

FACILITY CONDITION ASSESSMENT



**BUREAU
VERITAS**

prepared for

Richmond Public Schools
301 North Ninth Street
Richmond, VA 23219



Cardinal Elementary School
1745 Catalina Drive
Richmond, VA 23224

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BV PROJECT #:

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ON SITE DATE:

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Bureau Veritas

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1. Executive Summary

Campus Overview and Assessment Details

General Information	
Property Type	Elementary School
Number of Buildings	1
Main Address	1745 Catalina Drive, Richmond, VA 23224
Site Developed	2020
Outside Occupants / Leased Spaces	None
Date(s) of Visit	April 1-2, 2024
Management Point of Contact	Daniel Alu Project Engineer 800 Yard Street, Suite 115 Columbus, Ohio 43212 Mobile: 614.949.1355 daniel.alu@gofmx.com
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AssetCalc Link	Full dataset for this assessment can be found at: https://www.assetcalc.net/

Significant/Systemic Findings and Deficiencies

Historical Summary

Cardinal Elementary School was constructed in 2020. The building is new and has no significant historical background.

Architectural

The school's architecture and façade are from original construction and consists of brick, CMU and curtain wall systems. The structure shows limited evidence of excessive settlement. The windows are aluminum, and the exterior doors consist of aluminum and steel. The roofing consists of a sloped metal finish and single-ply TPO membrane. Evidence of roof leaks was not reported or observed during the on-site visit. The interior finishes are all original and maintained in good condition. Typical lifecycle based interior and exterior finish replacements are anticipated and budgeted for the reserve term.

Mechanical, Electrical, Plumbing and Fire (MEPF)

The HVAC system consists of a central system of boilers and chillers system feeding air handlers and terminal units throughout the building. The roof top packaged units serve select spaces. All HVAC components are original and operate as part of building automation system. According to property management there were two recent failures with heat exchangers. One heat exchanger replacement is in progress and the other is pending. Electrical system consists of a switchboard, transformers, and distribution panels with a backup generator for emergency power. There is one hydraulic passenger elevator that serves both floors. Typical commercial plumbing fixtures are utilized in the restrooms. Electric water heaters with storage tanks supply the domestic hot water. Plumbing leaks and water pressure problems were not observed or reported. Fire suppression consists of a sprinkler system that serves the entire building. The fire alarm control panel along with exit lights, emergency lighting, alarms, and fire extinguishers protect the entirety of the facility.

Site

Overall, the site is well maintained with moderate landscaping features and irrigation is not present. There are building mounted and pole mounted lighting that appears to be adequate. Asphalt parking lot serves the facility found to be in good condition. The play areas have a several play structures, asphalt sports surfaces and open playfields.

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 the Facility Condition Index (FCI), which provides a theoretical objective indication of a facility’s overall condition. The FCI is defined as the ratio of the cost of current needs divided by the current replacement value (CRV) of the facility. In this report, each building is considered as a separate 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
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 compare facilities across a portfolio instead of being over-analyzed and scrutinized as stand-alone mathematical values. The table below presents the current, 3-year, 5-year, and 10-year FCI’s for each facility:

FCI Analysis Cardinal Elementary School / Main Building(2020)			
Replacement Value	Total SF	Cost/SF	
\$ 46,598,800	116,497	\$ 400	
	Est Reserve Cost		FCI
Current	\$ 40,000		0.1 %
3-Year	\$ 40,000		0.1 %
5-Year	\$ 40,000		0.1 %
10-Year	\$ 619,300		1.3 %

Immediate Needs

Facility/Building	Total Items	Total Cost
Cardinal Elementary School / Main Building	2	\$40,000
Total	2	\$40,000

Main Building

ID	Location	Location Description	UF Code	Description	Condition	Plan Type	Cost
7662388	Cardinal Elementary School / Main Building	Boiler Room	D3020	Heat Exchanger, HVAC, Boiler #2, Replace	Failed	Performance/Integrity	\$20,000
7662387	Cardinal Elementary School / Main Building	Boiler Room	D3020	Heat Exchanger, HVAC, Boiler #1, Replace	Failed	Performance/Integrity	\$20,000
Total (2 items)							\$40,000



Key Findings

FCI Analysis | Cardinal Elementary School / Main Building(2020)

<i>Replacement Value</i>	<i>Total SF</i>	<i>Cost/SF</i>
\$ 46,598,800	116,497	\$ 400

	Est Reserve Cost	FCI
Current	\$ 40,000	0.1 %
3-Year	\$ 40,000	0.1 %
5-Year	\$ 40,000	0.1 %
10-Year	\$ 619,300	1.3 %



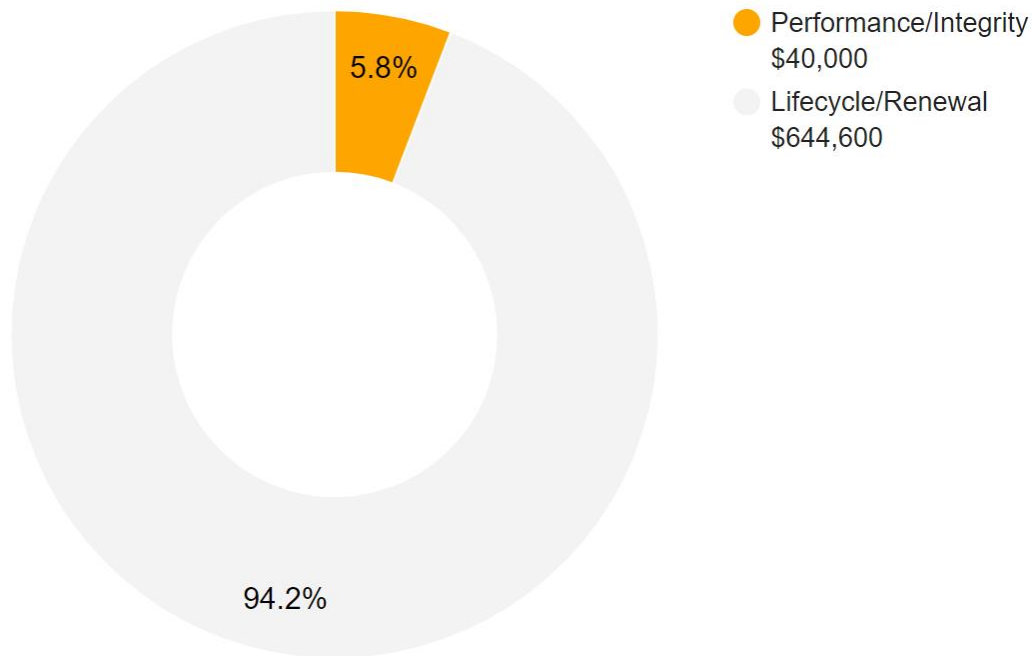
Plan Types

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 and highest on the list below.

Plan Type Descriptions

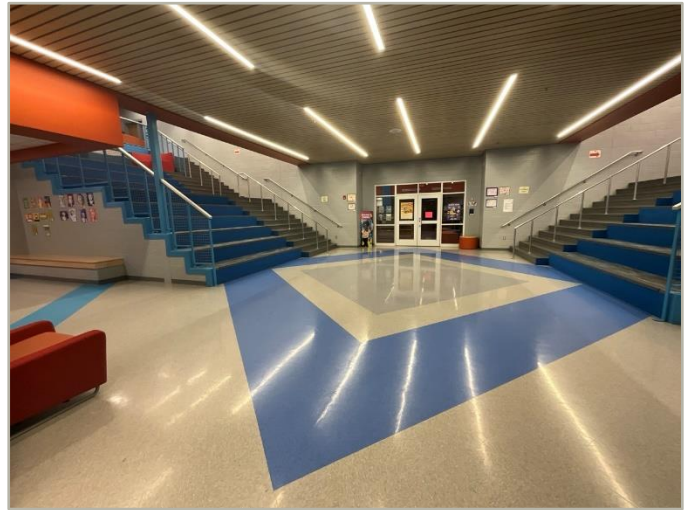
Safety	■	An observed or reported unsafe condition that if left unaddressed could result in injury; a system or component that presents potential liability risk.
Performance/Integrity	■	Component or system has failed, is almost failing, performs unreliably, does not perform as intended, and/or poses risk 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 neither deficient nor aged past EUL but for which future replacement or repair is anticipated and budgeted.

