

FACILITY CONDITION ASSESSMENT



**BUREAU
VERITAS**

prepared for

Alexandria City Public Schools
2000 North Beauregard Street
Alexandria, Virginia 22311
John Finnigan



Samuel W. Tucker Elementary
435 Ferdinand Day Drive
Alexandria, Virginia 22302

PREPARED BY:

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BV PROJECT #:

148303.21R000-012.354

DATE OF REPORT:

December 20, 2021

ON SITE DATE:

October 11, 2021

Bureau Veritas

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1. Executive Summary

Property Overview and Assessment Details

General Information	
Property Type	School
Main Address	435 Ferdinand Day Drive, Alexandria, Virginia 22302
Site Developed	YOC 2000 YOR 2011
Site Area	2.2 acres (estimated)
Parking Spaces	42 total spaces all in open lots; 4 of which are accessible
Building Area	80,180 SF
Number of Stories	2 above grade
Outside Occupants / Leased Spaces	None
Date(s) of Visit	October 11, 2021
Management Point of Contact	John Finnigan 703.517.1807 John.Finnigan@acps.k12.va.us
On-site Point of Contact (POC)	Fred Fulton
Assessment and Report Prepared By	Jose Rolon
Reviewed By	Anthony W Conner, MACM, BBA Technical Report Reviewer for: Thomas Bart 800.733.0660 x7540 Thomas.Bart@bureauveritas.com
AssetCalc Link	Full dataset for this assessment can be found at: https://www.assetcalc.net/

Significant/Systemic Findings and Deficiencies

Historical Summary

The school was originally constructed in 2000 with some renovations completed in 2011. Overall, the building shows evidence of good construction and adequate maintenance practices in recent years.

Architectural

The building appears structurally sound, with no areas of settlement or structural-related deficiencies reported or observed. The exterior envelope systems and components were observed to be performing adequately. Interior finishes have been well maintained throughout the facility. Interior finishes are anticipated for lifecycle replacement based on useful life and normal wear.

Mechanical, Electrical, Plumbing and Fire (MEPF)

The HVAC systems and components appear to have been well maintained during recent years, with ongoing replacements over the years as needed. In general, the plumbing systems are reportedly adequate to serve the facility, with equipment and fixtures updated as needed. Chiller replacement is scheduled for November 2021.

Most of the electrical service equipment and systems are well maintained and should be replaced during normal life expectancy. As needed electrical systems have been updated as needed and are of adequate size to provide necessary power to all systems. No major issues were observed or reported.

In general, the plumbing systems are adequate to serve the facilities, with equipment and fixtures to be updated as needed. The domestic water service within each facility is well maintained, with no evidence of leaks observed at the domestic piping. The domestic hot water supply appears to be adequate. No major issues were observed or reported.

Fire protection system consist of a hard-wired fire alarm system and wet fire sprinkler systems. The alarm system consists of strobes, pull stations, illuminated exit signs, emergency lighting (integrated in the lighting system), and other modern life safety devices. Building wide fire suppression (sprinkler) systems were observed within most of the facility.

Typical lifecycle replacements and ongoing maintenance of the MEPF equipment is budgeted and anticipated.

Site

The parking lots and sidewalks have been periodically repaved and sectionally replaced as needed over the years. ACPS is responsible for the south drive and full removal and replacement scheduled for November 2021.

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 | Samuel W. Tucker Elementary School Campus(2000)

<i>Replacement Value</i> \$ 24,054,000	<i>Total SF</i> 80,180	<i>Cost/SF</i> \$ 300
Est Reserve Cost		FCI
Current	\$ 72,600	0.3 %
3-Year	\$ 1,057,800	4.4 %
5-Year	\$ 2,742,100	11.4 %
10-Year	\$ 4,656,900	19.4 %

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.

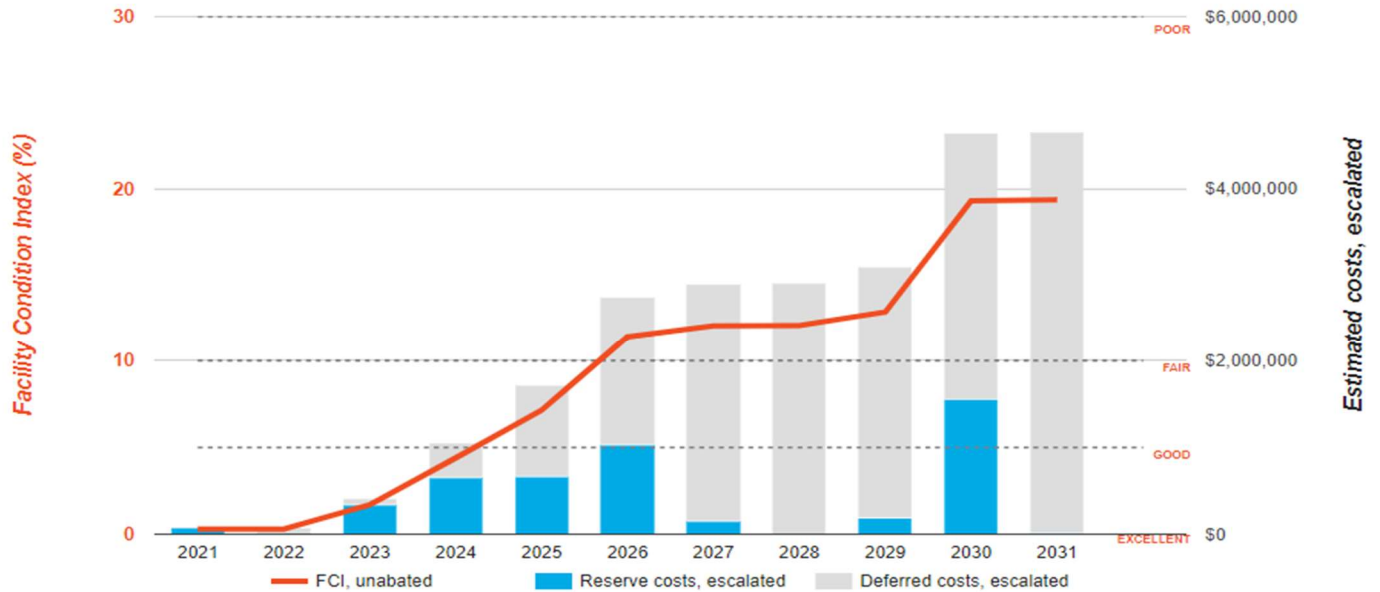
Needs by Year with Unaddressed FCI Over Time

FCI Analysis: Samuel W. Tucker Elementary School Campus

Replacement Value: \$24,054,000

Inflation Rate: 3.0%

Average Needs per Year: \$423,400



Immediate Needs

Facility/Building	Total Items	Total Cost
Samuel W. Tucker Elementary School Campus	3	\$72,600
Total	3	\$72,600

Samuel W. Tucker Elementary School Campus

ID	Location	Location Description	UF Code	Description	Condition	Plan Type	Cost
3391041	Samuel W. Tucker Elementary School Campus	Site	G2050	Playfield Surfaces, Rubber, Small Areas, Replace	Poor	Performance/Integrity	\$39,000
3390983	Samuel W. Tucker Elementary School Campus	Site	G2020	Parking Lots, Pavement, Asphalt, Mill & Overlay	Failed	Performance/Integrity	\$29,800
3391083	Samuel W. Tucker Elementary School Campus	Site	G2020	Parking Lots, Pavement, Asphalt, Seal & Stripe	Failed	Performance/Integrity	\$3,800
Total (3 items)							\$72,600

Key Findings



Parking Lots in Failed condition.

