FACILITY CONDITION ASSESSMENT

prepared for

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

RIVENDELL ACADEMY - East Wing
2972 Route 25A
Orford, NH 03777

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BV PROJECT #:
158982.22R000-384.379

DATE OF REPORT:
October 9, 2023

ON SITE DATE:
August 31, 2023

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1. Executive Summary

Property Overview and Assessment Details

General Information	
Property Type	School
School ID Number	
Main Address	2972 Route 25A, Orford, NH 03777
E911 Address Verification	No information available
GPS Location (Verified E911)	No information available
Site Developed	2000
Site Area	10.2 acres (estimated)
Parking Spaces	90 total spaces all in open lots; 3 of which are accessible.
Building Square Footage	45,778 (Verified)
Number of Stories	2 above grade
Supervisory Union/ District	Rivendell Interstate Supervisory District
Date(s) of Visit	August 31, 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 building was constructed in 2000 as the upper wing of Rivendell Academy. Rivendell academy is one of the few interstate districts in the country and serves a rural part of New Hampshire and Vermont.

Architectural

The building is of a steel framed construction. It has 2 types of roofing material, and EPDM material on the flat roof and an asphalt shingle roof on the gable roof. The gable roof is over the classroom spaces and the flat roof is over the gymnasium, atrium, and cafeteria spaces. The siding is a cement fiber material, and the windows are of some aluminum. The interior finishes mainly consist of VCT flooring in classrooms and hallways and wood flooring in the gymnasium. The walls are painted CMU and gypsum board. The interior finishes have been updated and replaced as needed.

Mechanical, Electrical, Plumbing and Fire (MEPF)

The heating needs for the building are supplied by a forced hot water system, this system is powered by 2 oil fired boilers that are original to the building. The hydronic piping is original to the building as well. There are 4 AHUs in the gymnasium and a single large AHU in the attic above the classroom spaces. They provide both heating and air circulation to the building and are original. There are roof top exhaust fans that provide air extraction. The electrical system consists of a large main distribution panel housed in the electrical room with smaller distribution panels scattered throughout the building. The entire electrical system is original to the building and still has time for its expected useful life. There is a hydraulic elevator serving both floors of the building. During the time of the site visit the elevator was inoperable but was scheduled for repair shortly after. The plumbing system consists of fixtures and appliances throughout the building. The hot water is provided by 2 main water heaters. There is a large indirect water heater and a smaller electric water heater, both of which are installed in the boiler room. There is a small supplemental electric water heater housed in the kitchen. The plumbing fixtures are original to the building but have been repaired and if needed replaced when necessary. There is a fire sprinkler system in the building. It has both wet pipe and dry pipe sections. It is original to the building. There is also a fully addressable fire alarm system throughout the building. There are fire extinguishers throughout the building.

Site

The building shares a site with the west wing of Rivendell Academy. There are large playfields to the left of the building with a parking lot to the front and right. There is a sidewalk to the rear of the building connecting it to the west wing.

Recommended Additional Studies

No additional studies recommended at this time.

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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:

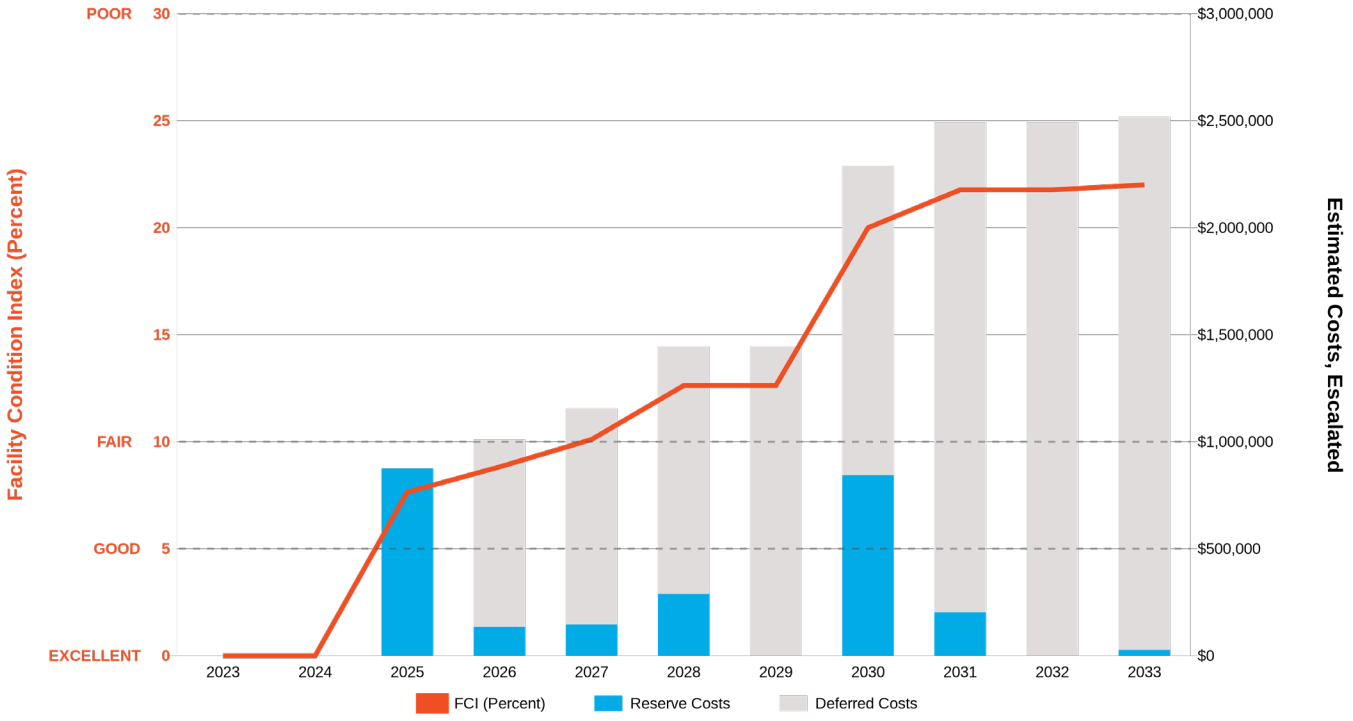
FCI Analysis		
Replacement Value	*Total SF*	*Cost/SF*
$11,444,500	45,778	$250
Current FCI	$0	**0.0%**
3-Year	$1,009,800	**8.8%**
5-Year	$1,445,100	**12.6%**
10-Year	$2,518,600	**22.0%**

Facility 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

Replacement Value: $11,444,500.00 **Inflation Rate: 3%** **Average Needs (per year - over next 10 years): $228,962.00**



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	0	0	0	0	0	0	0
2024	0	0	0	0	0	0	0
2025	824,832	50,232	0	0	50,232	875,064	0.08
2026	123,230	11,427	0	0	11,427	1,009,721	0.09
2027	130,540	16,384	0	0	16,384	1,156,645	0.1
2028	248,834	39,633	0	0	39,633	1,445,112	0.13
2029	0	0	0	0	0	1,445,112	0.13
2030	674,062	154,949	12,150	2,793	157,742	2,274,123	0.2
2031	159,900	42,657	0	0	42,657	2,476,680	0.22
2032	0	0	0	0	0	2,476,680	0.22
2033	20,100	6,913	0	0	6,913	2,503,693	0.22
2034	0	0	23,940	9,199	9,199	2,503,693	0.22
2035	389,401	165,792	153,650	65,418	231,210	3,058,886	0.27
2036	0	0	0	0	0	3,058,886	0.27
2037	1,700	871	0	0	871	3,061,457	0.27
2038	0	0	21,500	11,996	11,996	3,061,457	0.27
2039	0	0	0	0	0	3,061,457	0.27
2040	781,348	510,101	208,650	136,217	646,318	4,352,906	0.38
2041	3,540	2,487	67,220	47,218	49,705	4,358,933	0.38
2042	0	0	4,800	3,617	3,617	4,358,933	0.38

