FACILITY CONDITION ASSESSMENT

prepared for

Vermont Agency of Education_FCA Phase Two
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ON SITE DATE:
August 10, 2023

UNION MEMORIAL SCHOOL - Main Building (PS309-)
253 Main Street
Colchester VT,05446

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1. Executive Summary

Property Overview and Assessment Details

General Information	
Property Type	School
School ID Number	PS309-
Main Address	253 Main Street, Colchester VT,05446
E911 Address Verification	Zip 05446-7225, Standardized, Fixed abbreviations, Matched Street and city and state, Confirmed entire address
GPS Location (Verified E911)	Main Building 44.54856, -73.16071
Site Developed	1956
Site Area	5 acres (estimated)
Parking Spaces	70 total spaces all in open lots; 3 of which are accessible.
Building Square Footage	24,546 (Verified)
Number of Stories	1 above grade
Supervisory Union/ District	Colchester SD
Date(s) of Visit	August 10, 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 school is a single-story building that does not appear to have been changed since construction.

Architectural

The facade has been upgraded over the years. The roof has been replaced, the windows are replacements, and the siding has been replaced. There are a couple holes in the siding. One is right near the front entry. The finishes have been updated and are as expected. The casework cabinets have worn finishes, some of the countertops have some delamination and should be replaced. Some of the classrooms have large (almost full sized) carpet/rugs in the rooms. The restrooms are slowing being changed over to sheet vinyl from VCT. The ceramic tile is being replaced with FRP.

Mechanical, Electrical, Plumbing and Fire (MEPF)

The interior air handlers have not been upgraded and should be replaced. It is likely that the external air handlers have been upgraded. But replacement with more efficient equipment should be considered. The unit-vents/fan coils in the classrooms are in the first phase of replacement cycle. This included upgrading of the controls to a digital system. The classrooms are cooled with window air conditioners are installed and removed seasonally. The boiler room have been upgraded with new boilers and pumps with built-in variable frequency drives. The ductwork is also likely original and should be replaced. Addition of air conditioning to the building is something that might be added to replaced air handlers. The electrical distribution system is likely original to the building and should be upgraded to meet the needs of a modern school. The lighting has had most of the screw-in lamps upgraded to LED lamps or fixtures. The fluorescent lamps /fixtures will need to be upgraded to LED. Based on the fixture coverings in used light levels should be reviewed prior to aa direct replacement. The exterior lighting updating to LED should be completed. The motors on the HVAC equipment should be updated with Variable Frequency Drives to reduce operating costs. The plumbing fixtures have been changed at some point in the building history. The plumbing fixtures could be upgraded to more efficient flow rates. The water heaters have been changed. The 2-pipe hydronic system, the sanitary and waste piping should be replaced based on the age. The building is equipped with a fire alarm system and AED. The fire protection is limited to portable fire extinguishers and a sprinkler system in the utility room.

Site

The site lacks the required ADA parking stalls. The pavement in areas has been seal coated. The whole lot and drive lanes should be seal coated and striped. The playground needs to have the wood chips replenished. Pile of chips is on site for this. The classroom exterior doors are not equipped with ramps. The playground equipment has been upgraded over the years.

Recommended Additional Studies

Installation of air conditioning for the whole facility. A professional engineer must be retained to analyze the existing condition, provide recommendations and, if necessary, estimate the scope and cost of any required repairs. The cost of this study is included in the cost tables. Due to the ambiguity of the required repair scope at the time of this assessment, the cost for any possible subsequent repairs is not included.