Pavement, Asphalt
Samuel W. Tucker Elementary School
Campus Site

Uniformat Code: G2021
Recommendation: **Seal and Stripe in 2021**

Priority Score: **84.9**

Plan Type:
Performance/Integrity

Cost Estimate: \$3,800

\$\$\$\$

Restriping budgeted and scheduled - AssetCALC ID: 3391083



Parking Lots in Failed condition.

Pavement, Asphalt
Samuel W. Tucker Elementary School
Campus Site

Uniformat Code: G2021
Recommendation: **Mill and Overlay in 2021**

Priority Score: **84.9**

Plan Type:
Performance/Integrity

Cost Estimate: \$29,800

\$\$\$\$

Pavement work budgeted and scheduled - AssetCALC ID: 3390983



Playfield Surfaces in Poor condition.

Rubber, Small Areas
Samuel W. Tucker Elementary School
Campus Site

Uniformat Code: G2055
Recommendation: **Replace in 2021**

Priority Score: **82.9**

Plan Type:
Performance/Integrity

Cost Estimate: \$39,000

\$\$\$\$

Needs replacement - AssetCALC ID: 3391041

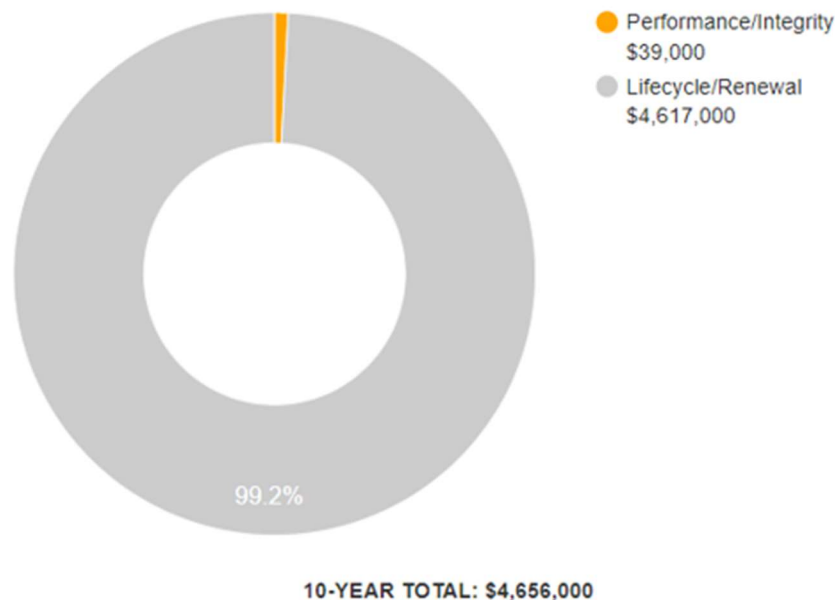
Plan Types

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)



2. Building and Site Information



Systems Summary

<i>System</i>	<i>Description</i>	<i>Condition</i>
Structure	Masonry bearing walls with metal roof deck supported by open-web steel joists and concrete strip footing foundation system	Fair
Façade	Primary Wall Finish: Brick Secondary Wall Finish: EIFS Windows: Aluminum	Fair
Roof	Primary: Flat construction with Built up material Secondary: Gable metal construction	Fair
Interiors	Walls: Painted gypsum board and CMU, ceramic tile, unfinished Floors: Carpet, VCT, ceramic tile, quarry tile, wood strip, polished concrete Ceilings: Painted gypsum board and ACT, unfinished/exposed	Fair
Elevators	Passenger: 1 hydraulic car serving all floors	Fair
Plumbing	Distribution: Copper supply and cast-iron waste and venting Gas Water Heater Fixtures: Toilets, urinals, and sinks in all restrooms	Fair
HVAC	Packaged units, exhaust fans, Boilers, Chiller, distribution pumps and air handlers Supplemental components: Ductless split systems	Fair
Fire Suppression	Wet sprinkler system and fire extinguishers	Fair
Electrical	Source and Distribution: Main switchboard, and distribution panels with copper wiring Interior Lighting: LED, linear fluorescent, CFL Emergency Power: ATS and diesel generator	Fair
Fire Alarm	Alarm panel with smoke detectors, heat detectors, alarms, strobes, pull stations, and exit signs	Fair
Equipment/Special	Commercial kitchen equipment	Good

Systems Summary

Site Pavement	Asphalt lots with limited areas of concrete pavement and adjacent concrete sidewalks	Fair
Site Development	Property signage	Fair
Landscaping and Topography	Limited landscaping features including lawns, trees, bushes Irrigation not present Low to moderate site slopes throughout	Fair
Utilities	Municipal water and sewer Local utility-provided electric and natural gas	Good
Site Lighting	Building-mounted: LED Pole light fixtures	Good
Ancillary Structures	None	--
Key Issues and Findings	Playground rubber surface needs replacement.	

Systems Expenditure Forecast

System	Immediate	Short Term (1-2 yr)	Near Term (3-5 yr)	Med Term (6-10 yr)	Long Term (11-20 yr)	TOTAL
Facade	-	-	-	\$141,567	\$8,416	\$149,983
Roofing	-	-	\$985,945	\$16,962	\$243,042	\$1,245,949
Interiors	-	-	\$519,672	\$86,115	\$1,203,943	\$1,809,730
Conveying	-	-	\$10,129	\$71,762	\$15,781	\$97,672
Plumbing	-	-	-	\$70,644	\$1,918,466	\$1,989,110
HVAC	-	\$38,827	\$56,047	\$366,979	\$50,079	\$511,932
Fire Protection	-	-	-	\$161,735	\$39,064	\$200,799
Electrical	-	\$24,930	\$62,509	\$889,121	\$2,422,856	\$3,399,416
Fire Alarm & Electronic Systems	-	\$272,777	\$525,689	-	\$1,075,044	\$1,873,510
Equipment & Furnishings	-	-	\$46,370	\$25,043	\$74,084	\$145,497
Site Development	\$39,000	-	\$74,846	\$79,718	\$82,361	\$275,925
Site Pavement	\$33,575	-	\$4,434	\$5,140	\$200,485	\$243,634
Site Utilities	-	-	\$47,271	-	-	\$47,271
TOTALS	\$72,600	\$336,600	\$2,333,000	\$1,914,800	\$7,333,700	\$11,990,700

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. 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.

5. 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 and 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.

6. Certification

Alexandria City Public Schools (the Client) retained Bureau Veritas to perform this Facility Condition Assessment in connection with its continued operation of Samuel W. Tucker Elementary, 435 Ferdinand Day Drive, Alexandria, Virginia 22302, the "Property". It is our understanding that the primary interest of the Client is to locate and evaluate materials and building system defects that might significantly affect the value of the property and to determine if the present Property has conditions that will have a significant impact on its continued operations.