Plan Type Distribution (by Cost)



10-YEAR TOTAL: \$684,600

2. Main Building



Main Building: Systems Summary		
Address	1745 Catalina Drive; Richmond, VA 23224	
Constructed/Renovated	2020	
Building Area	116,497 SF	
Number of Stories	2 above grade	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Structure	Steel frame and masonry bearing walls with concrete-topped metal decks over concrete slab foundation	Good
Façade	Primary Wall Finish: Brick Secondary Wall Finish: Curtain wall Windows: Aluminum	Good
Roof	Primary: Hip construction with asphalt shingles and Metal finish Secondary: Flat construction with TPO membrane	Good
Interiors	Walls: Painted gypsum board & CMU Floors: Carpet, VCT, ceramic tile, quarry tile, wood strip Ceilings: Painted gypsum board, ACT	Good
Elevators	Passenger: One hydraulic car serving all floors	Good
Plumbing	Distribution: Copper supply and PVC waste & venting Hot Water: Electric domestic boilers with storage tanks Fixtures: Toilets, urinals, and sinks in restrooms	Good

Main Building: Systems Summary		
HVAC	<p>Central System: Boilers, chillers and air handlers feeding fan coil units.</p> <p>Non-Central System: Packaged unit and Ductless split-systems</p> <p>Supplemental components: Suspended unit heaters</p>	Fair
Fire Suppression	Wet-pipe sprinkler system and kitchen hood system, dedicated computer/server room chemical system	Good
Electrical	<p>Source & Distribution: Main switchboard with copper wiring</p> <p>Interior Lighting: Linear fluorescent, LED</p> <p>Exterior Building-Mounted Lighting: LED</p> <p>Emergency Power: Gas generator with automatic transfer switch</p>	Good
Fire Alarm	Alarm panel with smoke detectors, heat detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs	Good
Equipment/Special	Commercial kitchen equipment	Good
Accessibility	Presently it does not appear an accessibility study is needed for this building. See the appendix for associated photos and additional information.	
Additional Studies	No additional studies are currently recommended for the building.	
Areas Observed	Most of the interior spaces were observed to gain a clear understanding of the facility's overall condition. Other areas accessed and assessed included the exterior equipment and assets directly serving the buildings, the exterior walls of the facility, and the roofs.	
Key Spaces Not Observed	All key areas of the facility were accessible and observed.	

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	-	-	-	-	-	-
Roofing	-	-	-	-	\$400,100	\$400,100
Interiors	-	-	-	\$482,700	\$1,309,000	\$1,791,700
Conveying	-	-	-	-	\$20,500	\$20,500
Plumbing	-	-	-	-	\$323,700	\$323,700
HVAC	\$40,000	-	-	-	\$770,600	\$810,600
Fire Protection	-	-	-	-	\$247,600	\$247,600
Electrical	-	-	-	-	\$897,400	\$897,400
Fire Alarm & Electronic Systems	-	-	-	-	\$2,005,200	\$2,005,200
Equipment & Furnishings	-	-	-	\$96,600	\$670,100	\$766,700
Site Utilities	-	-	-	-	\$1,000	\$1,000
TOTALS (3% inflation)	\$40,000	-	-	\$579,300	\$6,645,100	\$7,264,400

NEEDS OVER TIME: The vertical blue bars in the graphic below represent the year-by-year needs identified for the facility. The orange line 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 are associated with the values along the right Y axis.

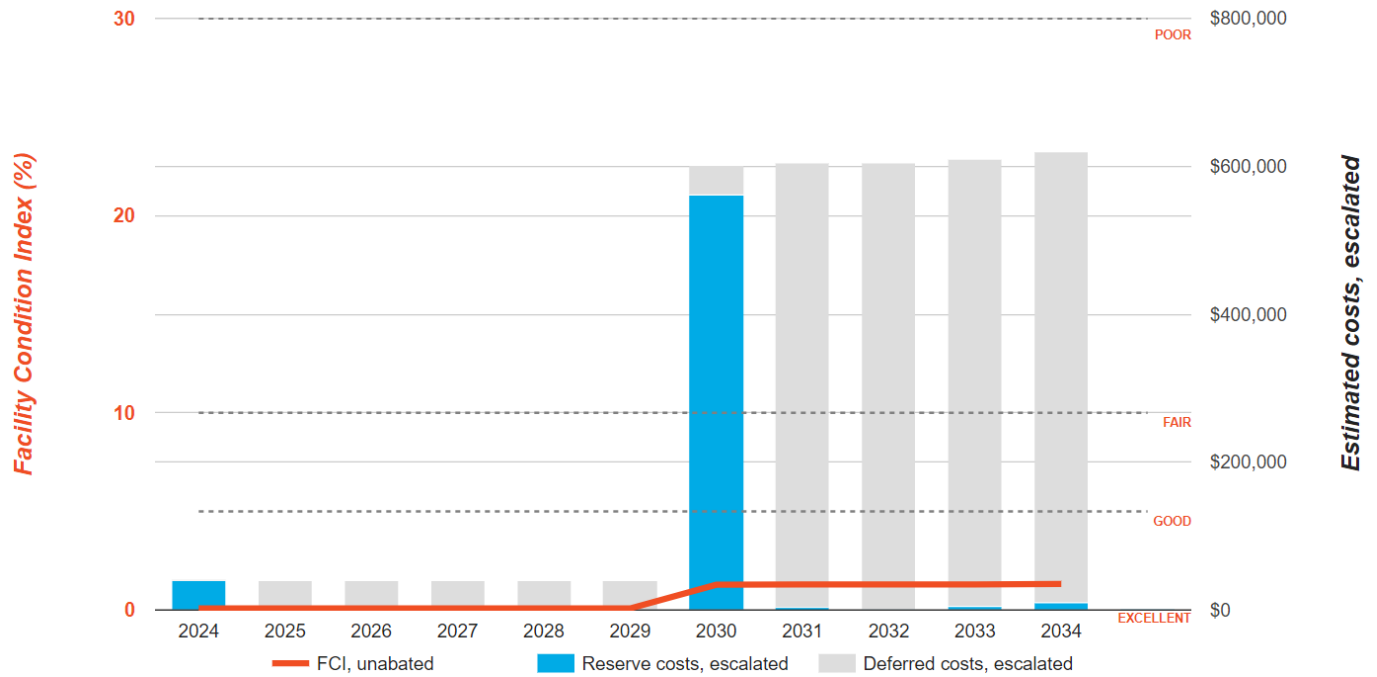
Needs by Year with Unaddressed FCI Over Time

