FACILITY CONDITION ASSESSMENT

prepared for

Richmond Public Schools
301 North Ninth Street
Richmond, VA 23219

Open High School
600 Pine Street
Richmond, VA 23220

PREPARED BY:
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BV PROJECT #:
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DATE OF REPORT:
June 13, 2024

ON SITE DATE:
March 4, 2024

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1. Executive Summary

Campus Overview and Assessment Details

General Information	
Property Type	High school campus
Number of Buildings	1
Main Address	600 Pine Street Richmond, VA 23220
Site Developed	1911
Outside Occupants / Leased Spaces	None
Date(s) of Visit	March 4, 2024
Management Point of Contact	Daniel Alu Project Engineer 800 Yard Street, Suite 115 Columbus, Ohio 43212 C: 614.949.1355 daniel.alu@gofmx.com
On-site Point of Contact (POC)	Ronald (Bobby) Hathaway Jr., Director of Facilities Department of Facility Services 1461 A Commerce Road Richmond, VA 23224 Office: (804) 780-6251 Mobile: (804) 325-0740 Email: Rhathawa@rvaschools.net
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General Information

AssetCalc Link	Full dataset for this assessment can be found at: https://www.assetcalc.net/

Significant/Systemic Findings and Deficiencies

Historical Summary

The high school building was originally constructed in 1911. The building has undergone several partial renovations since construction.

Architectural

The building consists of concrete and load bearing brick framed construction on concrete slab foundation. The exterior enclosures consist of brick, wood framed windows, and main entry doors. Deterioration of the window frames was observed. Roof consists of pitched asphalt shingle roofing system. Interior finishes are mostly vinyl tile (VCT) flooring, wood flooring and carpet, painted walls and ACT ceilings. Restroom finishes consist of vinyl tile flooring and walls. Architectural features are overall in fair condition, with normal lifecycle replacements anticipated.

Mechanical, Electrical, Plumbing and Fire (MEPF)

Heating is provided by a boiler feeding baseboard radiators. Cooling is provided by window units. Additional temperature control is provided by a standard split system. According to management, heating and cooling is difficult to manage and high humidity is a problem in basement and hallways. The cooling equipment is inadequate and a full HVAC retrofit upgrade is recommended, along with automation system as well.

Domestic hot water is provided by gas-fired water heaters and appears to be adequate for the building.

Electrical service equipment and systems have been replaced as needed. Interior lighting consists mainly of T-8 linear fluorescent and CFL fixtures and lamps.

The building is protected by a fire alarm system. Fire suppression is provided by fire extinguishers and on-site fire hydrants. It is recommended that the building be modernized with a fire sprinkler system.

Site

The parking lots and sidewalks have been well maintained over the years. The parking lot has areas of surface deterioration.

Recommended Additional Studies

Structural façade study due to building age and concrete wall cracks.

Environmental study due to suspect fungal growth at leaking windows throughout building.

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 | Open High School / Main Building(1914)

Replacement Value	*Total SF*	*Cost/SF*
$ 7,479,600	*18,699*	*$ 400*

	Est Reserve Cost	FCI
Current	$ 91,500	**1.2 %**
3-Year	$ 1,484,700	19.8 %
5-Year	$ 1,791,000	23.9 %
10-Year	$ 2,263,300	30.3 %

Immediate Needs

Facility/Building	Total Items	Total Cost
Open High School / Main Building	3	$91,500
Total	**3**	**$91,500**

Main Building

ID	Location	Location Description	UF Code	Description	Condition	Plan Type	Cost
7412415	Open High School / Main Building	Throughout Building	P2030	Consultant, Environmental, Remediation of Suspect Fungal Growth, Remove	NA	Environmental	$81,000
7412392	Open High School / Main Building	Throughout building	P2030	Consultant, Environmental, Analysis of Suspect Fungal Growth, Evaluate/Report	NA	Environmental	$3,500
7412403	Open High School / Main Building	Throughout building	P2030	Architectural Study, Building Envelope, Façade, Evaluate/Report	Poor	Performance/Integrity	$7,000
Total (3 items)							**$91,500**

Key Findings

Exterior Walls in Poor condition.

Brick
Main Building Open High School Exterior walls

Uniformat Code: B2010
Recommendation: **Repair in 2025**

Priority Score: **89.8**

Plan Type: Performance/Integrity

Cost Estimate: $171,600

$$$$

Clean stained brick and point washed out mortar joints especially under upper floor windows. - AssetCALC ID: 7675209

Exterior Walls in Poor condition.

any painted surface
Main Building Open High School Building Exterior

Uniformat Code: B2010
Recommendation: **Prep & Paint in 2026**

Priority Score: **89.6**

Plan Type: Performance/Integrity

Cost Estimate: $20,300

$$$$

The painted sections of the exterior facade were observed to be in poor condition with areas of damage and deterioration. - AssetCALC ID: 7412387

Exterior Walls in Poor condition.

Concrete
Main Building Open High School Exterior concrete walls

Uniformat Code: B2010
Recommendation: **Repair in 2025**

Priority Score: **88.8**

Plan Type: Performance/Integrity

Cost Estimate: $11,300

$$$$

Repair cracks in concrete walls around building perimeter. - AssetCALC ID: 7675207

Glazing in Poor condition.

any type, by SF
Main Building Open High School Building Exterior

Uniformat Code: B2020
Recommendation: **Replace in 2025**

Priority Score: **87.8**

Plan Type: Performance/Integrity

Cost Estimate: $154,000

$$$$

Damage and deterioration were observed at the window frames and glazing. - AssetCALC ID: 7412383

Parking Lots in Poor condition.

Pavement, Asphalt
Site Open High School Site

Uniformat Code: G2020
Recommendation: **Cut & Patch in 2025**

Priority Score: **84.8**

Plan Type:
Performance/Integrity

Cost Estimate: $5,400

**$$**$$

Alligator cracking and deterioration were observed at various sections of the parking areas. - AssetCALC ID: 7412394

Sink/Lavatory in Poor condition.

Service Sink, Wall-Hung
Main Building Open High School Mechanical room

Uniformat Code: D2010
Recommendation: **Replace in 2026**

Priority Score: **83.7**

Plan Type:
Performance/Integrity

Cost Estimate: $4,200

**$$**$$

Damage and deterioration were observed at the custodial sinks. - AssetCALC ID: 7412404

Piping & Valves in Poor condition.

Fiberglass Insulation, Domestic Water
Main Building Open High School Throughout

Uniformat Code: D2010
Recommendation: **Replace in 2025**

Priority Score: **82.8**

Plan Type:
Performance/Integrity

Cost Estimate: $5,400

**$$**$$

Water piping insulation was noted to be deteriorated. Replacement is recommended in the short term. - AssetCALC ID: 7649049

Recommended Follow-up Study: Building Envelope, Façade

Building Envelope, Façade
Main Building Open High School Throughout building

Uniformat Code: P2030
Recommendation: **Evaluate/Report in 2024**

Priority Score: **81.9**

Plan Type:
Performance/Integrity

Cost Estimate: $7,000

**$$**$$

Architectural study for building facade due to age and surface cracks in basement level concrete walls. - AssetCALC ID: 7412403

Flooring in Poor condition.

