU	K001928	2018
19	8029467	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 203	Inaccessible	Inaccessible	Inaccessible	1983
20	8029452	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 321	Inaccessible	Inaccessible	Inaccessible	1983
21	8029476	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 214	Inaccessible	Inaccessible	Inaccessible	1983
22	8029384	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 314	Inaccessible	Inaccessible	Inaccessible	1983
23	8029414	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 320	Inaccessible	Inaccessible	Inaccessible	1983
24	8029426	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 308	Inaccessible	Inaccessible	Inaccessible	1983
25	8029413	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 213	Inaccessible	Inaccessible	Inaccessible	1983
26	8029471	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 305, no access	Inaccessible	Inaccessible	Inaccessible	1983
27	8029373	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 206	Inaccessible	Inaccessible	Inaccessible	1983
28	8029469	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Room 246	Inaccessible	Inaccessible	Inaccessible	1983
29	8029387	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 303	Inaccessible	Inaccessible	Inaccessible	1983
30	8029468	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 207	Inaccessible	Inaccessible	Inaccessible	1983
31	8029451	D3030	Unit Ventilator	approx/nominal 2 Ton	480 CFM	Grahamwood Elementary School	Classroom 239	McQuay	No dataplate	AUBU064700125	2008
32	8029417	D3030	Unit Ventilator	approx/nominal 2 Ton	400 CFM	Grahamwood Elementary School	Classroom 244	McQuay	U.RZV.5,040	AUBU084600173	2008
33	8029462	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 317	Inaccessible	Inaccessible	Inaccessible	1983
34	8029389	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 311	Inaccessible	Inaccessible	Inaccessible	1983
35	8029429	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Room 224	Inaccessible	Inaccessible	Inaccessible	1983
36	8029448	D3030	Unit Ventilator	approx/nominal 2 Ton	480 CFM	Grahamwood Elementary School	Classroom 237	McQuay	U.RZV.5,048	AUBU084700124	2008
37	8029466	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 220	Inaccessible	Inaccessible	Inaccessible	1983
38	8029439	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 316	Inaccessible	Inaccessible	Inaccessible	1983
39	8029455	D3030	Unit Ventilator	approx/nominal 2 Ton	540 CFM	Grahamwood Elementary School	Classroom 238	McQuay	U.RZV.5,054	AUBU084800195	2008
40	8029386	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 216	Inaccessible	Inaccessible	Inaccessible	1983
41	8029412	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 204	Inaccessible	Inaccessible	Inaccessible	1983
42	8029368	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Room 226A School Coordinator	Inaccessible	Inaccessible	Inaccessible	1983
43	8029396	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 211	Inaccessible	Inaccessible	Inaccessible	1983
44	8029370	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 319	Inaccessible	Inaccessible	Inaccessible	1983
45	8029431	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 304	Inaccessible	Inaccessible	Inaccessible	1983
46	8029449	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Nurses Office in Media Center 2nd floor	Inaccessible	Inaccessible	Inaccessible	1983
47	8029481	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 312	Inaccessible	Inaccessible	Inaccessible	1983
48	8029380	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 205	Inaccessible	Inaccessible	Inaccessible	1983
49	8029388	D3030	Unit Ventilator	approx/nominal 2 Ton	540 CFM	Grahamwood Elementary School	Classroom 234	McQuay	U.RZV.5,054	AUBU084800192	2008

50	8029421	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Room 223 instructional facilitator office	Inaccessible	Inaccessible	Inaccessible	1983
51	8029440	D3030	Unit Ventilator	approx/nominal 2 Ton	400 CFM	Grahamwood Elementary School	Classroom 243	McQuay	U,RZV,5,040	AUBU084600172	2008
52	8029402	D3030	Unit Ventilator	approx/nominal 2 Ton	400 CFM	Grahamwood Elementary School	Classroom 242	McQuay	U,RZV,5,040	AUBU084600171	2008
53	8029475	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 315	Inaccessible	Inaccessible	Inaccessible	1983