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

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

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

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

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7. Appendices

- Appendix A: Photographic Record
- Appendix B: Site Plan
- Appendix C: Pre-Survey Questionnaire
- Appendix D: Component Condition Report
- Appendix E: Replacement Reserves
- Appendix F: Equipment Inventory List

Appendix A:

Photographic Record

Photographic Overview



1 - FRONT ELEVATION



2 - LEFT ELEVATION



3 - REAR ELEVATION



4 - RIGHT ELEVATION



5 - PARKING LOTS, PAVEMENT



6 - PARKING LOTS, PAVEMENT

Photographic Overview



7 - OVERVIEW OF PAVER DRIVEWAY



8 - CLOSEUP OF DAMAGED GROUND SURFACE
AT PLAYGROUND



9 - WINDOWS



10 - EXTERIOR DOORS



11 - ROOFING, METAL



12 - ROOFING, BUILT-UP

Photographic Overview



13 - ELEVATOR CAB FINISHES, STANDARD



14 - PASSENGER ELEVATOR, HYDRAULIC



15 - WATER HEATER



16 - URINAL



17 - TOILET



18 - SINK/LAVATORY

Photographic Overview



19 - BOILER NUMBER 1, FULTON PULSE BOILER
6/23/14



20 - AIR-COOLED CHILLER



21 - PUMP, DISTRIBUTION, HVAC HEATING
WATER



22 - DISTRIBUTION, HVAC CHILLED WATER



23 - PACKAGED UNIT, RTU



24 - AIR HANDLER, INTERIOR AHU

Photographic Overview



25 - FIRE RISER, WET STANDPIPE



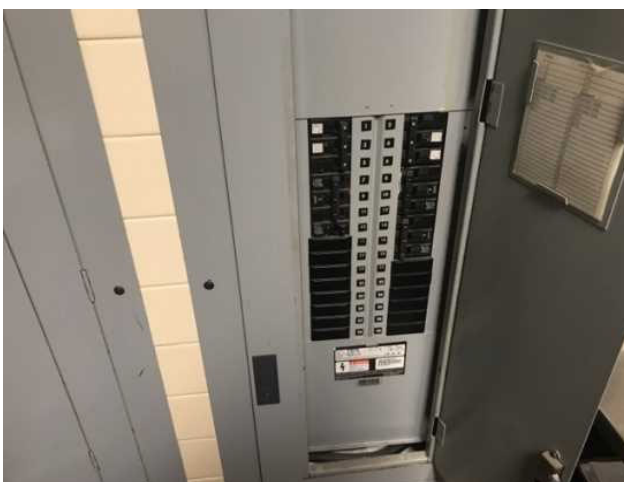
26 - FIRE ALARM PANEL



27 - GENERATOR



28 - EMERGENCY GENERATOR AUTOMATIC TRANSFER



29 - DISTRIBUTION PANEL



30 - VARIABLE FREQUENCY DRIVE, VFD

Photographic Overview



31 - FLOORING, VINYL TILE (VCT)



32 - FLOORING, CARPET



33 - CEILING FINISHES, ANY FLAT SURFACE



34 - SUSPENDED CEILINGS, ACOUSTICAL TILE (AC)



35 - INTERIOR DOORS

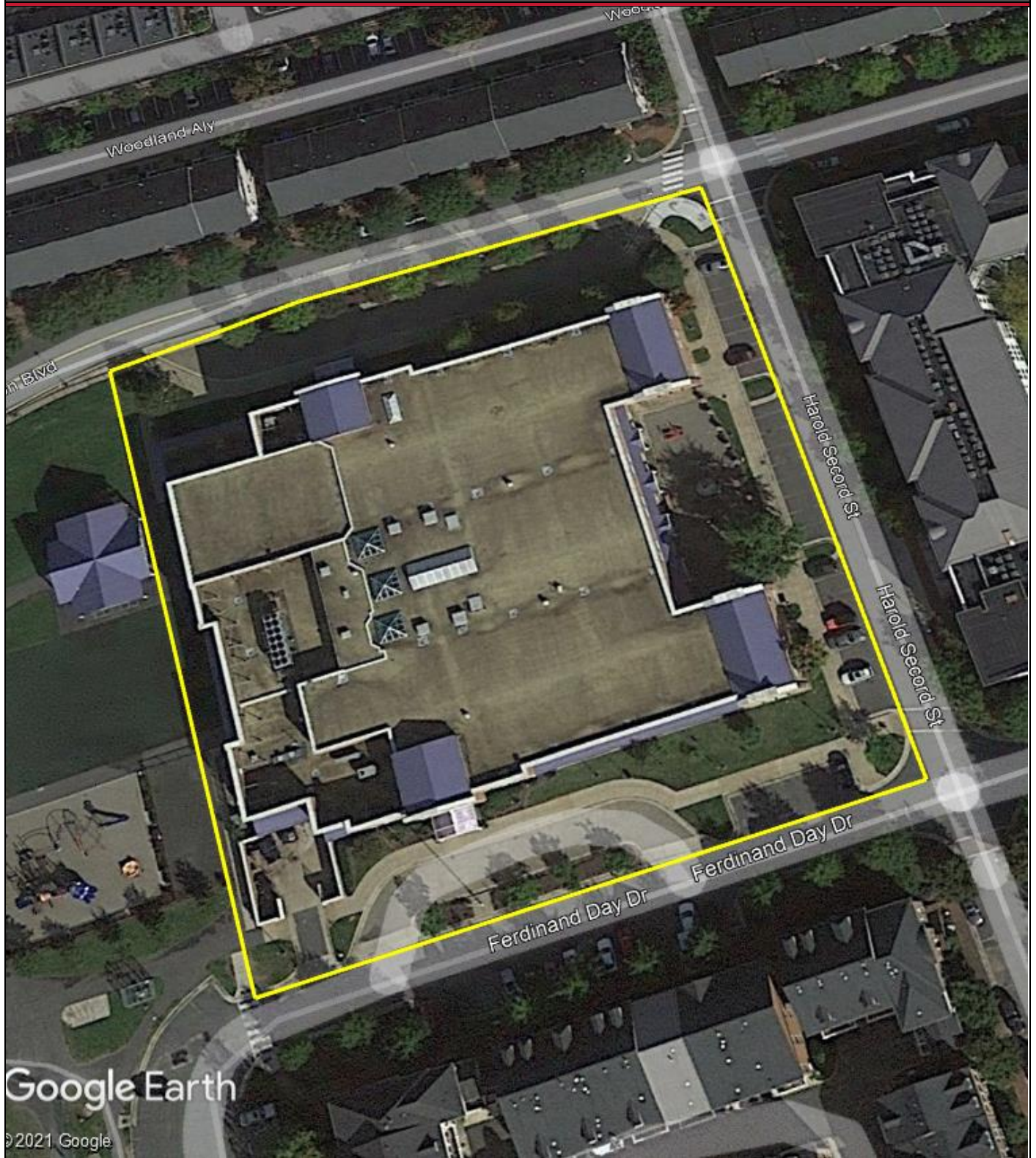


36 - WALL FINISHES, ANY SURFACE

Appendix B:

Site Plan

Site Plan



**BUREAU
VERITAS**

Project Number

148303.21R000-012.354

Source

Google

Project Name

Samuel W. Tucker Elementary

On-Site Date

October 11, 2021



Appendix C:

Pre-Survey Questionnaire

**BUREAU VERITAS FACILITY CONDITION ASSESSMENT:
PRE-SURVEY QUESTIONNAIRE**

Building / Facility Name: Samuel W. Tucker Elementary

Name of person completing form: John Finnigan

Title / Association with property: Director of Educational Facilities

Length of time associated w/ property: 6 years

Date Completed: 11/01/21

Phone Number: 703.517.1807

Method of Completion: Choose an item.