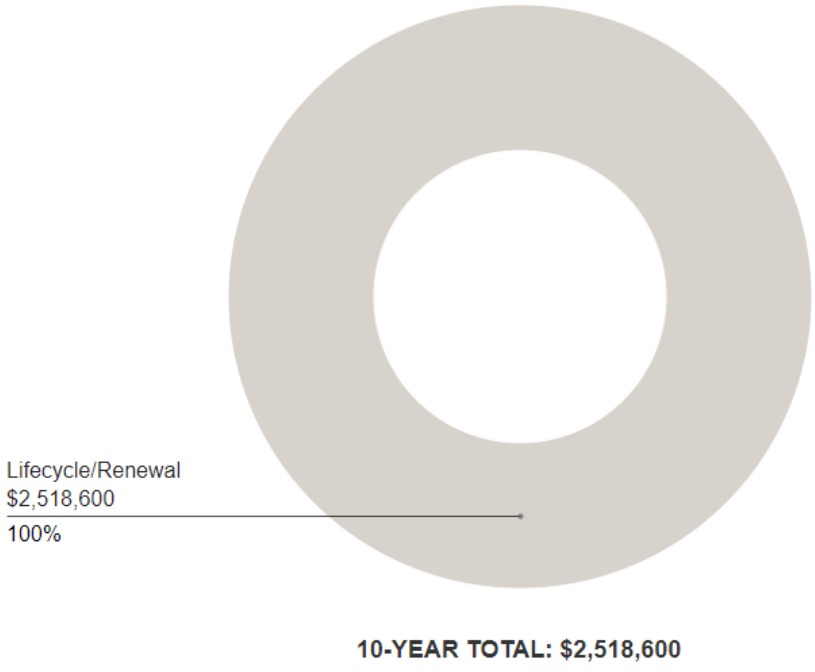
Plan Types

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, Safety 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)



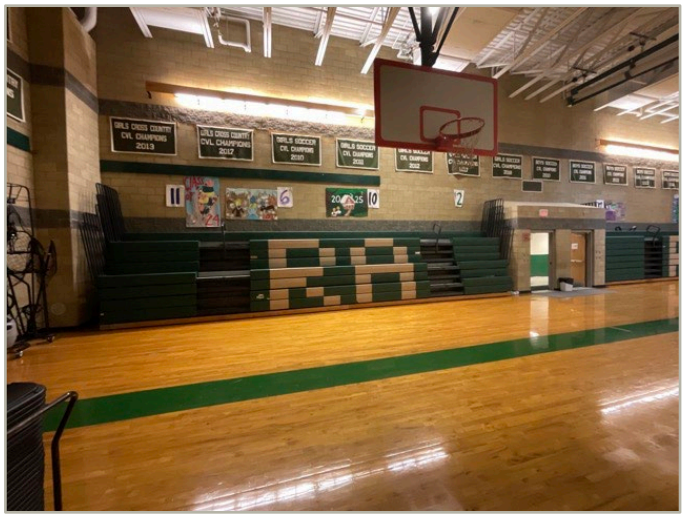
10-YEAR TOTAL: $2,518,600

Immediate Needs

ID	Location Description	UF Code	Description	Condition	Plan Type	Cost
Total (0 items)	0	0	0	0	0	$0
					Total	$0

No Key Findings For This Facility

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: Cement board siding Windows: Aluminum	Fair
Roof	Primary: Flat construction with single-ply EPDM membrane Secondary: Gable construction with asphalt shingles	Fair
Interiors	Walls: Painted gypsum board, painted CMU Floors: VCT, wood strip, coated concrete Ceilings: Painted gypsum board and ACT, Unfinished/exposed	Fair
Elevators	Passenger: 1 hydraulic car serving all 2 floors Wheelchair lift	Fair
Plumbing	Distribution: Copper supply and cast-iron waste & venting Hot Water: Indirect and Electric water heaters with integral tanks Fixtures: Toilets, urinals, and sinks in all restrooms	Fair
HVAC	Central System: Boilers, air handlers, feeding fan coil and hydronic baseboard radiators and cabinet terminal units Supplemental components: Suspended unit heaters	Fair
Safety and Security	Cameras, card readers, perimeter intrusion detection, 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 with dry-piped portion and fire extinguishers, and kitchen hood system	Fair

Electrical	Source & Distribution: Main distribution panel with copper wiring Interior Lighting: LED 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	Fair
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 signage; wood board fencing Limited park benches, picnic tables, trash receptacles	Fair
Landscaping & Topography	Limited landscaping features including lawns, trees, and bushes, Irrigation not present Low to moderate site slopes throughout	Fair
Utilities	Municipal water and sewer Local utility-provided electric with propane	Good
Site Lighting	Pole-mounted: LED Building-mounted: LED	Fair
Ancillary Structures	Garages and Storage sheds	Fair
Accessibility	Presently it does not appear an accessibility study is needed for this property.	
Key Issues and Findings	None observed at time of assessment.	

3. Supplemental Evaluations

Square Foot Verification

We have reviewed the square footage of 45,778 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

At the time of the onsite evaluation of this facility PCB air testing has not been conducted. Further ongoing information can be found on the Agency of Natural Resources PCB in Schools website Agency of Natural Resources PCB in Schools.

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	**51.3%**

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	-	-	-	$127,900	-	$127,900
Roofing	-	-	-	$30,400	$208,300	$238,700
Interiors	-	$494,400	$87,800	$173,700	$566,500	$1,322,400
Conveying	-	-	$19,100	$88,700	$7,100	$114,900
Plumbing	-	$4,700	$5,400	$86,300	$850,300	$946,600
HVAC	-	$111,700	$15,400	$422,000	$392,800	$941,900
Fire Protection	-	$52,000	-	-	-	$52,000
Electrical	-	-	-	$35,700	$308,800	$344,500
Fire Alarm & Electronic Systems	-	-	$177,300	-	$28,200	$205,500
Equipment & Furnishings	-	$32,400	$189,100	$87,600	$129,600	$438,600
Site Pavement	-	$113,100	$26,900	$14,900	$133,300	$288,300
Site Development	-	$66,800	$2,700	$6,400	-	$76,000
Site Utilities	-	-	$46,200	-	-	$46,200
TOTALS	**$0**	**$875,100**	**$569,900**	**$1,073,600**	**$2,624,900**	**$5,143,500**

4. 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.

5. 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 requires a public entity to make each of its existing facilities accessible to and usable by individuals with disabilities.
2. Require a public entity to take any action that would threaten or destroy the historic significance of an historic property; or
3. Require a public entity to take any action that it can demonstrate would result in a fundamental alteration in the nature of a service, program, or activity or in undue financial and administrative burdens. In those circumstances where personnel of the public entity believe that the proposed action would fundamentally alter the service, program, or activity or would result in undue financial and administrative burdens, a public entity has the burden of proving that compliance with 35.150(a) of this part would result in such alteration or burdens. The decision that compliance would result in such alteration or burdens must be made by the head of a public entity or his or her designee after considering all resources available for use in the funding and operation of the service, program, or activity, and must be accompanied by a written statement of the reasons for reaching that conclusion. If an action would result in such an alteration or such burdens, a public entity shall take any other action that would not result in such an alteration or such burdens but would nevertheless ensure that individuals with disabilities receive the benefits or services provided by the public entity.

Removal of barriers to accessibility should be addressed from a liability standpoint in order to comply with federal law, but the barriers may or may not be building code violations. The Americans with Disabilities Act Accessibility Guidelines are part of the ADA federal civil rights law pertaining to the disabled and are not a construction code. State and local jurisdictions have adopted the ADA Guidelines or have adopted other standards for accessibility as part of their construction codes.

During the FCA, Bureau Veritas performed a limited high-level accessibility review of the facility non-specific to any local regulations or codes. The scope of the visual observation was limited to the same areas observed while performing the FCA and the categories set forth in the 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 has 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.

6. 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.

7. 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 systems 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.

8. 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
Riverdell Academy - East Wing	**69%**	158982.22R000-384.379	High	45,778

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%

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.