FCI Analysis: Cardinal Elementary School Main Building

Replacement Value: \$46,598,800

Inflation Rate: 3.0%

Average Needs per Year: \$56,400



Cardinal Elementary School: Photographic Overview



1 - FRONT ELEVATION



2 - LEFT ELEVATION



3 - REAR ELEVATION



4 - RIGHT ELEVATION



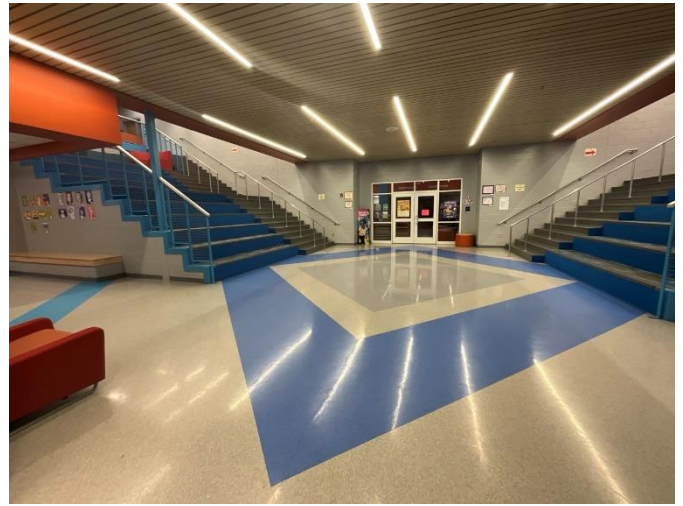
5 - ROOFS OVERVIEW



6 - BUILDING FACADE



7 - MAIN ENTRANCE



8 - CORRIDORS



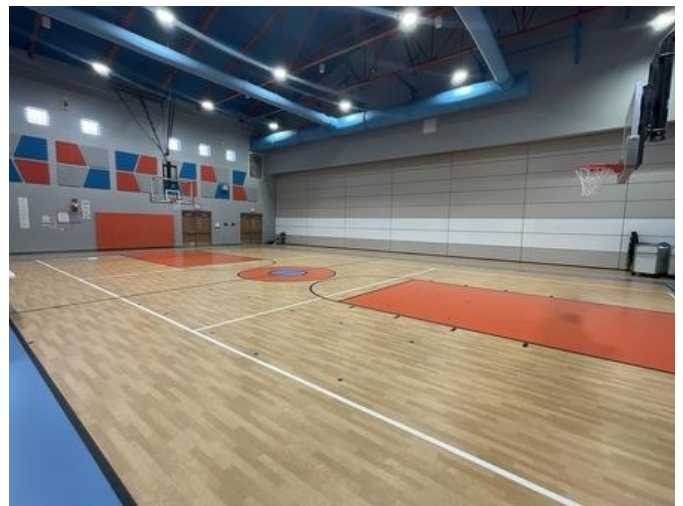
9 - TYPICAL CLASSROOM



10 - OPEN CLASSROOM



11 - LIBRARY



12 - GYMNASIUM



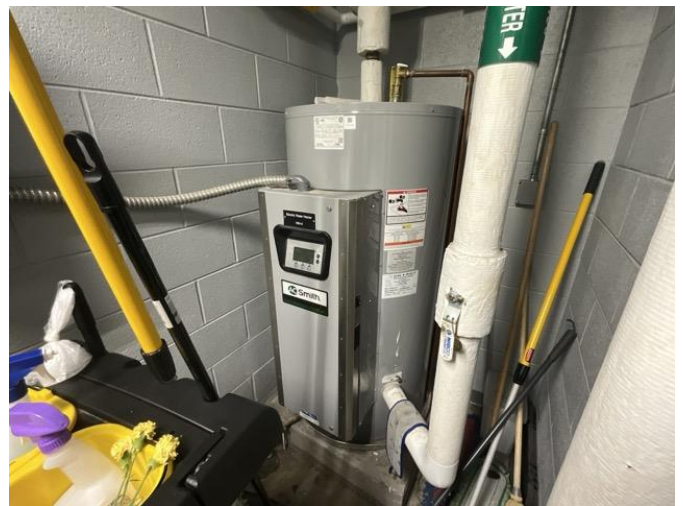
13 - CAFETERIA



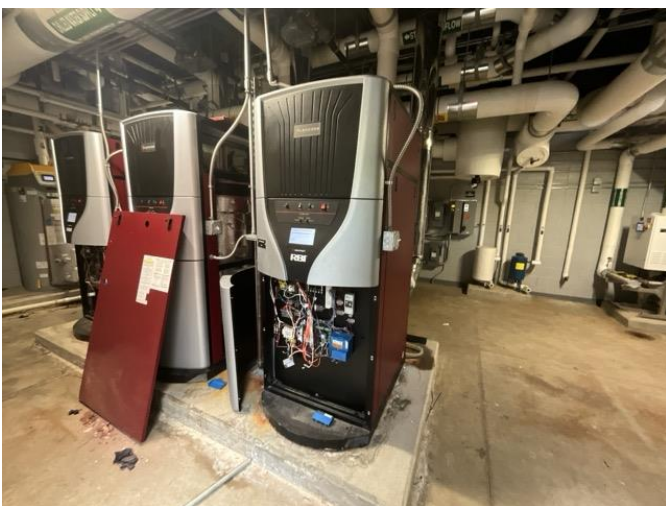
14 - KITCHEN



15 - DOMESTIC HOT WATER SUPPLY



16 - HOT WATER SUPPLY



17 - BOILERS



18 - CHILLERS



19 - ROOF TOP UNITS



20 - ELEVATOR



21 - FIRE SUPPRESSION SYSTEM



22 - MAIN ELECTRICAL SWITCHBOARD



23 - EMERGENCY GENERATOR



24 - FIRE ALARM PANEL

3. Site Summary



Site Information		
Site Area	14.2 acres (estimated)	
Parking Spaces	163 total spaces all in open lots; 10 of which are accessible	
<i>System</i>	<i>Description</i>	<i>Condition</i>
Pavement/Flatwork	Asphalt lots with limited areas of concrete aprons and pavement and adjacent concrete sidewalks and curbs	Excellent
Site Development	Property entrance signage; chain link and wood board fencing Brick and CMU dumpster enclosures Sports fields and courts with fencing and site lights	Good
Landscaping and Topography	Significant landscaping features including lawns, trees, bushes, and planters Irrigation not present Low to moderate site slopes throughout	Good
Utilities	Municipal water and sewer Local utility-provided electric and natural gas	Good
Site Lighting	Pole-mounted: LED	Excellent
Ancillary Structures	None	--

Site Information	
Site Accessibility	Presently it does not appear an accessibility study is needed for the exterior site areas. See the appendix for associated photos and additional information.
Site Additional Studies	No additional studies are currently recommended for the exterior site areas.
Site Areas Observed	The exterior areas within the property boundaries were observed to gain a clear understanding of the site’s overall condition.
Site Key Spaces Not Observed	All key areas of the exterior site were accessible and observed.

The table below shows the anticipated costs by trade or site 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
Site Development	-	-	-	-	\$73,200	\$73,200
Site Pavement	-	-	\$30,200	\$35,100	\$87,700	\$153,000
Site Utilities	-	-	-	-	\$188,100	\$188,100
TOTALS (3% inflation)	-	-	\$30,200	\$35,100	\$349,100	\$414,400



Site: Photographic Overview



1 - SITE OVERVIEW



2 - SITE PARKING OVERVIEW



3 - SITE WALKWAYS



4 - SITE PLAY AREA



5 - SITE LIGHTING



6 - PROPERTY SIGNAGE

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 material 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 assessment. A full measured ADA survey would be required to identify more 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 included in the dataset
- For any “none” boxes checked or reference to “no issues” identified, that alone does not guarantee full compliance

The following table summarizes the accessibility conditions of the general site and each significant building included in this report:

Accessibility Summary			
<i>Facility</i>	<i>Year Built/ Renovated</i>	<i>Prior Study Provided?</i>	<i>Major/Moderate Issues Observed?</i>
General Site	2020	No	No
Building 1	2020	No	No

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 a 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 or component 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.

7. Certification

Richmond Public Schools (the Client) retained Bureau Veritas to perform this Facility Condition Assessment in connection with its continued operation of Cardinal Elementary School, 1745 Catalina Drive, Richmond, VA 23224, 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.

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8. Appendices

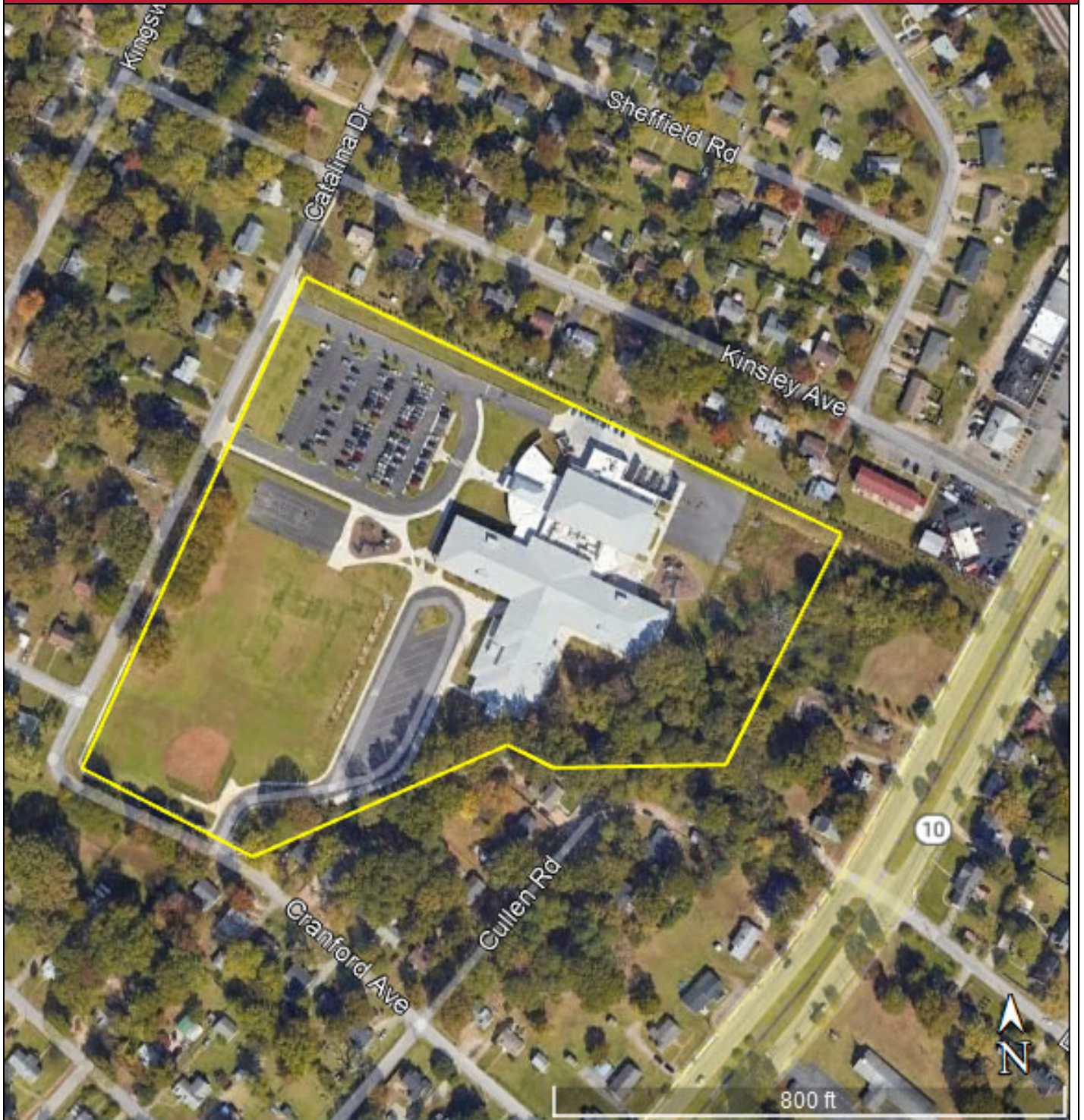
- Appendix A: Site Plan(s)
- Appendix B: Pre-Survey Questionnaire(s)
- Appendix C: Accessibility Review and Photos
- Appendix D: Component Condition Report
- Appendix E: Replacement Reserves
- Appendix F: Equipment Inventory List





Appendix A: Site Plan(s)



Site Plan



 BUREAU VERITAS	Project Number	Project Name	 N
	166385.24R000-013.468	Cardinal Elementary School	
	Source	On-Site Date	
	Google	April 1-2, 2024	

Appendix B: Pre-Survey Questionnaire(s)