Directions: Please answer all questions to the best of your knowledge and in good faith. Please provide additional details in the Comments column, or backup documentation for any **Yes** responses.

DATA OVERVIEW		RESPONSE		
1	Year/s constructed / renovated	2000		
2	Building size in SF	80,180		
3	Major Renovation/Rehabilitation		Year	Additional Detail
		Façade	2019, 2021	
		Roof		
		Interiors		
		HVAC	2021	Chiller scheduled to be replaced
		Electrical		
		Site Pavement		
		Accessibility		
QUESTION		RESPONSE		
4	List other significant capital improvements (focus on recent years; provide approximate date).	Hardscape resurfacing scheduled in 2021.		
5	List any major capital expenditures planned/requested for the next few years. Have they been budgeted?	HVAC system renovation is being analyzed and designed.		
6	Describe any on-going extremely problematic, historically chronic, or immediate facility needs.			

Mark the column corresponding to the appropriate response. Please provide additional details in the Comments column, or backup documentation for any Yes responses. (NA indicates "Not Applicable", Unk indicates "Unknown")						
QUESTION		RESPONSE				COMMENTS
		Yes	No	Unk	NA	
7	Are there any problems with foundations or structures, like excessive settlement?	X				Drive loop pavers have sunk, the area needs to be investigated to determine if there is a settlement / compaction problem.
8	Are there any wall, window, basement or roof leaks?		X			
9	Has any part of the facility ever contained visible suspect mold growth, or have there been any indoor air quality or mold related complaints from occupants?		X			
10	Are your elevators unreliable, with frequent service calls?		X			
11	Are there any plumbing leaks, water pressure, or clogging/back-up problems?		X			
12	Have there been any leaks or pressure problems with natural gas, HVAC supply/return lines, or steam service?		X			
13	Are any areas of the facility inadequately heated, cooled or ventilated? Any poorly insulated areas?		X			
14	Is the electrical service outdated, undersized, or otherwise problematic?		X			
15	Are there any problems or inadequacies with exterior lighting?		X			
16	Is site/parking drainage inadequate, with excessive ponding or other problems?		X			
17	Are there any other unresolved construction defects or significant issues/hazards at the property that have not yet been identified above?		X			
18	ADA: Has an accessibility study been performed at the site? If so, indicate when.		X			
19	ADA: If a study has occurred, have the associated recommendations been addressed? In full or in part?				X	
20	ADA: Have there been regular complaints about accessibility issues, or associated previous or pending litigation?		X			

Appendix D:

Component Condition Report

Component Condition Report | Samuel W. Tucker Elementary School Campus

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Facade						
B2020	Building exterior	Fair	Window, Aluminum Double-Glazed, 28-40 SF	50	9	3390978
B2020	Building exterior	Fair	Storefront, Glazing & Framing	600 SF	9	3390993
B2050	Building exterior	Fair	Exterior Door, Aluminum-Framed & Glazed, Standard Swing	10	9	3391050
B2050	Building exterior	Fair	Exterior Door, Steel, Standard	8	19	3390982
Roofing						
B3010	Roof	Fair	Roofing, Built-Up	60,000 SF	5	3391066
B3010	Roof	Fair	Roofing, Metal	12,000 SF	15	3390990
B3020	Roof	Fair	Roof Appurtenances, Gutters & Downspouts, Aluminum w/ Fittings	1,200 LF	4	3391053
B3060	Roof	Fair	Roof Skylight, per unit, up to 20 SF	10	9	3390992
Interiors						
C1030	Throughout building	Fair	Interior Door, Wood, Solid-Core	70	19	3390984
C1030	Throughout building	Fair	Interior Door, Steel, Fire-Rated at 90 Minutes or Over	12	19	3391046
C1070	Throughout building	Fair	Suspended Ceilings, Acoustical Tile (ACT)	50,000 SF	12	3391033
C1090	Restrooms	Good	Toilet Partitions, Plastic/Laminate	15	14	3391054
C2010	Restrooms	Good	Wall Finishes, Ceramic Tile	1,500 SF	29	3390991
C2010	Throughout building	Fair	Wall Finishes, any surface, Prep & Paint	65,000 SF	4	3391043
C2030	Kitchen	Good	Flooring, Quarry Tile	800 SF	29	3391021
C2030	Throughout building	Fair	Flooring, Vinyl Tile (VCT)	45,000 SF	4	3391067
C2030	Throughout building	Fair	Flooring, Ceramic Tile	2,500 SF	19	3390999
C2030	Throughout building	Fair	Flooring, Carpet, Commercial Standard	15,000 SF	3	3391010
C2030	Gymnasium	Fair	Flooring, Maple Sports Floor	5,500 SF	9	3391081
C2050	Throughout building	Fair	Ceiling Finishes, any flat surface, Prep & Paint	15,000 SF	4	3391003
Conveying						
D1010	Elevator	Fair	Elevator Cab Finishes, Standard	1	4	3391085
D1010	Mechanical room	Fair	Passenger Elevator, Hydraulic, 2 Floors, Renovate	1	9	3390985
Plumbing						
D2010	Throughout building	Fair	Plumbing System, Supply & Sanitary, Medium Density (includes fixtures)	80,180 SF	15	3391001
D2010	Restrooms	Fair	Toilet, Commercial Water Closet	20	9	3391071
D2010	Classroom	Fair	Sink/Lavatory, Vanity Top, Stainless Steel	12	9	3391009
D2010	Restrooms	Fair	Urinal, Standard	8	9	3391042
D2010	Restrooms	Good	Sink/Lavatory, Trough Style, Solid Surface	4	20	3391058
D2010	Utility closet	Fair	Sink/Lavatory, Service Sink, Floor	6	10	3391019
D2010	Mechanical room	Good	Water Heater, Gas, Commercial (200 MBH), 100 to 199 GAL	1	16	3391059
HVAC						
D3020	Mechanical room	Fair	Boiler, Gas, HVAC	1	9	3391026