Wood, Strip
Main Building Open High School Throughout building

Uniformat Code: C2030
Recommendation: **Replace in 2026**

Priority Score: **81.7**

Plan Type: Performance/Integrity

Cost Estimate: $142,500

$$$$

Damage and deterioration was observed at the interior wood flooring. - AssetCALC ID: 7412388

Recommended Follow-up Study: Environmental, Remediation of Suspect Fungal Growth

Environmental, Remediation of Suspect Fungal Growth
Main Building Open High School Throughout Building

Uniformat Code: P2030
Recommendation: **Remove in 2024**

Priority Score: **72.9**

Plan Type: Environmental

Cost Estimate: $81,000

$$$$

Environmental remediation of microbial growth. - AssetCALC ID: 7412415

HVAC System

Full System Renovation/Upgrade, Medium Complexity
Main Building Open High School Throughout building

Uniformat Code: D3050
Recommendation: **Replace in 2026**

Priority Score: **54.7**

Plan Type: Retrofit/Adaptation

Cost Estimate: $392,700

$$$$

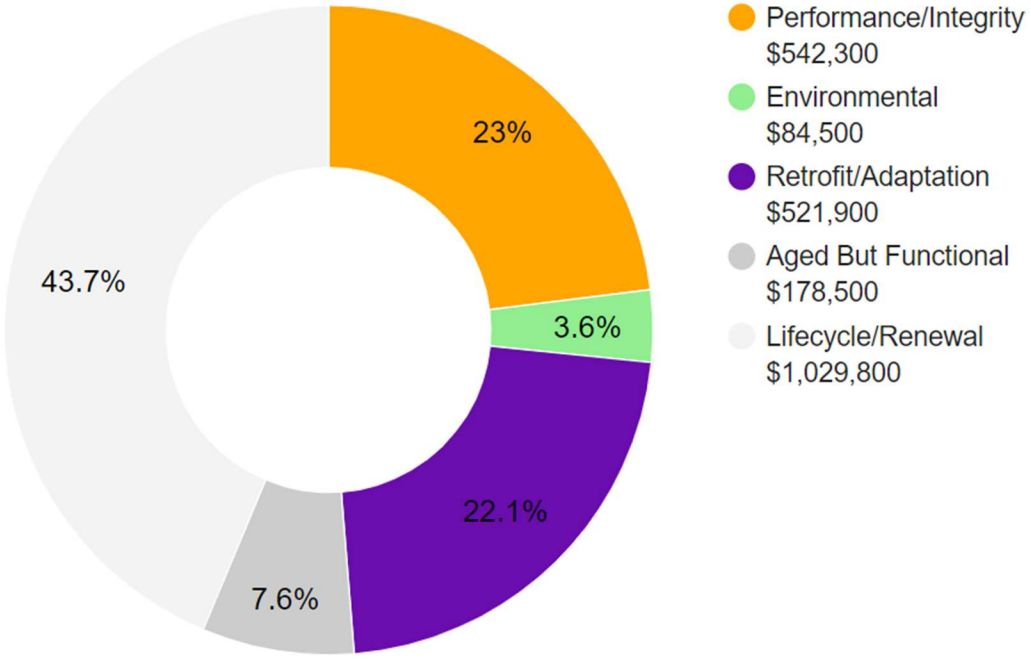
Renovate HVAC system to correct humidity and unconditioned spaces. - AssetCALC ID: 7675146

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: $2,357,000

2. Building Information

Building Systems Summary		
Address	600 Pine Street, Richmond, VA 23220	
Constructed/Renovated	1911	
Building Area	18,699 SF	
Number of Stories	3 above grade with 1 below-grade basement levels	
System	*Description*	*Condition*
Structure	Masonry bearing walls with wood roof deck supported by wood joists and concrete strip/wall footing foundation system	Fair
Façade	Primary Wall Finish: Brick Windows: Wood	Fair
Roof	Primary: Hip construction with asphalt shingles	Fair
Interiors	Walls: Painted gypsum board, wood paneling Floors: Carpet, VCT, wood strip Ceilings: Painted gypsum board and ACT	Fair
Elevators	Passenger: One traction car serving all three floors	Fair
Plumbing	Distribution: Copper supply and cast-iron waste & venting Hot Water: Gas water heaters with integral tanks Fixtures: Toilets, urinals, and sinks in all restrooms	Fair
HVAC	Central System: Boilers feeding hydronic baseboard radiators Non-Central System: Thru window AC units BAS controls	Fair

Building Systems Summary		
Fire Suppression	Fire extinguishers only	Fair
Electrical	Source & Distribution: Main switchboard with copper wiring Interior Lighting: Linear fluorescent	Fair
Fire Alarm	Alarm panel with smoke detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs.	Fair
Equipment/Special	None	Fair
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	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 building, and the exterior walls of the facility.	
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

