

FACILITY CONDITION ASSESSMENT



**BUREAU
VERITAS**

prepared for

**Vermont Agency of Education_FCA Phase Two
1 National Life Drive, Davis 5
Montpelier, VT 05620-2501**



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BV PROJECT #:

158982.22R000-304.379

DATE OF REPORT:

May 19, 2023

ON SITE DATE:

March 20, 2023

**SO ROYALTON ELEMENTARY - Main Building (PS274-SU067)
223 SOUTH WINDSOR ST
SOUTH ROYALTON , VT 05068**

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1. Executive Summary

Property Overview and Assessment Details

General Information	
Property Type	School
School ID Number	PS274-SU067
Main Address	223 South Windsor St, South Royalton, VT 05068
E911 Address Verification	Zip 05068, Standardized, Fixed abbreviations, Matched street and city and state, Confirmed entire address
GPS Location (Verified E911)	Main Building 43.8186,-72.51804
Site Developed	1963 Renovated: 2008
Site Area	acres (estimated)
Parking Spaces	177 total spaces all in open lots; 5 of which are accessible.
Building Square Footage	80,000 SF (Verified)
Number of Stories	2 above grade
Supervisory Union/ District	White River Valley SU
Date(s) of Visit	March 20, 2023

Note: (Verified) in Square Foot signifies that the square footage of the facility has been verified to be accurate.

Significant/Systemic Findings and Deficiencies

Historical Summary

The original school building was constructed in 1963 and has multiple expansions and renovations. The latest was to add a new gymnasium and fitness facility in 2008. The building houses both the elementary school and the high school.

Architectural

The exterior of the building is partly brick and partly fiber cement siding. The windows are a mix between aluminum and vinyl and were replaced in 2008. The roof consists of two different materials, one EPDM and one TPO/PVC. The EPDM roof was installed with the addition in 2008 and the TPO/PVC roof was installed in 2005 and is reaching the end of its useful life. There is also some ponding on sections of the roof. The interior finishes are a mix of ages and types but have been replaced and refurbished as needed.

Mechanical, Electrical, Plumbing and Fire (MEPF)

There are three boilers in the boiler room of the building. All three are oil burning. One is original to the building being built in 1963. One was installed in 2011 and the last was recently installed in 2018. There are four heating system pumps providing the heat heating water throughout the building. The building's electricity is provided via a main distribution panel. The electrical system was rehabilitated in 2008 with the addition of the newest section of the building. The lighting system is currently linear fluorescent but is being changed over to LED shortly. There are VFDs on the heating distribution pump motors. The plumbing system is varying ages dependent on the section of the building but has been brought up to the same standards throughout. The fixtures were replaced in 2008 and are still in decent condition. There is a fire suppression system in the building. There are also fire extinguishers throughout and a fire alarm system.

Site

The site sits between the main road into town and the White River. There are parking lots on both sides of the building and large sports fields between the building and the river.

Recommended Additional Studies

No additional studies recommended at this time.

Facility Condition Index (FCI)

One of the major goals of the FCA is to calculate each building’s Facility Condition Index (FCI), which provides a theoretical objective indication of a building’s overall condition. By definition, the FCI is defined as the ratio of the cost of current needs divided by current replacement value (CRV) of the facility. The chart below presents the industry standard ranges and cut-off points.

FCI Ranges and Descriptions	
0 – 5%	In new or well-maintained condition, with little or no visual evidence of wear or deficiencies.
5 – 10%	Subjected to wear but is still in a serviceable and functioning condition.
10 – 30%	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.
30% and above	Has reached the end of its useful or serviceable life. Renewal is now necessary.

The deficiencies and lifecycle needs identified in this assessment provide the basis for a portfolio-wide capital improvement funding strategy. In addition to the current FCI, extended FCI’s have been developed to provide owners the intelligence needed to plan and budget for the “keep-up costs” for their facilities. As such the 3-year, 5-year, and 10-year FCI’s are calculated by dividing the anticipated needs of those respective time periods by current replacement value. As a final point, the FCI’s ultimately provide more value when used to relatively compare facilities across a portfolio instead of being over-analyzed and scrutinized as stand-alone values. The table below summarizes the individual findings for this FCA:

FCI Analysis			
<i>Replacement Value</i>	<i>Total SF</i>	<i>Cost/SF</i>	
\$20,000,000	80,000	\$250	
Current		\$ 55,900	0.3 %
3-Year		\$ 1,643,500	8.2 %
5-Year		\$ 3,543,700	17.7 %
10-Year		\$ 5,243,900	26.2 %



Campus Level FCI:

The orange line in the graph below forecasts what would happen to the FCI (left Y axis) over time, assuming zero capital expenditures. The capital expenditures allocated for each year (blue bars) are associated with the dollar amounts along the right Y axis. If the school expends the average amount per year to maintain and replace systems, they will not incur the capital debt represented by the gray bars.

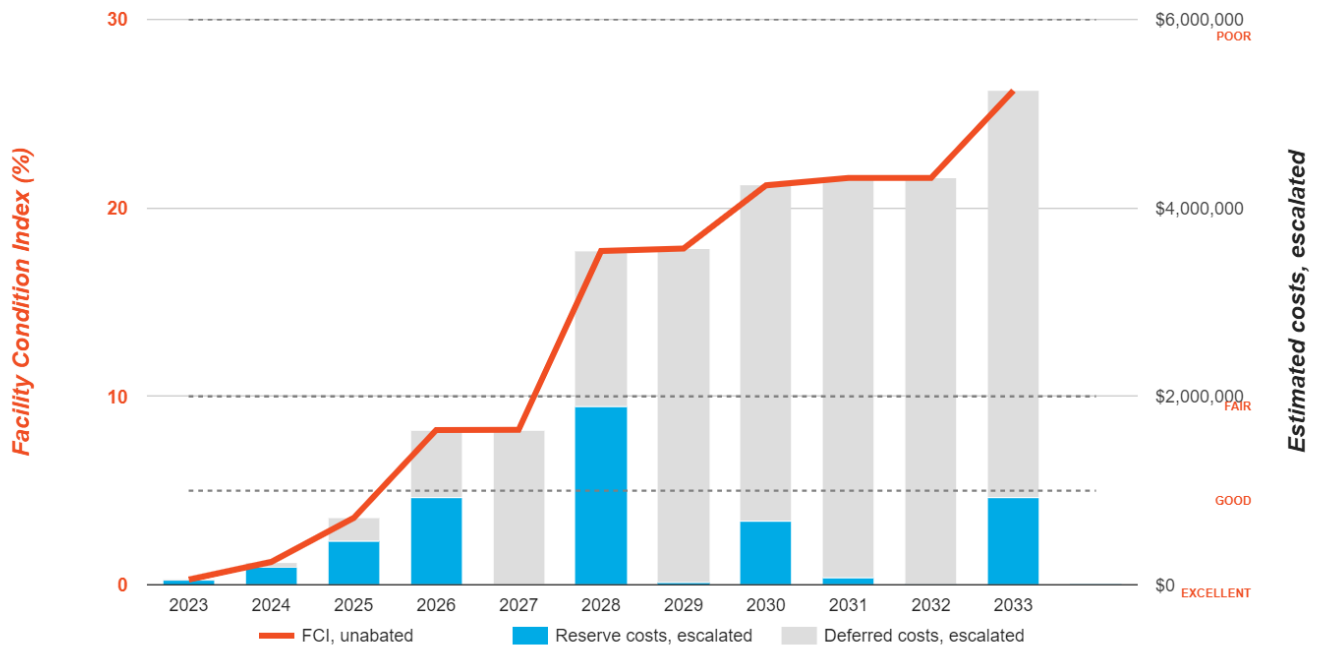
Needs by Year with Unaddressed FCI Over Time

FCI Analysis: SO ROYALTON ELEMENTARY - Main Building

Replacement Value: \$20,000,000

Inflation Rate: 3.0%

Average Needs per Year: \$476,800



Needs by Year with Unaddressed FCI Over Time (Table)

The above graph is a visual representation of the information contained in the table below.

Year	Reserve	Reserve Escalation	Recurrence	Recurrence Escalation	Total Escalation	Deferred	FCI
2023	55,825	0	0	0	0	55,825	0
2024	182,600	5,478	0	0	5,478	243,903	0.01
2025	440,550	26,829	0	0	26,829	711,282	0.04
2026	853,087	79,104	0	0	79,104	1,643,473	0.08
2027	2,400	301	0	0	301	1,646,174	0.08
2028	1,636,825	260,704	0	0	260,704	3,543,703	0.18
2029	20,200	3,920	0	0	3,920	3,567,823	0.18
2030	510,800	117,420	36,100	8,298	125,718	4,196,043	0.21
2031	60,340	16,097	0	0	16,097	4,272,480	0.21
2032	0	0	0	0	0	4,272,480	0.21
2033	689,825	237,242	0	0	237,242	5,199,547	0.26
2034	536,000	205,949	0	0	205,949	5,941,496	0.3
2035	600	255	294,900	125,557	125,812	5,942,351	0.3
2036	27,400	12,838	14,400	6,747	19,585	5,982,589	0.3
2037	17,000	8,714	21,700	11,123	19,837	6,008,303	0.3
2038	530,300	295,890	150	84	295,974	6,834,493	0.34
2039	565,200	341,780	22,600	13,666	355,446	7,741,473	0.39
2040	72,950	47,625	49,700	32,447	80,072	7,862,048	0.39
2041	182,200	127,983	312,287	219,361	347,344	8,172,231	0.41
2042	0	0	2,400	1,808	1,808	8,172,231	0.41

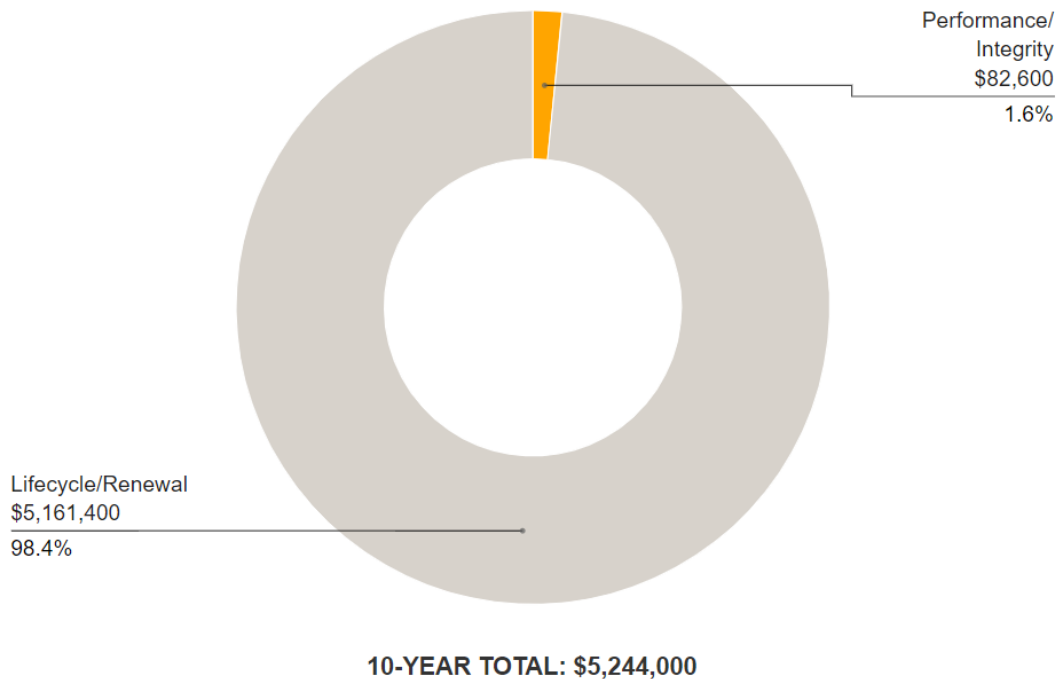


Plan Types

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. Each of the Key Findings identified below are assigned a Plan Type.

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 handicap accessibility requirements.
Environmental	■	Improvements to air or water quality, including removal of hazardous materials from the building or site.
Retrofit/Adaptation	■	Components, systems, or spaces recommended for upgrades in in order to meet current standards, facility usage, or client/occupant needs.
Lifecycle/Renewal	■	Any component or system that is not currently deficient or problematic but for which future replacement or repair is anticipated and budgeted.

Plan Type Distribution (by Cost)



Immediate Needs

ID	Location Description	UF Code	Description	Condition	Plan Type	Cost
5921350	Site	G2020	Parking Lots, Aggregate/Stone, Surface Gravel, Replenish	Poor	Performance/Integrity	\$21,700
5921376	Site	G2050	Athletic Surfaces & Courts, Basketball/General, Asphalt Pavement, Replace	Poor	Performance/Integrity	\$34,100
Total						\$55,800



Key Findings



Parking Lots in Poor condition.

Aggregate/Stone, Surface Gravel
SO ROYALTON ELEMENTARY - Main Building Site

Uniformat Code: G2020
Recommendation: **Replenish in 2023**
Priority Score: **84.9**
Plan Type: Performance/Integrity
Cost Estimate: \$21,700

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Damage and potholes - AssetCALC ID: 5921350



Athletic Surfaces & Courts in Poor condition.