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:

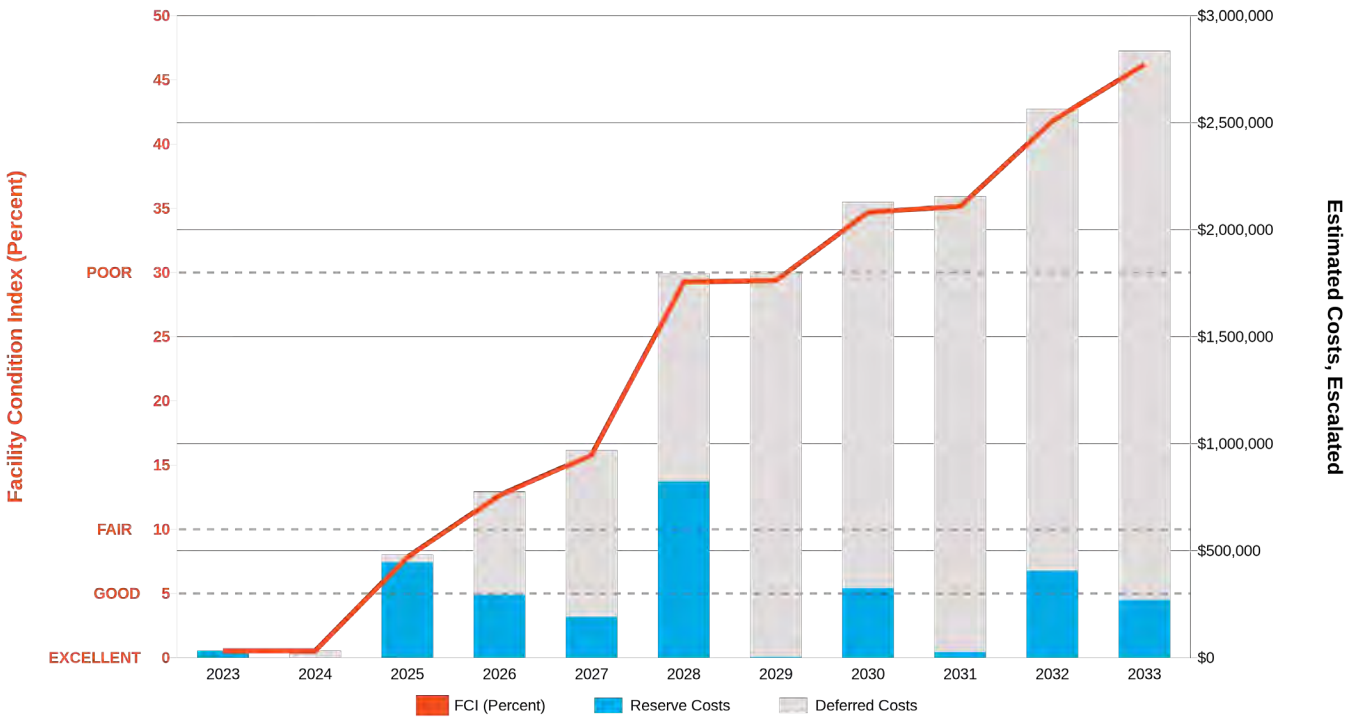
FCI Analysis		
Replacement Value	*Total SF*	*Cost/SF*
$6,136,500	24,546	$250
Current FCI	$33,200	**0.5%**
3-Year	$777,300	**12.7%**
5-Year	$1,796,500	**29.3%**
10-Year	$2,836,500	**46.2%**

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: $6,136,500.00 **Inflation Rate: 3%** **Average Needs (per year - over next 10 years): $257,857.00**



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	33,175	0	0	0	0	33,175	0.01
2024	0	0	0	0	0	33,175	0.01
2025	422,600	25,736	0	0	25,736	481,511	0.08
2026	265,637	24,632	5,000	464	25,096	771,780	0.13
2027	171,750	21,556	0	0	21,556	965,086	0.16
2028	692,831	110,350	19,575	3,118	113,468	1,768,267	0.29
2029	0	0	5,000	970	970	1,768,267	0.29
2030	265,860	61,114	0	0	61,114	2,095,241	0.34
2031	22,080	5,890	0	0	5,890	2,123,211	0.35
2032	307,700	93,779	5,000	1,524	95,303	2,524,690	0.41
2033	182,174	62,653	19,575	6,732	69,385	2,769,517	0.45
2034	0	0	0	0	0	2,769,517	0.45
2035	39,650	16,881	57,800	24,609	41,490	2,826,048	0.46
2036	73,638	34,502	23,100	10,823	45,325	2,934,188	0.48
2037	143,380	73,495	99,000	50,746	124,241	3,151,063	0.51
2038	21,600	12,052	29,475	16,446	28,498	3,184,715	0.52
2039	0	0	0	0	0	3,184,715	0.52
2040	147,000	95,969	82,865	54,098	150,067	3,427,684	0.56
2041	14,400	10,115	116,300	81,693	91,808	3,452,199	0.56
2042	8,500	6,405	11,250	8,477	14,882	3,467,104	0.56