Bureau Veritas Facility Condition Assessment Pre-Survey Questionnaire

Building / Facility Name: Cardinal

Name of person completing form: Ronald Hathaway

Title / Association with property: Director of Facilities

Length of time associated w/ property: 4

Date Completed: April 20, 2024

Phone Number: 804-325-0740

Method of Completion: Electronic

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	2020		
2	Building size in SF	116497		
3	Major Renovation/Rehabilitation		Year	Additional Detail
		Façade		Brick
		Roof		TPO/Metal/ Shingle
		Interiors		Sheetrock
		HVAC		Hot water, chilled water, VAVA boxes and some air handlers on the roof
		Electrical		
		Site Pavement		Asphalt
		Accessibility	2007	Satisfied the 2007 lawsuit requirement
Question		Response		
4	List other significant capital improvements (focus on recent years; provide approximate date).	None		
5	List any major capital expenditures planned/requested for the next few years. Have they been budgeted?	Noone		
6	Describe any on-going extremely problematic, historically chronic, or immediate facility needs.	Boilers unreliable		

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			
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				Heat exchangers failed in 2 boilers
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				Satisfied the 2007 lawsuit requirement
20	ADA: Have there been regular complaints about accessibility issues, or associated previous or pending litigation?		X			

Appendix C: Accessibility Review and Photos

Visual Checklist - 2010 ADA Standards for Accessible Design

Property Name: Cardinal Elementary School

BV Project Number: 166385.24R000-013.468

Abbreviated Accessibility Checklist

Facility History & Interview

Question		Yes	No	Unk	Comments
1	Has an accessibility study been previously performed? If so, when?			X	2020 construction
2	Have any ADA improvements been made to the property since original construction? Describe.		X		2020 construction
3	Has building management reported any accessibility-based 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



2ND PATHWAY

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

Abbreviated Accessibility Checklist

Building Entrances



MAIN ENTRANCE



AUTOMATIC DOOR OPENER

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

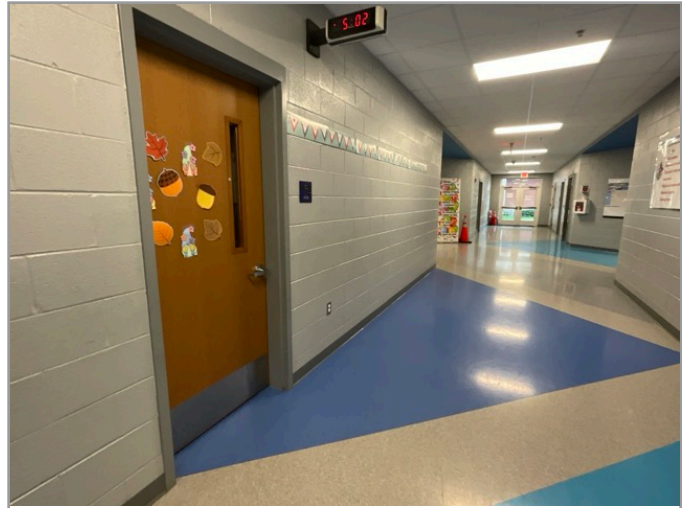
7	Do pairs of accessible entrance doors in series appear to have the minimum clear space between them ?	X			
8	Do thresholds at accessible entrances appear to have a compliant height ?	X			

Abbreviated Accessibility Checklist

Interior Accessible Route



ACCESSIBLE INTERIOR PATH



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 ?	✗			

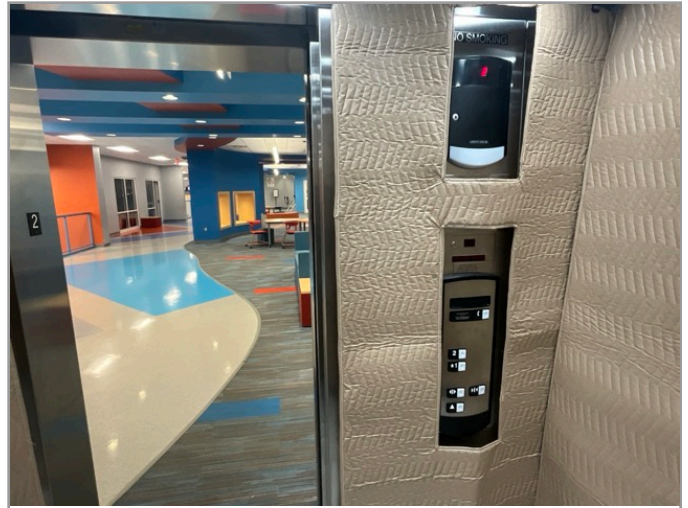
7	Are accessible areas of refuge and the accessible means of egress to those areas identified with accessible signage ?	X			
8	Do public transaction areas have an accessible, lowered service counter section ?	X			
9	Do public telephones appear mounted with an accessible height and location ?	X			
10	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 CAB



EMERGENCY CALL PANEL

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 ?	✗			

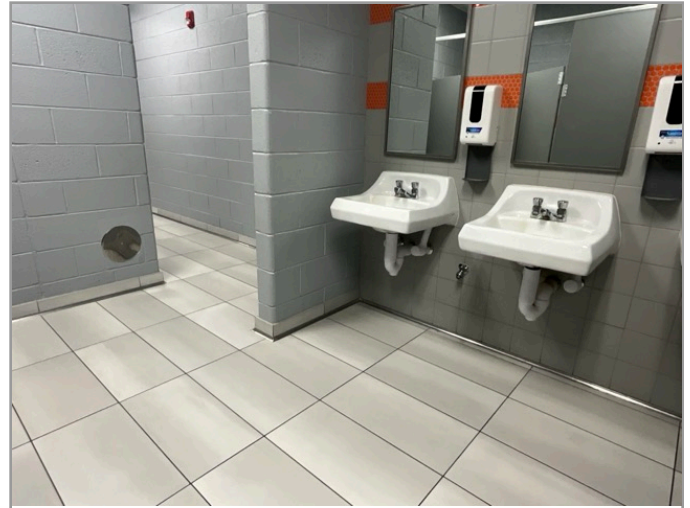
7	Are tactile and Braille characters mounted to the left of each elevator car control button ?	X			
8	Are audible and visual floor position indicators provided in the elevator car?	X			
9	Is the emergency call system on or adjacent to the control panel and does it not require voice communication ?	X			

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

Kitchens/Kitchenettes



BREAKROOM OVERVIEW



SINK CLEARANCE

Question	Yes	No	NA	Comments
1 Do kitchens/kitchenettes appear to have a minimum compliant path of travel or area of maneuverability ?	✗			
2 Are the appliances centered for a parallel or forward approach with adequate clear floor space ?	✗			
3 Is there an accessible countertop/preparation space of proper width and height ?	✗			
4 Is there an accessible sink space of proper width and height ?	✗			
5 Does the sink faucet have compliant handles ?	✗			
6 Is the plumbing piping under the sink configured to protect against contact ?	✗			

7	Are the cooktop/range controls front-mounted (or in a location that does not require reaching across the burners) ?			X	
---	---	--	--	---	--

Abbreviated Accessibility Checklist

Playgrounds & Swimming Pools



ACCESSIBLE ROUTE TO PLAYGROUND



OVERVIEW OF PLAYGROUND

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

Appendix D:

Component Condition Report

Component Condition Report | Cardinal Elementary School / Main Building

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Structure						
A1010	Throughout building	Good	Foundation System, Concrete or CMU Walls w/ Continuous Footings, 1-2 Story Building	1,828 LF	71	7491165
B1080	Throughout building	Good	Stairs, Metal or Pan-Filled, Interior	820 SF	46	7491169
Facade						
B2010	Building Exterior	Good	Curtain Wall, Aluminum-Framed System	1,300 SF	46	7491167
B2010	Building Exterior	Good	Exterior Walls, Brick	39,560 SF	46	7491166
B2020	Building Exterior	Good	Window, Aluminum Double-Glazed, 16-25 SF	138	26	7491168
B2050	Building Exterior	Good	Exterior Door, Steel, Standard	13	36	7491171
B2050	Building Exterior	Good	Exterior Door, Steel, Standard	4	36	7529180
B2050	Building Exterior	Good	Exterior Door, Aluminum-Framed & Glazed, Standard Swing	16	26	7491170
Roofing						
B3010	Roof	Good	Roofing, Asphalt Shingle, 30-Year Premium	67,050 SF	26	7491172
B3010	Roof	Good	Roofing, Single-Ply Membrane, TPO/PVC	13,700 SF	16	7529145
B3010	Roof	Good	Roofing, Metal	1,530 SF	36	7529147
B3020	Roof	Good	Roof Appurtenances, Gutters & Downspouts, Aluminum w/ Fittings	1,828 LF	16	7529156
B3060	Roof	Good	Roof Hatch, Metal	2	26	7491173
Interiors						
C1030	Throughout building	Good	Interior Door, Wood, Solid-Core	134	36	7491174
C1030	Throughout building	Good	Door Hardware, School, per Door	134	27	7491175
C1070	Throughout building	Good	Suspended Ceilings, Acoustical Tile (ACT)	106,500 SF	21	7491182
C1090	Restrooms	Good	Toilet Partitions, Plastic/Laminate	23	16	7491179
C2010	Throughout building	Fair	Wall Finishes, any surface, Prep & Paint	224,000 SF	6	7491181
C2030	Restrooms	Good	Flooring, Ceramic Tile	3,700 SF	36	7491177
C2030	Kitchen	Good	Flooring, Quarry Tile	1,900 SF	46	7491176