9. Energy Audit

The purpose of this Energy Audit is to provide Rivendell Academy – East Wing 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

10. 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 meters 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 only

Electricity

Green Mountain Power provides electrical service to the facility.

The consumption pattern likely varies seasonally. Any seasonal variation in consumption is primarily attributed to periods when school is out of session, while the static base load primarily consists of domestic water heating, 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 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

An on-site well and on-site septic system satisfies the water and sewer requirements of the facility.

11. Energy Conservation Measures

Bureau Veritas has conducted an Energy Audit on Rivendell Academy – East Wing. 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 two 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	$19,244
Estimated Annual Cost Savings Related to ECMs	$7,806
Net Effective ECM Payback	2.47 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 (CO_2). 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 the criteria.

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.

Rivendell Academy East

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	Replace Existing Linear Fluorescent Lamps; Replace 306x F43T8 with F43LED; Replace 17x F44T8 with F44LED; Replace 18x F42T8 with F42LED; Replace 24x F42T8 with F42LED; Replace 17x F42T8 with F42LED; Replace 50x F43T8 with F43LED	Location: Throughout building	$16,537	0.0	0.0	44,628.7	0.0	152.3	10.6	$8,033	$580	$8,614	1.9	$86,292	15
2	Install Low Flow Faucet Aerators; Replace 13x 2GPM rated bathroom aerators with 0.5GPM WaterSense certified aerators	Location: Restrooms	$197	0.0	21.6	0.0	5.2	3.0	0.2	$60	$0	$60	3.3	$314	10
Totals for no/low cost items			$197	0.0	21.6	0.0	5.2	3.0	0.2	$60	$0	$60	3.3		
Total for capital cost			$16,537	0.0	0.0	44,628.7	0.0	152.3	10.6	$8,033	$580	$8,614	1.9		
Interactive Savings Discount @10%				0.0	-2.2	-4,462.9	-0.5	-15.5	-1.1	-$809	-$58	-$867			
Total Contingency Expenses @ 15%			$2,510												
Totals for improvements			$19,244	0.0	19.4	40,165.8	4.7	139.7	9.7	$7,284	$522	$7,806	2.5		

12. 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 Rivendell Academy - East Wing, 2972 Route 25A, Orford, NH 03777, 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

13. Appendices

Appendix A: Photographic Record
Appendix B: Site Plans
Appendix C: Stem/Steam Assessment
Appendix D: School Educational Capacity and Programming Space
Appendix E: Accessibility Review & Photos
Appendix F: Component Condition Report
Appendix G: Replacement Reserves
Appendix H: Depleted Value Report

Appendix A:
Photographic Record

Photographic Overview

1 - FRONT ELEVATION

2 - LEFT ELEVATION

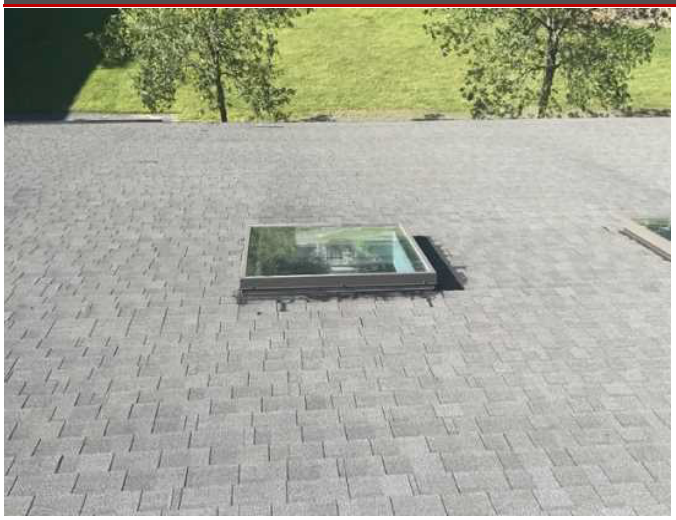
3 - REAR ELEVATION

4 - RIGHT ELEVATION

5 - EXTERIOR WALLS

6 - ROOFING

Photographic Overview



7 - ROOF SKYLIGHT

8 - CLASSROOM

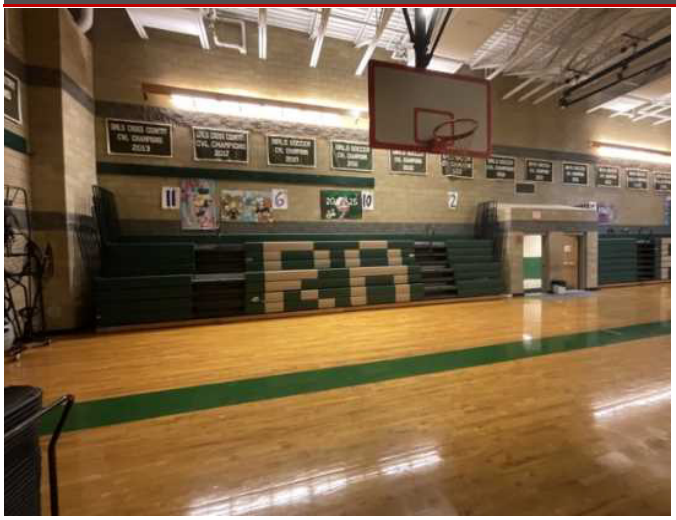
9 - BOILER

10 - DISTRIBUTION PANEL

11 - FIRE ALARM PANEL

12 - FOODSERVICE EQUIPMENT

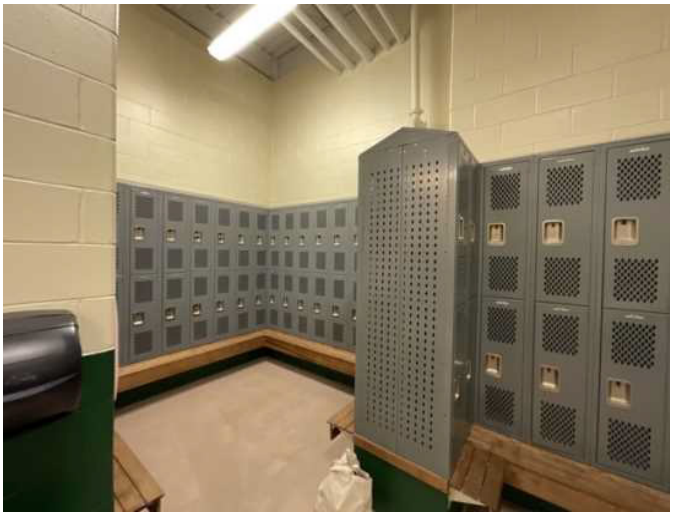
Photographic Overview



13 - GYMNASIUM

14 - PARKING LOTS

15 - PLAY STRUCTURE



16 - LOCKERS

17 - PARKING LOT

18 - AUDITORIUM

Appendix B:
Site Plans

Site Plan

Project Name	Project Number
Vermont Agency of Education	158982.22R000-384.379 Rivendell Academy – East Wing

Source	On-Site Date
Google MyMaps	August 31, 2023

Appendix C:
Stem/Steam Assessment

STEM/STEAM Evaluation

Property Name	STEM/STEAM Suitability Score	Project Number	School Type	Square Footage
Riverdell Academy - East Wing	**69%**	158982.22R000-384.379	High	45,778

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?	Yes	X	X	X
Does the facility have a Science Lab?	Yes		X	X
Does the facility have a Shop (Machine, Wood, Metal, etc.)?	Yes		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	3- Missing		1- Meets
Does the room have electrical outlet distribution along perimeter walls and from the ceiling?	2- Partial	2- Partial	2- Partial	2- Partial	2- Partial
Does the room have open shelving and lockable storage cabinets?	1- Meets	1- Meets	3- Missing		2- Partial
Does the room have technology connectivity and an interactive display?	1- Meets	1- Meets	1- Meets	1- Meets	2- Partial
Does the room have appropriate wet floor finishes?	1- Meets	1- Meets	1- Meets		1- Meets
Does the room have visual display boards?	1- Meets	1- Meets	1- Meets	1- Meets	1- Meets
Does the room have Prep/Storage Room?	2- Partial	1- Meets	3- Missing	2- Partial	1- Meets
Does the room have direct access to the exterior?	3- Missing	1- Meets	1- Meets		1- Meets
Does the room the ability to structurally suspend items from the ceiling?	3- Missing	2- Partial	3- Missing		2- Partial
Does the have goggle cabinets, fire extinguisher, eye wash and deluge shower?	2- Partial	1- Meets	3- Missing		3- Missing
Room Type Score	65%	90%	45%	75%	70%

Appendix D:
School Educational Capacity and Programming Space

School Educational Capacity and Programming Space

As part of Act 72, AOE has contracted with Bureau Veritas (BVNA) to complete a Facility Condition Assessment (FCA) of very public school building in Vermont. One component of the FCA report will be to identify whether the size and configuration of your current facility is meeting your school's educational and operational needs. In order for us to accurately capture your facility space needs, it is necessary for the AOE and BVNA to receive your input. To complete this brief survey, we recommend that you consult with school building leadership and facilities/custodial staff.