Basketball/General, Asphalt Pavement
SO ROYALTON ELEMENTARY - Main Building Site

Uniformat Code: G2050
Recommendation: **Replace in 2023**
Priority Score: **82.9**
Plan Type: Performance/Integrity
Cost Estimate: \$34,100

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Severe cracking - AssetCALC ID: 5921376



2. Building and Site Information



System Summary		
System	Description	Condition
Structure	Steel frame with concrete-topped metal decks over concrete pad column footings	Fair
Facade	Primary Wall Finish : Brick Secondary Wall Finish: Cement board siding Windows: Aluminum and Vinyl	Fair
Roof	Primary: Flat construction with single-ply TPO/PVC membrane Secondary: Flat construction with single-ply EPDM membrane	Fair
Interiors	Walls: Painted gypsum board, ceramic tile Floors: Carpet, VCT, faux wood plank LVT[VSJ1] , ceramic tile, quarry tile, wood strip, coated Ceilings: Painted gypsum board and ACT	Fair
Elevators	None	NA
Plumbing	Distribution: Copper supply and cast-iron waste & venting Hot Water: Indirect water heaters with integral tanks and gas tankless water heater Fixtures: Toilets, urinals, and sinks in all restrooms	Fair
HVAC	Central System: Boilers, air handlers feeding wall mounted unit ventilators Non-Central System: None Supplemental components: Ductless split-systems	Fair
Safety and Security	Cameras, security windows and doors, fencing, lighting, traffic gates. Multiple points of auto locking doors, main entry monitored, auto locking doors, internal locking on classroom doors, complete intercom system	Fair
Fire Suppression	Wet-pipe sprinkler system and fire extinguishers	Fair

Electrical	Source & Distribution: Main panel with copper wiring Interior Lighting: Linear fluorescent Emergency Power: None	Fair
Fire Alarm	Alarm panel with smoke detectors, heat detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs	Fair
Equipment/Special	Commercial kitchen equipment	Good
Site Pavement	Asphalt lots with limited areas of concrete aprons and pavement and adjacent concrete sidewalks, curbs, ramps, and stairs	Fair
Site Development	Building-mounted and property entrance signage; wood board, chain link fencing. Playgrounds and sports fields and courts with bleachers, dugouts, press box, fencing, and site lights Heavily furnished with park benches, picnic tables, trash receptacles	Good
Landscaping & Topography	Significant landscaping features including lawns, trees, bushes, and planters Irrigation not present Concrete retaining walls Severe site slopes along northeast boundary	Good
Utilities	On-site wells and septic Local utility-provided electric with propane and fuel oil tanks	Good
Site Lighting	Pole-mounted: LED Building-mounted: LED	Good
Ancillary Structures	Union Arena (ice rink) Union Supervisory Building, Bus Barn	Fair
Accessibility	Presently it does not appear an accessibility study is needed for this property.	
Key Issues and Findings	Gravel parking lot has significant potholes and damage. The elementary school asphalt in the playground has significant cracking.	

Square Foot Verification

We have reviewed the square footage of 80,000 square feet and it is in the range of square foot calculations as reported by the school district. This confirmation of the square footage of the facility is based on the exterior wall dimensions and number of stories measured from Google Earth and other publicly available internet searches. This measurement may not reflect the actual heated square footage but provides a general size of the heated square feet of the overall building.

PCB Air Indoor Testing

PCB air testing was conducted on 09/27/22 at this building and no results were found to be above the School Action Level (SAL). This information was gathered and verified through the Agency of Natural Resources PCB in Schools website <https://anrweb.vt.gov/DEC/PCBPublic/Home.aspx>.

School Educational Capacity and Programming Space

As part of the FCA report, school administrative staff were asked to conduct a self-assessment of whether their school building meets their space, operational needs and if they have sufficient building capacity and appropriate spaces to deliver educational programming. The school responses to the survey are reported in Appendix D. The respondents indicated that the following areas were inadequate to meet current needs:

A space needs self-assessment was conducted by the school administrative staff which identified space constraints in the following areas:

- Adequate number of classrooms.
- Adequate overall building space.
- Confidential space to maintain FERPA, HIPPA or IEP requirements.
- Administrative offices and/or office space for staff.
- Cafeteria, kitchen and/or gymnasium space.

The Depleted Value Facility Condition Index (FCI) is an estimate of a building's overall amount of consumed system life. The Depleted Value FCI ratings scale indicates the estimated condition of the system. Generally, the higher the Depleted Value FCI, the greater the need to repair or replace a system. Note that the FCI can also be calculated for system groups, building types and other aggregations. The estimated percentage of collective system life left in a building, also referred to as Remaining Useful Life (RUL). The higher the RUL, the newer the system. The sum of Depleted Value FCI and RUL will equal 100%.

Depleted Value Index	
Index Value	64.8

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	-	\$3,000	-	-	\$1,110,700	\$1,113,700
Roofing	-	-	\$723,100	-	\$4,100	\$727,100
Interiors	-	\$310,300	\$462,800	\$400,700	\$1,156,600	\$2,330,500
Conveying	-	-	-	-	\$25,700	\$25,700
Plumbing	-	\$1,600	\$7,900	\$38,400	\$181,700	\$229,700
HVAC	-	\$164,800	\$42,700	\$121,400	\$1,082,200	\$1,411,100
Fire Protection	-	-	\$200	\$115,000	\$200	\$115,400
Electrical	-	-	\$605,900	\$43,300	\$10,900	\$660,100
Fire Alarm & Electronic Systems	-	\$19,700	\$153,000	\$491,900	\$30,700	\$695,300
Equipment & Furnishings	-	\$140,700	\$528,500	\$24,600	\$185,100	\$879,000
Special Construction & Demo	-	-	-	-	\$71,900	\$71,900
Site Utilities	-	-	\$118,200	-	-	\$118,200
Site Development	\$34,100	-	\$190,000	\$272,300	\$11,100	\$507,400
Site Pavement	\$21,700	\$15,300	-	\$192,500	\$232,200	\$461,700
TOTALS	\$55,800	\$655,400	\$2,832,300	\$1,700,100	\$4,103,100	\$9,346,800

3. Property Space Use and Observed Areas

Areas Observed

The interior spaces were observed to gain a clear understanding of the property's overall condition. Other areas accessed included the site within the property boundaries, the exterior of the property and the roofs.

Key Spaces Not Observed

All key areas of the property were accessible and observed.

4. ADA Accessibility

Generally, Title II of the Americans with Disabilities Act (ADA) prohibits discrimination by entities to access and use of “areas of public accommodations” and “public facilities” on the basis of disability. Regardless of their age, these areas and facilities must be maintained and operated to comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

A public entity (i.e. city governments) shall operate each service, program, or activity so that the service, program, or activity, when viewed in its entirety, is readily accessible to and usable by individuals with disabilities.

However, this does not:

1. Necessarily require a public entity to make each of its existing facilities accessible to and usable by individuals with disabilities;
2. Require a public entity to take any action that would threaten or destroy the historic significance of an historic property; or
3. Require a public entity to take any action that it can demonstrate would result in a fundamental alteration in 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 appendix. It is understood by the Client that the limited observations described herein do not comprise a full ADA Compliance Survey, and that such a survey is beyond the scope of this particular assessment. A full measured ADA survey would be required to identify any and all specific potential accessibility issues. Additional clarifications of this limited survey:

- This survey was visual in nature and actual measurements were not taken to verify compliance.
- Only a representative sample of areas was observed.
- Two overview photos were taken for each subsection regardless of perceived compliance or non-compliance.
- Itemized costs for individual non-compliant items are not included in the dataset.
- For any “none” boxes checked or reference to “no issues” identified, that alone does not guarantee full compliance

The facility was originally constructed in 1956. The facility was renovated in 1994 and widespread accessibility.

No information about complaints or pending litigation associated with potential accessibility issues was provided during the interview process.

A detailed follow-up accessibility study is included as a recommendation based on the potential that specific ADA violations, not in this scope of services, may exist. 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 to familiarize ourselves with, and be able to comment on, the in-place construction systems, life safety, mechanical, electrical, and plumbing systems, and the general-built environment.
- Identify those components that are exhibiting deferred maintenance issues and provide cost estimates for Immediate Costs and Replacement Reserves based on observed conditions, maintenance history and industry standard useful life estimates. This will include the review of documented capital improvements completed within the last five-year period and work currently contracted for, if applicable.
- Provide a full description of the Property with descriptions of in-place systems and commentary on observed conditions.
- Provide a high-level categorical general statement regarding the subject Property's compliance to Title III of the Americans with Disabilities Act. This will not constitute a full ADA survey but will help identify exposure to issues and the need for further review.
- Obtain background and historical information about the facility from a building engineer, property manager, maintenance staff, or other knowledgeable source. The preferred methodology is to have the client representative or building occupant complete a Pre-Survey Questionnaire (PSQ) in advance of the site visit. Common alternatives include a verbal interview just prior to or during the walk-through portion of the assessment.
- Review maintenance records and procedures with the in-place maintenance personnel.
- Observe a representative sample of the interior spaces/units, including vacant spaces/units, to gain a clear understanding of the property's overall condition. Other areas to be observed include the exterior of the property, the roofs, interior common areas, and the significant mechanical, electrical and elevator equipment rooms.
- Provide recommendations for additional studies, if required, with related budgetary information.
- Provide an Executive Summary at the beginning of this report, which highlights key findings and includes a Facility Condition Index as a basis for comparing the relative conditions of the buildings within the portfolio.

6. Opinions of Probable Costs

Cost estimates are attached throughout this report, with the Replacement Reserves in the appendix.

These estimates are based on Invoice or Bid Document/s provided either by the Owner/facility and construction costs developed by construction resources such as *R.S. Means*, *CBRE Whitestone*, and *Marshall & Swift*, Bureau Veritas's experience with past costs for similar properties, city cost indexes, and assumptions regarding future economic conditions.

Opinions of probable costs should only be construed as preliminary, order of magnitude budgets. Actual costs most probably will vary from the consultant's opinions of probable costs depending on such matters as type and design of suggested remedy, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, whether a physical deficiency is repaired or replaced in whole, phasing or bundling of the work (if applicable), quality of contractor, quality of project management exercised, market conditions, use of subcontractors, and whether competitive pricing is solicited, etc. Certain opinions of probable costs cannot be developed within the scope of this guide without further study. Opinions of probable cost for further study should be included in the FCA.

Methodology

Based upon site observations, research, and judgment, along with referencing Expected Useful Life (EUL) tables from various industry sources, Bureau Veritas opines as to when a system or component will most probably necessitate replacement. Accurate historical replacement records, if provided, are typically the best source of information. Exposure to the elements, initial quality and installation, extent of use, the quality and amount of preventive maintenance exercised, etc., are all factors that impact the effective age of a system or component. As a result, a system or component may have an effective age that is greater or less than its actual chronological age. The Remaining Useful Life (RUL) of a component or system equals the EUL less its *effective age*, whether explicitly or implicitly stated. Projections of Remaining Useful Life (RUL) are based primarily on age and condition with the presumption of continued use and maintenance of the Property similar to the observed and reported past use and maintenance practices, in conjunction with the professional judgment of Bureau Veritas's assessors. Significant changes in occupants and/or usage may affect the service life of some systems or components.

Where quantities could not be or were not derived from an actual construction document take-off or facility walk-through, and/or where systemic costs are more applicable or provide more intrinsic value, budgetary square foot and gross square foot costs are used. Estimated costs are based on professional judgment and the probable or actual extent of the observed defect, inclusive of the cost to design, procure, construct and manage the corrections.

Definitions

Immediate Needs

Immediate Needs are line items that require immediate action as a result of: (1) material existing or potential unsafe conditions, (2) failed or imminent failure of mission critical building systems or components, or (3) conditions that, if not addressed, have the potential to result in, or contribute to, critical element or system failure within one year or will most probably result in a significant escalation of its remedial cost.

For database and reporting purposes the line items with RUL=0, and commonly associated with *Safety* or *Performance/Integrity* Plan Types, are considered Immediate Needs.

Replacement Reserves

Cost line items traditionally called Replacement Reserves (equivalently referred to as Lifecycle/Renewals) are for recurring probable renewals or expenditures, which are not classified as operation or maintenance expenses. The replacement reserves should be budgeted for in advance on an annual basis. Replacement Reserves are reasonably predictable both in terms of frequency and cost. However, Replacement Reserves may also include components or systems that have an indeterminable life but, nonetheless, have a potential for failure within an estimated time period.

Replacement Reserves generally exclude systems or components that are estimated to expire after the reserve term and are not considered material to the structural and mechanical integrity of the subject property. Furthermore, systems and components that are not deemed to have a material effect on the use of the Property are also excluded. Costs that are caused by acts of God, accidents, or other occurrences that are typically covered by insurance, rather than reserved for, are also excluded.

Replacement costs are solicited from ownership/property management, Bureau Veritas's discussions with service companies, manufacturers' representatives, and previous experience in preparing such schedules for other similar facilities. Costs for work performed by the ownership's or property management's maintenance staff are also considered.

Bureau Veritas's reserve methodology involves identification and quantification of those systems or components requiring capital reserve funds within the assessment period. The assessment period is defined as the effective age plus the reserve term. Additional information concerning system's or component's respective replacement costs (in today's dollars), typical expected useful lives, and remaining useful lives were estimated so that a funding schedule could be prepared. The Replacement Reserves Schedule presupposes that all required remedial work has been performed or that monies for remediation have been budgeted for items defined as Immediate Needs.

For the purposes of 'bucketizing' the System Expenditure Forecasts in this report, the Replacement Reserves have been subdivided and grouped as follows: Short Term (years 1-3), Near Term (years 4-5), Medium Term (years 6-10), and Long Term (years 11-20).

Key Findings

In an effort to highlight the most significant cost items and not be overwhelmed by the Replacement Reserves report in its totality, a subsection of Key Findings is included within the Executive Summary section of this report. Key Findings typically include repairs or replacements of deficient items within the first five-year window, as well as the most significant high-dollar line items that fall anywhere within the ten-year term. Note that while there is some subjectivity associated with identifying the Key Findings, the Immediate Needs are always included as a subset.