Component Condition Report | Cardinal Elementary School / Main Building

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
C2030	Throughout building	Good	Flooring, Vinyl Tile (VCT)	91,400 SF	11	7491178
C2030	Classrooms	Fair	Flooring, Carpet, Commercial Standard	9,100 SF	6	7491183
C2050	Corridor	Good	Ceiling Finishes, Gypsum Board/Plaster	4,700 SF	46	7529162
C2050	Corridor	Good	Ceiling Finishes, Wood Paneling	3,100 SF	26	7529177
Conveying						
D1010	Elevator Machine Room	Good	Passenger Elevator, Hydraulic, 2 Floors, 3000 to 4000 LB, Renovate [Car 1]	1	26	7491186
D1010	Elevator	Good	Elevator Cab Finishes, Standard	1	11	7491185
D1010	Elevator Equipment E109	Good	Passenger Elevator, Hydraulic, 2 Floors, 1500 to 2500 LB, Renovate	1	26	7494827
D1010	HC Lift	Good	Vertical Lift, Wheelchair, 5' Rise, Renovate	1	21	7529187
D1010	Elevator Equipment E109	Good	Elevator Controls, Automatic, 1 Car	1	16	7494813
Plumbing						
D2010	Restrooms	Good	Sink/Lavatory, Wall-Hung, Vitreous China	42	26	7491195
D2010	Boiler room	Good	Water Heater, Electric, Commercial (120 kW), 131 to 250 GAL [WH3]	1	16	7491188
D2010	Mechanical room	Good	Pump, Circulation/Booster, Domestic Water, 10 HP [DWBP-1]	1	21	7529184
D2010	Kitchen	Good	Sink/Lavatory, Commercial Kitchen, 3-Bowl	1	26	7491191
D2010	Throughout building	Good	Drinking Fountain, Wall-Mounted, Bi-Level	4	11	7491190
D2010	Mechanical room	Good	Storage Tank, Domestic Water, 251 to 500 GAL	1	26	7491187
D2010	Throughout building	Good	Plumbing System, Supply & Sanitary, Medium Density (excludes fixtures)	116,497 SF	36	7491254
D2010	Restrooms	Good	Toilet, Commercial Water Closet	38	26	7491197
D2010	Mechanical G204	Good	Water Heater, Electric, Commercial (12 kW), 30 to 80 GAL	1	16	7494821
D2010	Kitchen	Fair	Sink/Lavatory, Commercial Kitchen, 2-Bowl	1	26	7491196
D2010	Utility closet	Fair	Sink/Lavatory, Service Sink, Floor	4	31	7491192
D2010	Restrooms	Good	Urinal, Standard	14	26	7491193
D2010	Mechanical room	Good	Storage Tank, Domestic Water, 251 to 500 GAL	1	26	7529181
D2010	Mechanical room	Good	Water Heater, Electric, Commercial (120 kW) [WH2]	1	16	7529198

Component Condition Report | Cardinal Elementary School / Main Building

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D2010	Kitchen	Good	Sink/Lavatory, Drop-In Style, Stainless Steel	4	26	7529169
D2010	Custodian H202	Good	Water Heater, Indirect, 80 to 120 GAL [WH4]	1	11	7529193
D2010	Utility closet	Good	Backflow Preventer, Domestic Water, 2 IN	1	26	7491189
D2010	Mechanical room	Good	Water Heater, Electric, Commercial (120 kW), 131 to 250 GAL [WH1]	1	16	7529176
HVAC						
D3020	Mechanical room	Good	Boiler, Gas High-Efficiency Condensing Style, HVAC, 751 to 2000 MBH [B-2]	1	11	7529178
D3020	Boiler Room	Failed	Heat Exchanger, HVAC, Boiler #2	1	0	7662388
D3020	Building entrances	Good	Unit Heater, Electric, 6 to 10 KW	6	16	7529158
D3020	Boiler Room	Failed	Heat Exchanger, HVAC, Boiler #1	1	0	7662387
D3020	Mechanical room	Good	Boiler, Gas High-Efficiency Condensing Style, HVAC, 751 to 2000 MBH [B-3]	1	11	7529155
D3020	Boiler room	Good	Boiler, Gas High-Efficiency Condensing Style, HVAC, 751 to 2000 MBH [B-1]	1	11	7491202
D3030	Chiller Yard	Good	Chiller, Air-Cooled	1	21	7494823
D3030	Building entrances	Good	Split System Ductless, Single Zone, 1.5 to 2 TON	1	11	7529188
D3030	Chiller Yard	Good	Chiller, Air-Cooled	1	21	7494822
D3030	Roof	Good	Split System Ductless, Single Zone, 1.5 to 2 TON	1	11	7491206
D3030	Building entrances	Good	Split System Ductless, Single Zone, 1.5 to 2 TON	1	11	7529150
D3050	Building entrances	Good	Pump, Distribution, HVAC Chilled or Condenser Water, 26 to 50 HP [P-1]	1	21	7529191
D3050	Building entrances	Good	Pump, Distribution, HVAC Heating Water, 8 to 10 HP	1	15	7491207
D3050	Roof	Good	Packaged Unit, RTU, Pad or Roof-Mounted, 8 to 10 TON	1	16	7491209
D3050	Throughout building	Good	Variable Air Volume Unit, VAV Box, 100 to 400 CFM	28	20	7641502
D3050	Roof	Good	Make-Up Air Unit, MUA or MAU, 2000 to 6000 CFM	1	16	7529179
D3050	Building entrances	Good	Pump, Distribution, HVAC Chilled or Condenser Water, 26 to 50 HP [P-2]	1	21	7529173
D3050	Mechanical G204	Good	Air Handler, Interior AHU, Easy/Moderate Access, 2401 to 4000 CFM [AHU 1]	1	21	7494817
D3050	Building entrances	Good	Pump, Distribution, HVAC Heating Water, 8 to 10 HP [P-3]	1	15	7529190
D3060	Roof	Good	Exhaust Fan, Roof or Wall-Mounted, 42" Damper, 15001 to 20000 CFM [KEF-1]	1	15	7491215

Component Condition Report | Cardinal Elementary School / Main Building

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D3060	Roof	Good	Exhaust Fan, Roof or Wall-Mounted, 16" Damper, 1001 to 2000 CFM [EF-39]	1	16	7529189
D3060	Roof	Good	Exhaust Fan, Roof or Wall-Mounted, 16" Damper, 1001 to 2000 CFM [EF-37]	1	16	7491214
D3060	Roof	Good	Exhaust Fan, Roof or Wall-Mounted, 16" Damper, 1001 to 2000 CFM [EF-6]	1	16	7529167
Fire Protection						
D4010	Fire Pump Room	Good	Pump, Fire Suppression, 10 HP	1	21	7494815
D4010	Fire Pump Room	Good	Supplemental Components, Fire Jockey Pump, 0.5 HP	1	16	7494830
D4010	Fire Pump Room	Good	Supplemental Components, Fire Pump Controller	1	15	7494811
D4010	Throughout building	Good	Fire Suppression System, Existing Sprinkler Heads, by SF	116,497 SF	19	7491258
Electrical						
D5010	Chiller Yard	Good	Generator, Diesel, 130 to 300 KW	1	21	7491217
D5010	B104 Electrical	Good	Automatic Transfer Switch, ATS, 225 AMP [ATS-1]	1	21	7494829
D5010	B104 Electrical	Good	Automatic Transfer Switch, ATS, 600 AMP [ATS-2]	1	21	7494819
D5020	Electrical room E110	Fair	Secondary Transformer, Dry, Stepdown, 45 KVA [TC]	1	26	7494836
D5020	B104 Electrical	Good	Secondary Transformer, Dry, Stepdown, 75 KVA [TBS]	1	26	7494834
D5020	Mechanical G204	Good	Distribution Panel, 277/480 V, 400 AMP [HG]	1	26	7494812
D5020	B104 Electrical	Good	Switchboard, 277/480 V, 3000 AMP	1	36	7494826
D5020	B104 Electrical	Good	Distribution Panel, 120/208 V, 600 AMP [ELA]	1	26	7494810
D5020	B104 Electrical	Good	Secondary Transformer, Dry, Stepdown, 45 KVA [ETA]	1	26	7494835
D5020	Mechanical G204	Good	Secondary Transformer, Dry, Stepdown, 45 KVA	1	26	7494824
D5020	Electrical room E110	Good	Secondary Transformer, Dry, Stepdown, 45 KVA [TD1]	1	26	7494816
D5020	B104 Electrical	Good	Distribution Panel, 277/480 V, 400 AMP [HBS]	1	26	7494818
D5020	Electrical room E110	Good	Distribution Panel, 277/480 V, 1200 AMP [DPC]	1	26	7494833
D5020	B104 Electrical	Good	Switchboard, 277/480 V, 1000 AMP [HSS]	1	36	7494814
D5020	B104 Electrical	Good	Distribution Panel, 120/208 V, 400 AMP [EHA]	1	26	7494831
D5020	Electrical room E110	Good	Secondary Transformer, Dry, Stepdown, 45 KVA [TE]	1	26	7494832