School Name

Rivendell Academy

SU/SD

Rivendell Interstate Supervisory District

Does the school have an adequate number of classrooms to meet student enrollment needs?

Yes

Please provide some explanation and/or context (known needs, barriers, other constraints outside of space, etc.):

We have classrooms that are unused.

Does the school have adequate space to accommodate all the current educational programs being offered?

Yes

Please describe capacity of your school building(s) to deliver educational programming:

All programs have a space.

Would the school provide additional programming if available space was provided?

No

.

We have space for additional programing.

Does the school have adequate confidential space to provide 1:1 services to students as required to maintain FERPA, HIPPA or IEP requirements?

Yes

Please describe:

Yes - SPED, OT, SLP and PT all have a space to work in.

Do the school have adequate administrative offices and/or office space for staff?

Yes

Please describe:

It's not ideal because our district office is onsite but we make it work so everyone has their own space.

Based on the size of enrollment does the size of the cafeteria, kitchen and gymnasium meet the current and future enrollment needs?

Yes

Please describe:

More than enough space.

Appendix E:
Accessibility Review & Photos

Visual Survey - ADA Standards for Accessible Design

Property Name: Rivendell Academy – East Wing

BV Project Number: 158982.22R000-384.379

Facility History & Interview

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

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 - 2ND ACCESSIBLE PARKING AREA

3 - PRIMARY PATH OF TRAVEL

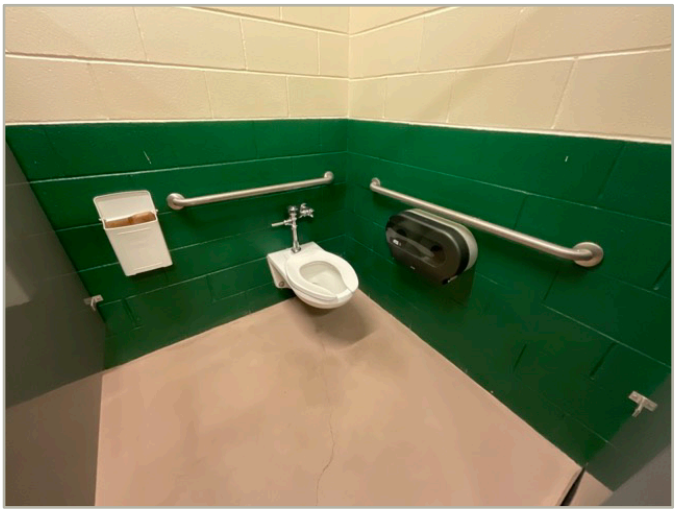
4 - CURB CUT

5 - MAIN ACCESSIBLE ENTRANCE

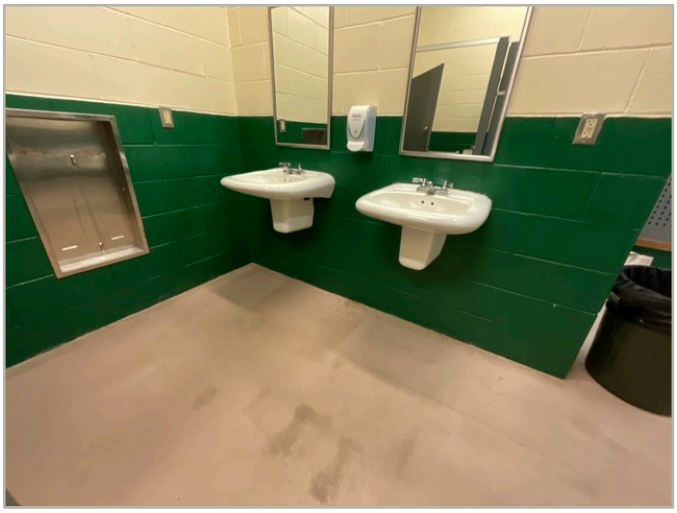
6 - SIGNAGE/HARDWARE

7 - ACCESSIBLE INTERIOR PATH

8 – INTERIOR PATH DOOR HARDWARE



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 *(ADA study recommended)*	Moderate Issues *(ADA study recommended)*	Minor Issues
Parking	- Needs full reconstruction - Excessive slopes over 3% require major re-grading - No level locations to add required spaces	- No or non-compliant curb cuts - Moderate difficulty to add required accessible spaces - Slopes close to compliant	- Painting of markings needed - Signage height non-compliant - Signage missing
Exterior Route	- Large areas of sidewalks with excessive slopes - No ramp when needed - Ramps with excessive slopes	- Ramps need rails - Ramps need rail extensions - All or most entrance door exterior maneuvering clearance areas with excessive slopes	- One entrance door exterior maneuvering clearance area with excessive slope - Non-compliant signage
Building Entrances	- No compliant entrance exists - Exterior entry door/s not wide enough - Entrance vestibule requires complete reconstruction / reconfiguration due to clearance	- Need significant # of lever handles - Need to add or modify automatic door opener - Entrance vestibule requires limited reconfigurations	- A few door knobs instead of lever handles - Non-compliant door threshold
Interior Route	- 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	- 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	- 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	- No elevator present when required - Elevator cab too small	- Panel control buttons not at compliant height - No hands-free emergency communication system - Elevator only has mechanical stops	- Audible/visual signals at every floor may be lacking - Minor signage / Braille issues
Public Restrooms	- No ADA RR on each accessible floor - Restroom(s) too small - Entire restroom(s) requires renovation - Water closet clearance requires moving walls	- Interior doors appear less than 32” wide - Missing or non-compliant grab bars - Easily fixable clearance issues	- 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 *(ADA study recommended)*	Moderate Issues *(ADA study recommended)*	Minor Issues
Kitchens/Kitchenettes	- Clear space for each appliance not present - Clearance between opposing counters too narrow	- Sink and counter too high - Sink knee and toe clearance not provided where required (built-in) - Less than 50% of cabinetry within reach range	- Dispensers not within reach range - Switches not within reach range - Missing sink pipe wraps if knee and toe clearance required
Playgrounds & Pools	- Large areas of surfacing non-compliant - Install compliant play structures - No pool lift provided	- Small area/s of surfacing or equipment non-compliant - Moderate issues with path of travel to playground/pool	- Minor issues with path of travel to playground/pool