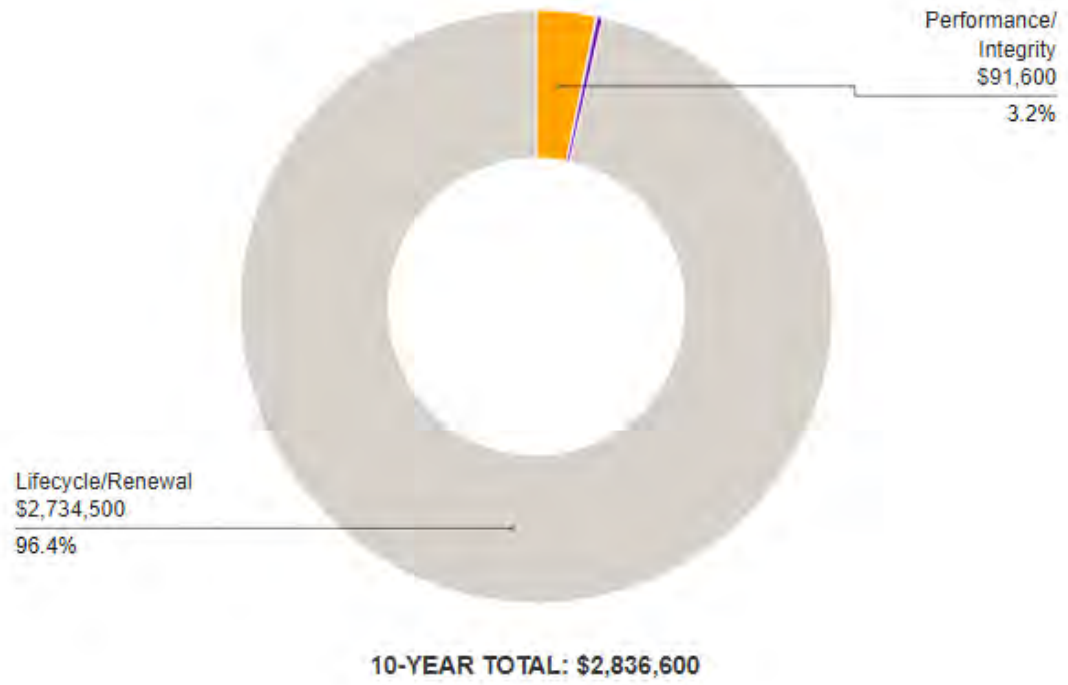
Plan Types

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: $2,836,600

Immediate Needs

ID	Location Description	UF Code	Description	Condition	Plan Type	Cost
6897473	Electrical room	C2030	Flooring, Vinyl Tile (VCT), w/ Asbestos Abatement, Replace	Poor	Environmental	$1,600
6938986	Site	G2020	Parking Lots, Pavement, Asphalt, Seal & Stripe	Poor	Performance/Integrity	$19,600
6897388	Site	G2050	Playground Surfaces, Engineered Wood Fiber, chips 3" Depth, Replace	Poor	Performance/Integrity	$5,000
6897654	Throughout	P2030	Engineering Study, Mechanical, General Design	NA	Retrofit/Adaptation	$7,000
					Total	**$33,200**

Key Findings

Parking Lots in Poor condition.