Component Condition Report Samuel W. Tucker Elementary School Campus					
UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL ID
D3020	Mechanical room	Fair	Boiler, Gas, HVAC	1	93391030
D3030	Roof	Fair	Split System Ductless, Single Zone	1	23391038
D3030	Roof	Fair	Chiller, Air-Cooled	1	243391016
D3050	Mechanical room	Fair	Pump, Distribution, HVAC Heating Water	1	43391032
D3050	Roof	Fair	Make-Up Air Unit, MUA or MAU, 2000 to 6000 CFM	1	93391008
D3050	Mechanical room	Fair	Air Handler, Interior AHU, Easy/Moderate Access, 1201 to 2400 CFM	1	83391034
D3050	Mechanical room	Fair	Air Handler, Interior AHU, Easy/Moderate Access	1	43391028
D3050	Roof	Good	Packaged Unit, RTU, Pad or Roof-Mounted, 2 TON	1	173391015
D3050	Mechanical room	Good	Pump, Distribution, HVAC Chilled or Condenser Water, 8 to 10 HP	1	223390996
D3050	Mechanical room	Good	Pump, Distribution, HVAC Chilled or Condenser Water, 8 to 10 HP	1	223391006
D3050	Mechanical room	Fair	Air Handler, Interior AHU, Easy/Moderate Access [AHU-4]	1	83390986
D3050	Roof	Good	Packaged Unit, RTU, Pad or Roof-Mounted	1	173391005
D3050	Throughout building	Fair	Fan Coil Unit, Hydronic Terminal	6	23391040
D3050	Mechanical room	Fair	Air Handler, Interior AHU, Easy/Moderate Access	1	43391075
D3050	Mechanical room	Fair	Pump, Distribution, HVAC Heating Water	1	43390980
D3050	Roof	Good	Packaged Unit, RTU, Pad or Roof-Mounted, 4 TON	1	173391035
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 10" Damper [EF-5]	1	23391037
D3060	Mechanical room	Fair	Supply Fan, Centrifugal, 16" Damper	1	43390987
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 10" Damper [EF-3]	1	23390981
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 10" Damper	1	23391072
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 10" Damper	1	23391076
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 10" Damper [EF-7]	1	23391074
D3060	Mechanical room	Fair	Supply Fan, Centrifugal, 16" Damper	1	43391017
D3060	Mechanical room	Fair	Supply Fan, Centrifugal, 12" Damper	1	43390998
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 10" Damper	1	23391044
D3060	Roof	Fair	Exhaust Fan, Roof or Wall-Mounted, 24" Damper	1	23391045
Fire Protection					
D4010	Throughout building	Fair	Fire Suppression System, Existing Sprinkler Heads, by SF	80,180 SF	63391051
D4010	Mechanical room	Fair	Supplemental Components, Fire Riser, Wet	1	193391082
D4010	Mechanical room	Good	Backflow Preventer, Fire Suppression	1	93391014
D4010	Mechanical room	Fair	Supplemental Components, Fire Riser, Wet	1	153391023
D4030	Throughout building	Good	Fire Extinguisher, Type ABC, up to 20 LB	24	73391090
Electrical					
D5010	Electrical room	Fair	Automatic Transfer Switch, ATS	1	43391048
D5010	Building exterior	Fair	Generator, Diesel	1	43391073
D5020	Kitchen	Fair	Distribution Panel, 120/208 V	1	93390997
D5020	Electrical room	Fair	Secondary Transformer, Dry, Stepdown	1	93390994

Component Condition Report | Samuel W. Tucker Elementary School Campus

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D5020	Electrical room	Fair	Switchboard, 277/480 V	1	12	3391000
D5020	Mechanical room	Fair	Distribution Panel, 120/208 V	1	9	3391069
D5020	Kitchen	Fair	Distribution Panel, 120/208 V	1	9	3391065
D5020	Throughout building	Fair	Electrical System, Full System Renovation/Upgrade, Medium Density/Complexity	80,180 SF	15	3391031
D5020	Mechanical room	Fair	Distribution Panel, 120/208 V	1	9	3391061
D5030	Mechanical room	Fair	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	1	2	3391025
D5030	Mechanical room	Good	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	1	17	3391004
D5030	Mechanical room	Fair	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	1	2	3391013
D5030	Mechanical room	Good	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	1	17	3391047
D5040	Throughout building	Fair	Emergency & Exit Lighting, Exit Sign, LED	32	4	3391077
D5040	Throughout building	Fair	Interior Lighting System, Full Upgrade, Medium Density & Standard Fixtures	80,180 SF	9	3391070
D5040	Building exterior	Good	Standard Fixture w/ Lamp, any type, w/ LED Replacement	20	17	3391060
Fire Alarm & Electronic Systems						
D7030	Throughout building	Good	Security/Surveillance System, Full System Upgrade, Average Density	80,180 SF	12	3391022
D7050	Throughout building	Fair	Fire Alarm System, Full System Upgrade, Standard Addressable, Upgrade/Install	80,180 SF	2	3391088
D7050	Main entrance	Fair	Fire Alarm Panel, Annunciator	1	2	3391084
D7050	Electrical room	Fair	Fire Alarm Panel, Fully Addressable	1	2	3390995
D8010	Throughout building	Fair	BAS/HVAC Controls, Extensive/Robust BMS or Smart Building System, Install	80,180 SF	3	3391020
Equipment & Furnishings						
E1030	Kitchen	Good	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels	1	13	3391089
E1030	Kitchen	Good	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels	1	13	3391064
E1030	Kitchen	Good	Foodservice Equipment, Exhaust Hood, 3 to 6 LF	1	13	3391039
E1030	Kitchen	Good	Foodservice Equipment, Steamer, Freestanding	1	9	3391086
E1030	Kitchen	Good	Foodservice Equipment, Refrigerator, Undercounter 2-Door	1	13	3391068
E1030	Kitchen	Good	Foodservice Equipment, Freezer, Chest	1	13	3391079
E1030	Roof	Good	Foodservice Equipment, Walk-In, Condenser for Refigerator/Freezer	1	12	3391056
E1030	Kitchen	Good	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels	1	13	3391049
E1030	Roof	Good	Foodservice Equipment, Walk-In, Condenser for Refigerator/Freezer	1	12	3391055
E1030	Kitchen	Good	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels	1	13	3391007
E1030	Kitchen	Good	Foodservice Equipment, Convection Oven, Double	1	6	3391027
E1030	Kitchen	Fair	Foodservice Equipment, Walk-In, Refrigerator	1	5	3391011
E1030	Kitchen	Fair	Foodservice Equipment, Walk-In, Freezer	1	5	3391080
E1030	Kitchen	Good	Foodservice Equipment, Refrigerator, Undercounter 2-Door	1	13	3391063
Pedestrian Plazas & Walkways						
G2020	Site	Good	Parking Lots, Pavement, Concrete	1,800 SF	29	3390989
G2020	Site	Failed	Parking Lots, Pavement, Asphalt, Mill & Overlay	8,500 SF	0	3390983
G2020	Site	Failed	Parking Lots, Pavement, Asphalt, Seal & Stripe	8,500 SF	0	3391083