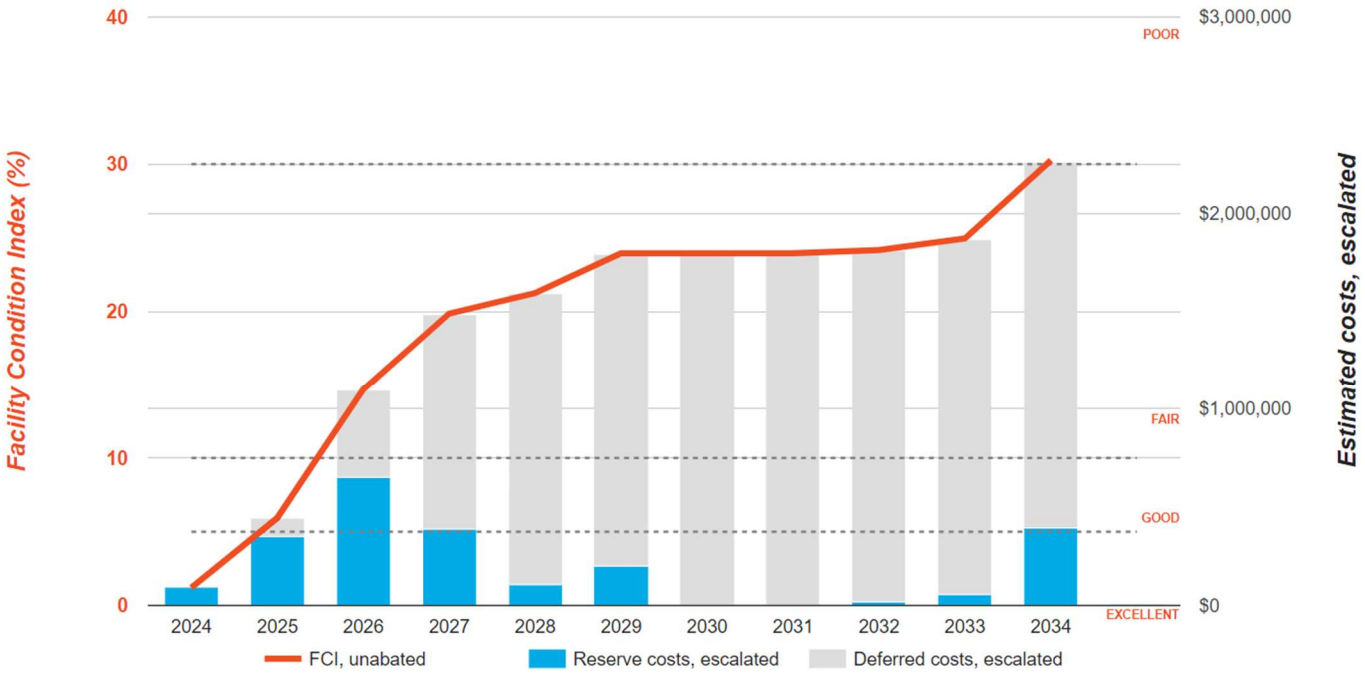
System	Immediate	Short Term (1-2 yr)	Near Term (3-5 yr)	Med Term (6-10 yr)	Long Term (11-20 yr)	TOTAL
Structure	-	-	-	-	$1,181,900	$1,181,900
Facade	-	$368,500	$2,600	-	$1,818,800	$2,189,900
Roofing	-	-	-	$59,200	-	$59,200
Interiors	-	$151,200	$193,800	$151,200	$172,000	$668,100
Conveying	-	$9,500	-	-	$233,000	$242,500
Plumbing	-	$10,000	-	$61,800	$387,100	$459,000
HVAC	-	$416,600	$300,500	$142,500	$74,300	$933,900
Fire Protection	-	-	$105,200	-	-	$105,200
Electrical	-	-	$91,900	$7,400	-	$99,300
Fire Alarm & Electronic Systems	-	$49,600	-	$50,300	$178,800	$278,700
Follow-up Studies	$91,500	-	-	-	-	$91,500
TOTALS (3% inflation)	**$91,500**	**$1,005,400**	**$694,100**	**$472,300**	**$4,046,000**	**$6,309,300**

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: Open High School Main Building

Replacement Value: $7,479,600 Inflation Rate: 3.0% Average Needs per Year: $205,800



Open High School: Photographic Overview

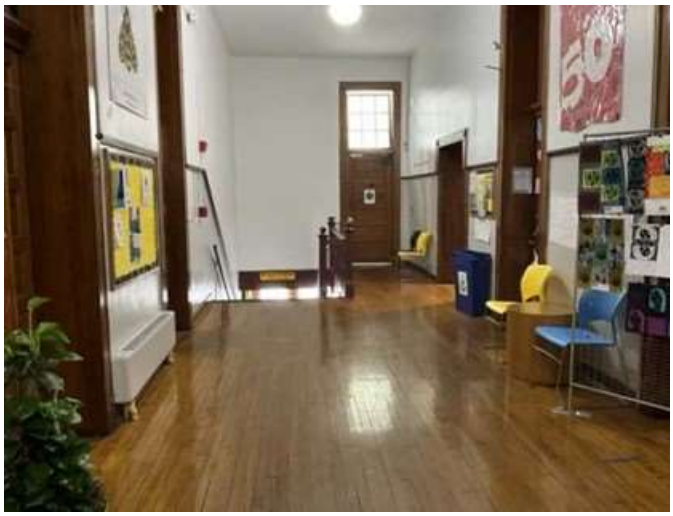
1 - FRONT ELEVATION

2 - LEFT ELEVATION

3 - RIGHT ELEVATION

4 – REAR ELEVATION

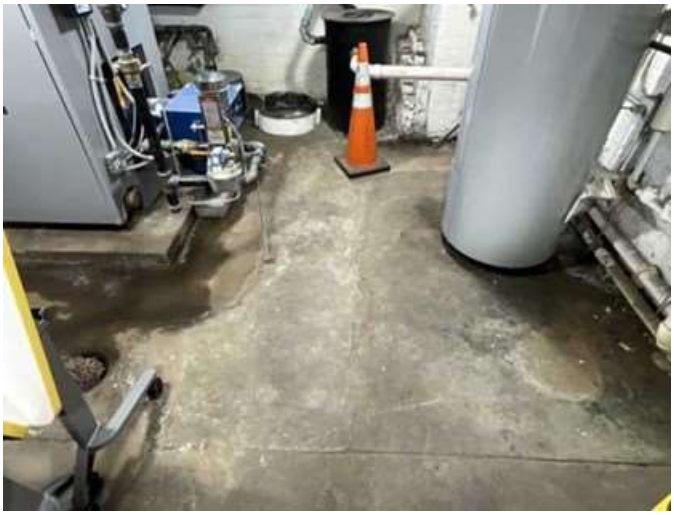
5 – BUILDING FACADE



6 – INTERIOR CORRIDOR

7 - OFFICE

8 – ELEVATOR CONTROLS



9 – DOMESTIC HOT WATER

10 – MECHANICAL ROOM

11 – ELECTRICAL DISTRIBUTION

12 - FIRE ALARM CONTROL PANEL

3. Site Summary

Site Information		
Site Area	0.60 acres (estimated)	
Parking Spaces	24 total spaces all in open lots; two of which are accessible.	
System	*Description*	*Condition*
Pavement/Flatwork	Asphalt lots with limited areas of concrete aprons and pavement and adjacent concrete sidewalks.	Fair
Site Development	Property entrance signage; chain link fencing;	Fair
Landscaping and Topography	Limited landscaping features including lawns, trees, bushes, and planters. Irrigation not present.	Fair
Utilities	Municipal water and sewer Local utility-provided electric and natural gas.	Fair
Site Lighting	None	--
Ancillary Structures	None	--
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 Information	
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 Pavement	-	$11,600	$52,000	$7,100	$17,700	$88,400
Site Development	-	-	$17,400	$5,400	$1,200	$24,000
TOTALS (3% inflation)	**-**	**$11,600**	**$69,300**	**$12,500**	**$19,000**	**$112,400**

Site: Photographic Overview

1 - MAIN PARKING AREA

2 – PAVEMENT PAINT AND STRIPE

3 – SITE FENCING

4 – SEATING AREA

5 – BIKE RACK

6 – PEDESTRIAN WALKWAY

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

Facility	*Year Built/ Renovated*	*Prior Study Provided?*	*Major/Moderate Issues Observed?*
General Site	1911	No	No
Building 1	1911	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 Open High School, 600 Pine Street, Richmond, VA 23220, the "Property". It is our understanding that the primary interest of the Client is to locate and evaluate materials and building system defects that might significantly affect the value of the property and to determine if the present Property has conditions that will have a significant impact on its continued operations.