Pavement, Asphalt
UNION MEMORIAL SCHOOL - Main Building Site

Uniformat Code: G2020
Recommendation: **Seal & Stripe in 2023**
Priority Score: **84.9**
Plan Type: Performance/Integrity
Cost Estimate: $19,600
**$$$**$

Parking lines faded - AssetCALC ID: 6938986

Playground Surfaces in Poor condition.

Engineered Wood Fiber, Chips 3" Depth
UNION MEMORIAL SCHOOL - Main Building Site

Uniformat Code: G2050
Recommendation: **Replace in 2023**
Priority Score: **82.9**
Plan Type: Performance/Integrity
Cost Estimate: $5,000
**$$**$$

Need chips added, in parking lot - AssetCALC ID: 6897388

Flooring in Poor condition.

Vinyl Tile (VCT), w/ Asbestos Abatement
UNION MEMORIAL SCHOOL - Main Building Electrical room

Uniformat Code: C2030
Recommendation: **Replace in 2023**
Priority Score: **72.9**
Plan Type: Environmental
Cost Estimate: $1,600
**$$**$$

Asbestos - AssetCALC ID: 6897473

Recommended Follow-up Study: Mechanical, General Design

Mechanical, General Design
UNION MEMORIAL SCHOOL - Main Building Throughout

Uniformat Code: P2030
Recommendation: **Perform Study in 2023**
Priority Score: **54.9**
Plan Type: Retrofit/Adaptation
Cost Estimate: $7,000
**$$**$$

Adding AC to building - AssetCALC ID: 6897654

2. Building and Site Information

System Summary

System	*Description*	*Condition*
Structure	Masonry bearing walls with metal roof deck supported by open-web steel joists and concrete strip footing foundation system.	Fair
Facade	Primary Wall Finish: Vinyl Siding Windows: Aluminum	Good
Roof	Primary: Gable and flat construction with modified bituminous finish Secondary: gable construction with strip of standing seam metal	Fair
Interiors	Walls: Painted lath & plaster, ceramic tile, FRP, Unfinished Floors: Carpet, VCT, sheet vinyl, quarry tile Ceilings: Painted lath & plaster, hard tile, and ACT	Fair
Elevators	None	N/A
Plumbing	Distribution: Copper supply and cast-iron waste & venting Hot Water: Electric water heaters with integral tanks Fixtures: Toilets and sinks in all restrooms	Fair
HVAC	Central System: Boilers, air handlers feeding VAVs, fan coils, hydronic baseboard radiators and cabinet terminal units. Non-Central System: None Supplemental components: Seasonal Window air conditioners	Good
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	Very limited Wet-pipe sprinkler system and fire extinguishers	Good

Electrical	Source & Distribution: Main panel with copper wiring Interior Lighting: linear fluorescent, 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 aprons and adjacent concrete sidewalks, curbs, and stoops	Good
Site Development	Building-mounted signage; chain link fencing; open dumpster area Playgrounds and sports fields Limited park benches, picnic tables, trash receptacles	Good
Landscaping & Topography	Limited landscaping features including lawns, trees, bushes, and planters. Irrigation not present. No retaining walls. Low to moderate site slopes throughout	Fair
Utilities	Municipal water, sewer and on-site well Local utility-provided electric and natural gas	Good
Site Lighting	Pole-mounted: None Building-mounted: LED, HPS Pedestrian walkway and landscape accent lighting	Fair
Ancillary Structures	Storage sheds and Gazebo	Good
Accessibility	Potential moderate/major issues have been identified at this property and a detailed accessibility study is recommended	
Key Issues and Findings	Replacing some Uni-vent (fan coils) in classrooms Replacing floor in Kitchen storeroom Replacing some of the HVAC controls with digital system Installing Wood Chips in playground Asbestos containing VCT. Electrical lighting is not LED. Electrical distribution is primarily original. HVAC ductwork is likely original. Air Handlers are older and require updating. Most equipment is Kitchen is older. Sanitary and domestic piping upgrade should be scheduled. Replacement of the 2-pipe hydronic system should be scheduled. Some classroom countertops require replacement. The classroom casework finishes have worn off. The finishes are as expected. Parking lot asphalt needs to be seal coated and striped.	