Component Condition Report | Samuel W. Tucker Elementary School Campus

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
G2030	Site	Good	Sidewalk, Brick/Masonry Pavers	3,000 SF	19	3391087
G2030	Site	Fair	Sidewalk, Concrete, Large Areas	1,000 SF	15	3391078
Athletic, Recreational & Playfield Areas						
G2050	Site	Fair	Play Structure, Multipurpose, Small	1	9	3391024
G2050	Gymnasium	Fair	Sports Apparatus, Basketball, Backboard/Rim/Pole	6	4	3390988
G2050	Site	Fair	Play Structure, Multipurpose, Large	1	9	3391052
G2050	Site	Poor	Playfield Surfaces, Rubber, Small Areas	1,500 SF	0	3391041
G2050	Site	Fair	Play Structure, Multipurpose, Very Small	1	9	3391002
Sitework						
G2060	Site	Fair	Signage, Property, Pylon Standard, Replace/Install	1	4	3391012
G2060	Site	Fair	Trash Receptacle, Medium-Duty Metal or Precast	4	9	3390979
G2060	Site	Fair	Fences & Gates, Fence, Metal Tube 4'	200 LF	19	3391036
G2060	Site	Fair	Park Bench, Wood/Composite/Fiberglass	8	9	3391057
G2060	Site	Fair	Flagpole, Metal	1	9	3391029
G4050	Site	Fair	Pole Light Fixture w/ Lamps, any type 20' High, w/ LED Replacement, Replace/Install	10	4	3391062

Appendix E:

Replacement Reserves

Replacement Reserves Report																																
12/20/2021																																
Location		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	Total Escalated Estimate									
Samuel W. Tucker Elementary School Campus		\$72,575	\$0	\$336,539	\$648,621	\$659,706	\$1,024,595	\$154,952	\$4,428	\$188,749	\$1,555,081	\$11,591	\$0	\$624,426	\$187,679	\$220,520	\$4,400,892	\$41,883	\$118,807	\$819,006	\$825,025	\$95,408	\$11,990,482									
Samuel W. Tucker Elementary School Campus / Samuel W. Tucker Elementary School		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0										
Grand Total		\$72,575	\$0	\$336,539	\$648,621	\$659,706	\$1,024,595	\$154,952	\$4,428	\$188,749	\$1,555,081	\$11,591	\$0	\$624,426	\$187,679	\$220,520	\$4,400,892	\$41,883	\$118,807	\$819,006	\$825,025	\$95,408	\$11,990,482									
Samuel W. Tucker Elementary School Campus																																
Uniformat Code	Location Description	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	Deficiency Repair Estimate
B2020	Building exterior	3390978	Window, Aluminum Double-Glazed, 28-40 SF, Replace	30	21	9	50	EA	\$1,250.00	\$62,500													\$62,500									\$62,500
B2020	Building exterior	3390993	Storefront, Glazing & Framing, Replace	30	21	9	600	SF	\$55.00	\$33,000													\$33,000									\$33,000
B2050	Building exterior	3391050	Exterior Door, Aluminum-Framed & Glazed, Standard Swing, Replace	30	21	9	10	EA	\$1,300.00	\$13,000													\$13,000									\$13,000
B2050	Building exterior	3390982	Exterior Door, Steel, Standard, Replace	40	21	19	8	EA	\$600.00	\$4,800																			\$4,800			\$4,800
B3010	Roof	3390990	Roofing, Metal, Replace	40	25	15	12000	SF	\$13.00	\$156,000																\$156,000						\$156,000
B3010	Roof	3391066	Roofing, Built-Up, Replace	25	20	5	60000	SF	\$14.00	\$840,000						\$840,000																\$840,000
B3020	Roof	3391053	Roof Appurtenances, Gutters & Downspouts, Aluminum w/ Fittings, Replace	20	16	4	1200	LF	\$9.00	\$10,800					\$10,800																	\$10,800
B3060	Roof	3390992	Roof Skylight, per unit, up to 20 SF, Replace	30	21	9	10	EA	\$1,300.00	\$13,000													\$13,000									\$13,000
C1030	Throughout building	3390984	Interior Door, Wood, Solid-Core, Replace	40	21	19	70	EA	\$700.00	\$49,000																			\$49,000			\$49,000
C1030	Throughout building	3391046	Interior Door, Steel, Fire-Rated at 90 Minutes or Over, Replace	40	21	19	12	EA	\$950.00	\$11,400																			\$11,400			\$11,400
C1070	Throughout building	3391033	Suspended Ceilings, Acoustical Tile (ACT), Replace	25	13	12	50000	SF	\$3.50	\$175,000														\$175,000								\$175,000
C1090	Restrooms	3391054	Toilet Partitions, Plastic/Laminate, Replace	20	6	14	15	EA	\$750.00	\$11,250															\$11,250							\$11,250
C2010	Throughout building	3391043	Wall Finishes, any surface, Prep & Paint	10	6	4	65000	SF	\$1.50	\$97,500					\$97,500										\$97,500							\$195,000
C2030	Throughout building	3390999	Flooring, Ceramic Tile, Replace	40	21	19	2500	SF	\$18.00	\$45,000																			\$45,000			\$45,000
C2030	Throughout building	3391067	Flooring, Vinyl Tile (VCT), Replace	15	11	4	45000	SF	\$5.00	\$225,000					\$225,000														\$225,000			\$450,000
C2030	Throughout building	3391010	Flooring, Carpet, Commercial Standard, Replace	10	7	3	15000	SF	\$7.50	\$112,500				\$112,500										\$112,500								\$225,000
C2030	Gymnasium	3391081	Flooring, Maple Sports Floor, Replace	30	21	9	5500	SF	\$12.00	\$66,000													\$66,000									\$66,000
C2050	Throughout building	3391003	Ceiling Finishes, any flat surface, Prep & Paint	10	6	4	15000	SF	\$2.00	\$30,000					\$30,000										\$30,000							\$60,000
D1010	Elevator	3391085	Elevator Cab Finishes, Standard, Replace	15	11	4	1	EA	\$9,000.00	\$9,000					\$9,000														\$9,000			\$18,000
D1010	Mechanical room	3390985	Passenger Elevator, Hydraulic, 2 Floors, Renovate	30	21	9	1	EA	\$55,000.00	\$55,000													\$55,000									\$55,000
D2010	Mechanical room	3391059	Water Heater, Gas, Commercial (200 MBH), 100 to 199 GAL., Replace	20	4	16	1	EA	\$16,600.00	\$16,600																	\$16,600					\$16,600
D2010	Throughout building	3391001	Plumbing System, Supply & Sanitary, Medium Density (includes fixtures), Replace	40	25	15	80180	SF	\$15.00	\$1,202,700															\$1,202,700							\$1,202,700
D2010	Restrooms	3391071	Toilet, Commercial Water Closet, Replace	30	21	9	20	EA	\$1,300.00	\$26,000													\$26,000									\$26,000
D2010	Classroom	3391009	Sink/Lavatory, Vanity Top, Stainless Steel, Replace	30	21	9	12	EA	\$1,200.00	\$14,400													\$14,400									\$14,400
D2010	Restrooms	3391042	Urinal, Standard, Replace	30	21	9	8	EA	\$1,100.00	\$8,800													\$8,800									\$8,800
D2010	Utility closet	3391019	Sink/Lavatory, Service Sink, Floor, Replace	35	25	10	6	EA	\$800.00	\$4,800														\$4,800								\$4,800
D2010	Restrooms	3391058	Sink/Lavatory, Trough Style, Solid Surface, Replace	30	10	20	4	EA	\$2,500.00	\$10,000																			\$10,000			\$10,000
D3020	Mechanical room	3391026	Boiler, Gas, HVAC, Replace	30	21	9	1	EA	\$50,800.00	\$50,800													\$50,800									\$50,800
D3020	Mechanical room	3391030	Boiler, Gas, HVAC, Replace	30	21	9	1	EA	\$50,800.00	\$50,800													\$50,800									\$50,800
D3030	Roof	3391038	Split System Ductless, Single Zone, Replace	15	13	2	1	EA	\$4,800.00	\$4,800			\$4,800															\$4,800				\$9,600
D3050	Throughout building	3391040	Fan Coil Unit, Hydronic Terminal, Replace	20	18	2	6	EA	\$3,600.00	\$21,600			\$21,600																			\$21,600
D3050	Mechanical room	3391032	Pump, Distribution, HVAC Heating Water, Replace	25	21	4	1	EA	\$6,800.00	\$6,800					\$6,800																	\$6,800
D3050																																