Component Condition Report | Cardinal Elementary School / Main Building

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D5020	Electrical room E110	Good	Distribution Panel, 120/208 V, 400 AMP [LC1]	1	26	7494820
D5020	B104 Electrical	Good	Secondary Transformer, Dry, Stepdown, 112.5 KVA [TKS]	1	25	7494825
D5030	Mechanical room	Good	Variable Frequency Drive, VFD, by HP of Motor, 100 HP, Replace/Install	1	16	7529171
D5030	Throughout building	Good	Electrical System, Wiring & Switches, Average or Low Density/Complexity	116,497	SF 36	7491260
D5040	Throughout building	Good	Interior Lighting System, Full Upgrade, Medium Density & Standard Fixtures	116,497	SF 16	7491256
Fire Alarm & Electronic Systems						
D6020	Throughout building	Excellent	Low Voltage System, Facility-Wide, Phone & Data Lines	116,497	SF 19	7491257
D6060	Throughout building	Excellent	Intercom/PA System, Public Address Upgrade, Facility-Wide	116,497	SF 19	7491255
D7030	Throughout building	Good	Security/Surveillance System, Full System Upgrade, Average Density	116,497	SF 14	7491252
D7050	Main Office	Good	Fire Alarm Panel, Fully Addressable	1	11	7491220
D7050	Throughout building	Good	Fire Alarm System, Full System Upgrade, Standard Addressable, Upgrade/Install	116,497	SF 16	7491259
D8010	Boiler room	Good	BAS/HVAC Controls, Basic System or Legacy Upgrades, Upgrade/Install	116,497	SF 13	7491261
Equipment & Furnishings						
E1030	Kitchen	Good	Foodservice Equipment, Steamer, Tabletop	1	6	7529164
E1030	Kitchen	Good	Foodservice Equipment, Walk-In, Freezer	1	16	7529157
E1030	Kitchen	Good	Foodservice Equipment, Prep Table Refrigerated, Salad/Sandwich	1	11	7529175
E1030	Kitchen	Good	Foodservice Equipment, Icemaker, Freestanding	1	11	7529170
E1030	Kitchen	Good	Foodservice Equipment, Convection Oven, Single [G]	1	6	7529160
E1030	Kitchen	Good	Foodservice Equipment, Dairy Cooler/Wells [8]	1	11	7491222
E1030	Kitchen	Good	Foodservice Equipment, Steam Kettle	1	16	7491230
E1030	Kitchen	Good	Foodservice Equipment, Convection Oven, Single [F]	1	6	7529183
E1030	Kitchen	Good	Foodservice Equipment, Convection Oven, Single [A]	1	6	7529185
E1030	Kitchen	Good	Foodservice Equipment, Exhaust Hood, 8 to 10 LF	2	11	7529174
E1030	Kitchen	Good	Foodservice Equipment, Prep Table Refrigerated, Salad/Sandwich	1	11	7529161
E1030	Kitchen	Good	Foodservice Equipment, Dairy Cooler/Wells [4]	1	11	7529168

Component Condition Report | Cardinal Elementary School / Main Building

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
E1030	Kitchen	Good	Foodservice Equipment, Garbage Disposal, 1 to 3 HP	1	9	7529194
E1030	Kitchen	Good	Foodservice Equipment, Convection Oven, Single [B]	1	6	7529149
E1030	Kitchen	Good	Foodservice Equipment, Convection Oven, Single [D]	1	6	7491227
E1030	Kitchen	Good	Foodservice Equipment, Exhaust Hood, 8 to 10 LF	2	13	7491229
E1030	Kitchen	Good	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels [J]	1	11	7491233
E1030	Kitchen	Good	Foodservice Equipment, Walk-In, Refrigerator	1	16	7529172
E1030	Kitchen	Good	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels [L]	1	11	7529197
E1030	Kitchen	Good	Foodservice Equipment, Dairy Cooler/Wells [6]	1	11	7529148
E1030	Kitchen	Good	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels [K]	1	11	7529192
E1030	Kitchen	Good	Foodservice Equipment, Steamer, Tabletop [8]	1	6	7491224
E1030	Kitchen	Good	Foodservice Equipment, Steamer, Tabletop	1	6	7529152
E1030	Kitchen	Good	Foodservice Equipment, Prep Table Refrigerated, Salad/Sandwich	1	11	7491232
E1030	Kitchen	Good	Foodservice Equipment, Prep Table Refrigerated, Salad/Sandwich	1	11	7529166
E1030	Kitchen	Good	Foodservice Equipment, Freezer, 1-Door Reach-In [3]	1	12	7529195
E1030	Kitchen	Good	Foodservice Equipment, Freezer, 1-Door Reach-In [5]	1	11	7529196
E1030	Kitchen	Good	Foodservice Equipment, Convection Oven, Single [E]	1	6	7529154
E1030	Kitchen	Good	Foodservice Equipment, Deep Fryer	1	10	7529165
E1030	Kitchen	Good	Foodservice Equipment, Mixer, Freestanding	1	18	7491231
E1030	Kitchen	Good	Foodservice Equipment, Freezer, 1-Door Reach-In [7]	1	11	7529163
E1030	Kitchen	Good	Foodservice Equipment, Convection Oven, Single [H]	1	6	7529146
E1030	Kitchen	Good	Foodservice Equipment, Convection Oven, Single [I]	1	6	7529182
E1030	Kitchen	Good	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels [A]	1	11	7491228
E1040	Art Room	Good	Ceramics Equipment, Kiln	1	18	7491234
E1040	Throughout building	Good	Healthcare Equipment, Defibrillator (AED), Cabinet-Mounted	2	7	7491235
E1060	Kitchen	Good	Residential Appliances, Washer	1	11	7529186

Component Condition Report | Cardinal Elementary School / Main Building

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
E1060	Kitchen	Good	Residential Appliances, Washer	1	11	7529159
E2010	Throughout building	Good	Casework, Countertop, Plastic Laminate	880 LF	12	7491236
E2010	Throughout building	Good	Casework, Cabinetry, Economy	880 LF	17	7491237
Sitework						
G4050	Building exterior	Good	Exterior Fixture w/ Lamp, any type, w/ LED Replacement, 250 W	1	16	7529151

Component Condition Report | Cardinal Elementary School / Site

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Pedestrian Plazas & Walkways						
G2020	Site	Good	Parking Lots, Pavement, Asphalt, Mill & Overlay	59,700 SF	23	7491241
G2020	Site	Good	Parking Lots, Pavement, Asphalt, Seal & Stripe	59,700 SF	4	7491240
G2030	Site	Good	Sidewalk, Concrete, Large Areas	1,020 SF	46	7491239
Athletic, Recreational & Playfield Areas						
G2050	Site	Good	Play Structure, Multipurpose, Large	1	16	7491246
G2050	Site	Good	Playfield Surfaces, Chips Rubber, 3" Depth	2,440 SF	11	7491247
Sitework						
G2060	Site	Good	Signage, Property, Monument, Replace/Install	1	19	7491248
G2060	Site	Good	Dumpster Enclosure, Masonry (CMU) Walls, 8' High (per LF), Replace/Install	66 LF	36	7491251
G2060	Site	Good	Fences & Gates, Fence, Chain Link 6'	1,160 LF	36	7529153
G4050	Building Exterior	Good	Exterior Fixture w/ Lamp, any type, w/ LED Replacement, 250 W	22	16	7491250
G4050	Site	Good	Pole Light Fixture w/ Lamps, any type 20' High, w/ LED Replacement, 400 W, Replace/Install	26	16	7491249

Appendix E: Replacement Reserves

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	7494813	D1010	Elevator Controls	Automatic, 1 Car		Cardinal Elementary School / Main Building	Elevator Equipment E109				2020		
2	7494827	D1010	Passenger Elevator	Hydraulic, 2 Floors, 1500 to 2500 LB	2500 LB	Cardinal Elementary School / Main Building	Elevator Equipment E109				2020		
3	7491186	D1010	Passenger Elevator [Car 1]	Hydraulic, 2 Floors, 3000 to 4000 LB	3000 - 4000 LB	Cardinal Elementary School / Main Building	Elevator Machine Room	Schindler Elevator Corporation	6-370407-40	No dataplate	2020	7436	
4	7529187	D1010	Vertical Lift	Wheelchair, 5' Rise		Cardinal Elementary School / Main Building	HC Lift	Graventa Gensis	82648	NA	2020	7491	
D20 Plumbing													
Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7491187	D2010	Storage Tank	Domestic Water, 251 to 500 GAL	251 - 500 GAL	Cardinal Elementary School / Main Building	Mechanical room	Bell & Gossett	424482	No dataplate	2020	7492	
2	7529181	D2010	Storage Tank	Domestic Water, 251 to 500 GAL	500 GAL	Cardinal Elementary School / Main Building	Mechanical room	Bell & Gossett	425935	425935	2020	7497	
3	7529184	D2010	Pump [DWBP-1]	Circulation/Booster, Domestic Water, 10 HP	10 HP	Cardinal Elementary School / Main Building	Mechanical room	QuantumFlo	GR3-AL-TF-184JM-2-B-D-5	1905140056	2020	7645	
4	7494821	D2010	Water Heater	Electric, Commercial (12 kW), 30 to 80 GAL	40 GAL	Cardinal Elementary School / Main Building	Mechanical G204	A.O. Smith	DSE-40A-200	19461170163	2020	5685	
5	7529176	D2010	Water Heater [WH1]	Electric, Commercial (120 kW), 131 to 250 GAL	150 - 250 GAL	Cardinal Elementary School / Main Building	Mechanical room	A. O. Smith	BTH-199A 300	1937116278694	2020	7496	