Exceedingly Aged

A common scenario encountered during the assessment process, and a frequent source of debate, occurs when classifying and describing "very old" systems or components that are still functioning adequately and do not appear nor were reported to be in any way deficient. To help provide some additional intelligence on these items, such components will be tagged in the database as Exceedingly Aged. This designation will be reserved for mechanical or electrical systems or components that have aged well beyond their industry standard lifecycles, typically at least 15 years beyond and/or twice their Estimated Useful Life (EUL). In tandem with this designation, these items will be assigned a Remaining Useful Life (RUL) not less than two years but not greater than 1/3 of their standard EUL. As such the recommended replacement time for these components will reside outside the typical Short-Term window but will not be pushed 'irresponsibly' (too far) into the future.

7. STEM/STEAM Assessment

STEM and STEAM education is an integrated curriculum that is driven by exploratory project-based learning and student-centered development of ideas and solutions. BV has evaluated the facility for the existence of spaces and systems to provide STEM/STEAM education based on input from the point of contact for the school. The below table identifies the required standards and to what degree the requirements have been met for the facility.

STEM/STEAM Evaluations				
Property Name	STEM/STEAM Suitability Score	Project Number	School Type	Square Footage
So Royalton Elementary - Main Building	33%	158982.22R000-304.379	High	80,000

Suitability Classification	Scale	Score Value	Score Impact
Compares Poorly	Score 0 - 25	1- Meets	100%
Compares Marginally	Score 25-50	2- Partial	50%
Compares Fairly	Score 50-75	3- Missing	0%
Compares Well	Score 75 - 100		

Details of the STEM/STEAM evaluation are included in the appendix of this report. Reference this appendix for specific data associated with this limited survey.



8. Energy Audit

The purpose of this Energy Audit is to provide the South Royalton Elementary / White River Valley High School complex with a baseline of energy usage, the relative energy efficiency of the facility, and specific recommendations for Energy Conservation Measures. Information obtained from these analyses may be used to support a future application to an Energy Conservation Program, Federal and Utility grants towards energy conservation, as well as support performance contracting, justify a municipal bond-funded improvement program, or as a basis for replacement of equipment or systems.

The energy audit consisted of an on-site visual assessment to determine current conditions, itemize the energy consuming equipment (i.e. Boilers, Make-Up Air Units, DWH equipment); review lighting systems both exterior and interior; and review efficiency of all such equipment. The study also included interviews and consultation with operational and maintenance personnel. The following is a summary of the tasks and reporting that make up the Energy Audit portion of the report.

The following is a summary of the tasks and reporting that make up the Energy Audit portion of the report.

Energy and Water Using Equipment

- Bureau Veritas has surveyed the common areas, offices, maintenance facilities and mechanical rooms to document utility-related equipment, including heating systems, cooling systems, air handling systems and lighting systems.

Building Envelope

- Bureau Veritas has reviewed the characteristics and conditions of the building envelope, checking insulation values and conditions. This review also includes an inspection of the condition of walls, windows, doors, roof areas, insulation and special use areas.

Recommendations for Energy Savings Opportunities

- Based on the information gathered during the on-site assessment, the utility rates, as well as recent consumption data and engineering analysis, Bureau Veritas has identified opportunities to save energy and provide probable construction costs, projected energy/utility savings and provide a simple payback analysis.

Analysis of Energy Consumption

- Based on the information gathered during the on-site assessment, Bureau Veritas has conducted an analysis of the energy usage of all equipment, and identified which equipment is using the most energy and what equipment upgrades may be necessary. As a result, equipment upgrades, or replacements are identified that may provide a reasonable return on the investment and improve maintenance reliability.

Energy Audit Process

- Interviewing staff and review plans and past upgrades
- Performing an energy audit for each use type
- Performing a preliminary evaluation of the utility system
- Analyzing findings, utilizing ECM cost-benefit worksheets
- Making preliminary recommendations for system energy improvements and measures
- Estimating initial cost and changes in operating and maintenance costs based on implementation of energy efficiency measures
- Ranking recommended cost measures, based on the criticality of the project and the largest payback

9. Historical Energy and Water Performance Metrics

Utility Data Tabulation Methodology

Establishing the energy baseline begins with an analysis of the utility cost and consumption of the facility. Utilizing the historical energy data and local weather information, we evaluate the existing utility consumption and assign it to the various end-uses throughout the buildings. The Historical Data Analysis breaks down utilities by consumption, cost and annual profile.

This data is analyzed using standard engineering assumptions and practices. The analysis serves the following functions:

- Allows our engineers to benchmark the energy and water consumption of the facilities against consumption of efficient buildings of similar construction, use and occupancy.
- Generates the historical and current unit costs for energy and water
- Provides an indication of how well changes in energy consumption correlate to changes in weather.
- Reveals potential opportunities for energy consumption and/or cost reduction. For example, the analysis may indicate that there is excessive, simultaneous heating and cooling, which may mean that there is an opportunity to improve the control of the heating and cooling systems.

By performing this analysis and leveraging our experience, our engineers prioritize buildings and pinpoint systems for additional investigation during the site visit, thereby maximizing the benefit of their time spent on-site and minimizing time and effort by the customer’s personnel.

No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used average utility costs from other VT Agency of Education properties to approximate the utility costs for this property. Bureau Veritas will update the report on receipt of the actual data from the client.

Utilities Metering at a Glance	
Number of electric meters observed	One
Number of gas meters observed	None
Number of central steam meters observed	None
Number of domestic water meter observed	None

Average Utility Rates			
Electricity	Propane	No. 2 Oil	Water & Sewer
Average Rate	Average Rate	Average Rate	Blended Rate
\$0.18 / kWh (est.)	\$1.96 / Gal (est.)	\$2.78 / Gal (est.)	N/A – on-site



Electricity

Vermont Electric Co-op provides electrical service to the facility.

The consumption pattern likely remains relatively constant. Any seasonal variation in consumption is primarily attributed to periods when school is out of session, while the static base load primarily consists of lighting and appliances.

Note: No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used the electric rate from other properties within the same geographical region having similar construction layout and usage patterns. Bureau Veritas will update the report on receipt of the actual data from the client.

Propane and Fuel Oil

The propane and fuel oil suppliers to the facility were not provided. The deliveries are made on an as-needed basis. The primary use of propane is for supplemental domestic water heating and cooking. The primary use of fuel oil is for space heating and domestic water heating. Any seasonal variation in consumption is primarily attributed to the heating loads, while the static base load primarily consists of domestic water heating and cooking.

Note: No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used the utility rates from other properties within the same geographical region having similar construction layout and usage patterns. Bureau Veritas will update the report on receipt of the actual data from the client.



Water and Sewer

The water and sewer requirements for the facility are satisfied by an on-site well and septic system, respectively.



10. Energy Conservation Measures

Bureau Veritas has conducted an Energy Audit on the South Royalton Elementary / White River Valley High School complex. The study included a review of the building's construction features, historical energy and water consumption and costs, review of the building envelope, HVAC equipment, heat distribution systems, lighting, and the building's operational and maintenance practices.

Bureau Veritas has evaluated five Energy Conservation Measures (ECMs) for this property. The savings for each measure are calculated using standard engineering methods followed in the industry, and detailed calculations for ECM are provided in Appendix H for reference. A 10% discount in energy savings was applied to account for the interactive effects amongst the ECMs. In addition to the consideration of the interactive effects, Bureau Veritas has applied a 15% contingency to the implementation costs to account for potential cost overruns during the implementation of the ECMs.

The following table summarizes the recommended ECMs in terms of description, investment cost, energy consumption reduction, and cost savings.

Recommended Non- Renewable Energy Conservation Measures: Financial Impact	
Total Projected Initial ECM Investment	\$153,615
Estimated Annual Cost Savings Related to ECMs	\$22,211
Net Effective ECM Payback	6.92 Years

Key Metrics to Benchmark the Subject Property's Energy Usage Profile

- **Building Site Energy Use Intensity** - The sum of the total site energy use in thousands of Btu per unit of gross building area. Site energy accounts for all energy consumed at the building location only not the energy consumed during generation and transmission of the energy to the site.
- **Building Source Energy Use Intensity** – The sum of the total source energy use in thousands of Btu per unit of gross building area. Source energy is the energy consumed during generation and transmission in supplying the energy to your site.
- **Building Cost Intensity** - This metric is the sum of all energy use costs in dollars per unit of gross building area.
- **Greenhouse Gas Emissions** - Although there are numerous gases that are classified as contributors to the total for Greenhouse Emissions, the scope of this energy audit focuses on carbon dioxide (CO₂). Carbon dioxide enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and also as a result of other chemical reactions (e.g., manufacture of cement).

Energy Conservation Measures Screening:

Bureau Veritas screens ECMs using the financial methodology below. ECMs which are considered financially viable must meet this criteria

1. Simple Payback Period –The number of years required for the cumulative value of energy or water cost savings less future non-fuel or non-water costs to equal the investment costs of the building energy or water system, without consideration of discount rates. ECMs with a payback period greater than the Expected Useful Life (EUL) of the project are not typically recommended, as the cost of the project will not be recovered during the lifespan of the equipment. These ECMs are recommended for implementation during future system replacement. At that time, replacement may be evaluated based on the premium cost of installing energy efficient equipment.



South Royalton Elementary / White River Valley High School Complex

Energy Conservation Measures

Description of ECM		Location	Net Projected Initial Investment (\$)	Estimated Annual Savings Propane (Gal)	Estimated Annual Savings #2 Oil (Gal)	Estimated Annual Savings Electricity (kWh)	Estimated Annual Savings Water (KGal)	Total Energy Savings (MMBTU)	Total Green House Gas Savings (MtCO ² /Yr.)	Estimated Utility Cost Savings (\$)	Estimated Annual O&M Savings (\$)	Total Estimated Annual Cost Savings (\$)	Simple Payback (Yrs)	Life Cycle Savings (\$)	Expected Useful Life (EUL) (Yrs)
1	Install Timers On Exhaust Fans; Install (8x) timer(s) on (8x) Rooftop Exhaust Fans	Location: Roof	\$2,633	0.0	1,457.8	2,614.0	0.0	210.8	15.4	\$4,523	\$0	\$4,523	0.6	\$51,367	15
2	Replace Existing Linear Fluorescent Lamps; Replace 252x F43T8 with F43LED; Replace 15x F42T8 with F42LED; Replace 60x F43T8 with F43LED; Replace 75x F42T8 with F42LED; Replace 37x F44T12 with F44LED; Replace 21x F42T8 with F42LED	Location: Building interiors	\$21,215	0.0	0.0	53,059.3	0.0	181.0	12.6	\$9,551	\$942	\$10,493	2.0	\$104,050	15
3	Replace Existing Linear Fluorescent Lamps; Replace 21x F42T8 with F42LED; Replace 16x F42T8 with F42LED	Location: Building interiors	\$1,496	0.0	0.0	3,399.6	0.0	11.6	0.8	\$612	\$70	\$682	2.2	\$6,644	15
4	Re-Commission The Building & Its Control Systems; Improve building efficiency by 12% through re-commissioning	Location: Throughout building	\$35,479	0.0	1,440.0	0.0	0.0	199.4	14.6	\$4,003	\$0	\$4,003	8.9	\$12,311	15
5	Replace Inefficient Heating Plant; Replace (1x) Cast Iron boiler(s) with (2x) 95% efficient Condensing Boiler	Location: Boiler room	\$72,755	0.0	1,705.3	0.0	0.0	236.2	17.3	\$4,741	\$237	\$4,978	14.6	\$13,922	25
Totals for no/low cost items			\$0	0.0	0.0	0.0	0.0	0.0	0.0	\$0	\$0	\$0	0.0		
Total for capital cost			\$133,578	0.0	4,603.1	59,072.9	0.0	839.1	60.6	\$23,430	\$1,249	\$24,679	5.4		
Interactive Savings Discount @10%				0.0	-460.3	-5,907.3	0.0	-83.9	-6.1	-\$2,343	-\$125	-\$2,468			
Total Contingency Expenses @ 15%			\$20,037												
Totals for improvements			\$153,615	0.0	4,142.8	53,165.6	0.0	755.2	54.6	\$21,087	\$1,124	\$22,211	6.9		

11. Certification

Vermont Agency of Education, Phase Two (the Client) retained Bureau Veritas to perform this Facility Condition Assessment in connection with its continued operation of So Royalton Elementary - Main Building, 223 South Windsor St, South Royalton, VT 05068, 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 on behalf of and exclusively for the use of the Client for the purpose stated within the *Purpose and Scope* section of this report. The report, or any excerpt thereof, shall not be used by any party other than the Client or for any other purpose than that specifically stated in our agreement or within the *Purpose and Scope* section of this report without the express written consent of Bureau Veritas.

Any reuse or distribution of this report without such consent shall be at the Client and the recipient's sole risk, without liability to Bureau Veritas.