54	8029482	D3030	Unit Ventilator	approx/nominal 2 Ton	540 CFM	Grahamwood Elementary School	Classroom 236	McQuay	U,RZV,5,054	AUBU084800193	2008
55	8029432	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 215	Inaccessible	Inaccessible	Inaccessible	1983
56	8029435	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 218	Inaccessible	Inaccessible	Inaccessible	1983
57	8029450	D3030	Unit Ventilator	approx/nominal 2 Ton	540 CFM	Grahamwood Elementary School	Classroom 241	McQuay	U,RZV,5,054	AUBUCB4800191	2008
58	8029394	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Room 225	Inaccessible	Inaccessible	Inaccessible	1983
59	8029378	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 313	Inaccessible	Inaccessible	Inaccessible	1983
60	8029372	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 307	Inaccessible	Inaccessible	Inaccessible	1983
61	8029410	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 306	Inaccessible	Inaccessible	Inaccessible	1983
62	8029456	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Media Center 2nd floor-219	Inaccessible	Inaccessible	Inaccessible	1983
63	8029470	D3030	Unit Ventilator	approx/nominal 2 Ton	540 CFM	Grahamwood Elementary School	Classroom 245	McQuay	U,RZV,5,054	AUBU084800194	2008
64	8029480	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Room 226 intervention office	Inaccessible	Inaccessible	Inaccessible	1983
65	8029472	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 309	Inaccessible	Inaccessible	Inaccessible	1983
66	8029391	D3030	Unit Ventilator	approx/nominal 2 Ton	300 CFM	Grahamwood Elementary School	Classroom 318	Inaccessible	Inaccessible	Inaccessible	1983
67	8003652	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	5 HP	Grahamwood Elementary School	Boiler Room	Balbor	M3615T	366786Y696H1	
68	8003485	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	3 HP	Grahamwood Elementary School	Boiler Room	Armstrong Air	Illegible	1020050075	
69	8003541	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	10 HP	Grahamwood Elementary School	Boiler Room	Bell & Gossett	Inaccessible	Inaccessible	
70	8003518	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	1 HP	Grahamwood Elementary School	Boiler Room	Balbor	35E4363S75861	F1804061126	2018
71	8003630	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	1/6 HP	Grahamwood Elementary School	Boiler Room	Bell & Gossett	ALTERNATING CURRENT M0T0R	M10711	
72	8003593	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	10 HP	Grahamwood Elementary School	Boiler Room	Bell & Gossett	Illegible	Illegible	2019
73	8003494	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	1 HP	Grahamwood Elementary School	Boiler Room	Balbor	Inaccessible	Inaccessible	2018
74	8003575	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	10 HP	Grahamwood Elementary School	Boiler Room	Bell & Gossett	Inaccessible	Inaccessible	
75	8003632	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	3 HP	Grahamwood Elementary School	Boiler Room	Armstrong Air	Illegible	Illegible	
76	8003482	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	10 HP	Grahamwood Elementary School	Boiler Room	Bell & Gossett	E1510 SSF 8.125	PRD 26053-2 091	2019
77	8003505	D3050	Pump	Distribution, HVAC Chilled or Condenser Water	7.5 HP	Grahamwood Elementary School	Boiler Room	Balbor	Illegible	Illegible	
78	8003629	D3050	Air Handler	Interior AHU, Easy/Moderate Access	15000 CFM	Grahamwood Elementary School	Roof	CaptiveAire Systems	Illegible	Illegible	
79	8003537	D3050	Air Handler	Interior AHU, Easy/Moderate Access	10000 CFM	Grahamwood Elementary School	Roof	Greenheck	ERT-52S-15-30-ES	C2KC0643	2002
80	8029382	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	3 TON	Grahamwood Elementary School	Roof bldg 705	Lennox	LGH036H4EB4Y	5618D01359	2018
81	8003641	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	10 TON	Grahamwood Elementary School	Roof	AAON, Inc.	Illegible	Illegible	

82	8029458	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	3 TON	Grahamwood Elementary School	Roof bldg 705	Lennox	LGH036H4EB4Y	5618D01358	2018
83	8003643	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	6 TON	Grahamwood Elementary School	Roof	AAON, Inc.	Illegible	Illegible	
84	8003613	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	6 TON	Grahamwood Elementary School	Roof	AAON, Inc.	Illegible	Illegible	
85	8003549	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	20 TON	Grahamwood Elementary School	Roof	AAON, Inc.	Illegible	Illegible	