Appendix F:
Component Condition Report

Component Condition Report | Rivendell Academy - East Wing

UF L3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
Structure								
B1080	Site	Structure	Fair	Stairs, Concrete, Exterior	170	SF	27	6972028
Facade								
B2010	Building Exterior	Facade	Fair	Exterior Walls, Fiber Cement Siding	32,500	SF	22	6971952
B2020	Building Exterior	Facade	Fair	Window, Vinyl-Clad Double-Glazed, up to 15 SF	130		7	6971961
B2050	Building Exterior	Facade	Fair	Exterior Door, Aluminum-Framed & Glazed, Standard Swing	20		7	6972015
Roofing								
B3010	Roof	Roofing	Fair	Roofing, Asphalt Shingle, 20-Year Standard	15,000	SF	12	6972019
B3010	Roof	Roofing	Fair	Roofing, Single-Ply Membrane, EPDM	8,100	SF	12	6972002
B3060	Roof	Roofing	Fair	Roof Skylight, per unit, up to 20 SF	19		7	6971969
Interiors								
C1030	Throughout building	Interiors	Fair	Door Hardware, School, per Door	83		7	6971996
C1030	Throughout	Interiors	Fair	Interior Door, Wood, Solid-Core	27		17	6971974
C1030	Throughout building	Interiors	Fair	Interior Door, Wood, Solid-Core Decorative High-End	20		17	6972018
C1070	Throughout building	Interiors	Fair	Suspended Ceilings, Acoustical Tile (ACT)	44,000	SF	2	6971997
C1090	Locker room	Interiors	Fair	Lockers, Steel-Baked Enamel, 12" W x 15" D x 72" H	156		4	6971962
C2010	Throughout building	Interiors	Fair	Wall Finishes, any surface, Prep & Paint	80,000	SF	2	6971986
C2030	Throughout	Interiors	Fair	Flooring, Vinyl Tile (VCT)	36,000	SF	2	6971975
C2030	Locker room	Interiors	Fair	Flooring, any surface, w/ Epoxy Coating, Prep & Paint	1,000	SF	2	6972039
C2030	Gymnasium	Interiors	Fair	Flooring, Wood, Strip	7,200	SF	7	6971946
Conveying								
D1010	Elevator	Conveying	Fair	Elevator Controls, Automatic, 1 Car	1		12	6972003
D1010	Elevator	Conveying	Fair	Passenger Elevator, Hydraulic, 3 Floors, Renovate	1		8	6972035
D1010	Hallway	Conveying	Fair	Vertical Lift, Wheelchair, 5' Rise, Renovate	1		4	6971993
Plumbing								
D2010	Boiler room	Plumbing	Fair	Water Heater, Indirect	1		4	6972029
D2010	Labs	Plumbing	Fair	Emergency Plumbing Fixtures, Eye Wash & Shower Station	3		7	6971988
D2010	Hallway	Plumbing	Fair	Drinking Fountain, Wall-Mounted, Single-Level	1		7	6971978
D2010	Restrooms	Plumbing	Fair	Toilet, Commercial Water Closet	17		7	6972005
D2010	Classrooms	Plumbing	Fair	Sink/Lavatory, Drop-In Style, Stainless Steel	2		7	6971990
D2010	Restrooms	Plumbing	Fair	Urinal, Standard	4		7	6971949
D2010	Restrooms	Plumbing	Fair	Sink/Lavatory, Wall-Hung, Vitreous China	13		7	6972030
D2010	Utility closet	Plumbing	Fair	Sink/Lavatory, Service Sink, Floor	2		12	6971960
D2010	Boiler room	Plumbing	Fair	Water Heater, Electric, Residential, 30 to 52 GAL	1		2	6971955
D2010	Kitchen	Plumbing	Fair	Water Heater, Booster	1		2	6972000
D2010	Hallway	Plumbing	Fair	Drinking Fountain, Wall-Mounted, Bi-Level	1		7	6972037
D2010	Throughout building	Plumbing	Fair	Plumbing System, Supply & Sanitary, Medium Density (excludes fixtures)	45,778	SF	17	6972006
D2010	Restrooms	Plumbing	Fair	Shower, Valve & Showerhead	12		7	6971947
D2010	Kitchen	Plumbing	Fair	Sink/Lavatory, Commercial Kitchen, 3-Bowl	1		8	6971954
HVAC								
D3020	Boiler room	HVAC	Fair	Boiler, Oil, HVAC	2		8	6972014
D3020	Throughout building	HVAC	Fair	Radiator, Hydronic, Baseboard (per LF)	200	LF	7	6972004

UF L3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
D3020	Attic	HVAC	Fair	Unit Heater, Hydronic	1		3	6971980
D3020	Kitchen	HVAC	Fair	Unit Heater, Hydronic	1		3	6971989
D3020	Boiler room	HVAC	Fair	Boiler Supplemental Components, Expansion Tank	1		18	6971987
D3050	Throughout building	HVAC	Fair	HVAC System, Hydronic Piping, 2-Pipe	45,778	SF	17	6972022
D3050	Throughout building	HVAC	Fair	HVAC System, Ductwork, Medium Density	45,778	SF	7	6971964
D3050	Boiler room	HVAC	Fair	Pump, Distribution, HVAC Heating Water	2		2	6972042
D3050	Attic	HVAC	Fair	Air Handler, Interior AHU, Easy/Moderate Access	1		7	6971977
D3050	Gymnasium	HVAC	Fair	Air Handler, Interior AHU, Easy/Moderate Access	4		2	6971951
D3050	Boiler room	HVAC	Fair	Pump, Distribution, HVAC Heating Water	1		2	6971995
D3060	Cafeteria	HVAC	Fair	Exhaust Fan, Propeller, 0.25 HP Motor	1		4	6971982
D3060	Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	1		3	6971985
D3060	Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 12" Damper	2		3	6972010
D3060	Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 12" Damper	2		3	6971991
D3060	Attic	HVAC	Fair	Axial Flow Fan, In-Line, up to 1 HP Motor	1		4	6972020
Fire Protection								
D4010	Throughout building	Fire Protection	Fair	Fire Suppression System, Existing Sprinkler Heads, by SF	45,778	SF	2	6972013
Electrical								
D5020	Electrical room	Electrical	Fair	Distribution Panel, 120/208 V	1		7	6971965
D5020	Electrical room	Electrical	Fair	Distribution Panel, 120/208 V	1		7	6972043
D5020	Electrical room	Electrical	Fair	Distribution Panel, 120/208 V	1		7	6972012
D5030	Boiler room	Electrical	Fair	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	2		12	6972041
D5040	Throughout building	Electrical	Fair	Interior Lighting System, Full Upgrade, Medium Density & Standard Fixtures	45,778	SF	12	6971966
Fire Alarm & Electronic Systems								
D7050	Hallway	Fire Alarm & Electronic Systems	Fair	Fire Alarm Panel, Fully Addressable	1		3	6972034
D7050	Throughout building	Fire Alarm & Electronic Systems	Fair	Fire Alarm System, Full System Upgrade, Standard Addressable, Upgrade/Install	45,778	SF	5	6972024
D7050	Hallway	Fire Alarm & Electronic Systems	Fair	Fire Alarm Panel, Annunciator	1		3	6971998
Equipment & Furnishings								
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Mixer, Freestanding	1		2	6972009
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Convection Oven, Double	1		2	6971999
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels	1		14	6971958
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Exhaust Hood, 3 to 6 LF	1		3	6972036
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Walk-In, Evaporator for Refigerator/Freezer	1		10	6971970
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Prep Table Refrigerated, Salad/Sandwich	1		12	6971956
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Walk-In, Evaporator for Refigerator/Freezer	1		10	6972007
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Refrigerator	1		3	6971950
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Exhaust Hood, 8 to 10 LF	2		5	6971971
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Freezer	1		3	6972023
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Dishwasher Commercial	1		5	6972017