Prepared by: Bureau Veritas Technical Assessments

12. Appendices

- Appendix A: Photographic Record
- Appendix B: Site Plans
- Appendix C: Stem/Steam Assessment
- Appendix D: Accessibility Review & Photos
- Appendix E: Component Condition Report
- Appendix F: Replacement Reserves
- Appendix G: Depleted Value Report



Appendix A: Photographic Record

Photographic Overview



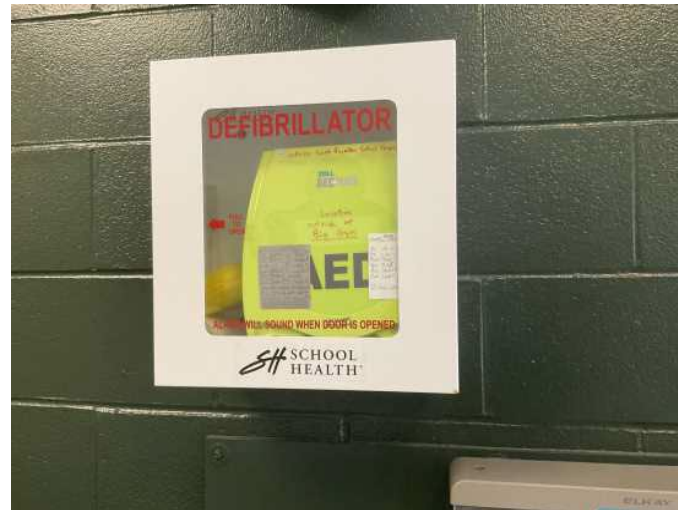
1 - SITE PHOTO



2 - INTERIOR PHOTO



3 - NEW COMMERCIAL KITCHEN ASSET



4 - FIRE ALARM / SECURITY PHOTO



5 - COPY ROOM



6 - INTERIOR PHOTO

Photographic Overview



7 - SITE PHOTO



8 - SPACEID 221_ROOM OVERVIEW PHOTO



9 - INTERIOR PHOTO



10 - INTERIOR PHOTO



11 - INTERIOR PHOTO



12 - SPACEID 227_ROOM OVERVIEW PHOTO

Photographic Overview



13 - SPACEID 239_ROOM OVERVIEW PHOTO



14 - INTERIOR PHOTO



15 - INTERIOR PHOTO



16 - RIGHT ELEVATION



17 - SITE PHOTO

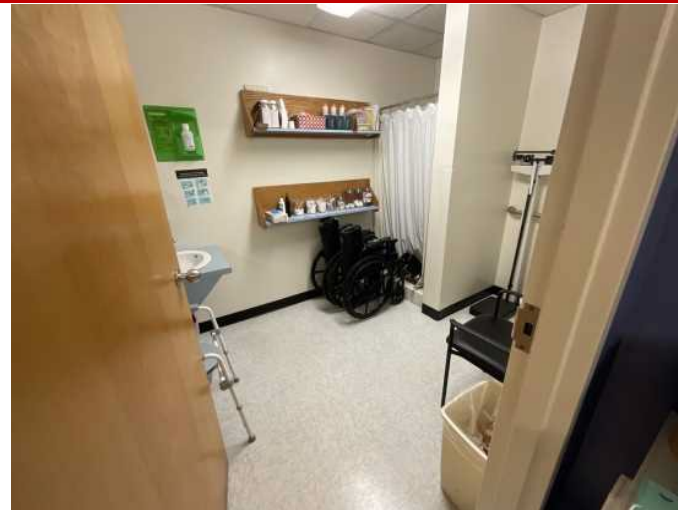


18 - SPACEID 213_ROOM OVERVIEW PHOTO

Photographic Overview



19 - SPACEID 234_ROOM OVERVIEW PHOTO



20 - SPACEID 232_ROOM OVERVIEW PHOTO



21 - SITE PHOTO



22 - LEFT ELEVATION



23 - EXTERIOR WALLS PHOTO

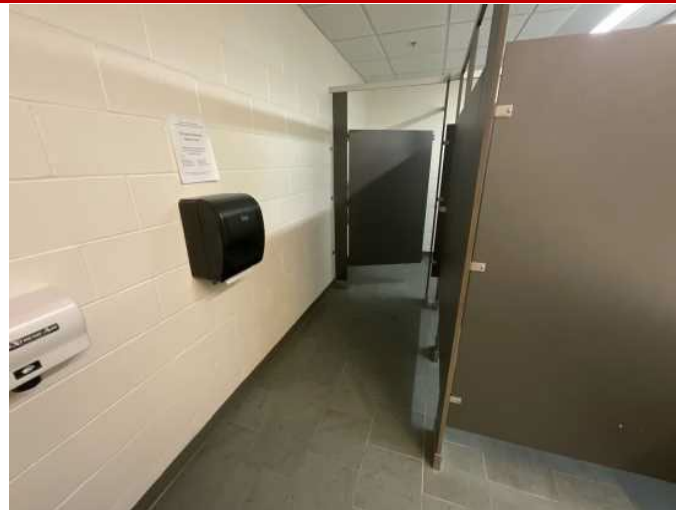


24 - INTERIOR PHOTO

Photographic Overview



25 - SPACEID 226_ROOM OVERVIEW PHOTO



26 - INTERIOR PHOTO



27 - SPACEID 225_ROOM OVERVIEW PHOTO



28 - INTERIOR PHOTO



29 - NEW HVAC ASSET



30 - SPACEID 217_ROOM OVERVIEW PHOTO

Photographic Overview



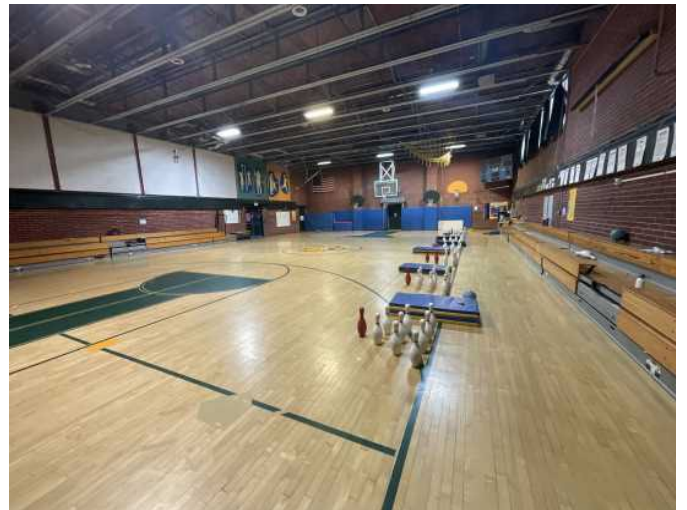
31 - SPACEID 228_ROOM OVERVIEW PHOTO



32 - REAR ELEVATION



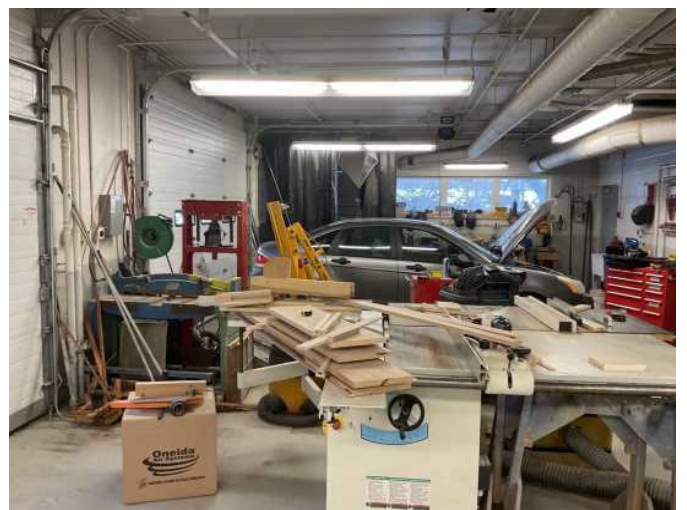
33 - SPACEID 215_ROOM OVERVIEW PHOTO



34 - INTERIOR PHOTO



35 - SPACEID 241_ROOM OVERVIEW PHOTO



36 - SPACEID 222_ROOM OVERVIEW PHOTO

Photographic Overview



37 - SPACEID 235_ROOM OVERVIEW PHOTO



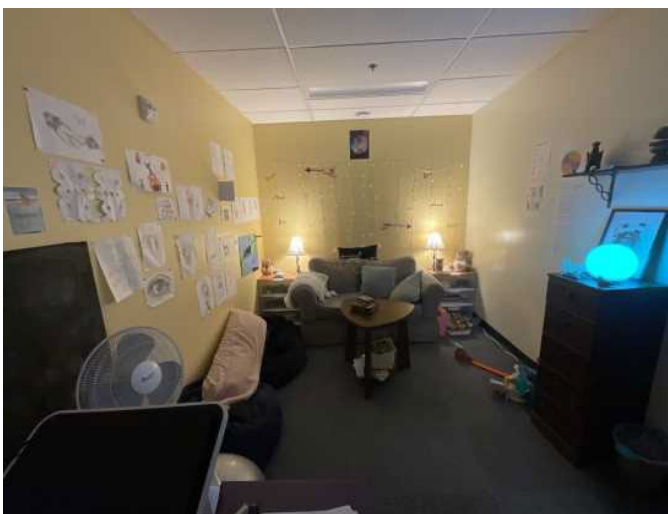
38 - FRONT ELEVATION



39 - SPACEID 229_ROOM OVERVIEW PHOTO



40 - SITE PHOTO



41 - SPACEID 245_ROOM OVERVIEW PHOTO



42 - SPACEID 243_ROOM OVERVIEW PHOTO

Photographic Overview



43 - SPACEID 231_ROOM OVERVIEW PHOTO



44 - INTERIOR PHOTO



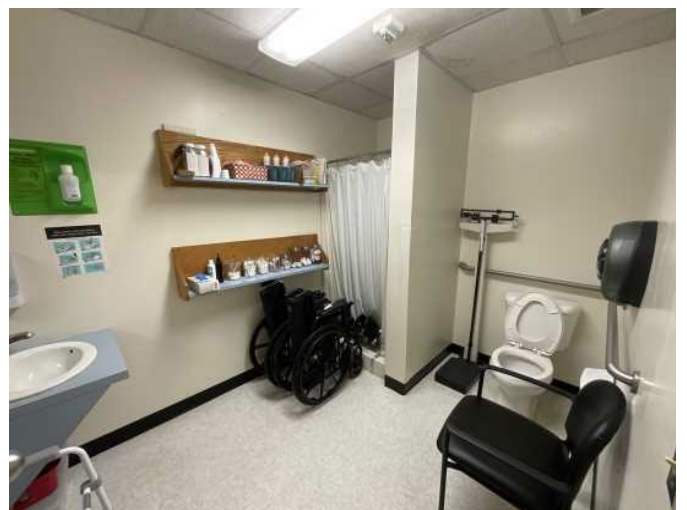
45 - SPACEID 236_ROOM OVERVIEW PHOTO



46 - SITE PHOTO



47 - PLUMBING PHOTO



48 - INTERIOR PHOTO

Photographic Overview



49 - SPACEID 220_ROOM OVERVIEW PHOTO



50 - INTERIOR PHOTO



51 - SPACEID 218_ROOM OVERVIEW PHOTO



52 - SPACEID 240_ROOM OVERVIEW PHOTO



53 - SPACEID 233_ROOM OVERVIEW PHOTO



54 - SPACEID 242_ROOM OVERVIEW PHOTO

Photographic Overview



55 - INTERIOR PHOTO



56 - SPACEID 223_ROOM OVERVIEW PHOTO



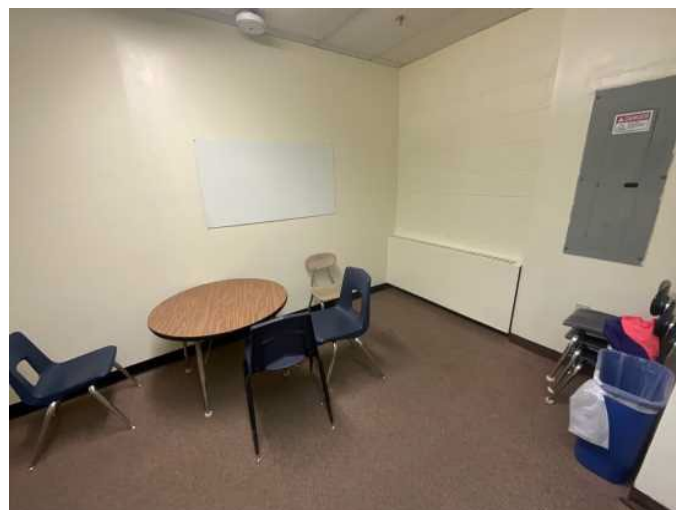
57 - INTERIOR PHOTO



58 - INTERIOR PHOTO

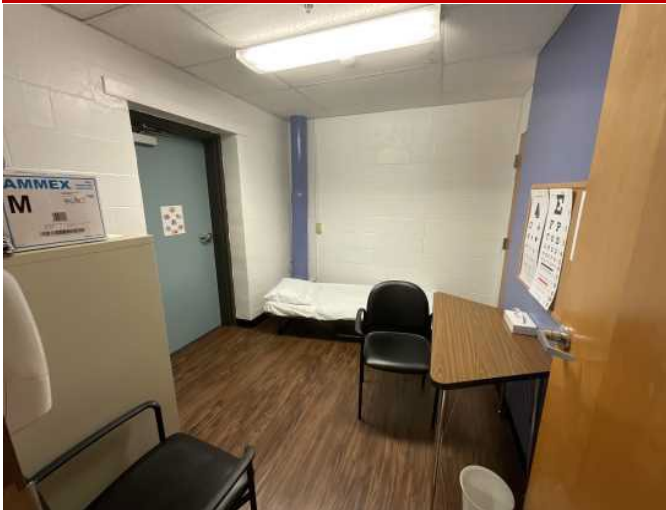


59 - SPACEID 219_ROOM OVERVIEW PHOTO



60 - SPACEID 216_ROOM OVERVIEW PHOTO

Photographic Overview



61 - INTERIOR PHOTO



62 - SPACEID 214_ROOM OVERVIEW PHOTO



63 - INTERIOR PHOTO



64 - INTERIOR PHOTO



65 - INTERIOR PHOTO



66 - HVAC PHOTO

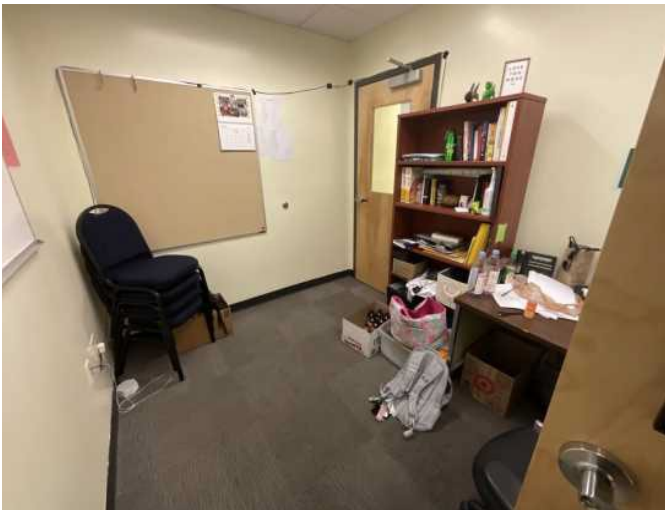
Photographic Overview



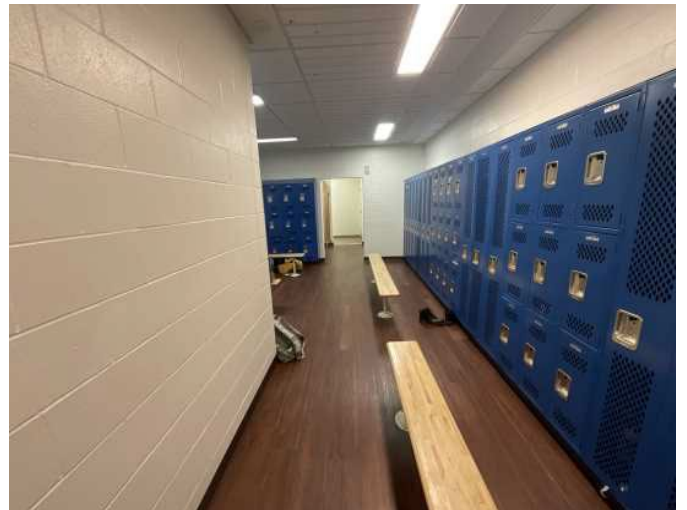
67 - SPACEID 246_ROOM OVERVIEW PHOTO



68 - SPACEID 212_ROOM OVERVIEW PHOTO



69 - SPACEID 244_ROOM OVERVIEW PHOTO



70 - INTERIOR PHOTO



71 - FIRE SUPPRESSION PHOTO



72 - ELECTRICAL PHOTO

Photographic Overview



73 - COVER PHOTO



74 - SPACEID 237_ROOM OVERVIEW PHOTO



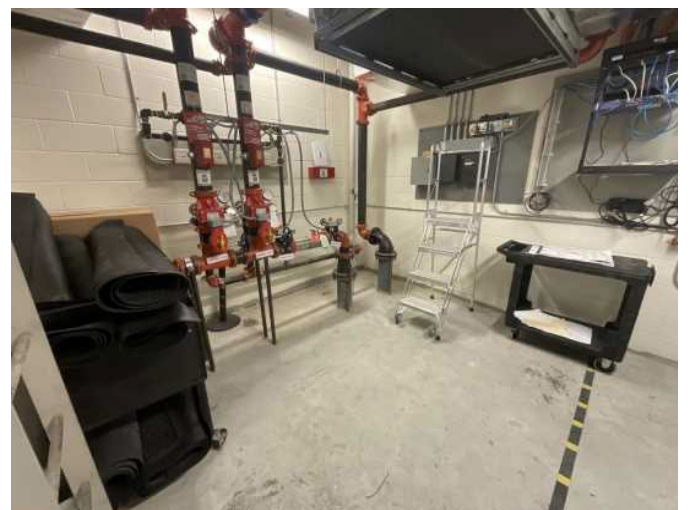
75 - SPACEID 230_ROOM OVERVIEW PHOTO



76 - INTERIOR PHOTO



77 - SITE PHOTO



78 - SPACEID 224_ROOM OVERVIEW PHOTO

Photographic Overview



79 - SITE PHOTO



80 - SITE PHOTO



81 - INTERIOR PHOTO

Appendix B:

Site Plans

Site Plan



Project Name	Project Number
Vermont Agency of Education	158982.22R000-304.379 South Royalton Elementary School
Source	On-Site Date
Google MyMaps	May 20, 2023

Appendix C: Stem/Steam Assessment

STEM/STEAM Evaluation

Property Name	STEM/STEAM Suitability Score	Project Number	School Type	Square Footage
So Royalton Elementary - Main Building	33%	158982.22R000-304.379	High	80,000

Suitability Classification	Scale
Compares Poorly	Score 0 - 25
Compares Marginally	Score 25-50
Compares Fairly	Score 50-75
Compares Well	Score 75 - 100

Score Value	Score Impact
1- Meets	100%
2- Partial	50%
3- Missing	0%

Rooms to support STEM/STEAM Curriculum - X= Required by School Type

Room Types	Room Present (Yes/No)	Elementary School	Middle School	High School
Does the facility have an Art Room?		X	X	X
Does the facility have a Science Lab?	Yes		X	X
Does the facility have a Shop (Machine, Wood, Metal, etc.)?	No		X	X
Does the facility have a Computer Lab?	Yes	X	X	X
Does the facility have a dedicated STEM/STEAM Room?	Yes	X	X	X

Overall Compliance					
Questions	Art Room	Science Labs	Shops	Computer Lab	STEM/STEAM
Does the room have chemical resilient perimeter counters with a minimum of two sinks, one being ADA accessible?	1- Meets	1- Meets			1- Meets
Does the room have electrical outlet distribution along perimeter walls and from the ceiling?	2- Partial	2- Partial		2- Partial	2- Partial
Does the room have open shelving and lockable storage cabinets?	1- Meets	1- Meets			1- Meets
Does the room have technology connectivity and an interactive display?	2- Partial	2- Partial		1- Meets	1- Meets
Does the room have appropriate wet floor finishes?	1- Meets	1- Meets			1- Meets
Does the room have visual display boards?	1- Meets	1- Meets		1- Meets	1- Meets
Does the room have Prep/Storage Room?	1- Meets	1- Meets		1- Meets	1- Meets
Does the room have direct access to the exterior?	3- Missing	3- Missing			3- Missing