86	8029425	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	3 TON	Grahamwood Elementary School	Roof bldg 705	Lennox	LGH036H4EB4Y	5618D03928	2018
87	8003478	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	2 TON	Grahamwood Elementary School	Roof	York	Illegible	Illegible	
88	8029447	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	3 TON	Grahamwood Elementary School	Roof bldg 705	Lennox	LGH036H4EB4Y	5618D03931	2018
89	8029403	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	3 TON	Grahamwood Elementary School	Roof bldg 705	Lennox	LGH036H4EB4Y	5618D01357	2018
90	8029392	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	3 TON	Grahamwood Elementary School	Roof bldg 705	Lennox	LGH036H4EB4Y	5618D03927	2018
91	8029401	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	3 TON	Grahamwood Elementary School	Roof bldg 705	Lennox	LGH036H4EB4Y	5618D01356	2018
92	8029418	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	3 TON	Grahamwood Elementary School	Roof bldg 705	Lennox	LGH036H4EB4Y	5618D03930	2018
93	8029416	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	3 TON	Grahamwood Elementary School	Roof bldg 705	Lennox	LGH036H4EB4Y	5618D03929	2018
94	8029405	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	3 TON	Grahamwood Elementary School	Roof bldg 705	Lennox	LGH036H4EB4Y	5618D01355	2018
95	8003610	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	6 TON	Grahamwood Elementary School	Roof	AAON, Inc.	Illegible	Illegible	
96	8029404	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	3 TON	Grahamwood Elementary School	Roof bldg 705	Lennox	LGH036H4EB4Y	5618D03926	2018
97	8003646	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	5 TON	Grahamwood Elementary School	Roof	Daikin Industries	Illegible	Illegible	
98	8003480	D3060	Exhaust Fan	Centrifugal, 28" Damper	7500 CFM	Grahamwood Elementary School	Roof	Loren Cook Company	Illegible	Illegible	
99	8029454	D3060	Exhaust Fan	Roof or Wall-Mounted, 10" Damper	500 CFM	Grahamwood Elementary School	Roof bldg 705	Greenheck	G097VG4X	15402105	2018
100	8029406	D3060	Exhaust Fan	Roof or Wall-Mounted, 10" Damper	500 CFM	Grahamwood Elementary School	Roof bldg 705	Greenheck	G085VGX	15402106	2018
101	8029390	D3060	Exhaust Fan	Roof or Wall-Mounted, 10" Damper	500 CFM	Grahamwood Elementary School	Roof bldg 705	Greenheck	G123V65X	15402108	2018
102	8029427	D3060	Exhaust Fan	Roof or Wall-Mounted, 10" Damper	500 CFM	Grahamwood Elementary School	Roof bldg 705	Greenheck	G080VGX	15402107	2018
103	8003533	D3060	Exhaust Fan	Roof or Wall-Mounted, 16" Damper	1500 CFM	Grahamwood Elementary School	Roof	Loren Cook Company	Illegible	Illegible	
104	8003486	D3060	Exhaust Fan	Roof or Wall-Mounted, 16" Damper	1500 CFM	Grahamwood Elementary School	Roof	Loren Cook Company	Illegible	Illegible	
105	8003495	D3060	Exhaust Fan	Roof or Wall-Mounted, 16" Damper	1500 CFM	Grahamwood Elementary School	Roof	Loren Cook Company	Illegible	Illegible	
106	8003481	D3060	Exhaust Fan	Roof or Wall-Mounted, 16" Damper	1500 CFM	Grahamwood Elementary School	Roof	Loren Cook Company	Illegible	Illegible	
107	8003586	D3060	Exhaust Fan	Roof or Wall-Mounted, 16" Damper	1500 CFM	Grahamwood Elementary School	Roof	Loren Cook Company	Illegible	Illegible	
108	8003606	D3060	Exhaust Fan	Roof or Wall-Mounted, 16" Damper	1500 CFM	Grahamwood Elementary School	Roof	Loren Cook Company	Illegible	Illegible	
109	8003561	D3060	Exhaust Fan	Roof or Wall-Mounted, 16" Damper	1500 CFM	Grahamwood Elementary School	Roof	Loren Cook Company	Illegible	Illegible	
110	8003592	D3060	Exhaust Fan	Roof or Wall-Mounted, 24" Damper	5000 CFM	Grahamwood Elementary School	Roof	Loren Cook Company	Illegible	Illegible	
111	8003590	D3060	Exhaust Fan	Roof or Wall-Mounted, 24" Damper	5000 CFM	Grahamwood Elementary School	Roof	Loren Cook Company	Illegible	Illegible	
112	8003548	D3060	Exhaust Fan	Roof or Wall-Mounted, 42" Damper	18000 CFM	Grahamwood Elementary School	Roof	Loren Cook Company	No dataplate	No dataplate	
113	8003573	D3060	Exhaust Fan	Roof or Wall-Mounted, 42" Damper	18000 CFM	Grahamwood Elementary School	Roof	Loren Cook Company	No dataplate	No dataplate	

D40 Fire Protection													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	8003503	D4010	Backflow Preventer	Fire Suppression	4 IN	Grahamwood Elementary School	Utility Rooms/Areas						