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

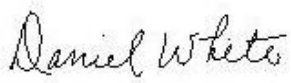
No testing, exploratory probing, dismantling or operating of equipment or in-depth studies were performed unless specifically required under the *Purpose and Scope* section of this report. This assessment did not include engineering calculations to determine the adequacy of the Property's original design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

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

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

Prepared by: Jake Stauffer
Project Manager

Reviewed by:



Daniel White,
Technical Report Reviewer for
Bill Champion,
Program Manager
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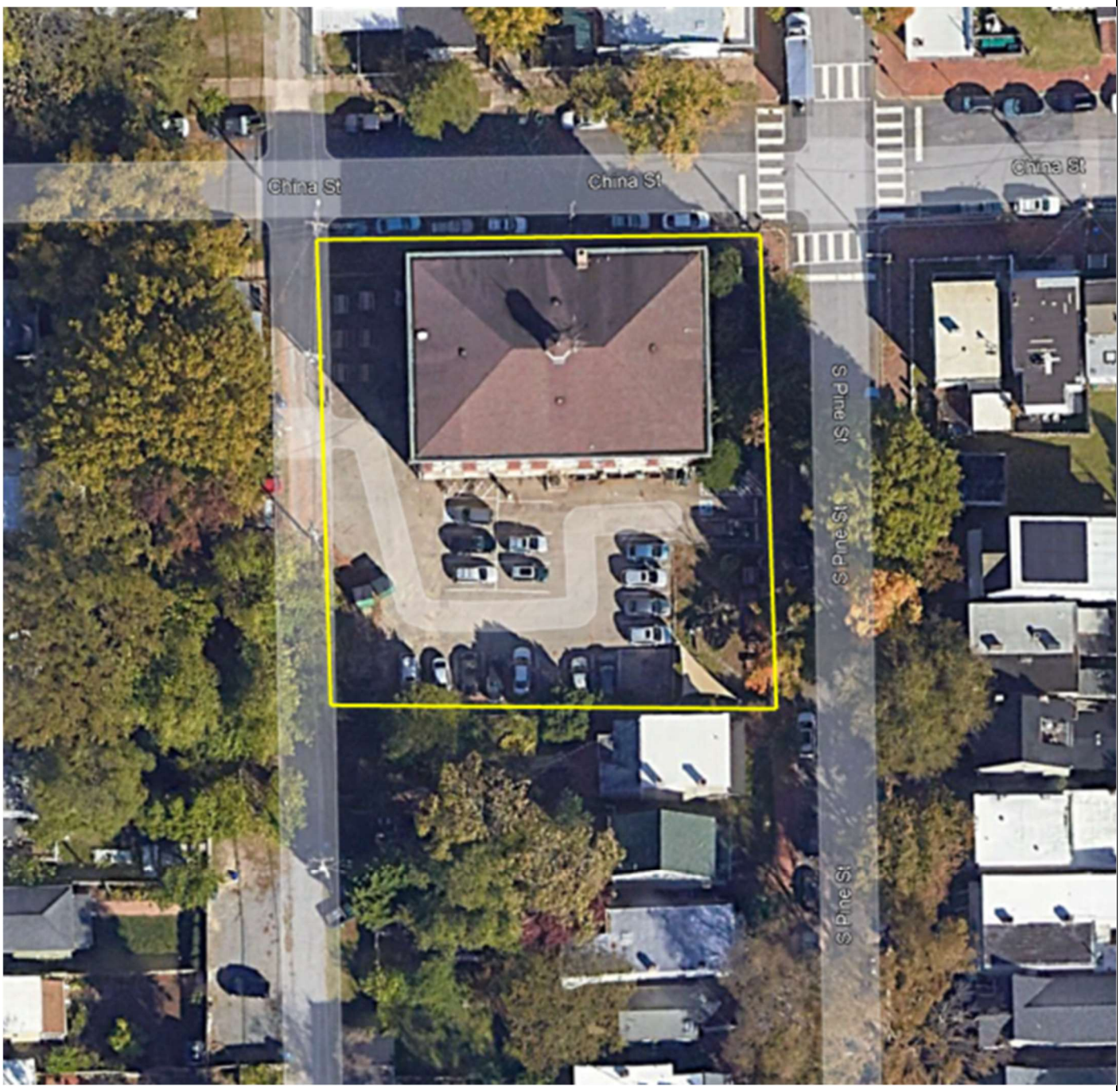
8. Appendices

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

Appendix A:
Site Plan

Site Plan



Project Number	Project Name
166385.24R000-043.468	Open High School
Source	**On-Site Date**
Google	March 5, 2024

N

Appendix B:
Pre-Survey Questionnaires

Bureau Veritas Facility Condition Assessment: Pre-Survey Questionnaire

Building / Facility Name: Open High
Name of person completing form: Ronald Hathaway
Title / Association with property: Director of Facilities
Length of time associated w/ property: 30
Date Completed: 2/26/2024
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	1911		
2	Building size in SF	18699		
3	Major Renovation/Rehabilitation		Year	Additional Detail
		Façade		Brick
		Roof		Tar and Gravel
		Interiors		Wood, VCT, Sheetrock, plaster
		HVAC		Hot water Boiler and window units
		Electrical		Original
		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).	Boiler replaced 2020,
5	List any major capital expenditures planned/requested for the next few years. Have they been budgeted?	Upgrade BAS system, no funding
6	Describe any on-going extremely problematic, historically chronic, or immediate facility needs.	Building comfort, windows are inefficient, window units provide cooling but hallways are a problem. Basement humidity control. Window frames rotten and leak.