Does the room the ability to structurally suspend items from the ceiling?	3- Missing	3- Missing			3- Missing
Does the have goggle cabinets, fire extinguisher, eye wash and deluge shower?	3- Missing	2- Partial			2- Partial
Room Type Score	60%	60%	0%	88%	70%

Appendix D:

Accessibility Review & Photos

Visual Survey - ADA Standards for Accessible Design

Property Name: South Royalton Elementary School

BV Project Number: 158985.22R000-304.379

Facility History & Interview

Question	Yes	No	Unk	Comments
1. ADA: Has an accessibility study been performed at the site? If so, when?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. ADA: If a study has occurred, have the associated recommendations been addressed? In full or in part?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. ADA: Have there been regular complaints about accessibility issues, or previous or pending litigation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Building : Accessibility Issues

Category	Major Issues (ADA study recommended)	Moderate Issues (ADA study recommended)	Minor Issues	None*
Parking				None
Exterior Route				None
Building Entrances				None
Interior Route				None
Public Restrooms				None

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



1 - OVERVIEW OF ACCESSIBLE PARKING AREA



2 - CLOSE-UP OF STALL or 2ND PARK AREA



3 - EXT RAMP or PRIMARY PATH OF TRAVEL



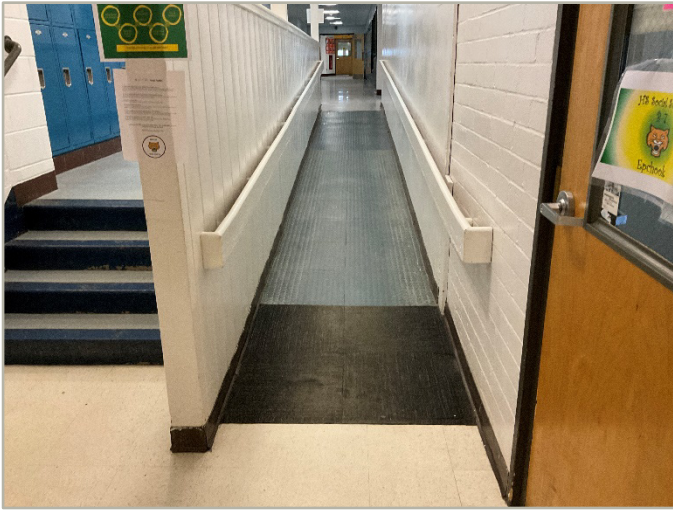
4 - CURB CUT or 2ND PATH OF TRAVEL



5 - MAIN ACCESSIBLE ENTRANCE



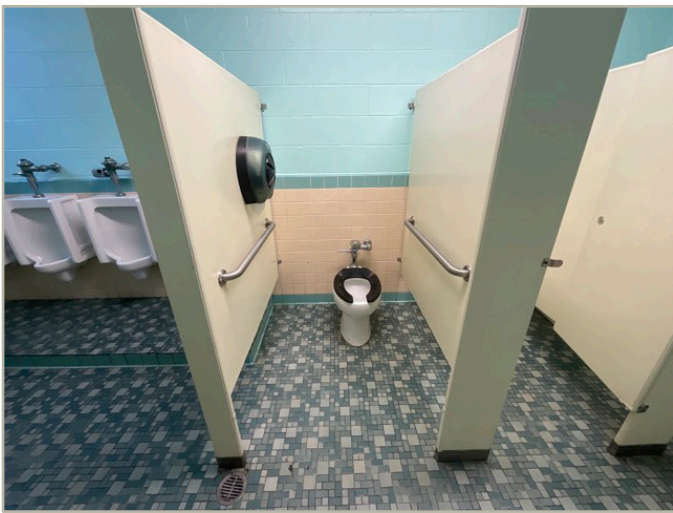
6 - 2ND ENTRANCE or SIGNAGE/HARDWARE



7 - ACCESSIBLE INTERIOR PATH (RAMP/LIFT)



8 - HARDWARE, STAIR RAILS or SELF-SERVICE AREA



9 - TOILET STALL OVERVIEW



10 - SINK, FAUCET HANDLES or ACCESSORIES

The table below is intended to be used as a general reference guide to help differentiate the orders of magnitude between some of the more commonly observed accessibility issues. The table is not intended to be all-inclusive, and boxes checked in the tables above do not necessarily mean those specific problems or shortcomings cited as examples below exist at the subject buildings and sites. Reference the data and photos above and/or the *Key Findings* section in the body of the report for visuals and/or more specifics about the particular subject site conditions.

Reference Guide			
	Major Issues <i>(ADA study recommended)</i>	Moderate Issues <i>(ADA study recommended)</i>	Minor Issues
Parking	<ul style="list-style-type: none"> - Needs full reconstruction - Excessive slopes over 3% require major re-grading - No level locations to add required spaces 	<ul style="list-style-type: none"> - No or non-compliant curb cuts - Moderate difficulty to add required accessible spaces - Slopes close to compliant 	<ul style="list-style-type: none"> - Painting of markings needed - Signage height non-compliant - Signage missing
Exterior Route	<ul style="list-style-type: none"> - Large areas of sidewalks with excessive slopes - No ramp when needed - Ramps with excessive slopes 	<ul style="list-style-type: none"> - Ramps need rails - Ramps need rail extensions - All or most entrance door exterior maneuvering clearance areas with excessive slopes 	<ul style="list-style-type: none"> - One entrance door exterior maneuvering clearance area with excessive slope - Non-compliant signage
Building Entrances	<ul style="list-style-type: none"> - No compliant entrance exists - Exterior entry door/s not wide enough - Entrance vestibule requires complete reconstruction / reconfiguration due to clearance 	<ul style="list-style-type: none"> - Need significant # of lever handles - Need to add or modify automatic door opener - Entrance vestibule requires limited reconfigurations 	<ul style="list-style-type: none"> - A few door knobs instead of lever handles - Non-compliant door threshold
Interior Route	<ul style="list-style-type: none"> - All or most interior doors appear less than 32" wide - Corridors less than 36" wide - No ramp when needed - Ramps with excessive slopes - Non-compliant treads/risers at means of egress stairways 	<ul style="list-style-type: none"> - Single height drinking fountains - Drinking fountain too high or protrudes into accessible route - Ramps need rails - Ramps need rail extensions - Need significant # of lever handles - Non-compliant rail extensions at egress stairways - All/most door thresholds high 	<ul style="list-style-type: none"> - One door threshold too high - A few door knobs instead of lever handles - Non-compliant door pressures - Non-compliant signage - Switches not within reach range
Elevators	<ul style="list-style-type: none"> - No elevator present when required - Elevator cab too small 	<ul style="list-style-type: none"> - Panel control buttons not at compliant height - No hands-free emergency communication system - Elevator only has mechanical stops 	<ul style="list-style-type: none"> - Audible/visual signals at every floor may be lacking - Minor signage / Braille issues
Public Restrooms	<ul style="list-style-type: none"> - No ADA RR on each accessible floor - Restroom(s) too small - Entire restroom(s) requires renovation - Water closet clearance requires moving walls 	<ul style="list-style-type: none"> - Interior doors appear less than 32" wide - Missing or non-compliant grab bars - Easily fixable clearance issues 	<ul style="list-style-type: none"> - Minor height adjustments required - Non-compliant door pressures - Missing a visual strobe (only required if audible fire alarm already present) - Missing lavatory pipe wraps - Signage not compliant