3. Supplemental Evaluations

Square Foot Verification

We have reviewed the square footage of 24,546 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. 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	**52.3%**

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
Facade	-	-	$4,868	$3,934	$224,125	$232,927
Roofing	-	-	-	$399,260	$11,344	$410,604
Interiors	$1,600	-	$336,888	$152,886	$375,827	$867,201
Plumbing	-	-	$330,199	$64,720	$60,947	$455,866
HVAC	-	$181,624	$232,129	$22,383	$377,854	$813,990
Fire Protection	-	$567	$2,085	-	$2,803	$5,455
Electrical	-	-	$241,476	$61,562	$24,686	$327,724
Fire Alarm & Electronic Systems	-	$65,102	-	$128,211	$209,565	$402,878
Equipment & Furnishings	-	-	$131,676	$42,144	$105,826	$279,646
Special Construction & Demo	-	$1,326	-	-	$18,841	$20,167
Site Development	$5,000	$38,192	$12,881	$117,335	$70,574	$243,982
Site Utilities	-	-	-	$21,288	-	$21,288
Site Pavement	$19,575	$161,522	$22,692	$26,307	$65,851	$295,947
Follow-up Studies	$7,000	-	-	-	-	$7,000
TOTALS	**$33,175**	**$448,333**	**$1,314,894**	**$1,040,030**	**$1,548,243**	**$4,384,675**

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 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 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 assessment. A full measured ADA survey would be required to identify 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 like 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.

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
Union Memorial School - Main Building	**2%**	158982.22R000-341.379	High	24,546

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 Union Memorial School 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	One
Number of central steam meters observed	None
Number of domestic water meters observed	One

Average Utility Rates		
Electricity	Natural Gas	Water & Sewer
Average Rate	Average Rate	Blended Rate
$0.18 / kWh (est.)	$1.20 / therm (est.)	$16.11 / kGal (est.)

Electricity

Green Mountain Power 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 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.

Natural Gas

Vermont Gas provides natural gas to the facility.
The primary use of natural gas is for space heating. Any seasonal variation in consumption is primarily attributed to the heating loads.

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 Town of Colchester satisfies the water and sewer requirements of the facility.

The water consumption pattern most likely remains more or less flat over the 10-month period that school is in session.

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 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.

11. Energy Conservation Measures

Bureau Veritas has conducted an Energy Audit on Union Memorial School. 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 four 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	$10,660
Estimated Annual Cost Savings Related to ECMs	$3,259
Net Effective ECM Payback	3.3 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.

Union Memorial School

	Description of ECM	Location	Net Projected Initial Investment ($)	Estimated Annual Savings Nat Gas (therms)	Estimated Annual Savings Electricity (kWh)	Estimated Annual Savings Water (KGal)	Total Energy Savings (MMBTU)	Total Green House Gas Savings ($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 Low Flow Faucet Aerators; Replace 23x 1.5GPM rated bathroom aerators with 0.5GPM WaterSense certified aerators	Location: Restrooms and classrooms	$349	0.0	864.3	5.8	2.9	0.2	$156	$0	$248	1.4	$1,770	10
2	Replace Existing Linear Fluorescent Lamps; Replace 149x F44T8 with F44LED; Replace 15x F22T8 with F22LED; Replace 12x F42T8 with F42LED	Location: Throughout interiors	$6,137	0.0	13,143.0	0.0	44.8	3.1	$2,366	$150	$2,515	2.4	$23,892	15
3	Install Low Flow Tankless Restroom Fixtures; Retrofit 10x; 1.6 GPF toilets with dual-flush flush valves	Location: Restrooms	$1,868	0.0	0.0	43.0	0.0	0.0	$0	$0	$693	2.7	$6,403	15
4	Retrofit Flush Tank Toilets to Dual Flush; Retrofit 7x 1.6GPF toilets to dual-flush	Location: Restrooms	$916	0.0	0.0	10.2	0.0	0.0	$0	$0	$165	5.6	$1,539	20
Totals for no/low cost items			$1,264	0.0	864.3	16.0	2.9	0.2	$156	$0	$413	3.1		
Total for capital cost			$8,005	0.0	13,143.0	43.0	44.8	3.1	$2,366	$150	$3,208	2.5		
Interactive Savings Discount @10%				0.0	-1,400.7	-5.9	-4.8	-0.3	-$252	-$15	-$362			
Total Contingency Expenses @ 15%			$1,390											
Totals for improvements			$10,660	0.0	12,606.6	53.1	43.0	3.0	$2,269	$135	$3,259	3.3		