Appendix F:

Equipment Inventory List

D10 Conveying													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	3390985	D1010	Passenger Elevator	Hydraulic, 2 Floors	2500 LB	Samuel W. Tucker Elementary School Campus	Mechanical room	Dover	EP08020	EL1510	2000	19003479	
D20 Plumbing													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	3391059	D2010	Water Heater	Gas, Commercial (200 MBH), 100 to 199 GAL	120 GAL	Samuel W. Tucker Elementary School Campus	Mechanical room	State	SUF-119-300-NEA300	1749108471533	2017	19003448	
D30 HVAC													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	3391026	D3020	Boiler	Gas, HVAC	2000 MBH	Samuel W. Tucker Elementary School Campus	Mechanical room	Fulton	Illegible	Illegible	2000	19003453	
2	3391030	D3020	Boiler	Gas, HVAC	2000 MBH	Samuel W. Tucker Elementary School Campus	Mechanical room	Fulton	Illegible	Illegible	2000	19003454	
3	3391016	D3030	Chiller	Air-Cooled	250 TON	Samuel W. Tucker Elementary School Campus	Roof	Carrier	30RBB25064-L47-3	2611Q76060	2021	19003489	
4	3391038	D3030	Split System Ductless	Single Zone	2 TON	Samuel W. Tucker Elementary School Campus	Roof	Sanyo	C2472	0173284	2008	19003497	
5	3391040	D3050	Fan Coil Unit	Hydronic Terminal	1200 CFM	Samuel W. Tucker Elementary School Campus	Throughout building	Inaccessible	Inaccessible	Inaccessible	2000		6
6	3390996	D3050	Pump	Distribution, HVAC Chilled or Condenser Water, 8 to 10 HP	10 HP	Samuel W. Tucker Elementary School Campus	Mechanical room	Armstrong	No tag/plate found	No tag/plate found	2018	19003456	
7	3391006	D3050	Pump	Distribution, HVAC Chilled or Condenser Water, 8 to 10 HP	10 HP	Samuel W. Tucker Elementary School Campus	Mechanical room	Armstrong	No tag/plate found	No tag/plate found	2018	19003450	
8	3391032	D3050	Pump	Distribution, HVAC Heating Water	10 HP	Samuel W. Tucker Elementary School Campus	Mechanical room	Taco	E30120L2GC1LF2L0A	No tag/plate found	2000	19003457	
9	3390980	D3050	Pump	Distribution, HVAC Heating Water	10 HP	Samuel W. Tucker Elementary School Campus	Mechanical room	No tag/plate found	No tag/plate found	No tag/plate found	2000	19003455	
10	3391028	D3050	Air Handler	Interior AHU, Easy/Moderate Access	2000 CFM	Samuel W. Tucker Elementary School Campus	Mechanical room	McQuay	CAH006FDAG	Illegible	2000	19003482	
11	3391075	D3050	Air Handler	Interior AHU, Easy/Moderate Access	2000 CFM	Samuel W. Tucker Elementary School Campus	Mechanical room	McQuay	Illegible	Illegible	2000	19003484	
12	3391034	D3050	Air Handler	Interior AHU, Easy/Moderate Access, 1201 to 2400 CFM	2000 CFM	Samuel W. Tucker Elementary School Campus	Mechanical room	McQuay	CAH10FDAC	SCOU000201631	2000	19003480	
13	3390986	D3050	Air Handler [AHU-4]	Interior AHU, Easy/Moderate Access	40000 CFM	Samuel W. Tucker Elementary School Campus	Mechanical room	Temptrol	WF-DHR41	76737	2000	19003477	
14	3391008	D3050	Make-Up Air Unit	MUA or MAU, 2000 to 6000 CFM		Samuel W. Tucker Elementary School Campus	Roof	Masterbuilt	AFSI106G2	ZXC790019	2010	19003493	
15	3391005	D3050	Packaged Unit	RTU, Pad or Roof-Mounted	5 TON	Samuel W. Tucker Elementary School Campus	Roof	Trane	YHC067E4RHA0NF0E100000	182514591L	2018	19003494	
16	3391015	D3050	Packaged Unit	RTU, Pad or Roof-Mounted, 2 TON	2 TON	Samuel W. Tucker Elementary School Campus	Roof	Trane	4YCC4024A1060AB	181011254L	2018	19003474	
17	3391035	D3050	Packaged Unit	RTU, Pad or Roof-Mounted, 4 TON	4 TON	Samuel W. Tucker Elementary School Campus	Roof	Trane	YHC047E4RHA0NF6E1000	182514713L	2018	19003475	