	Major Issues <i>(ADA study recommended)</i>	Moderate Issues <i>(ADA study recommended)</i>	Minor Issues
Kitchens/Kitchenettes	<ul style="list-style-type: none"> - Clear space for each appliance not present - Clearance between opposing counters too narrow 	<ul style="list-style-type: none"> - Sink and counter too high - Sink knee and toe clearance not provided where required (built-in) - Less than 50% of cabinetry within reach range 	<ul style="list-style-type: none"> - Dispensers not within reach range - Switches not within reach range - Missing sink pipe wraps if knee and toe clearance required
Playgrounds & Pools	<ul style="list-style-type: none"> - Large areas of surfacing non-compliant - Install compliant play structures - No pool lift provided 	<ul style="list-style-type: none"> - Small area/s of surfacing or equipment non-compliant - Moderate issues with path of travel to playground/pool 	<ul style="list-style-type: none"> - Minor issues with path of travel to playground/pool

Appendix E:

Component Condition Report

Component Condition Report SO ROYALTON ELEMENTARY - Main Building								
UF L3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity		RUL	ID
Structure								
B1080	Throughout building	Structure	Good	Stairs, Metal or Pan-Filled, Interior	1,000	SF	36	5921412
Facade								
B2010	Building Exterior	Facade	Good	Exterior Walls, Stucco	1,050	SF	36	5921329
B2010	Building Exterior	Facade	Good	Exterior Walls, Fiber Cement Siding	7,500	SF	31	5921365
B2010	Building Exterior	Facade	Fair	Exterior Walls, Brick Veneer	19,500	SF	17	5921428
B2010	Building Exterior	Facade	Fair	Exterior Walls, Wood Siding	250	SF	16	5921445
B2010	Building Exterior	Facade	Fair	Exterior Walls, Vinyl Siding	4,500	SF	16	5921514
B2020	Building Exterior	Facade	Fair	Storefront, Glazing & Framing	250	SF	16	5921505
B2020	Building Exterior	Facade	Fair	Window, Aluminum Double-Glazed, 16-25 SF	101		16	5921427
B2020	Building Exterior	Facade	Fair	Window, Aluminum Double-Glazed, 16-25 SF	3		3	5921323
B2020	Building Exterior	Facade	Fair	Window, Vinyl-Clad Double-Glazed, 16-25 SF	15		16	5921478
B2050	Building Exterior	Facade	Fair	Exterior Door, Aluminum-Framed & Glazed, Standard Swing	4		16	5921322
B2050	Concession stand	Facade	Fair	Overhead/Dock Door, Aluminum, 12'x12' (144 SF)	1		16	5921420
B2050	Building Exterior	Facade	Fair	Overhead/Dock Door, Aluminum, 12'x12' (144 SF)	1		16	5921405
B2050	Building Exterior	Facade	Fair	Exterior Door, Aluminum-Framed & Glazed, Standard Swing	3		16	5921436
B2050	Building Exterior	Facade	Fair	Exterior Door, Steel, Standard	1		26	5921398
Roofing								
B3010	Roof	Roofing	Fair	Roofing, Single-Ply Membrane, EPDM	13,000	SF	6	5921296
B3010	Roof	Roofing	Fair	Roofing, Single-Ply Membrane, TPO/PVC	30,000	SF	4	5921491
B3060	Roof	Roofing	Fair	Roof Skylight, per unit, up to 20 SF	2		16	5921367
Interiors								
C1030	Throughout building	Interiors	Fair	Interior Door, Steel, w/ Extensive Glazing	1		18	5921487
C1030	Throughout building	Interiors	Fair	Door Hardware, School, per Door	1		16	5921393
C1030	Hallways	Interiors	Good	Interior Door, Steel, Fire-Rated at 90 Minutes or Over	6		27	5921421
C1030	Throughout building	Interiors	Fair	Interior Door, Wood, Solid-Core Decorative High-End	1		26	5921394
C1030	Throughout building	Interiors	Fair	Interior Door, Wood, Solid-Core Decorative High-End w/ Glazing	1		4	5921481
C1030	Front hallway	Interiors	Fair	Interior Door, Aluminum-Framed & Glazed, Standard Swing	4		26	5921340
C1030	Throughout building	Interiors	Fair	Interior Door, Wood, Solid-Core Decorative High-End	1		4	5921390
C1070	Classrooms	Interiors	Fair	Suspended Ceilings, Hard Tile, Replacement w/ ACT	5,000	SF	3	5921389
C1070	Throughout building	Interiors	Fair	Suspended Ceilings, Acoustical Tile (ACT)	78,000	SF	11	5921425
C1090	Hallways	Interiors	Fair	Lockers, Steel-Baked Enamel, 12" W x 15" D x 72" H	274		6	5921357
C1090	Locker room	Interiors	Fair	Lockers, Steel-Baked Enamel, 12" W x 15" D x 72" H	1		6	5921324
C1090	Restrooms	Interiors	Fair	Toilet Partitions, Metal	8		4	5921416
C2010	Restrooms	Interiors	Fair	Wall Finishes, Ceramic Tile	500	SF	8	5921314
C2010	Throughout building	Interiors	Fair	Wall Finishes, any surface, Prep & Paint	132,000	SF	3	5921399
C2010	Basement restroom	Interiors	Fair	Wall Finishes, Ceramic Tile	250	SF	26	5921347
C2030	Boiler room	Interiors	Fair	Flooring, any surface, w/ Epoxy Coating, Prep & Paint	500	SF	3	5921317
C2030	Gymnasium	Interiors	Fair	Flooring, Wood, Strip	6,000	SF	16	5921305

UF L3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity		RUL	ID
C2030	Library	Interiors	Fair	Flooring, Carpet, Commercial Tile	5,000	SF	3	5921366
C2030	Custodians office	Interiors	Fair	Flooring, Quarry Tile	500	SF	6	5921490
C2030	Kitchen	Interiors	Fair	Flooring, Vinyl Sheeting	1,000	SF	3	5921409
C2030	Restrooms	Interiors	Fair	Flooring, Ceramic Tile	250	SF	8	5921384
C2030	Office	Interiors	Fair	Flooring, Carpet, Commercial Standard	3,000	SF	3	5921332
C2030	High school gymnasium	Interiors	Fair	Flooring, Rubber Tile	1,000	SF	3	5921400
C2030	Classrooms	Interiors	Fair	Flooring, Laminate Faux Wood	2,000	SF	8	5921300
C2030	Throughout building	Interiors	Fair	Flooring, Vinyl Tile (VCT)	50,000	SF	4	5921402
C2030	Hallways	Interiors	Fair	Flooring, Ceramic Tile	2,000	SF	26	5921495
C2030	Office	Interiors	Fair	Flooring, Vinyl Sheeting	500	SF	4	5921403
C2030	High school gymnasium	Interiors	Fair	Flooring, Wood, Strip	8,000	SF	16	5921307
Conveying								
D1010	Hallways	Conveying	Fair	Vertical Lift, Wheelchair, 5' Rise, Renovate	1		15	5921385
Plumbing								
D2010	Lab	Plumbing	Fair	Emergency Plumbing Fixtures, Eye Wash	1		6	5921341
D2010	Restrooms	Plumbing	Fair	Sink/Lavatory, Wall-Hung, Vitreous China	2		16	5921304
D2010	Boiler room	Plumbing	Good	Water Heater, Indirect	2		11	5921330
D2010	Classrooms	Plumbing	Fair	Sink/Lavatory, Vanity Top, Stainless Steel	5		16	5921447
D2010	Hallways	Plumbing	Fair	Drinking Fountain, Wall-Mounted, Single-Level	2		5	5921448
D2010	Throughout building	Plumbing	Fair	Plumbing System, Supply & Sanitary, High Density (excludes fixtures)	80,000	SF	26	5921470
D2010	Restrooms	Plumbing	Fair	Urinal, Waterless	3		16	5921364
D2010	Restrooms	Plumbing	Fair	Sink/Lavatory, Vanity Top, Solid Surface or Vitreous China	1		16	5921404
D2010	Utility closet	Plumbing	Fair	Sink/Lavatory, Service Sink, Laundry	1		16	5921497
D2010	Kitchen	Plumbing	Fair	Sink/Lavatory, Commercial Kitchen, 3-Bowl	1		16	5921318
D2010	Restrooms	Plumbing	Fair	Sink/Lavatory, Wall-Hung, Vitreous China	10		16	5921387
D2010	Restrooms	Plumbing	Fair	Sink/Lavatory, Wall-Hung, Vitreous China	5		16	5921443
D2010	Cafe	Plumbing	Fair	Sink/Lavatory, Vanity Top, Stainless Steel	1		17	5921469
D2010	Restrooms	Plumbing	Fair	Toilet, Commercial Water Closet	2		16	5921466
D2010	Kitchen	Plumbing	Fair	Sink/Lavatory, Commercial Kitchen, 1-Bowl	2		16	5921308
D2010	Restrooms	Plumbing	Fair	Toilet, Commercial Water Closet	4		16	5921446
D2010	Classrooms	Plumbing	Fair	Sink/Lavatory, Vanity Top, Stainless Steel	1		16	5921327
D2010	Hallways	Plumbing	Fair	Drinking Fountain, Wall-Mounted, Bi-Level	1		4	5921370
D2010	Restrooms	Plumbing	Fair	Toilet, Commercial Water Closet	1		16	5921449
D2010	Restrooms	Plumbing	Fair	Sink/Lavatory, Vanity Top, Solid Surface or Vitreous China	1		16	5921362
D2010	Locker room	Plumbing	Fair	Shower, Ceramic Tile	3		16	5921336
D2010	Lab	Plumbing	Fair	Sink/Lavatory, Vanity Top, Solid Surface or Vitreous China	15		16	5921472
D2010	Restrooms	Plumbing	Fair	Toilet, Commercial Water Closet	12		19	5921502
D2010	Kitchen	Plumbing	Fair	Water Heater, Gas, Tankless	1		2	5921441
D2010	Restrooms	Plumbing	Fair	Urinal, Standard	6		19	5921414
D2010	Utility closet	Plumbing	Fair	Sink/Lavatory, Service Sink, Floor	1		21	5921312
D2010	Restrooms	Plumbing	Fair	Toilet, Commercial Water Closet	6		16	5921355

UF L3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity		RUL	ID
D2010	Nurse's office	Plumbing	Fair	Shower, Fiberglass	1		6	5921326
D2060	Boiler room	Plumbing	Fair	Supplemental Components, Compressed Air Dryer, Process Support	1		9	5921479
D2060	Boiler room	Plumbing	Fair	Air Compressor, Tank-Style	1		9	5921467
D2060	Boiler room	Plumbing	Fair	Air Compressor, Tank-Style	1		9	5921459
HVAC								
D3020	Gym office	HVAC	Fair	Unit Heater, Hydronic	1		6	5921345
D3020	Boiler room	HVAC	Good	Boiler Supplemental Components, Expansion Tank	1		30	5921492
D3020	Mechanical space	HVAC	Fair	Unit Heater, Hydronic	1		6	5921392
D3020	Boiler room	HVAC	Fair	Boiler, Oil, HVAC	1		19	5921343
D3020	Sprinkler room	HVAC	Fair	Air Ventilator, Energy Recovery Unit, up to 6500 CFM	1		4	5921450
D3020	Boiler room	HVAC	Good	Boiler, Oil, HVAC	1		26	5921475
D3020	Throughout building	HVAC	Fair	Radiator, Hydronic, Baseboard (per LF)	500	LF	8	5921337
D3020	Boiler room	HVAC	Fair	Boiler, Oil, HVAC, 2001 to 5000 MBH	1		2	5921463
D3030	Classrooms	HVAC	Good	Unit Ventilator, approx/nominal 3 Ton	8		18	5921431
D3030	High school gymnasium	HVAC	Fair	Unit Ventilator, approx/nominal 3 Ton	1		7	5921453
D3050	Throughout building	HVAC	Fair	HVAC System, Ductwork, High Density	8,000	SF	16	5921498
D3050	Boiler room	HVAC	Fair	Pump, Distribution, HVAC Heating Water	2		14	5921489
D3050	Boiler room	HVAC	Fair	Pump, Distribution, HVAC Heating Water	2		14	5921349
D3050	Throughout building	HVAC	Fair	HVAC System, Hydronic Piping, 2-Pipe	80,000	SF	12	6122934
D3050	Roof	HVAC	Fair	Packaged Unit, RTU, Pad or Roof-Mounted [RTU-1]	1		6	5921429
D3060	Building exterior	HVAC	Fair	Exhaust Fan, Centrifugal, 16" Damper	1		11	5921320
D3060	Boiler room	HVAC	Fair	Exhaust Fan, Centrifugal, 12" Damper	1		9	5921360
D3060	Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 12" Damper, 501 to 1000 CFM	2		7	5921437
D3060	Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 10" Damper, 50 to 500 CFM	3		7	5921496
D3060	Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 10" Damper	1		6	5921482
D3060	Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper, 1001 to 2000 CFM	2		7	5921354
Fire Protection								
D4010	Throughout building	Fire Protection	Fair	Fire Suppression System, Existing Sprinkler Heads, by SF	80,000	SF	11	5921297
D4010	Sprinkler room	Fire Protection	Fair	Fire Riser, Wet Standpipe, 4 IN	2		26	5921358
D4030	Throughout building	Fire Protection	Fair	Fire Extinguisher, Type ABC, up to 20 LB	1		6	5921397
Electrical								
D5010	Roof	Electrical	Fair	Solar Power, Photovoltaic (PV) Panel, 24 SF	65		6	5921302
D5020	Boiler room	Electrical	Fair	Distribution Panel, 120/208 V	1		16	5921506
D5020	Boiler room	Electrical	Fair	Distribution Panel, 120/208 V	1		4	5921424
D5020	Electrical room	Electrical	Fair	Distribution Panel, 120/208 V, 400 AMP	1		9	5921456
D5030	Boiler room	Electrical	Fair	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	2		9	5921510
D5030	Boiler room	Electrical	Fair	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	2		9	5921372