UF L3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Food Warmer, Tabletop Drawers (Set of 4)	1		3	6972021
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Walk-In, Condenser for Refigerator/Freezer	1		10	6972038
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Refrigerator, 2-Door Reach-In	1		3	6971973
E1030	Cafeteria	Equipment & Furnishings	Fair	Foodservice Equipment, Refrigerator, 1-Door Reach-In	1		7	6971984
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Walk-In, Evaporator for Refigerator/Freezer	1		10	6972025
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Griddle	1		2	6971972
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Prep Table Refrigerated, Salad/Sandwich	1		3	6971957
E1040	Classrooms	Equipment & Furnishings	Fair	Laboratory Equipment, Lab Sink, Epoxy Resin	19		7	6971976
E1040	Labs	Equipment & Furnishings	Fair	Laboratory Equipment, Exhaust Hood, Constant Volume 4 LF	3		3	6971983
E2010	Gymnasium	Equipment & Furnishings	Fair	Bleachers, Telescoping Power-Operated, up to 15 Tier (per Seat)	100		5	6972033
E2010	Classrooms	Equipment & Furnishings	Fair	Casework, Cabinetry Economy	150	LF	3	6972008
Pedestrian Plazas & Walkways								
G2020	Site	Pedestrian Plazas & Walkways	Fair	Parking Lots, Pavement, Asphalt, Seal & Stripe	27,000	SF	2	6981744
G2020	Site	Pedestrian Plazas & Walkways	Fair	Parking Lots, Pavement, Asphalt, Mill & Overlay	27,000	SF	2	6972031
G2020	Site	Pedestrian Plazas & Walkways	Fair	Parking Lots, Aggregate/Stone, Surface Gravel, Replenish	17,100	SF	4	6971948
G2030	Site	Pedestrian Plazas & Walkways	Fair	Sidewalk, Concrete, Small Areas/Sections	700	SF	27	6972026
G2030	Site	Pedestrian Plazas & Walkways	Fair	Sidewalk, Asphalt	2,800	SF	12	6971959
Athletic, Recreational & Playfield Areas								
G2050	Gymnasium	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Basketball, Backboard/Rim/Pole	6		2	6972016
G2050	Gymnasium	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Scoreboard, Electronic Basic	2		2	6972027
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Soccer, Movable Practice Goal	2		7	6972011
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Play Structure, Swing Set, 4 Seats	1		3	6971963
Sitework								
G2060	Site	Sitework	Fair	Park Bench, Metal Powder-Coated	1		7	6971981
G2060	Site	Sitework	Fair	Picnic Table, Wood/Composite/Fiberglass	1		7	6971968
G2060	Site	Sitework	Fair	Flagpole, Metal	1		7	6972032
G4050	Site	Sitework	Fair	Pole Light Fixture w/ Lamps, any type 20' High, w/ LED Replacement, Replace/Install	8		5	6971992
G4050	Building exterior	Sitework	Fair	Exterior Fixture w/ Lamp, any type, w/ LED Replacement	4		5	6971979
G4050	Site	Sitework	Fair	Pole Light Fixture w/ Lamps, any type 20' High, w/ LED Replacement, Replace/Install	1		4	6971953

Appendix G:
Replacement Reserves

Replacement Reserves Report
Rivendell Academy - East Wing

2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	Total Escalated Estimate
$0	$0	$875,065	$134,657	$146,924	$288,467	$0	$843,954	$202,557	$0	$27,013	$33,139	$774,261	$0	$2,571	$33,496	$0	$1,636,316	$120,464	$8,417	$16,255	$5,143,555

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
B2020	6971961	Window, Vinyl-Clad Double-Glazed, up to 15 SF, Replace	30	23	7	130	EA	$600.00	$78,000								$78,000														$78,000
B2050	6972015	Exterior Door, Aluminum-Framed & Glazed, Standard Swing, Replace	30	23	7	20	EA	$1,300.00	$26,000								$26,000														$26,000
B3010	6972019	Roofing, Asphalt Shingle, 20-Year Standard, Replace	20	8	12	15000	SF	$3.80	$57,000													$57,000									$57,000
B3010	6972002	Roofing, Single-Ply Membrane, EPDM, Replace	20	8	12	8100	SF	$11.00	$89,100													$89,100									$89,100
B3060	6971969	Roof Skylight, per unit, up to 20 SF, Replace	30	23	7	19	EA	$1,300.00	$24,700								$24,700														$24,700
C1030	6971974	Interior Door, Wood, Solid-Core, Replace	40	23	17	27	EA	$700.00	$18,900																		$18,900				$18,900
C1030	6972018	Interior Door, Wood, Solid-Core Decorative High-End, Replace	40	23	17	20	EA	$1,500.00	$30,000																		$30,000				$30,000
C1030	6971996	Door Hardware, School, per Door, Replace	30	23	7	83	EA	$400.00	$33,200								$33,200														$33,200
C1070	6971997	Suspended Ceilings, Acoustical Tile (ACT), Replace	25	23	2	44000	SF	$3.50	$154,000			$154,000																			$154,000
C1090	6971962	Lockers, Steel-Baked Enamel, 12" W x 15" D x 72" H, Replace	20	16	4	156	EA	$500.00	$78,000					$78,000																	$78,000
C2010	6971986	Wall Finishes, any surface, Prep & Paint	10	8	2	80000	SF	$1.50	$120,000			$120,000										$120,000									$240,000
C2030	6972039	Flooring, any surface, w/ Epoxy Coating, Prep & Paint	10	8	2	1000	SF	$12.00	$12,000			$12,000										$12,000									$24,000
C2030	6971946	Flooring, Wood, Strip, Replace	30	23	7	7200	SF	$15.00	$108,000								$108,000														$108,000
C2030	6971975	Flooring, Vinyl Tile (VCT), Replace	15	13	2	36000	SF	$5.00	$180,000			$180,000															$180,000				$360,000
D1010	6972035	Passenger Elevator, Hydraulic, 3 Floors, Renovate	30	22	8	1	EA	$70,000.00	$70,000									$70,000													$70,000
D1010	6972003	Elevator Controls, Automatic, 1 Car, Replace	20	8	12	1	EA	$5,000.00	$5,000													$5,000									$5,000
D1010	6971993	Vertical Lift, Wheelchair, 5' Rise, Renovate	25	21	4	1	EA	$17,000.00	$17,000					$17,000																	$17,000
D2010	6972000	Water Heater, Booster, Replace	15	13	2	1	EA	$3,500.00	$3,500			$3,500															$3,500				$7,000
D2010	6971955	Water Heater, Electric, Residential, 30 to 52 GAL, Replace	15	13	2	1	EA	$900.00	$900			$900															$900				$1,800
D2010	6972029	Water Heater, Indirect, Replace	15	11	4	1	EA	$4,800.00	$4,800					$4,800															$4,800		$9,600
D2010	6972006	Plumbing System, Supply & Sanitary, Medium Density (excludes fixtures), Replace	40	23	17	45778	SF	$11.00	$503,558																		$503,558				$503,558
D2010	6971988	Emergency Plumbing Fixtures, Eye Wash & Shower Station, Replace	20	13	7	3	EA	$2,300.00	$6,900								$6,900														$6,900
D2010	6971978	Drinking Fountain, Wall-Mounted, Single-Level, Replace	15	8	7	1	EA	$1,200.00	$1,200								$1,200														$1,200
D2010	6972005	Toilet, Commercial Water Closet, Replace	30	23	7	17	EA	$1,300.00	$22,100								$22,100														$22,100
D2010	6971949	Urinal, Standard, Replace	30	23	7	4	EA	$1,100.00	$4,400								$4,400														$4,400
D2010	6972030	Sink/Lavatory, Wall-Hung, Vitreous China, Replace	30	23	7	13	EA	$1,500.00	$19,500								$19,500														$19,500
D2010	6972037	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	8	7	1	EA	$1,500.00	$1,500								$1,500														$1,500
D2010	6971947	Shower, Valve & Showerhead, Replace	30	23	7	12	EA	$800.00	$9,600								$9,600														$9,600
D2010	6971990	Sink/Lavatory, Drop-In Style, Stainless Steel, Replace	30	23	7	2	EA	$1,200.00	$2,400								$2,400														$2,400
D2010	6971954	Sink/Lavatory, Commercial Kitchen, 3-Bowl, Replace	30	22	8	1	EA	$2,500.00	$2,500									$2,500													$2,500
D2010	6971960	Sink/Lavatory, Service Sink, Floor, Replace	35	23	12	2	EA	$800.00	$1,600													$1,600									$1,600
D3020	6972014	Boiler, Oil, HVAC, Replace	30	22	8	2	EA	$43,700.00	$87,400									$87,400													$87,400
D3020	6971980	Unit Heater, Hydronic, Replace	20	17	3	1	EA	$2,100.00	$2,100				$2,100																		$2,100
D3020	6971989	Unit Heater, Hydronic, Replace	20	17	3	1	EA	$1,100.00	$1,100				$1,100																		$1,100
D3020	6972004	Radiator, Hydronic, Baseboard (per LF), Replace	30	23	7	200	LF	$150.00	$30,000								$30,000														$30,000
D3020	6971987	Boiler Supplemental Components, Expansion Tank, Replace	40	22	18	1	EA	$3,540.00	$3,540																			$3,540			$3,540