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			Window frames rotten and leak
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			Building comfort, windows are inefficient, window units provide cooling but hallways are a problem. Basement humidity control
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: Open High School

BV Project Number: 166385.24R000-043.468

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

Abbreviated Accessibility Checklist

Parking

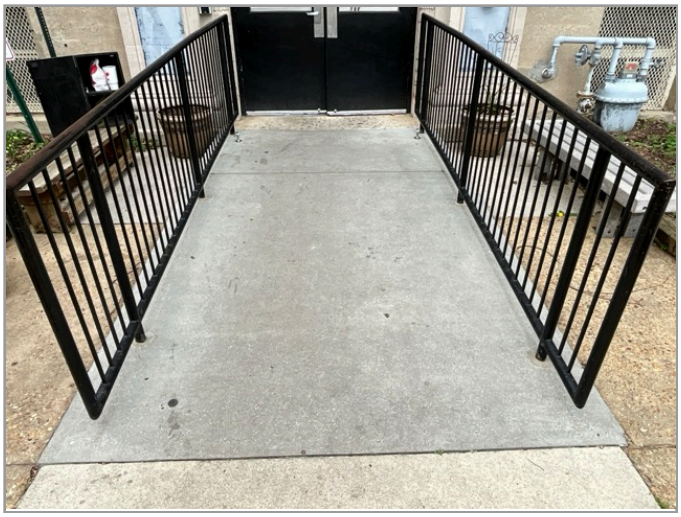
CLOSE-UP OF STALL

OVERVIEW OF ACCESSIBLE PARKING AREA

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

Abbreviated Accessibility Checklist

Exterior Accessible Route



ACCESSIBLE RAMP

ACCESSIBLE PATH

	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 ?	X			
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 ?	X			
3	Are curb ramps present at transitions through raised curbs on all accessible routes?	X			
4	Do curb ramps appear to have compliant slopes for all components ?	X			
5	Do ramp runs on an accessible route appear to have compliant slopes ?	X			
6	Do ramp runs on an accessible route appear to have a compliant rise and width ?	X			

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

ACCESSIBLE ENTRANCE

ADDITIONAL ENTRANCE

	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 ?	✕			
8	Do thresholds at accessible entrances appear to have a compliant height ?	✕			

Abbreviated Accessibility Checklist

Interior Accessible Route

ACCESSIBLE INTERIOR PATH

DOOR HARDWARE

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

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

IN-CAB CONTROLS

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

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

Abbreviated Accessibility Checklist

Public Restrooms

TOILET STALL OVERVIEW

SINK, FAUCET HANDLES AND ACCESSORIES

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

7	Do toilet stalls appear to provide the minimum compliant clear floor area ?	✕			
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 ?	✕			
9	Do accessories and mirrors appear to be mounted at a compliant height ?	✕			

Appendix D:
Component Condition Report

Component Condition Report | Open High School / Main Building

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Structure						
A1010	Building exterior	Fair	Foundation System, Concrete or CMU Walls w/ Continuous Footings	400 LF	20	7649051
B1010	Building exterior	Fair	Structural Framing, Masonry (CMU) Bearing Walls	18,699 SF	20	7649052
Facade						
B2010	Building Exterior	Fair	Exterior Walls, Brick	18,699 SF	20	7412411
B2010	Exterior concrete walls	Poor	Exterior Walls, Concrete, Repair	390 SF	0	7675207
B2010	Exterior walls	Poor	Exterior Walls, Brick, Repair	5,200 SF	0	7675209
B2010	Building Exterior	Poor	Exterior Walls, any painted surface, Prep & Paint	4,500 SF	2	7412387
B2020	Building Exterior	Poor	Glazing, any type, by SF	2,800 SF	1	7412383
B2050	Building Exterior	Fair	Exterior Door, Steel, Standard	4	3	7412373
Roofing						
B3010	Roof	Fair	Roofing, Asphalt Shingle, 30-Year Premium	8,245 SF	9	7412391
Interiors						
C1030	Throughout building	Fair	Door Hardware, School, per Door	72	3	7412424
C1030	Throughout building	Fair	Interior Door, Wood, Solid-Core	72	3	7412399
C1070	Throughout building	Fair	Suspended Ceilings, Acoustical Tile (ACT)	4,600 SF	10	7412406
C1090	Classrooms	Fair	Lockers, Steel-Baked Enamel, 12" W x 15" D x 72" H	168	10	7412385
C2010	Throughout building	Fair	Wall Finishes, any surface, Prep & Paint	28,000 SF	5	7412397
C2030	Throughout building	Poor	Flooring, Wood, Strip	9,500 SF	2	7412388
C2030	Throughout building	Fair	Flooring, Vinyl Tile (VCT)	4,500 SF	5	7412414
C2030	Throughout building	Fair	Flooring, Carpet, Commercial Standard	1,750 SF	8	7412395
C2050		Fair	Ceiling Finishes, any flat surface, Prep & Paint	14,000 SF	5	7674864
Conveying						
D1010	Throughout building	Fair	Elevator Cab Finishes, Standard	1	2	7412384
D1010	Elevator	Fair	Passenger Elevator, Overhead Traction, 2-5 Floors, 2000 to 5000 LB, Renovate	1	15	7412370
Plumbing						
D2010	Mechanical room	Fair	Backflow Preventer, Domestic Water	1	10	7412407
D2010	Mechanical room	Poor	Sink/Lavatory, Service Sink, Wall-Hung	3	2	7412404
D2010	Restrooms	Fair	Toilet, Commercial Water Closet	12	10	7412396
D2010	Mechanical room	Fair	Water Heater, Gas, Commercial (125 MBH)	1	10	7412398
D2010	Classroom 101	Fair	Emergency Plumbing Fixtures, Eye Wash	1	10	7412378
D2010	Restrooms	Fair	Sink/Lavatory, Wall-Hung, Vitreous China	5	10	7412374
D2010	Throughout	Poor	Piping & Valves, Fiberglass Insulation, Domestic Water	900 LF	1	7649049
D2010	Classroom 101	Fair	Sink/Lavatory, Service Sink, Wall-Hung	1	15	7412418
D2010	Restrooms	Fair	Urinal, Standard	4	10	7412390
D2010	Mechanical room	Fair	Backflow Preventer, Domestic Water	1	15	7412377