UF L3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity		RUL	ID
D5030	Throughout building	Electrical	Fair	Electrical System, Wiring & Switches, High Density/Complexity	80,000	SF	26	5921356
D5040	Throughout building	Electrical	Fair	Interior Lighting System, Full Upgrade, High Density & Standard Fixtures	80,000	SF	6	5921311
Fire Alarm & Electronic Systems								
D6060	Throughout building	Fire Alarm & Electronic Systems	Fair	Intercom/PA System, Public Address Upgrade, Facility-Wide	80,000	SF	6	5921391
D7030	Throughout building	Fire Alarm & Electronic Systems	Fair	Security/Surveillance System, Full System Upgrade, Average Density	80,000	SF	8	5921411
D7050	Front hallway	Fire Alarm & Electronic Systems	Fair	Fire Alarm Panel, Fully Addressable	1		2	5921511
D7050	Throughout building	Fire Alarm & Electronic Systems	Fair	Fire Alarm System, Full System Upgrade, Standard Addressable, Upgrade/Install	80,000	SF	8	5921494
D7050	Utility closet	Fire Alarm & Electronic Systems	Fair	Fire Alarm Panel, Multiplex	1		3	5921321
Equipment & Furnishings								
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Condenser for Refrigerator/Freezer	1		4	5921319
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Convection Oven, Single	2		4	5921381
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Evaporator for Refrigerator/Freezer	1		4	5921382
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Condenser for Refrigerator/Freezer	1		4	5921432
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Dishwasher Commercial	1		3	5921299
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Evaporator for Refrigerator/Freezer	1		4	5921513
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Prep Table Refrigerated, Salad/Sandwich	1		4	5921313
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Exhaust Hood, 8 to 10 LF	1		3	5921348
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Mixer, Freestanding	1		11	5921430
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Icemaker, Freestanding	1		4	5921406
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Combination Freezer/Refrigerator	1		6	5921508
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Refrigerator, 2-Door Reach-In	1		9	5921310
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Slicer	1		4	5921331
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Range/Oven, 6-Burner	1		2	5921378
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels	1		4	5921359
E1040	Lab	Equipment & Furnishings	Fair	Laboratory Equipment, Exhaust Hood, Variable Volume 4 LF	1		3	5921374
E1040	Lab	Equipment & Furnishings	Fair	Laboratory Equipment, Exhaust Hood, Constant Volume 4 LF	1		3	5921298
E1060	Concession stand	Equipment & Furnishings	Fair	Residential Appliances, Refrigerator, 14 to 18 CF	1		4	5921457
E1060	Utility closet	Equipment & Furnishings	Fair	Residential Appliances, Washer/Dryer Combo Unit	1		4	5921395
E1060	Utility closet	Equipment & Furnishings	Fair	Residential Appliances, Washer/Dryer Combo Unit	1		4	5921454
E2010	Classrooms	Equipment & Furnishings	Fair	Casework, Cabinetry Economy	50	LF	6	5921455

UF L3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity		RUL	ID
E2010	Classrooms	Equipment & Furnishings	Fair	Casework, Cabinetry, Hardwood Standard	300	LF	3	5921379
E2010	Classrooms	Equipment & Furnishings	Fair	Casework, Cabinetry Hardwood High-End	50	LF	6	5921418
E2010	Gymnasium	Equipment & Furnishings	Fair	Bleachers, Telescoping Power-Operated, up to 15 Tier (per Seat)	250		6	5921353
E2010	Site	Equipment & Furnishings	Fair	Bleachers, Fixed Steel Frame, Aluminum Benches (per Seat)	200		12	5921438
E2010	High school gymnasium	Equipment & Furnishings	Fair	Bleachers, Telescoping Power-Operated, up to 15 Tier (per Seat)	500		6	5921407
Special Construction & Demo								
F1020	Site	Special Construction & Demo	Fair	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Standard	150	SF	16	5921303
F1020	Site	Special Construction & Demo	Fair	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Standard	750	SF	17	5921386
Pedestrian Plazas & Walkways								
G2020	Site	Pedestrian Plazas & Walkways	Fair	Parking Lots, Pavement, Asphalt, Mill & Overlay	32,000	SF	12	6122936
G2020	Site	Pedestrian Plazas & Walkways	Poor	Parking Lots, Aggregate/Stone, Surface Gravel, Replenish	15,500	SF	0	5921350
G2020	Site	Pedestrian Plazas & Walkways	Fair	Parking Lots, Pavement, Asphalt, Seal & Stripe	32,000	SF	3	5921507
G2020	Site	Pedestrian Plazas & Walkways	Fair	Parking Lots, Pavement, Asphalt, Mill & Overlay	30,000	SF	11	5921342
G2030	Site	Pedestrian Plazas & Walkways	Fair	Sidewalk, Asphalt	950	SF	11	5921417
G2030	Site	Pedestrian Plazas & Walkways	Good	Sidewalk, Concrete, Large Areas	5,500	SF	36	5921415
Athletic, Recreational & Playfield Areas								
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Play Structure, Multipurpose, Medium	1		6	5921419
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Basketball, Backboard/Rim/Pole	2		11	5921422
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Basketball, Backboard/Rim/Pole	6		11	5921499
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Soccer, Movable Practice Goal	2		8	5921442
G2050	Site	Athletic, Recreational & Playfield Areas	Poor	Athletic Surfaces & Courts, Basketball/General, Asphalt Pavement	5,250	SF	0	5921376
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Basketball, Backboard/Rim/Pole	2		11	5921383
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Scoreboard, Electronic Standard	2		11	5921433
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Basketball, Backboard/Rim/Pole	4		11	5921516
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Scoreboard, Electronic Standard	1		11	5921426
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Play Structure, Multipurpose, Large	1		6	5921439
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Outdoor Spectator Seating, Bleachers, Aluminum Benches (per Seat)	200		11	5921465
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Play Structure, Climbing Wall, by vertical surface area	25	SF	8	5921483
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Play Structure, Swing Set, 4 Seats	1		6	5921486
Sitework								
G2060	Site	Sitework	Fair	Fences & Gates, Fence, Chain Link 6'	750	LF	26	5921474
G2060	Site	Sitework	Fair	Fences & Gates, Fence, Wood Split 3-Rail	300	LF	4	5921473
G2060	Site	Sitework	Fair	Park Bench, Wood/Composite/Fiberglass	1		6	5921338
G2060	Site	Sitework	Fair	Fences & Gates, Fence, Chain Link 4'	250	LF	26	5921485
G2060	Site	Sitework	Fair	Park Bench, Precast Concrete	1		11	5921325
G2060	Site	Sitework	Fair	Bike Rack, Portable 6-10 Bikes	1		8	5921396

UF L3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity		RUL	ID
G2060	Site	Sitework	Fair	Picnic Table, Wood/Composite/Fiberglass	1		6	5921401
G2060	Site	Sitework	Fair	Park Bench, Wood/Composite/Fiberglass	9		8	5921334
G2060	Site	Sitework	Fair	Retaining Wall, Concrete Cast-in-Place	750	SF	6	5921368
G2060	Site	Sitework	Fair	Pedestrian Bridge, Wood Construction	85	SF	11	5921458
G2060	Site	Sitework	Fair	Park Bench, Metal Powder-Coated	2		6	5921388
G2060	Site	Sitework	Fair	Park Bench, Wood/Composite/Fiberglass	1		13	5921509
G4050	Site	Sitework	Fair	Pole Light Fixture w/ Lamps, any type 30' High, w/ LED Replacement, Replace/Install	2		6	5921363
G4050	Building exterior	Sitework	Fair	Exterior Fixture w/ Lamp, any type, w/ LED Replacement	1		6	5921380
G4050	Site	Sitework	Fair	Pole Light Fixture w/ Lamps, any type 30' High, w/ LED Replacement, Replace/Install	3		6	5921500
G4050	Building exterior	Sitework	Fair	Exterior Fixture w/ Lamp, any type, w/ LED Replacement	1		6	5921371
G4050	Site	Sitework	Fair	Pole Light Fixture w/ Lamps, any type 20' High, w/ LED Replacement, Replace/Install	3		6	5921410
G4050	Building exterior	Sitework	Fair	Exterior Fixture w/ Lamp, any type, w/ LED Replacement	2		6	5921434
G4050	Building exterior	Sitework	Fair	Exterior Fixture w/ Lamp, any type, w/ LED Replacement	7		6	5921493
G4050	Site	Sitework	Fair	Pole Light Fixture w/ Lamps, any type 30' High, w/ LED Replacement, Replace/Install	7		6	5921501

Appendix F: Replacement Reserves

Replacement Reserves Report
SO ROYALTON ELEMENTARY - Main Building

2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	Total Escalated Estimate
\$55,825	\$188,078	\$467,379	\$932,191	\$2,701	\$1,897,529	\$24,120	\$672,618	\$76,437	\$0	\$927,067	\$741,949	\$421,312	\$61,385	\$58,537	\$826,424	\$943,246	\$202,722	\$841,831	\$4,208	\$1,445	\$9,347,006

Uniformat Code	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost *	Subtotal	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	Deficiency Repair Estimate
B2010	5921445	Exterior Walls, Wood Siding, Replace	30	15	15	250	SF	\$10.00	\$2,500																\$2,500					\$2,500	
B2010	5921514	Exterior Walls, Vinyl Siding, Replace	30	15	15	4500	SF	\$6.00	\$27,000																\$27,000					\$27,000	
B2010	5921428	Exterior Walls, Brick Veneer, Replace	50	34	16	19500	SF	\$27.00	\$526,500																	\$526,500				\$526,500	
B2020	5921323	Window, Aluminum Double-Glazed, 16-25 SF, Replace	30	28	2	3	EA	\$950.00	\$2,850			\$2,850																		\$2,850	
B2020	5921427	Window, Aluminum Double-Glazed, 16-25 SF, Replace	30	15	15	101	EA	\$950.00	\$95,950																\$95,950					\$95,950	
B2020	5921478	Window, Vinyl-Clad Double-Glazed, 16-25 SF, Replace	30	15	15	15	EA	\$900.00	\$13,500																\$13,500					\$13,500	
B2020	5921505	Storefront, Glazing & Framing, Replace	30	15	15	250	SF	\$55.00	\$13,750																\$13,750					\$13,750	
B2050	5921322	Exterior Door, Aluminum-Framed & Glazed, Standard Swing, Replace	30	15	15	4	EA	\$1,300.00	\$5,200																\$5,200					\$5,200	
B2050	5921436	Exterior Door, Aluminum-Framed & Glazed, Standard Swing, Replace	30	15	15	3	EA	\$1,300.00	\$3,900																\$3,900					\$3,900	
B2050	5921420	Overhead/Dock Door, Aluminum, 12'x12' (144 SF), Replace	30	15	15	1	EA	\$4,400.00	\$4,400																\$4,400					\$4,400	
B2050	5921405	Overhead/Dock Door, Aluminum, 12'x12' (144 SF), Replace	30	15	15	1	EA	\$4,400.00	\$4,400																\$4,400					\$4,400	
B3010	5921491	Roofing, Single-Ply Membrane, TPO/PVC, Replace	20	17	3	30000	SF	\$17.00	\$510,000				\$510,000																	\$510,000	
B3010	5921296	Roofing, Single-Ply Membrane, EPDM, Replace	20	15	5	13000	SF	\$11.00	\$143,000					\$143,000																\$143,000	
B3060	5921367	Roof Skylight, per unit, up to 20 SF, Replace	30	15	15	2	EA	\$1,300.00	\$2,600																\$2,600					\$2,600	
C1030	5921481	Interior Door, Wood, Solid-Core Decorative High-End w/ Glazing, Replace	40	37	3	1	EA	\$2,100.00	\$2,100				\$2,100																	\$2,100	
C1030	5921390	Interior Door, Wood, Solid-Core Decorative High-End, Replace	40	37	3	1	EA	\$1,500.00	\$1,500				\$1,500																	\$1,500	
C1030	5921487	Interior Door, Steel, w/ Extensive Glazing, Replace	40	23	17	1	EA	\$950.00	\$950																		\$950			\$950	
C1030	5921393	Door Hardware, School, per Door, Replace	30	15	15	1	EA	\$400.00	\$400																\$400					\$400	
C1070	5921389	Suspended Ceilings, Hard Tile, Replacement w/ ACT, Replace	25	23	2	5000	SF	\$3.50	\$17,500			\$17,500																		\$17,500	
C1070	5921425	Suspended Ceilings, Acoustical Tile (ACT), Replace	25	15	10	78000	SF	\$3.50	\$273,000										\$273,000											\$273,000	
C1090	5921416	Toilet Partitions, Metal, Replace	20	17	3	8	EA	\$850.00	\$6,800				\$6,800																	\$6,800	
C1090	5921357	Lockers, Steel-Baked Enamel, 12" W x 15" D x 72" H, Replace	20	15	5	274	EA	\$500.00	\$137,000					\$137,000																\$137,000	
C1090	5921324	Lockers, Steel-Baked Enamel, 12" W x 15" D x 72" H, Replace	20	15	5	1	EA	\$500.00	\$500						\$500															\$500	
C2010	5921314	Wall Finishes, Ceramic Tile, Replace	40	33	7	500	SF	\$18.00	\$9,000							\$9,000														\$9,000	
C2010	5921399	Wall Finishes, any surface, Prep & Paint	10	8	2	132000	SF	\$1.50	\$198,000			\$198,000										\$198,000								\$396,000	
C2030	5921317	Flooring, any surface, w/ Epoxy Coating, Prep & Paint	10	8	2	500	SF	\$12.00	\$6,000			\$6,000										\$6,000								\$12,000	
C2030	5921490	Flooring, Quarry Tile, Replace	50	45	5	500	SF	\$26.00	\$13,000						\$13,000															\$13,000	
C2030	5921384	Flooring, Ceramic Tile, Replace	40	33	7	250	SF	\$18.00	\$4,500							\$4,500														\$4,500	
C2030	5921305	Flooring, Wood, Strip, Replace	30	15	15	6000	SF	\$15.00	\$90,000															\$90,000					\$90,000		
C2030	5921307	Flooring, Wood, Strip, Replace	30	15	15	8000	SF	\$15.00	\$120,000															\$120,000					\$120,000		
C2030	5921409	Flooring, Vinyl Sheeting, Replace	15	13	2	1000	SF	\$7.00	\$7,000			\$7,000																		\$7,000	
C2030	5921400	Flooring, Rubber Tile, Replace	15	13	2	1000	SF	\$9.00	\$9,000			\$9,000															\$7,000			\$14,000	
C2030	5921402	Flooring, Vinyl Tile (VCT), Replace	15	12	3	50000	SF	\$5.00	\$250,000				\$250,000														\$9,000			\$18,000	
C2030	5921403	Flooring, Vinyl Sheeting, Replace	15	12	3	500	SF	\$7.00	\$3,500				\$3,500															\$250,000		\$500,000	
C2030	5921300	Flooring, Laminate Faux Wood, Replace	15	8	7	2000	SF	\$7.00	\$14,000							\$14,000												\$3,500		\$7,000	
C2030	5921366	Flooring, Carpet, Commercial Tile, Replace	10	8	2	5000	SF	\$6.50	\$32,500			\$32,500										\$32,500								\$65,000	
C2030	5921332	Flooring, Carpet, Commercial Standard, Replace	10	8	2	3000	SF	\$7.50	\$22,500			\$22,500										\$22,500								\$45,000	
D1010	5921385	Vertical Lift, Wheelchair, 5' Rise, Renovate	25	11	14	1	EA	\$17,000.00	\$17,000															\$17,000						\$17,000	
D2010	5921441	Water Heater, Gas, Tankless, Replace	15	14	1	1	EA	\$1,600.00	\$1,600		\$1,600																			\$3,200	
D2010	5921330	Water Heater, Indirect, Replace	15	5	10	2	EA	\$4,800.00	\$9,600										\$9,600								\$1,600			\$9,600	