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
D3050	6972042	Pump, Distribution, HVAC Heating Water, Replace	25	23	2	2	EA	$6,100.00	$12,200			$12,200																			$12,200
D3050	6971995	Pump, Distribution, HVAC Heating Water, Replace	15	13	2	1	EA	$5,100.00	$5,100			$5,100															$5,100				$10,200
D3050	6972022	HVAC System, Hydronic Piping, 2-Pipe, Replace	40	23	17	45778	SF	$5.00	$228,890																		$228,890				$228,890
D3050	6971951	Air Handler, Interior AHU, Easy/Moderate Access, Replace	25	23	2	4	EA	$22,000.00	$88,000			$88,000																			$88,000
D3050	6971977	Air Handler, Interior AHU, Easy/Moderate Access, Replace	30	23	7	1	EA	$40,000.00	$40,000								$40,000														$40,000
D3050	6971964	HVAC System, Ductwork, Medium Density, Replace	30	23	7	45778	SF	$4.00	$183,112								$183,112														$183,112
D3060	6972020	Axial Flow Fan, In-Line, up to 1 HP Motor, Replace	20	16	4	1	EA	$2,100.00	$2,100					$2,100																	$2,100
D3060	6971985	Exhaust Fan, Roof or Wall-Mounted, 16" Damper, Replace	20	17	3	1	EA	$2,400.00	$2,400				$2,400																		$2,400
D3060	6972010	Exhaust Fan, Roof or Wall-Mounted, 12" Damper, Replace	20	17	3	2	EA	$1,400.00	$2,800				$2,800																		$2,800
D3060	6971991	Exhaust Fan, Roof or Wall-Mounted, 12" Damper, Replace	20	17	3	2	EA	$1,400.00	$2,800				$2,800																		$2,800
D3060	6971982	Exhaust Fan, Propeller, 0.25 HP Motor, Replace	20	16	4	1	EA	$700.00	$700					$700																	$700
D4010	6972013	Fire Suppression System, Existing Sprinkler Heads, by SF, Replace	25	23	2	45778	SF	$1.07	$48,982			$48,982																			$48,982
D5020	6971965	Distribution Panel, 120/208 V, Replace	30	23	7	1	EA	$11,500.00	$11,500								$11,500														$11,500
D5020	6972043	Distribution Panel, 120/208 V, Replace	30	23	7	1	EA	$6,000.00	$6,000								$6,000														$6,000
D5020	6972012	Distribution Panel, 120/208 V, Replace	30	23	7	1	EA	$11,500.00	$11,500								$11,500														$11,500
D5030	6972041	Variable Frequency Drive, VFD, by HP of Motor, Replace/Install	20	8	12	2	EA	$5,300.00	$10,600													$10,600									$10,600
D5040	6971966	Interior Lighting System, Full Upgrade, Medium Density & Standard Fixtures, Replace	20	8	12	45778	SF	$4.50	$206,001													$206,001									$206,001
D7050	6972034	Fire Alarm Panel, Fully Addressable, Replace	15	12	3	1	EA	$15,000.00	$15,000				$15,000															$15,000			$30,000
D7050	6971998	Fire Alarm Panel, Annunciator, Replace	15	12	3	1	EA	$1,580.00	$1,580				$1,580															$1,580			$3,160
D7050	6972024	Fire Alarm System, Full System Upgrade, Standard Addressable, Upgrade/Install	20	15	5	45778	SF	$3.00	$137,334						$137,334																$137,334
E1030	6972009	Foodservice Equipment, Mixer, Freestanding, Replace	25	23	2	1	EA	$14,000.00	$14,000			$14,000																			$14,000
E1030	6971999	Foodservice Equipment, Convection Oven, Double, Replace	10	8	2	1	EA	$9,500.00	$9,500			$9,500										$9,500									$19,000
E1030	6971972	Foodservice Equipment, Griddle, Replace	15	13	2	1	EA	$7,000.00	$7,000			$7,000															$7,000				$14,000
E1030	6972036	Foodservice Equipment, Exhaust Hood, 3 to 6 LF, Replace	15	12	3	1	EA	$3,300.00	$3,300				$3,300															$3,300			$6,600
E1030	6971950	Foodservice Equipment, Walk-In, Refrigerator, Replace	20	17	3	1	EA	$15,000.00	$15,000				$15,000																		$15,000
E1030	6972023	Foodservice Equipment, Walk-In, Freezer, Replace	20	17	3	1	EA	$25,000.00	$25,000				$25,000																		$25,000
E1030	6972021	Foodservice Equipment, Food Warmer, Tabletop Drawers (Set of 4), Replace	15	12	3	1	EA	$5,700.00	$5,700				$5,700															$5,700			$11,400
E1030	6971973	Foodservice Equipment, Refrigerator, 2-Door Reach-In, Replace	15	12	3	1	EA	$4,600.00	$4,600				$4,600															$4,600			$9,200
E1030	6971957	Foodservice Equipment, Prep Table Refrigerated, Salad/Sandwich, Replace	15	12	3	1	EA	$4,700.00	$4,700				$4,700															$4,700			$9,400
E1030	6971971	Foodservice Equipment, Exhaust Hood, 8 to 10 LF, Replace	15	10	5	2	EA	$4,500.00	$9,000						$9,000															$9,000	$18,000
E1030	6972017	Foodservice Equipment, Dishwasher Commercial, Replace	10	5	5	1	EA	$21,500.00	$21,500						$21,500											$21,500					$43,000
E1030	6971984	Foodservice Equipment, Refrigerator, 1-Door Reach-In, Replace	15	8	7	1	EA	$2,700.00	$2,700								$2,700														$2,700
E1030	6971970	Foodservice Equipment, Walk-In, Evaporator for Refigerator/Freezer, Replace	15	5	10	1	EA	$4,600.00	$4,600											$4,600											$4,600
E1030	6972007	Foodservice Equipment, Walk-In, Evaporator for Refigerator/Freezer, Replace	15	5	10	1	EA	$4,600.00	$4,600											$4,600											$4,600