6	7529198	D2010	Water Heater [WH2]	Electric, Commercial (120 kW)	200 GAL	Cardinal Elementary School / Main Building	Mechanical room	A. O. Smith	BTH-199A 300	183411645538	2020	7495
7	7491188	D2010	Water Heater [WH3]	Electric, Commercial (120 kW), 131 to 250 GAL	150 - 250 GAL	Cardinal Elementary School / Main Building	Boiler room	A. O. Smith	DSE 80A 200	1946171062254	2020	7489
8	7529193	D2010	Water Heater [WH4]	Indirect, 80 to 120 GAL	80 - 120 GAL	Cardinal Elementary School / Main Building	Custodian H202	A. O. Smith	DSE 80A 200	1946117106255	2020	7490
9	7491189	D2010	Backflow Preventer	Domestic Water, 2 IN	2 IN	Cardinal Elementary School / Main Building	Utility closet				2020	

D30 HVAC

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7491202	D3020	Boiler [B-1]	Gas High-Efficiency Condensing Style, HVAC, 751 to 2000 MBH	2000 MBH	Cardinal Elementary School / Main Building	Boiler room	RBI	CK2000	121984572	2020	7500	
2	7529178	D3020	Boiler [B-2]	Gas High-Efficiency Condensing Style, HVAC, 751 to 2000 MBH	2000 MBH	Cardinal Elementary School / Main Building	Mechanical room	RBI	CK2000	121984543	2020	7498	
3	7529155	D3020	Boiler [B-3]	Gas High-Efficiency Condensing Style, HVAC, 751 to 2000 MBH	2000 MBH	Cardinal Elementary School / Main Building	Mechanical room	RBI	CK2000	121984544	2020	7499	
4	7662387	D3020	Heat Exchanger	HVAC, Boiler #1	Inaccessible	Cardinal Elementary School / Main Building	Boiler Room						
5	7662388	D3020	Heat Exchanger	HVAC, Boiler #2	Inaccessible	Cardinal Elementary School / Main Building	Boiler Room						
6	7529158	D3020	Unit Heater	Electric, 6 to 10 KW	6 - 10 KW	Cardinal Elementary School / Main Building	Building entrances	Trane	Inaccessible	Inaccessible	2020		6
7	7494823	D3030	Chiller	Air-Cooled	165 TON	Cardinal Elementary School / Main Building	Chiller Yard	Trane	ACRA 165F UAAZ AATF P1X3 ASAD 9DB9 2020 944T	UTSM0547	2020	5676	

8	7494822	D3030	Chiller	Air-Cooled	165 TON	Cardinal Elementary School / Main Building	Chiller Yard	Trane	ACRA 165F UAA AA1F AA1F P1X3 A5A0 0DB0 XC20 AAA1	Illegible	2020	5677
9	7529188	D3030	Split System Ductless	Single Zone, 1.5 to 2 TON	1.5 TON	Cardinal Elementary School / Main Building	Building entrances	Mitsubishi Electric	PUZ-A18NKA7	99U14475D	2020	7276
10	7491206	D3030	Split System Ductless	Single Zone, 1.5 to 2 TON	1.5 TON	Cardinal Elementary School / Main Building	Roof	Mitsubishi Electric	PUZ-A18NKA7	99U14442D	2020	7275
11	7529150	D3030	Split System Ductless	Single Zone, 1.5 to 2 TON	1.5 TON	Cardinal Elementary School / Main Building	Building entrances	Mitsubishi Electric	PUZ-A18NKA7	9XU15084A	2020	7621
12	7491207	D3050	Pump	Distribution, HVAC Heating Water, 8 to 10 HP	10 HP	Cardinal Elementary School / Main Building	Building entrances	WEG	010180T3E215T-SG	1050179390	2020	7644
13	7529191	D3050	Pump [P-1]	Distribution, HVAC Chilled or Condenser Water, 26 to 50 HP	26 - 50 HP	Cardinal Elementary School / Main Building	Building entrances	WEG	RPM 1775	16APR2019 1048597065	2020	7641
14	7529173	D3050	Pump [P-2]	Distribution, HVAC Chilled or Condenser Water, 26 to 50 HP	26 - 50 HP	Cardinal Elementary School / Main Building	Building entrances	WEG	RPM 1775	17 APR 2019-1048597066	2020	7642
15	7529190	D3050	Pump [P-3]	Distribution, HVAC Heating Water, 8 to 10 HP	10 HP	Cardinal Elementary School / Main Building	Building entrances	WEG	010180T3E215T-S	1051087651	2020	7643
16	7494817	D3050	Air Handler [AHU 1]	Interior AHU, Easy/Moderate Access, 2401 to 4000 CFM		Cardinal Elementary School / Main Building	Mechanical G204	Trane	CSAA030UAL00	K19K84867	2020	5682
17	7529179	D3050	Make-Up Air Unit	MUA or MAU, 2000 to 6000 CFM	2000 - 6000 CFM	Cardinal Elementary School / Main Building	Roof	CaptiveAire Systems	A2-D.500-20D	DTP0054	2020	7651
18	7491209	D3050	Packaged Unit	RTU, Pad or Roof-Mounted, 8 to 10 TON	10 TON	Cardinal Elementary School / Main Building	Roof	Trane	YHC120F4RXA PK6C1C1B6000EB000E0000000000	200912312L	2020	7649

19	7641502	D3050	Variable Air Volume Unit	VAV Box, 100 to 400 CFM		Cardinal Elementary School / Main Building	Throughout building	Inaccessible	Inaccessible	Inaccessible	2020	inaccessible	28
20	7491214	D3060	Exhaust Fan [EF-37]	Roof or Wall-Mounted, 16" Damper, 1001 to 2000 CFM	1600	Cardinal Elementary School / Main Building	Roof	Cook	90 ACEH 90C15DH	065S147546-00/0008401	2020	7646	
21	7529189	D3060	Exhaust Fan [EF-39]	Roof or Wall-Mounted, 16" Damper, 1001 to 2000 CFM	1600	Cardinal Elementary School / Main Building	Roof	Cook	90 ACEH 90C15DH	065S1,47546-00/0009901	2020	7654	
22	7529167	D3060	Exhaust Fan [EF-6]	Roof or Wall-Mounted, 16" Damper, 1001 to 2000 CFM	1001 - 2000 CFM	Cardinal Elementary School / Main Building	Roof	Cook	90 ACEH 90C15DH	065S147546-00/0003701	2020	7647	
23	7491215	D3060	Exhaust Fan [KEF-1]	Roof or Wall-Mounted, 42" Damper, 15001 to 20000 CFM	15000	Cardinal Elementary School / Main Building	Roof	CaptiveAire Systems	DU240HFA	DTP0056	2020	7551	

D40 Fire Protection

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7494815	D4010	Pump	Fire Suppression, 10 HP		Cardinal Elementary School / Main Building	Fire Pump Room	Patterson Pump	5X3 VIP	FP-C184483-01	2020	5679	
2	7494830	D4010	Supplemental Components	Fire Jockey Pump, 0.5 HP	.5 HP	Cardinal Elementary School / Main Building	Fire Pump Room	NEMA Premium	P63AT-1126	1627-328-00	2020	5680	
3	7494811	D4010	Supplemental Components	Fire Pump Controller		Cardinal Elementary School / Main Building	Fire Pump Room	NA	FTA1930-AM30B	1992779-01RE	2020	5681	

D50 Electrical

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7491217	D5010	Generator	Diesel, 130 to 300 KW	230 KW	Cardinal Elementary School / Main Building	Chiller Yard	Generac	SD0230KG178	3005133514	2020	7368	
2	7494829	D5010	Automatic Transfer Switch [ATS-1]	ATS, 225 AMP		Cardinal Elementary School / Main Building	B104 Electrical	Eaton	KJAA04146	ATV3KDA40225XSU	2020	5689	

3	7494819	D5010	Automatic Transfer Switch [ATS-2]	ATS, 600 AMP		Cardinal Elementary School / Main Building	B104 Electrical	Eaton	KJAA04146	ATV3LDA40400XSU	2020	5691
4	7494824	D5020	Secondary Transformer	Dry, Stepdown, 45 KVA		Cardinal Elementary School / Main Building	Mechanical G204	Square D			2020	5683
5	7494835	D5020	Secondary Transformer [ETA]	Dry, Stepdown, 45 KVA		Cardinal Elementary School / Main Building	B104 Electrical	Square D			2020	5693
6	7494834	D5020	Secondary Transformer [TBS]	Dry, Stepdown, 75 KVA		Cardinal Elementary School / Main Building	B104 Electrical	Square D			2020	5690
7	7494836	D5020	Secondary Transformer [TC]	Dry, Stepdown, 45 KVA	45 KVA	Cardinal Elementary School / Main Building	Electrical room E110	Square D	EXN75TH3	2081919077A	2019	5673
8	7494816	D5020	Secondary Transformer [TD1]	Dry, Stepdown, 45 KVA	45 KVA	Cardinal Elementary School / Main Building	Electrical room E110	Square D	EXN45TH3NLP	1071919020	2020	5672
9	7494832	D5020	Secondary Transformer [TE]	Dry, Stepdown, 45 KVA	45 KVA	Cardinal Elementary School / Main Building	Electrical room E110		EXN45T3HNLP	1071719104	2020	5671
10	7494825	D5020	Secondary Transformer [TKS]	Dry, Stepdown, 112.5 KVA		Cardinal Elementary School / Main Building	B104 Electrical	Square D	EXN112T3HNLP	2091319083A	2019	5688
11	7494826	D5020	Switchboard	277/480 V, 3000 AMP		Cardinal Elementary School / Main Building	B104 Electrical	Square D	42250702-001	No dataplate	2020	5686
12	7494814	D5020	Switchboard [HSS]	277/480 V, 1000 AMP		Cardinal Elementary School / Main Building	B104 Electrical	Square D	444225070200500001	No dataplate	2020	5695
13	7494833	D5020	Distribution Panel [DPC]	277/480 V, 1200 AMP	1000	Cardinal Elementary School / Main Building	Electrical room E110	Square D	44422507020020001	No dataplate	2020	5670