2	8003655	D4010	Fire Suppression System	Commercial Kitchen, per LF of Hood		Grahamwood Elementary School	Commercial Kitchen	CaptiveAire Systems	Illegible	Illegible			50
D50 Electrical													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	8029385	D5020	Switchboard	120/208 V	800 AMP	Grahamwood Elementary School	Electrical room Building 705	Eaton	No dataplate	No dataplate	2018		
2	8003487	D5020	Switchboard	120/208 V	1200 AMP	Grahamwood Elementary School	Boiler Room	GE	APNB3812FH2A	APNB3812FH2A			
3	8029478	D5020	Distribution Panel	120/208 V	100 AMP	Grahamwood Elementary School	Electrical Room	Eaton	No dataplate	No dataplate	2018		
4	8003635	D5020	Distribution Panel	120/208 V	225 AMP	Grahamwood Elementary School	Boiler Room	GE	12A	162DQ79318			
5	8003529	D5020	Distribution Panel	120/208 V	400 AMP	Grahamwood Elementary School	Boiler Room	Westinghouse	PRL1	No dataplate			
6	8003618	D5020	Distribution Panel	120/208 V	225 AMP	Grahamwood Elementary School	Boiler Room	GE	10-1A	162DQ79318			
7	8003513	D5020	Distribution Panel	120/208 V	225 AMP	Grahamwood Elementary School	Boiler Room	GE	18-20	162D079318			
8	8029473	D5020	Distribution Panel	120/208 V	400 AMP	Grahamwood Elementary School	Electrical Room	Eaton	No dataplate	No dataplate	2018		
9	8029409	D5020	Distribution Panel	120/208 V	400 AMP	Grahamwood Elementary School	Electrical Room	Eaton	No dataplate	No dataplate	2018		
10	8003470	D5020	Distribution Panel	120/208 V	225 AMP	Grahamwood Elementary School	Commercial Kitchen	GE	11A	162DQ79318			
11	8003562	D5020	Distribution Panel	120/208 V	400 AMP	Grahamwood Elementary School	Boiler Room	Square D	No dataplate	No dataplate			
12	8003477	D5020	Distribution Panel	120/208 V	1000 AMP	Grahamwood Elementary School	Boiler Room	Federal	C-720093	C-720093			
13	8029376	D5020	Distribution Panel	120/208 V	400 AMP	Grahamwood Elementary School	Electrical Room bldg 705	Eaton	No dataplate	No dataplate	2018		
14	8003511	D5020	Distribution Panel	120/208 V	225 AMP	Grahamwood Elementary School	Boiler Room	GE	12A	R162DQ79318			
15	8003500	D5030	Variable Frequency Drive	VFD, by HP of Motor	5 HP	Grahamwood Elementary School	Boiler Room	Abb	ACH550-VCR-031A-2	2192000848			
16	8003572	D5030	Variable Frequency Drive	VFD, by HP of Motor	5 HP	Grahamwood Elementary School	Boiler Room	Abb	ACH550-VCR-031A-2	Illegible			
D70 Electronic Safety & Security													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	8029483	D7050	Fire Alarm Panel	Fully Addressable		Grahamwood Elementary School	Main faculty office	Simplex	4100ES	No dataplate	2012		
E10 Equipment													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	8003531	E1030	Foodservice Equipment	Convection Oven, Double		Grahamwood Elementary School	Kitchen	Blodgett	No dataplate	No dataplate			
2	8003624	E1030	Foodservice Equipment	Convection Oven, Double		Grahamwood Elementary School	Kitchen	Blodgett	No dataplate	No dataplate			
3	8003579	E1030	Foodservice Equipment	Dairy Cooler/Wells		Grahamwood Elementary School	Kitchen		F160S72	1305150000036	2017		2
4	8003471	E1030	Foodservice Equipment	Dishwasher Commercial		Grahamwood Elementary School	Kitchen	No dataplate	No dataplate	No dataplate			
5	8003497	E1030	Foodservice Equipment	Freezer, 2-Door Reach-In		Grahamwood Elementary School	Kitchen	Inaccessible	Inaccessible	Inaccessible			
6	8003539	E1030	Foodservice Equipment	Freezer, 2-Door Reach-In		Grahamwood Elementary School	Kitchen	Atosa	MBF8002GR	MBF8002GRAUS1 T0320073100C40035			
7	8003553	E1030	Foodservice Equipment	Icemaker, Freestanding		Grahamwood Elementary School	Kitchen	Ice-O-Matic	KYT0420A-161	1120394478			

8	8003647	E1030	Foodservice Equipment	Range, 2-Burner	Grahamwood Elementary School	Kitchen	Garland			
9	8003564	E1030	Foodservice Equipment	Refrigerator, 1-Door Reach-In	Grahamwood Elementary School	Kitchen	Beverage-Air Corporation	Illegible		Illegible
10	8003602	E1030	Foodservice Equipment	Refrigerator, 3-Door Reach-In	Grahamwood Elementary School	Kitchen	Migali	C-3R-HC	C-3R-HC00317052900920005	2017
11	8003560	E1030	Foodservice Equipment	Walk-In, Condenser for Refigerator/Freezer	Grahamwood Elementary School	Kitchen	Inaccessible	Inaccessible		Inaccessible
12	8003617	E1030	Foodservice Equipment	Walk-In, Condenser for Refigerator/Freezer	Grahamwood Elementary School	Kitchen	Inaccessible	Inaccessible		Inaccessible