Appendix G:

Depleted Value Report

SO ROYALTON ELEMENTARY - Main Building

Depleted Value Index

64.8%

System	System Contribution	System Value
Air Compressor	\$ 1,999	\$ 7,270
Air Compressor	\$ 5,453	\$ 7,270
Air Ventilator	\$ 11,688	\$ 12,987
Athletic Surfaces & Courts	\$ 25,594	\$ 34,125
Bike Rack	\$ 250	\$ 500
Bleachers	\$ 101,250	\$ 112,500
Bleachers	\$ 17,600	\$ 24,000
Bleachers	\$ 112,500	\$ 225,000
Boiler	\$ 117,333	\$ 160,000
Boiler	\$ 20,960	\$ 26,200
Boiler	\$ 60,000	\$ 160,000
Boiler Supplemental Components	\$ 3,300	\$ 4,400
Casework	\$ 5,250	\$ 8,750
Casework	\$ 61,200	\$ 90,000
Casework	\$ 17,500	\$ 25,000
Distribution Panel	\$ 4,900	\$ 7,000
Distribution Panel	\$ 4,500	\$ 6,000
Distribution Panel	\$ 4,200	\$ 6,000
Door Hardware	\$ 200	\$ 400
Drinking Fountain	\$ 1,200	\$ 2,400
Drinking Fountain	\$ 563	\$ 1,500
Electrical System	\$ 240,000	\$ 320,000
Emergency Plumbing Fixtures	\$ 1,125	\$ 1,500
Exhaust Fan	\$ 1,800	\$ 2,400
Exhaust Fan	\$ 1,050	\$ 1,400
Exhaust Fan	\$ 840	\$ 2,800
Exhaust Fan	\$ 1,200	\$ 3,600
Exhaust Fan	\$ 816	\$ 1,200
Exhaust Fan	\$ 2,400	\$ 4,800
Exterior Door	\$ 2,600	\$ 5,200
Exterior Door	\$ 1,463	\$ 3,900
Exterior Door	\$ 480	\$ 600
Exterior Fixture w/ Lamp	\$ 225	\$ 600
Exterior Fixture w/ Lamp	\$ 560	\$ 600
Exterior Fixture w/ Lamp	\$ 1,040	\$ 1,200
Exterior Fixture w/ Lamp	\$ 2,730	\$ 4,200

System	System Contribution	System Value
Exterior Walls	\$ 10,500	\$ 21,000
Exterior Walls	\$ 30,938	\$ 82,500
Exterior Walls	\$ 315,900	\$ 526,500
Exterior Walls	\$ 2,000	\$ 2,500
Exterior Walls	\$ 13,500	\$ 27,000
Fences & Gates	\$ 12,600	\$ 15,750
Fences & Gates	\$ 5,400	\$ 6,000
Fences & Gates	\$ 3,900	\$ 4,500
Fire Alarm Panel	\$ 12,375	\$ 15,000
Fire Alarm Panel	\$ 3,200	\$ 4,000
Fire Alarm System	\$ 208,000	\$ 240,000
Fire Extinguisher	\$ 80	\$ 150
Fire Riser	\$ 16,000	\$ 20,000
Fire Suppression System	\$ 32,100	\$ 85,600
Flooring	\$ 4,800	\$ 6,000
Flooring	\$ 45,000	\$ 90,000
Flooring	\$ 26,000	\$ 32,500
Flooring	\$ 9,100	\$ 13,000
Flooring	\$ 5,600	\$ 7,000
Flooring	\$ 3,600	\$ 4,500
Flooring	\$ 18,000	\$ 22,500
Flooring	\$ 7,200	\$ 9,000
Flooring	\$ 11,200	\$ 14,000
Flooring	\$ 216,667	\$ 250,000
Flooring	\$ 21,600	\$ 36,000
Flooring	\$ 2,800	\$ 3,500
Flooring	\$ 90,000	\$ 120,000
Foodservice Equipment	\$ 2,940	\$ 6,300
Foodservice Equipment	\$ 7,840	\$ 11,200
Foodservice Equipment	\$ 4,293	\$ 4,600
Foodservice Equipment	\$ 5,040	\$ 6,300
Foodservice Equipment	\$ 10,750	\$ 21,500
Foodservice Equipment	\$ 3,335	\$ 4,600
Foodservice Equipment	\$ 3,525	\$ 4,700
Foodservice Equipment	\$ 2,588	\$ 4,500
Foodservice Equipment	\$ 4,900	\$ 14,000
Foodservice Equipment	\$ 2,513	\$ 6,700
Foodservice Equipment	\$ 32,375	\$ 35,000
Foodservice Equipment	\$ 1,725	\$ 4,600
Foodservice Equipment	\$ 2,960	\$ 3,200
Foodservice Equipment	\$ 4,500	\$ 6,000
Foodservice Equipment	\$ 1,473	\$ 1,700

System	System Contribution	System Value
HVAC System	\$ 41,600	\$ 48,000
HVAC System	\$ 300,000	\$ 400,000
Intercom/PA System	\$ 99,000	\$ 132,000
Interior Door	\$ 570	\$ 950
Interior Door	\$ 2,850	\$ 5,700
Interior Door	\$ 750	\$ 1,500
Interior Door	\$ 1,575	\$ 2,100
Interior Door	\$ 3,900	\$ 5,200
Interior Door	\$ 900	\$ 1,500
Interior Lighting System	\$ 260,000	\$ 400,000
Laboratory Equipment	\$ 6,000	\$ 8,000
Laboratory Equipment	\$ 1,120	\$ 2,800
Lockers	\$ 76,720	\$ 137,000
Lockers	\$ 500	\$ 500
Outdoor Spectator Seating	\$ 14,400	\$ 24,000
Overhead/Dock Door	\$ 2,640	\$ 4,400
Overhead/Dock Door	\$ 2,640	\$ 4,400
Packaged Unit	\$ 15,000	\$ 20,000
Park Bench	\$ 450	\$ 600
Park Bench	\$ 938	\$ 1,250
Park Bench	\$ 2,880	\$ 5,400
Park Bench	\$ 1,050	\$ 1,400
Park Bench	\$ 225	\$ 600
Parking Lots	\$ 84,000	\$ 112,000
Parking Lots	\$ 16,275	\$ 21,700
Parking Lots	\$ 10,800	\$ 14,400
Parking Lots	\$ 78,750	\$ 105,000
Pedestrian Bridge	\$ 6,120	\$ 12,750
Picnic Table	\$ 288	\$ 600
Play Structure	\$ 15,333	\$ 20,000
Play Structure	\$ 28,000	\$ 35,000
Play Structure	\$ 800	\$ 1,000
Play Structure	\$ 2,500	\$ 3,125
Plumbing System	\$ 1,008,000	\$ 1,120,000
Pole Light Fixture w/ Lamps	\$ 7,000	\$ 14,000
Pole Light Fixture w/ Lamps	\$ 15,300	\$ 20,400
Pole Light Fixture w/ Lamps	\$ 10,200	\$ 12,000
Pole Light Fixture w/ Lamps	\$ 26,133	\$ 49,000
Pump	\$ 6,100	\$ 12,200
Pump	\$ 7,093	\$ 15,200
Radiator	\$ 37,500	\$ 75,000
Residential Appliances	\$ 450	\$ 600

System	System Contribution	System Value
Residential Appliances	\$ 840	\$ 1,400
Residential Appliances	\$ 420	\$ 1,400
Retaining Wall	\$ 48,750	\$ 97,500
Roof Skylight	\$ 1,300	\$ 2,600
Roofing	\$ 71,500	\$ 143,000
Roofing	\$ 255,000	\$ 510,000
Security/Surveillance System	\$ 80,000	\$ 160,000
Shed/Gazebo/Shade Structure	\$ 3,750	\$ 7,500
Shed/Gazebo/Shade Structure	\$ 18,750	\$ 37,500
Shower	\$ 3,500	\$ 7,500
Shower	\$ 800	\$ 1,600
Sidewalk	\$ 2,613	\$ 5,225
Sidewalk	\$ 24,750	\$ 49,500
Sink/Lavatory	\$ 1,500	\$ 3,000
Sink/Lavatory	\$ 2,571	\$ 6,000
Sink/Lavatory	\$ 825	\$ 1,100
Sink/Lavatory	\$ 540	\$ 900
Sink/Lavatory	\$ 1,500	\$ 2,500
Sink/Lavatory	\$ 8,000	\$ 15,000
Sink/Lavatory	\$ 4,500	\$ 7,500
Sink/Lavatory	\$ 720	\$ 1,200
Sink/Lavatory	\$ 1,920	\$ 3,200
Sink/Lavatory	\$ 720	\$ 1,200
Sink/Lavatory	\$ 330	\$ 1,100
Sink/Lavatory	\$ 8,250	\$ 16,500
Sink/Lavatory	\$ 480	\$ 800
Solar Power	\$ 107,640	\$ 117,000
Sports Apparatus	\$ 11,400	\$ 19,000
Sports Apparatus	\$ 28,500	\$ 57,000
Sports Apparatus	\$ 700	\$ 1,400
Sports Apparatus	\$ 9,500	\$ 19,000
Sports Apparatus	\$ 6,400	\$ 16,000
Sports Apparatus	\$ 19,000	\$ 38,000
Sports Apparatus	\$ 6,800	\$ 8,000
Stairs	\$ 36,000	\$ 48,000
Storefront	\$ 10,313	\$ 13,750
Supplemental Components	\$ 840	\$ 5,600
Suspended Ceilings	\$ 12,250	\$ 17,500
Suspended Ceilings	\$ 136,500	\$ 273,000
Toilet	\$ 1,040	\$ 2,600
Toilet	\$ 3,120	\$ 5,200
Toilet	\$ 780	\$ 1,300

System	System Contribution	System Value
Toilet	\$ 6,864	\$ 15,600
Toilet	\$ 6,435	\$ 7,800
Toilet Partitions	\$ 5,440	\$ 6,800
Unit Heater	\$ 638	\$ 1,700
Unit Heater	\$ 567	\$ 1,700
Unit Ventilator	\$ 67,200	\$ 72,000
Unit Ventilator	\$ 4,500	\$ 9,000
Urinal	\$ 1,680	\$ 1,800
Urinal	\$ 3,300	\$ 6,600
Variable Frequency Drive	\$ -	\$ 17,600
Variable Frequency Drive	\$ -	\$ 10,600
Vertical Lift	\$ -	\$ 17,000
Wall Finishes	\$ -	\$ 9,000
Wall Finishes	\$ -	\$ 198,000
Wall Finishes	\$ -	\$ 4,500
Water Heater	\$ -	\$ 9,600
Water Heater	\$ -	\$ 1,600
Window	\$ -	\$ 95,950
Window	\$ -	\$ 2,850
Window	\$ -	\$ 13,500
Totals	\$ 5,282,169	\$ 8,150,252