14	7494831	D5020	Distribution Panel [EHA]	120/208 V, 400 AMP		Cardinal Elementary School / Main Building	B104 Electrical	Square D	124225070202700001	No dataplate	2020	5692
15	7494810	D5020	Distribution Panel [ELA]	120/208 V, 600 AMP		Cardinal Elementary School / Main Building	B104 Electrical	Square D	44422507020010001	No dataplate	2020	5694
16	7494818	D5020	Distribution Panel [HBS]	277/480 V, 400 AMP		Cardinal Elementary School / Main Building	B104 Electrical	Square D	29422507020090001	No dataplate	2020	5687
17	7494812	D5020	Distribution Panel [HG]	277/480 V, 400 AMP		Cardinal Elementary School / Main Building	Mechanical G204	Square D	29422507020018001	No dataplate	2020	5684
18	7494820	D5020	Distribution Panel [LC1]	120/208 V, 400 AMP	400 AMP	Cardinal Elementary School / Main Building	Electrical room E110		29422507020430001		2020	5669
19	7529171	D5030	Variable Frequency Drive	VFD, by HP of Motor, 100 HP	100 HP	Cardinal Elementary School / Main Building	Mechanical room	Danfoss	174L1093	097204Y479	2020	

D70 Electronic Safety & Security

Index	ID	UFCODE	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7491220	D7050	Fire Alarm Panel	Fully Addressable		Cardinal Elementary School / Main Building	Main Office	FCI	No dataplate	No dataplate	2020	7597	

E10 Equipment

Index	ID	UFCODE	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7529165	E1030	Foodservice Equipment	Deep Fryer		Cardinal Elementary School / Main Building	Kitchen	Garland	Inaccessible	Inaccessible	2020	7294	
2	7529174	E1030	Foodservice Equipment	Exhaust Hood, 8 to 10 LF		Cardinal Elementary School / Main Building	Kitchen	CaptiveAire Systems	6024ND 2	No dataplate	2020	7299	2
3	7491229	E1030	Foodservice Equipment	Exhaust Hood, 8 to 10 LF		Cardinal Elementary School / Main Building	Kitchen	CaptiveAire Systems	6024ND 2	No dataplate	2020	7488	2

4	7529194	E1030	Foodservice Equipment	Garbage Disposal, 1 to 3 HP	Cardinal Elementary School / Main Building	Kitchen	InsinkErator	CC202D-7	19068722565	2020	7297
5	7529170	E1030	Foodservice Equipment	Icemaker, Freestanding	Cardinal Elementary School / Main Building	Kitchen	Manitowoc	IYT0450A161	1120490248	2020	7458
6	7491231	E1030	Foodservice Equipment	Mixer, Freestanding	Cardinal Elementary School / Main Building	Kitchen	Hobart	HL200	311 603770	2020	7485
7	7529175	E1030	Foodservice Equipment	Prep Table Refrigerated, Salad/Sandwich	Cardinal Elementary School / Main Building	Kitchen	Delfield	SCSC-50BP	2003150002083	2020	7462
8	7529161	E1030	Foodservice Equipment	Prep Table Refrigerated, Salad/Sandwich	Cardinal Elementary School / Main Building	Kitchen	Delfield	MARK7SC 50 NU	2003150002085	2020	7464
9	7491232	E1030	Foodservice Equipment	Prep Table Refrigerated, Salad/Sandwich	Cardinal Elementary School / Main Building	Kitchen	Delfield	SCSC-50BP	2003150002080	2020	7459
10	7529166	E1030	Foodservice Equipment	Prep Table Refrigerated, Salad/Sandwich	Cardinal Elementary School / Main Building	Kitchen	Delfield	MARK7SC 50 NU	2003150002084	2020	7463
11	7491230	E1030	Foodservice Equipment	Steam Kettle	Cardinal Elementary School / Main Building	Kitchen	Cleveland	KET6TP	200123058	2020	7486
12	7529164	E1030	Foodservice Equipment	Steamer, Tabletop	Cardinal Elementary School / Main Building	Kitchen	Delfield	SH-4-NU-ESP	2003150002086	2020	7465
13	7529152	E1030	Foodservice Equipment	Steamer, Tabletop	Cardinal Elementary School / Main Building	Kitchen	Delfield	SH-4-NU-ESP	2003150002082	2020	7461
14	7529157	E1030	Foodservice Equipment	Walk-In, Freezer	Cardinal Elementary School / Main Building	Kitchen	Thermkool	Inaccessible	Inaccessible	2020	7481

15	7529172	E1030	Foodservice Equipment	Walk-In, Refrigerator	Cardinal Elementary School / Main Building	Kitchen	Thermkool	Inaccessible	Inaccessible	2020	7482
16	7529195	E1030	Foodservice Equipment [3]	Freezer, 1-Door Reach-In	Cardinal Elementary School / Main Building	Kitchen	Delfield	GARPT1P-S-18	2003152001037	2020	7467
17	7529168	E1030	Foodservice Equipment [4]	Dairy Cooler/Wells	Cardinal Elementary School / Main Building	Kitchen	Beverage-Air Corporation	SMF34Y-1-S	13006130	2020	7474
18	7529196	E1030	Foodservice Equipment [5]	Freezer, 1-Door Reach-In	Cardinal Elementary School / Main Building	Kitchen	Delfield	GARPT1P-S-18	2003152001038	2020	7468
19	7529148	E1030	Foodservice Equipment [6]	Dairy Cooler/Wells	Cardinal Elementary School / Main Building	Kitchen	Beverage-Air Corporation	SMF34Y-1-S	13006133	2020	7473
20	7529163	E1030	Foodservice Equipment [7]	Freezer, 1-Door Reach-In	Cardinal Elementary School / Main Building	Kitchen	Delfield	GARPT1P-S-I14	2003152002001	2020	7471
21	7491222	E1030	Foodservice Equipment [8]	Dairy Cooler/Wells	Cardinal Elementary School / Main Building	Kitchen	Beverage-Air Corporation	SMF34Y-1-S	13006132	2020	7472
22	7491224	E1030	Foodservice Equipment [8]	Steamer, Tabletop	Cardinal Elementary School / Main Building	Kitchen	Delfield	SH-4-NU-ESP	2003150002081	2020	7460
23	7529185	E1030	Foodservice Equipment [A]	Convection Oven, Single	Cardinal Elementary School / Main Building	Kitchen	Convotherm	C4et	WB219114815	2020	7483
24	7491228	E1030	Foodservice Equipment [A]	Food Warmer, Proofing Cabinet on Wheels	Cardinal Elementary School / Main Building	Kitchen	Metro	H0V514UVE	20200324-0102	2020	7487
25	7529149	E1030	Foodservice Equipment [B]	Convection Oven, Single	Cardinal Elementary School / Main Building	Kitchen	Convotherm	C4et	WB219114812	2020	7484

26	7491227	E1030	Foodservice Equipment [D]	Convection Oven, Single	Cardinal Elementary School / Main Building	Kitchen	Garland	MC0-GD-10	2002100102458	2020	7475
27	7529154	E1030	Foodservice Equipment [E]	Convection Oven, Single	Cardinal Elementary School / Main Building	Kitchen	Garland	MC0-GD-10	2002100102328	2020	7476
28	7529183	E1030	Foodservice Equipment [F]	Convection Oven, Single	Cardinal Elementary School / Main Building	Kitchen	Garland	MC0-GD-10	2002100183986	2020	7477
29	7529160	E1030	Foodservice Equipment [G]	Convection Oven, Single	Cardinal Elementary School / Main Building	Kitchen	Garland	MC0-GD-10	200210012330	2020	7478
30	7529146	E1030	Foodservice Equipment [H]	Convection Oven, Single	Cardinal Elementary School / Main Building	Kitchen	Garland	MC0-GD-10	200210012329	2020	7479
31	7529182	E1030	Foodservice Equipment [I]	Convection Oven, Single	Cardinal Elementary School / Main Building	Kitchen	Garland	MC0-GD-10	200210012331	2020	7480
32	7491233	E1030	Foodservice Equipment [J]	Food Warmer, Proofing Cabinet on Wheels	Cardinal Elementary School / Main Building	Kitchen	Delfield	No dataplate	No dataplate	2020	7466
33	7529192	E1030	Foodservice Equipment [K]	Food Warmer, Proofing Cabinet on Wheels	Cardinal Elementary School / Main Building	Kitchen	Delfield	No dataplate	No dataplate	2020	7469
34	7529197	E1030	Foodservice Equipment [L]	Food Warmer, Proofing Cabinet on Wheels	Cardinal Elementary School / Main Building	Kitchen	Delfield	No dataplate	No dataplate	2020	7470
35	7491234	E1040	Ceramics Equipment	Kiln	Cardinal Elementary School / Main Building	Art Room	Skutt	KM 1027-3	22809378	2020	
36	7491235	E1040	Healthcare Equipment	Defibrillator (AED), Cabinet-Mounted	Cardinal Elementary School / Main Building	Throughout building				2020	2