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
E1030	6972038	Foodservice Equipment, Walk-In, Condenser for Refigerator/Freezer, Replace	15	5	10	1	EA	$6,300.00	$6,300											$6,300											$6,300
E1030	6972025	Foodservice Equipment, Walk-In, Evaporator for Refigerator/Freezer, Replace	15	5	10	1	EA	$4,600.00	$4,600											$4,600											$4,600
E1030	6971956	Foodservice Equipment, Prep Table Refrigerated, Salad/Sandwich, Replace	15	3	12	1	EA	$4,700.00	$4,700													$4,700									$4,700
E1030	6971958	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels, Replace	15	1	14	1	EA	$1,700.00	$1,700															$1,700							$1,700
E1040	6971983	Laboratory Equipment, Exhaust Hood, Constant Volume 4 LF, Replace	15	12	3	3	EA	$2,800.00	$8,400				$8,400															$8,400			$16,800
E1040	6971976	Laboratory Equipment, Lab Sink, Epoxy Resin, Replace	30	23	7	19	EA	$2,450.00	$46,550								$46,550														$46,550
E2010	6972008	Casework, Cabinetry Economy, Replace	20	17	3	150	LF	$175.00	$26,250				$26,250																		$26,250
E2010	6972033	Bleachers, Telescoping Power-Operated, up to 15 Tier (per Seat), Replace	20	15	5	100	EA	$450.00	$45,000						$45,000																$45,000
G2020	6972031	Parking Lots, Pavement, Asphalt, Mill & Overlay	25	23	2	27000	SF	$3.50	$94,500			$94,500																			$94,500
G2020	6981744	Parking Lots, Pavement, Asphalt, Seal & Stripe	5	3	2	27000	SF	$0.45	$12,150			$12,150					$12,150					$12,150					$12,150				$48,600
G2020	6971948	Parking Lots, Aggregate/Stone, Surface Gravel, Replenish	7	3	4	17100	SF	$1.40	$23,940					$23,940							$23,940							$23,940			$71,820
G2030	6971959	Sidewalk, Asphalt, Replace	25	13	12	2800	SF	$5.50	$15,400													$15,400									$15,400
G2050	6972016	Sports Apparatus, Basketball, Backboard/Rim/Pole, Replace	25	23	2	6	EA	$9,500.00	$57,000			$57,000																			$57,000
G2050	6972027	Sports Apparatus, Scoreboard, Electronic Basic, Replace	25	23	2	2	EA	$3,000.00	$6,000			$6,000																			$6,000
G2050	6972011	Sports Apparatus, Soccer, Movable Practice Goal, Replace	15	8	7	2	EA	$700.00	$1,400								$1,400														$1,400
G2050	6971963	Play Structure, Swing Set, 4 Seats, Replace	20	17	3	1	EA	$2,500.00	$2,500				$2,500																		$2,500
G2060	6971981	Park Bench, Metal Powder-Coated, Replace	20	13	7	1	EA	$700.00	$700								$700														$700
G2060	6971968	Picnic Table, Wood/Composite/Fiberglass, Replace	20	13	7	1	EA	$600.00	$600								$600														$600
G2060	6972032	Flagpole, Metal, Replace	30	23	7	1	EA	$2,500.00	$2,500								$2,500														$2,500
G4050	6971953	Pole Light Fixture w/ Lamps, any type 20' High, w/ LED Replacement, Replace/Install	20	16	4	1	EA	$4,000.00	$4,000					$4,000																	$4,000
G4050	6971992	Pole Light Fixture w/ Lamps, any type 20' High, w/ LED Replacement, Replace/Install	20	15	5	8	EA	$4,200.00	$33,600						$33,600																$33,600
G4050	6971979	Exterior Fixture w/ Lamp, any type, w/ LED Replacement, Replace	20	15	5	4	EA	$600.00	$2,400						$2,400																$2,400
								Totals, Unescalated		$0	$0	$824,832	$123,230	$130,540	$248,834	$0	$686,212	$159,900	$0	$20,100	$23,940	$543,051	$0	$1,700	$21,500	$0	$989,998	$70,760	$4,800	$9,000	$3,858,397
								Totals, Escalated (3.0% inflation, compounded annually)		$0	$0	$875,065	$134,657	$146,924	$288,467	$0	$843,954	$202,557	$0	$27,013	$33,139	$774,261	$0	$2,571	$33,496	$0	$1,636,316	$120,464	$8,417	$16,255	$5,143,555

Appendix H:
Depleted Value Report

Rivendell Academy - East Wing

Depleted Value Index

51.3%

System	System Contribution	System Value
Air Handler	$ 21,333	$ 40,000
Air Handler	$ 46,933	$ 88,000
Axial Flow Fan	$ 840	$ 2,100
Bleachers	$ 29,250	$ 45,000
Boiler	$ 69,920	$ 87,400
Boiler Supplemental Components	$ 3,009	$ 3,540
Casework	$ 22,313	$ 26,250
Distribution Panel	$ 9,775	$ 11,500
Distribution Panel	$ 4,600	$ 6,000
Distribution Panel	$ 8,625	$ 11,500
Door Hardware	$ 16,969	$ 33,200
Drinking Fountain	$ 960	$ 1,200
Drinking Fountain	$ 1,200	$ 1,500
Elevator Controls	$ 3,750	$ 5,000
Emergency Plumbing Fixtures	$ 6,348	$ 6,900
Exhaust Fan	$ 537	$ 700
Exhaust Fan	$ 2,080	$ 2,400
Exhaust Fan	$ 2,240	$ 2,800
Exhaust Fan	$ 2,147	$ 2,800
Exterior Door	$ 23,920	$ 26,000
Exterior Fixture w/ Lamp	$ 1,920	$ 2,400
Exterior Walls	$ 23,833	$ 357,500
Fire Alarm Panel	$ 12,000	$ 15,000
Fire Alarm Panel	$ 527	$ 1,580
Fire Alarm System	$ 27,467	$ 137,334
Fire Suppression System	$ 16,327	$ 48,982
Flagpole	$ 2,125	$ 2,500
Flooring	$ 120,000	$ 180,000
Flooring	$ 10,200	$ 12,000
Flooring	$ 54,000	$ 108,000
Foodservice Equipment	$ 11,200	$ 14,000
Foodservice Equipment	$ 3,167	$ 9,500
Foodservice Equipment	$ 1,360	$ 1,700
Foodservice Equipment	$ 1,760	$ 3,300
Foodservice Equipment	$ 1,533	$ 4,600
Foodservice Equipment	$ 4,073	$ 4,700
Foodservice Equipment	$ 3,680	$ 4,600

System	System Contribution	System Value
Foodservice Equipment	$ 8,625	$ 15,000
Foodservice Equipment	$ 6,900	$ 9,000
Foodservice Equipment	$ 14,375	$ 25,000
Foodservice Equipment	$ 12,363	$ 21,500
Foodservice Equipment	$ 2,280	$ 5,700
Foodservice Equipment	$ 4,830	$ 6,300
Foodservice Equipment	$ 3,680	$ 4,600
Foodservice Equipment	$ 2,160	$ 2,700
Foodservice Equipment	$ 2,990	$ 4,600
Foodservice Equipment	$ 4,200	$ 7,000
Foodservice Equipment	$ 4,324	$ 4,700
HVAC System	$ 98,096	$ 228,890
HVAC System	$ 134,282	$ 183,112
Interior Door	$ 12,285	$ 18,900
Interior Door	$ 25,500	$ 30,000
Interior Lighting System	$ 118,451	$ 206,001
Laboratory Equipment	$ 34,913	$ 46,550
Laboratory Equipment	$ 6,720	$ 8,400
Lockers	$ 71,760	$ 78,000
Park Bench	$ 607	$ 700
Parking Lots	$ 9,315	$ 12,150
Parking Lots	$ 72,450	$ 94,500
Parking Lots	$ 9,576	$ 23,940
Passenger Elevator	$ 28,000	$ 70,000
Picnic Table	$ 460	$ 600
Play Structure	$ 1,150	$ 2,500
Plumbing System	$ 261,850	$ 503,558
Pole Light Fixture w/ Lamps	$ 25,760	$ 33,600
Pole Light Fixture w/ Lamps	$ 3,067	$ 4,000
Pump	$ 8,017	$ 12,200
Pump	$ 3,740	$ 5,100
Radiator	$ 27,600	$ 30,000
Roof Skylight	$ 22,724	$ 24,700
Roofing	$ 30,400	$ 57,000
Roofing	$ 40,986	$ 89,100
Shower	$ 8,832	$ 9,600
Sidewalk	$ 10,733	$ 14,000
Sidewalk	$ 13,090	$ 15,400
Sink/Lavatory	$ 2,040	$ 2,400
Sink/Lavatory	$ 14,950	$ 19,500
Sink/Lavatory	$ 640	$ 1,600
Sink/Lavatory	$ 2,100	$ 2,500
Sports Apparatus	$ 45,600	$ 57,000

System	System Contribution	System Value
Sports Apparatus	$ 4,400	$ 6,000
Sports Apparatus	$ 1,213	$ 1,400
Stairs	$ 8,103	$ 9,350
Suspended Ceilings	$ 118,067	$ 154,000
Toilet	$ -	$ 22,100
Unit Heater	$ -	$ 2,100
Unit Heater	$ -	$ 1,100
Urinal	$ -	$ 4,400
Variable Frequency Drive	$ -	$ 10,600
Vertical Lift	$ -	$ 17,000
Wall Finishes	$ -	$ 120,000
Water Heater	$ -	$ 4,800
Water Heater	$ -	$ 900
Water Heater	$ -	$ 3,500
Window	$ -	$ 78,000
Totals	**$ 1,916,124**	**$ 3,738,337**