Component Condition Report | Open High School / Main Building

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
D2010	Mechanical room	Fair	Backflow Preventer, Domestic Water	1	10	7412417
D2010	Throughout building	Fair	Drinking Fountain, Wall-Mounted, Single-Level	2	10	7412422
D2010	Throughout building	Fair	Plumbing System, Supply & Sanitary, Medium Density (excludes fixtures)	18,699 SF	20	7412409
D2060	Mechanical room	Fair	Supplemental Components, Compressed Air Dryer, Process Support, 100 CFM	1	14	7412401
HVAC						
D3020	Interior	Fair	Furnace, Gas	1	10	7412412
D3020	Mechanical room	Fair	Boiler Supplemental Components, Expansion Tank	1	10	7412382
D3020	Throughout building	Fair	Radiator, Hydronic, Baseboard (per LF)	300 LF	3	7412421
D3020	Mechanical room	Fair	Boiler, Gas, HVAC	1	25	7412402
D3030	South exterior	Fair	Split System, Interior & Exterior Component Pairing, 4 TON	1	10	7412416
D3030	Throughout building	Fair	Air Conditioner, Window/Thru-Wall	23	3	7412419
D3050	Main Building	Fair	HVAC System, Hydronic Piping, 2-Pipe	18,699 SF	3	7412400
D3050	Throughout building	NA	HVAC System, Full System Renovation/Upgrade, Medium Complexity	18,699 SF	2	7675146
D3050	Throughout building	Fair	HVAC System, Ductwork, Medium Density	18,699 SF	10	7412381
D3050	Main Building	Fair	Air Handler, Interior AHU, Easy/Moderate Access	1	5	7412393
D3060	Throughout building	Fair	Exhaust Fan, Industrial Dust Collection, 1 to 1.5 HP Motor	8	22	7412386
Fire Protection						
D4010	Throughout	NA	Fire Suppression System, Full System Install/Retrofit, Medium Density/Complexity, Install	18,699 SF	4	7649050
Electrical						
D5020	Zen Den	Fair	Distribution Panel, 120/240 V	1	10	7414185
D5040	Throughout building	Fair	Interior Lighting System, Full Upgrade, Medium Density & Standard Fixtures	18,699 SF	3	7412371
Fire Alarm & Electronic Systems						
D7030	Throughout building	Fair	Security/Surveillance System, Full System Upgrade, Average Density	18,699 SF	10	7412413
D7050	Throughout building	Fair	Fire Alarm System, Full System Upgrade, Standard Addressable, Upgrade/Install	18,699 SF	18	7412375
D7050	Office	Good	Fire Alarm Panel, Multiplex	1	14	7412410
D8010	Mechanical room	Fair	BAS/HVAC Controls, Basic System or Legacy Upgrades, Upgrade	18,699 SF	2	7412380
Follow-up Studies						
P2030	Throughout building	NA	Consultant, Environmental, Analysis of Suspect Fungal Growth, Evaluate/Report	1	0	7412392
P2030	Throughout Building	NA	Consultant, Environmental, Remediation of Suspect Fungal Growth, Remove	2,700 SF	0	7412415
P2030	Throughout building	Poor	Architectural Study, Building Envelope, Façade, Evaluate/Report	1	0	7412403

Component Condition Report | Open High School / Site

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Pedestrian Plazas & Walkways						
G2020	Site	Fair	Parking Lots, Pavement, Asphalt, Seal & Stripe	12,810 SF	2	7412408
G2020	Site	Fair	Parking Lots, Pavement, Asphalt, Mill & Overlay	12,810 SF	5	7412376
G2020	Site	Poor	Parking Lots, Pavement, Asphalt, Cut & Patch	975 SF	0	7412394

Component Condition Report | Open High School / Site

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Sitework						
G2060	Site	Fair	Fences & Gates, Fence, Chain Link 4'	600 LF	3	7412420
G2060	Site	Fair	Bike Rack, Fixed 6-10 Bikes	1	15	7412389
G2060	Building exterior	Fair	Park Bench, Precast Concrete	4	10	7412405
G2060	Site	Fair	Picnic Table, Wood/Composite/Fiberglass	8	5	7412372

Appendix E:
Replacement Reserves

Replacement Reserves Report

6/13/2024

Location	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	Total Escalated Estimate
Open High School	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	
Open High School / Main Building	$91,500	$352,579	$652,853	$387,744	$105,229	$201,134	$0	$0	$16,626	$59,168	$396,488	$0	$28,872	$74,308	$14,521	$334,340	$0	$92,142	$117,846	$0	$3,383,937	**$6,309,287**
Open High School / Site	$0	$5,523	$6,116	$11,801	$0	$57,541	$0	$7,090	$0	$0	$5,376	$0	$8,219	$0	$0	$1,246	$0	$9,528	$0	$0	$0	**$112,439**
Grand Total	**$91,500**	**$358,103**	**$658,968**	**$399,545**	**$105,229**	**$258,675**	**$0**	**$7,090**	**$16,626**	**$59,168**	**$401,863**	**$0**	**$37,090**	**$74,308**	**$14,521**	**$335,586**	**$0**	**$101,670**	**$117,846**	**$0**	**$3,383,937**	**$6,421,726**