18	3391072	D3060	Exhaust Fan	Roof or Wall-Mounted, 10" Damper	500 CFM	Samuel W. Tucker Elementary School Campus	Roof	CentriMaster	PV135E5	YXC790008	2000	19003495	
19	3391076	D3060	Exhaust Fan	Roof or Wall-Mounted, 10" Damper	500 CFM	Samuel W. Tucker Elementary School Campus	Roof	CentriMaster	PV165	YXC790004	2000	19003499	
20	3391044	D3060	Exhaust Fan	Roof or Wall-Mounted, 10" Damper	500 CFM	Samuel W. Tucker Elementary School Campus	Roof	CentriMaster	V100DE	YXC790001	2000	19003496	
21	3391045	D3060	Exhaust Fan	Roof or Wall-Mounted, 24" Damper	5000 CFM	Samuel W. Tucker Elementary School Campus	Roof	CentriMaster	Illegible	Illegible	2000	19003491	
22	3390981	D3060	Exhaust Fan [EF-3]	Roof or Wall-Mounted, 10" Damper	500 CFM	Samuel W. Tucker Elementary School Campus	Roof	CentriMaster	PV165	YXC790004	2000	19003498	
23	3391037	D3060	Exhaust Fan [EF-5]	Roof or Wall-Mounted, 10" Damper	500 CFM	Samuel W. Tucker Elementary School Campus	Roof	CentriMaster	YXC790001		2000	19003500	
24	3391074	D3060	Exhaust Fan [EF-7]	Roof or Wall-Mounted, 10" Damper	500 CFM	Samuel W. Tucker Elementary School Campus	Roof	CentriMaster	PV100DE2	YXC790007	2000	19003488	
25	3390998	D3060	Supply Fan	Centrifugal, 12" Damper	1000 CFM	Samuel W. Tucker Elementary School Campus	Mechanical room	CentriMaster	QBR161	YXC790017	2000	19003486	
26	3390987	D3060	Supply Fan	Centrifugal, 16" Damper	2000 CFM	Samuel W. Tucker Elementary School Campus	Mechanical room	CentriMaster	QBR300	YXC790016	2000	19003487	
27	3391017	D3060	Supply Fan	Centrifugal, 16" Damper	2000 CFM	Samuel W. Tucker Elementary School Campus	Mechanical room	CentriMaster	QBR245	YXC790018	2000	19003481	
D40 Fire Protection													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	3391014	D4010	Backflow Preventer	Fire Suppression	6 IN	Samuel W. Tucker Elementary School Campus	Mechanical room	Ames	2000SS	015224	2000	19003449	
2	3391090	D4030	Fire Extinguisher	Type ABC, up to 20 LB		Samuel W. Tucker Elementary School Campus	Throughout building	No tag/plate found	No tag/plate found	No tag/plate found	2018		24
D50 Electrical													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	3391073	D5010	Generator	Diesel	60 KW	Samuel W. Tucker Elementary School Campus	Building exterior	Kohler	60R0ZJ	0654253	2000	19003443	
2	3391048	D5010	Automatic Transfer Switch	ATS	2000 AMP	Samuel W. Tucker Elementary School Campus	Electrical room				2000	19003439	
3	3390994	D5020	Secondary Transformer	Dry, Stepdown	112 KVA	Samuel W. Tucker Elementary School Campus	Electrical room	Siemens	3F3Y112	No tag/plate found	2000	19003437	
4	3391000	D5020	Switchboard	277/480 V	2000 AMP	Samuel W. Tucker Elementary School Campus	Electrical room				2000	19003438	
5	3390997	D5020	Distribution Panel	120/208 V	400 AMP	Samuel W. Tucker Elementary School Campus	Kitchen	Siemens	S3C30ML400FBF	No tag/plate found	2000	19003462	
6	3391069	D5020	Distribution Panel	120/208 V	400 AMP	Samuel W. Tucker Elementary School Campus	Mechanical room	Siemens	SEE42ML400CBS	No tag/plate found	2000	19003483	
7	3391065	D5020	Distribution Panel	120/208 V	400 AMP	Samuel W. Tucker Elementary School Campus	Kitchen	Siemens	S3C30JX300FTF	No tag/plate found	2000	19003461	
8	3391061	D5020	Distribution Panel	120/208 V	400 AMP	Samuel W. Tucker Elementary School Campus	Mechanical room	Siemens	SEE42ML400CTS	No tag/plate found	2000	19003485	
9	3391025	D5030	Variable Frequency Drive	VFD, by HP of Motor	15 HP	Samuel W. Tucker Elementary School Campus	Mechanical room	Danfoss	VLT6032GT4CN1STR0DLF00A00	011815G109	2000	19003478	

10	3391004	D5030	Variable Frequency Drive	VFD, by HP of Motor	15 HP	Samuel W. Tucker Elementary School Campus	Mechanical room	Danfoss	177U95545	186902Y230	2018	19003452	
11	3391013	D5030	Variable Frequency Drive	VFD, by HP of Motor	15 HP	Samuel W. Tucker Elementary School Campus	Mechanical room	Danfoss	VLT6016	No tag/plate found	2000	19003476	
12	3391047	D5030	Variable Frequency Drive	VFD, by HP of Motor	15 HP	Samuel W. Tucker Elementary School Campus	Mechanical room	Danfoss	177U9545	186802Y230	2018	19003451	
13	3391077	D5040	Emergency & Exit Lighting	Exit Sign, LED		Samuel W. Tucker Elementary School Campus	Throughout building	Inaccessible	Inaccessible	Inaccessible	2010		32
14	3391060	D5040	Standard Fixture w/ Lamp	any type, w/ LED Replacement	100 W	Samuel W. Tucker Elementary School Campus	Building exterior	Inaccessible	Inaccessible	Inaccessible	2018		20
D70 Electronic Safety & Security													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	3390995	D7050	Fire Alarm Panel	Fully Addressable		Samuel W. Tucker Elementary School Campus	Electrical room	Simplex	4020	No tag/plate found	2000	19003440	
E10 Equipment													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	3391027	E1030	Foodservice Equipment	Convection Oven, Double		Samuel W. Tucker Elementary School Campus	Kitchen	Blodgett	V-100	102517CT048B	2017	19003473	
2	3391039	E1030	Foodservice Equipment	Exhaust Hood, 3 to 6 LF		Samuel W. Tucker Elementary School Campus	Kitchen				2019	19003470	
3	3391089	E1030	Foodservice Equipment	Food Warmer, Proofing Cabinet on Wheels		Samuel W. Tucker Elementary School Campus	Kitchen	CVap	4000 A	No tag/plate found	2019	19003472	
4	3391064	E1030	Foodservice Equipment	Food Warmer, Proofing Cabinet on Wheels		Samuel W. Tucker Elementary School Campus	Kitchen	No tag/plate found	No tag/plate found	No tag/plate found	2019	19003469	
5	3391049	E1030	Foodservice Equipment	Food Warmer, Proofing Cabinet on Wheels		Samuel W. Tucker Elementary School Campus	Kitchen	No tag/plate found	No tag/plate found	No tag/plate found	2019	19003465	
6	3391007	E1030	Foodservice Equipment	Food Warmer, Proofing Cabinet on Wheels		Samuel W. Tucker Elementary School Campus	Kitchen	Winston Industries	4000A	No tag/plate found	2019	19003467	
7	3391079	E1030	Foodservice Equipment	Freezer, Chest		Samuel W. Tucker Elementary School Campus	Kitchen				2019	19003460	
8	3391068	E1030	Foodservice Equipment	Refrigerator, Undercounter 2-Door		Samuel W. Tucker Elementary School Campus	Kitchen	Inaccessible	Inaccessible	Inaccessible	2019	19003466	
9	3391063	E1030	Foodservice Equipment	Refrigerator, Undercounter 2-Door		Samuel W. Tucker Elementary School Campus	Kitchen	Inaccessible	Inaccessible	Inaccessible	2019	19003463	
10	3391086	E1030	Foodservice Equipment	Steamer, Freestanding		Samuel W. Tucker Elementary School Campus	Kitchen	Blodgett	BCX14E	040720JW056S	2020	19003471	
11	3391056	E1030	Foodservice Equipment	Walk-In, Condenser for Refrigerator/Freezer		Samuel W. Tucker Elementary School Campus	Roof	Trenton	TEZA008H8-HS2C-B	180176855T	2018	19003490	
12	3391055	E1030	Foodservice Equipment	Walk-In, Condenser for Refrigerator/Freezer		Samuel W. Tucker Elementary School Campus	Roof	Trenton	TEZA020L8-HT3C-F	1801179964T	2018	19003492	
13	3391080	E1030	Foodservice Equipment	Walk-In, Freezer		Samuel W. Tucker Elementary School Campus	Kitchen	No tag/plate found	No tag/plate found	No tag/plate found	2000	19003468	
14	3391011	E1030	Foodservice Equipment	Walk-In, Refrigerator		Samuel W. Tucker Elementary School Campus	Kitchen	Brown	Inaccessible	Inaccessible	2000	19003458	