Open High School

Open High School / Main Building

Uniformat Code	Location Description	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	Deficiency Repair Estimate
A1010	Building exterior	7649051	Foundation System, Concrete or CMU Walls w/ Continuous Footings, Replace	75	55	20	400	LF	$140.00	$56,000																					$56,000	**$56,000**
B1010	Building exterior	7649052	Structural Framing, Masonry (CMU) Bearing Walls, Replace	75	55	20	18699	SF	$32.00	$598,368																					$598,368	**$598,368**
B2010	Exterior walls	7675209	Exterior Walls, Brick, Repair	0	110	* 0	5200	SF	$33.00	$171,600		$171,600																				**$171,600**
B2010	Building Exterior	7412387	Exterior Walls, any painted surface, Prep & Paint	10	8	2	4500	SF	$4.50	$20,250			$20,250										$20,250									**$40,500**
B2010	Exterior concrete walls	7675207	Exterior Walls, Concrete, Repair	0	113	* 0	390	SF	$29.00	$11,310		$11,310																				**$11,310**
B2010	Building Exterior	7412411	Exterior Walls, Brick, Replace	50	30	20	18699	SF	$53.00	$991,047																					$991,047	**$991,047**
B2020	Building Exterior	7412383	Glazing, any type, by SF, Replace	30	29	1	2800	SF	$55.00	$154,000		$154,000																				**$154,000**
B2050	Building Exterior	7412373	Exterior Door, Steel, Standard, Replace	40	37	3	4	EA	$600.00	$2,400				$2,400																		**$2,400**
B3010	Roof	7412391	Roofing, Asphalt Shingle, 30-Year Premium, Replace	30	21	9	8245	SF	$5.50	$45,348										$45,348												**$45,348**
C1030	Throughout building	7412399	Interior Door, Wood, Solid-Core, Replace	40	37	3	72	EA	$700.00	$50,400				$50,400																		**$50,400**
C1030	Throughout building	7412424	Door Hardware, School, per Door, Replace	30	27	3	72	EA	$400.00	$28,800				$28,800																		**$28,800**
C1070	Throughout building	7412406	Suspended Ceilings, Acoustical Tile (ACT), Replace	25	15	10	4600	SF	$3.50	$16,100											$16,100											**$16,100**
C1090	Classrooms	7412385	Lockers, Steel-Baked Enamel, 12" W x 15" D x 72" H, Replace	20	10	10	168	EA	$500.00	$84,000											$84,000											**$84,000**
C2010	Throughout building	7412397	Wall Finishes, any surface, Prep & Paint	10	5	5	28000	SF	$1.50	$42,000						$42,000										$42,000						**$84,000**
C2030	Throughout building	7412388	Flooring, Wood, Strip, Replace	30	28	2	9500	SF	$15.00	$142,500			$142,500																			**$142,500**
C2030	Throughout building	7412414	Flooring, Vinyl Tile (VCT), Replace	15	10	5	4500	SF	$5.00	$22,500						$22,500															$22,500	**$45,000**
C2030	Throughout building	7412395	Flooring, Carpet, Commercial Standard, Replace	10	2	8	1750	SF	$7.50	$13,125								$13,125										$13,125				**$26,250**
C2050	Main Building	7674864	Ceiling Finishes, any flat surface, Prep & Paint	10	5	5	14000	SF	$2.00	$28,000						$28,000										$28,000						**$56,000**
D1010	Throughout building	7412384	Elevator Cab Finishes, Standard, Replace	15	13	2	1	EA	$9,000.00	$9,000			$9,000															$9,000				**$18,000**
D1010	Elevator	7412370	Passenger Elevator, Overhead Traction, 2-5 Floors, 2000 to 5000 LB, Renovate	35	20	15	1	EA	$140,000.00	$140,000																$140,000						**$140,000**
D2010	Mechanical room	7412398	Water Heater, Gas, Commercial (125 MBH), Replace	20	10	10	1	EA	$12,400.00	$12,400											$12,400											**$12,400**
D2010	Mechanical room	7412417	Backflow Preventer, Domestic Water, Replace	30	20	10	1	EA	$1,100.00	$1,100											$1,100											**$1,100**
D2010	Mechanical room	7412407	Backflow Preventer, Domestic Water, Replace	30	20	10	1	EA	$1,100.00	$1,100											$1,100											**$1,100**
D2010	Mechanical room	7412377	Backflow Preventer, Domestic Water, Replace	30	15	15	1	EA	$3,200.00	$3,200																$3,200						**$3,200**
D2010	Throughout building	7412409	Plumbing System, Supply & Sanitary, Medium Density (excludes fixtures), Replace	40	20	20	18699	SF	$11.00	$205,689																					$205,689	**$205,689**
D2010	Mechanical room	7412404	Sink/Lavatory, Service Sink, Wall-Hung, Replace	35	33	2	3	EA	$1,400.00	$4,200			$4,200																			**$4,200**
D2010	Restrooms	7412396	Toilet, Commercial Water Closet, Replace	30	20	10	12	EA	$1,300.00	$15,600											$15,600											**$15,600**
D2010	Classroom 101	7412378	Emergency Plumbing Fixtures, Eye Wash, Replace	20	10	10	1	EA	$1,500.00	$1,500											$1,500											**$1,500**
D2010	Restrooms	7412374	Sink/Lavatory, Wall-Hung, Vitreous China, Replace	30	20	10	5	EA	$1,500.00	$7,500											$7,500											**$7,500**
D2010	Restrooms	7412390	Urinal, Standard, Replace	30	20	10	4	EA	$1,100.00	$4,400											$4,400											**$4,400**
D2010	Throughout building	7412422	Drinking Fountain, Wall-Mounted, Single-Level, Replace	15	5	10	2	EA	$1,200.00	$2,400											$2,400											**$2,400**
D2010	Classroom 101	7412418	Sink/Lavatory, Service Sink, Wall-Hung, Replace	35	20	15	1	EA	$1,400.00	$1,400																$1,400						**$1,400**
D2010	Throughout	7649049	Piping & Valves, Fiberglass Insulation, Domestic Water, Replace	40	39	1	900	LF	$6.00	$5,400		$5,400																				**$5,400**
D2060	Mechanical room	7412401	Supplemental Components, Compressed Air Dryer, Process Support, 100 CFM, Replace	20	6	14	1	EA	$5,600.00	$5,600															$5,600							**$5,600**
D3020	Interior	7412412	Furnace, Gas, Replace	20	10	10	1	EA	$20,000.00	$20,000											$20,000											**$20,000**
D3020	Throughout building	7412421	Radiator, Hydronic, Baseboard (per LF), Replace	30	27	3	300	LF	$150.00	$45,000				$45,000																		**$45,000**
D3020	Mechanical room	7412382	Boiler Supplemental Components, Expansion Tank, Replace	40	30	10	1	EA	$2,700.00	$2,700											$2,700											**$2,700**
D3030	Throughout building	7412419	Air Conditioner, Window/Thru-Wall, Replace	10	7	3	23	EA	$2,200.00	$50,600				$50,600									$50,600									**$101,200**
D3030	South exterior	7412416	Split System, Interior & Exterior Component Pairing, 4 TON, Replace	15	5	10	1	EA	$8,530.00	$8,530											$8,530											**$8,530**
D3050	Main Building	7412400	HVAC System, Hydronic Piping, 2-Pipe, Replace	40	37	3	18699	SF	$5.00	$93,495				$93,495																		**$93,495**
D3050	Throughout building	7675146	HVAC System, Full System Renovation/Upgrade, Medium Complexity, Replace	40	38	2	18699	SF	$21.00	$392,679			$392,679																			**$392,679**
D3050	Main Building	7412393	Air Handler, Interior AHU, Easy/Moderate Access, Replace	30	25	5	1	EA	$81,000.00	$81,000						$81,000																**$81,000**
D3050	Throughout building	7412381	HVAC System, Ductwork, Medium Density, Replace	30	20	10	18699	SF	$4.00	$74,796											$74,796											**$74,796**
D4010	Throughout	7649050	Fire Suppression System, Full System Install/Retrofit, Medium Density/Complexity, Install	40	36	4	18699	SF	$5.00	$93,495					$93,495																	**$93,495**
D5020	Zen Den	7414185	Distribution Panel, 120/240 V, Replace	30	20	10	1	EA	$5,500.00	$5,500											$5,500											**$5,500**

Replacement Reserves Report

6/13/2024

Uniformat Code	Location Description	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	Deficiency Repair Estimate
D5040	Throughout building	7412371	Interior Lighting System, Full Upgrade, Medium Density & Standard Fixtures, Replace	20	17	3	18699	SF	$4.50	$84,146				$84,146																		**$84,146**
D7030	Throughout building	7412413	Security/Surveillance System, Full System Upgrade, Average Density, Replace	15	5	10	18699	SF	$2.00	$37,398											$37,398											**$37,398**
D7050	Office	7412410	Fire Alarm Panel, Multiplex, Replace	15	1	14	1	EA	$4,000.00	$4,000															$4,000							**$4,000**
D7050	Throughout building	7412375	Fire Alarm System, Full System Upgrade, Standard Addressable, Upgrade/Install	20	2	18	18699	SF	$3.00	$56,097																			$56,097			**$56,097**
D8010	Mechanical room	7412380	BAS/HVAC Controls, Basic System or Legacy Upgrades, Upgrade	15	13	2	18699	SF	$2.50	$46,748			$46,748														$46,748					**$93,495**
P2030	Throughout building	7412392	Consultant, Environmental, Analysis of Suspect Fungal Growth, Evaluate/Report	0	0	0	1	EA	$3,500.00	$3,500	$3,500																					**$3,500**
P2030	Throughout building	7412403	Architectural Study, Building Envelope, Façade, Evaluate/Report	0	0	0	1	EA	$7,000.00	$7,000	$7,000																					**$7,000**
P2030	Throughout Building	7412415	Consultant, Environmental, Remediation of Suspect Fungal Growth, Remove	0	0	0	2700	SF	$30.00	$81,000	$81,000																					**$81,000**
Totals, Unescalated											**$91,500**	**$342,310**	**$615,377**	**$354,841**	**$93,495**	**$173,500**	**$0**	**$0**	**$13,125**	**$45,348**	**$295,024**	**$0**	**$20,250**	**$50,600**	**$9,600**	**$214,600**	**$0**	**$55,748**	**$69,222**	**$0**	**$1,873,604**	**$4,318,142**
Totals, Escalated (3.0% inflation, compounded annually)											**$91,500**	**$352,579**	**$652,853**	**$387,744**	**$105,229**	**$201,134**	**$0**	**$0**	**$16,626**	**$59,168**	**$396,488**	**$0**	**$28,872**	**$74,308**	**$14,521**	**$334,340**	**$0**	**$92,142**	**$117,846**	**$0**	**$3,383,937**	**$6,309,287**

Open High School / Site

Uniformat Code	Location Description	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	Deficiency Repair Estimate
G2020	Site	7412394	Parking Lots, Pavement, Asphalt, Cut & Patch	0	2	* 0	975	SF	$5.50	$5,363		$5,363																				**$5,363**
G2020	Site	7412408	Parking Lots, Pavement, Asphalt, Seal & Stripe	5	3	2	12810	SF	$0.45	$5,765			$5,765					$5,765					$5,765					$5,765				**$23,058**
G2020	Site	7412376	Parking Lots, Pavement, Asphalt, Mill & Overlay	25	20	5	12810	SF	$3.50	$44,835						$44,835																**$44,835**
G2060	Site	7412420	Fences & Gates, Fence, Chain Link 4', Replace	40	37	3	600	LF	$18.00	$10,800				$10,800																		**$10,800**
G2060	Site	7412372	Picnic Table, Wood/Composite/Fiberglass, Replace	20	15	5	8	EA	$600.00	$4,800						$4,800																**$4,800**
G2060	Building exterior	7412405	Park Bench, Precast Concrete, Replace	25	15	10	4	EA	$1,000.00	$4,000											$4,000											**$4,000**
G2060	Site	7412389	Bike Rack, Fixed 6-10 Bikes, Replace	20	5	15	1	EA	$800.00	$800																$800						**$800**
Totals, Unescalated											**$0**	**$5,363**	**$5,765**	**$10,800**	**$0**	**$49,635**	**$0**	**$5,765**	**$0**	**$0**	**$4,000**	**$0**	**$5,765**	**$0**	**$0**	**$800**	**$0**	**$5,765**	**$0**	**$0**	**$0**	**$93,656**
Totals, Escalated (3.0% inflation, compounded annually)											**$0**	**$5,523**	**$6,116**	**$11,801**	**$0**	**$57,541**	**$0**	**$7,090**	**$0**	**$0**	**$5,376**	**$0**	**$8,219**	**$0**	**$0**	**$1,246**	**$0**	**$9,528**	**$0**	**$0**	**$0**	**$112,439**

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	7412370	D1010	**Passenger Elevator**	Overhead Traction, 2-5 Floors, 2000 to 5000 LB	2500 LB	Open High School / Main Building	Elevator	Kone	No dataplate	No dataplate		https://rvaschools.gofmx.com/equipment/1576896	

D20 Plumbing

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7412398	D2010	**Water Heater**	Gas, Commercial (125 MBH)	80 GAL	Open High School / Main Building	Mechanical room	State	SBS7576NE 300	9281040005	2014	https://rvaschools.gofmx.com/equipment/1576887	
2	7412407	D2010	**Backflow Preventer**	Domestic Water	.75 IN	Open High School / Main Building	Mechanical room	Watts	No dataplate	92103		https://rvaschools.gofmx.com/equipment/1576892	
3	7412377	D2010	**Backflow Preventer**	Domestic Water	2 IN	Open High School / Main Building	Mechanical room	Watts	No dataplate	240104		https://rvaschools.gofmx.com/equipment/1576891	
4	7412417	D2010	**Backflow Preventer**	Domestic Water	.75 IN	Open High School / Main Building	Mechanical room	Watts	No dataplate	30582		https://rvaschools.gofmx.com/equipment/1576893	
5	7412401	D2060	**Supplemental Components**	Compressed Air Dryer, Process Support, 100 CFM	.5 HP	Open High School / Main Building	Mechanical room	DeVil Biss	220	418487		https://rvaschools.gofmx.com/equipment/1576890	

D30 HVAC

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7412402	D3020	**Boiler**	Gas, HVAC	1900 MBH	Open High School / Main Building	Mechanical room	Peerless Boilers	TCII-07-(W.S)-(0.G	No dataplate	2019	https://rvaschools.gofmx.com/equipment/1576886	
2	7412412	D3020	**Furnace**	Gas	400 MBH	Open High School / Main Building	Interior	Inaccessible	Inaccessible	Inaccessible			
3	7412421	D3020	**Radiator**	Hydronic, Baseboard (per LF)		Open High School / Main Building	Throughout building						300
4	7412382	D3020	**Boiler Supplemental Components**	Expansion Tank	40 Estimated GAL	Open High School / Main Building	Mechanical room	NA	NA	NA		https://rvaschools.gofmx.com/equipment/1576895	
5	7412419	D3030	**Air Conditioner**	Window/Thru-Wall	1 TON	Open High School / Main Building	Throughout building	NA	NA	NA			23
6	7412416	D3030	**Split System**	Interior & Exterior Component Pairing, 4 TON	4 TON	Open High School / Main Building	South exterior	York	TCD48831SA	W1G9071679	2019	https://rvaschools.gofmx.com/equipment/1576865	
7	7412393	D3050	**Air Handler**	Interior AHU, Easy/Moderate Access	16800 CFM	Open High School / Main Building	Main Building	Illegible	Illegible	Illegible		https://rvaschools.gofmx.com/equipment/1576888	
8	7412386	D3060	**Exhaust Fan**	Industrial Dust Collection, 1 to 1.5 HP Motor	1000 CFM	Open High School / Main Building	Throughout building	Carrier	FN1aAF006	1521F25345		https://rvaschools.gofmx.com/equipment/1576897	8

D50 Electrical

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7414185	D5020	**Distribution Panel**	120/240 V	400 AMP	Open High School / Main Building	Zen Den	Square D	449366910	No dataplate		https://rvaschools.gofmx.com/equipment/1576837	

D70 Electronic Safety & Security

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7412410	D7050	**Fire Alarm Panel**	Multiplex		Open High School / Main Building	Office	Edwards	iO Series	No dataplate		https://rvaschools.gofmx.com/equipment/1576885	