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 Union Memorial School - Main Building, 253 Main Street, Colchester VT,05446, 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

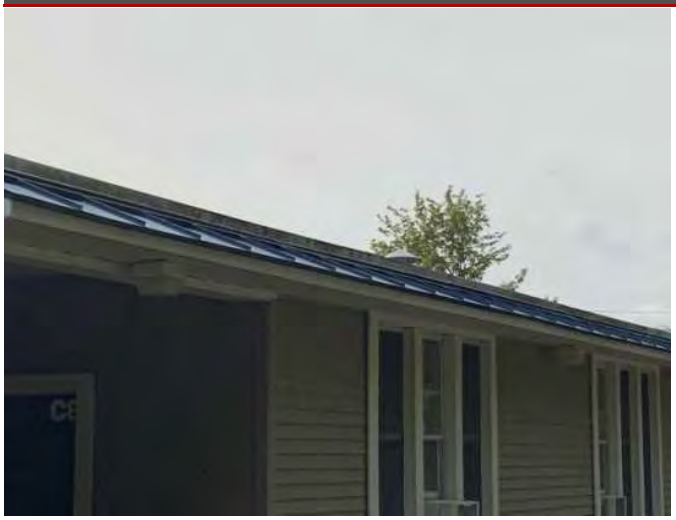
3 - REAR ELEVATION

4 - RIGHT ELEVATION

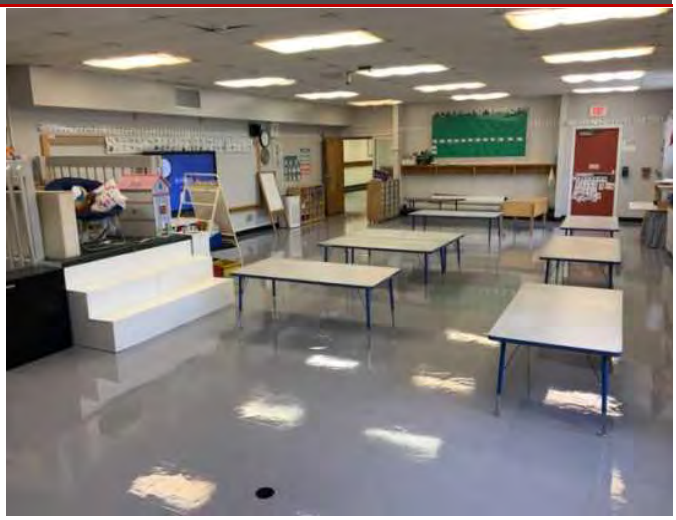
5 - BUILDING FACADE

6 - ROOFING

Photographic Overview



7 - ROOFING



8 - TYPICAL CLASSROOM

9 - OFFICE GROUP

10 - CAFETERIA AND GYMNASIUM

11 - LIBRARY

12 - HEAT PUMP DOMESTIC WATER HEATER

Photographic Overview

13 - BOILER

14 - SEASONAL WINDOW AIR CONDITIONER

15 - PUMP

16 - MAIN ELECTRICAL ROOM

17 - UNIT VENTILATOR

18 - BAS/HVAC CONTROLS

Photographic Overview

19 - SHED STRUCTURE

20 - SHED/GAZEBO/SHADE STRUCTURE

21 - SPORTS APPARATUS

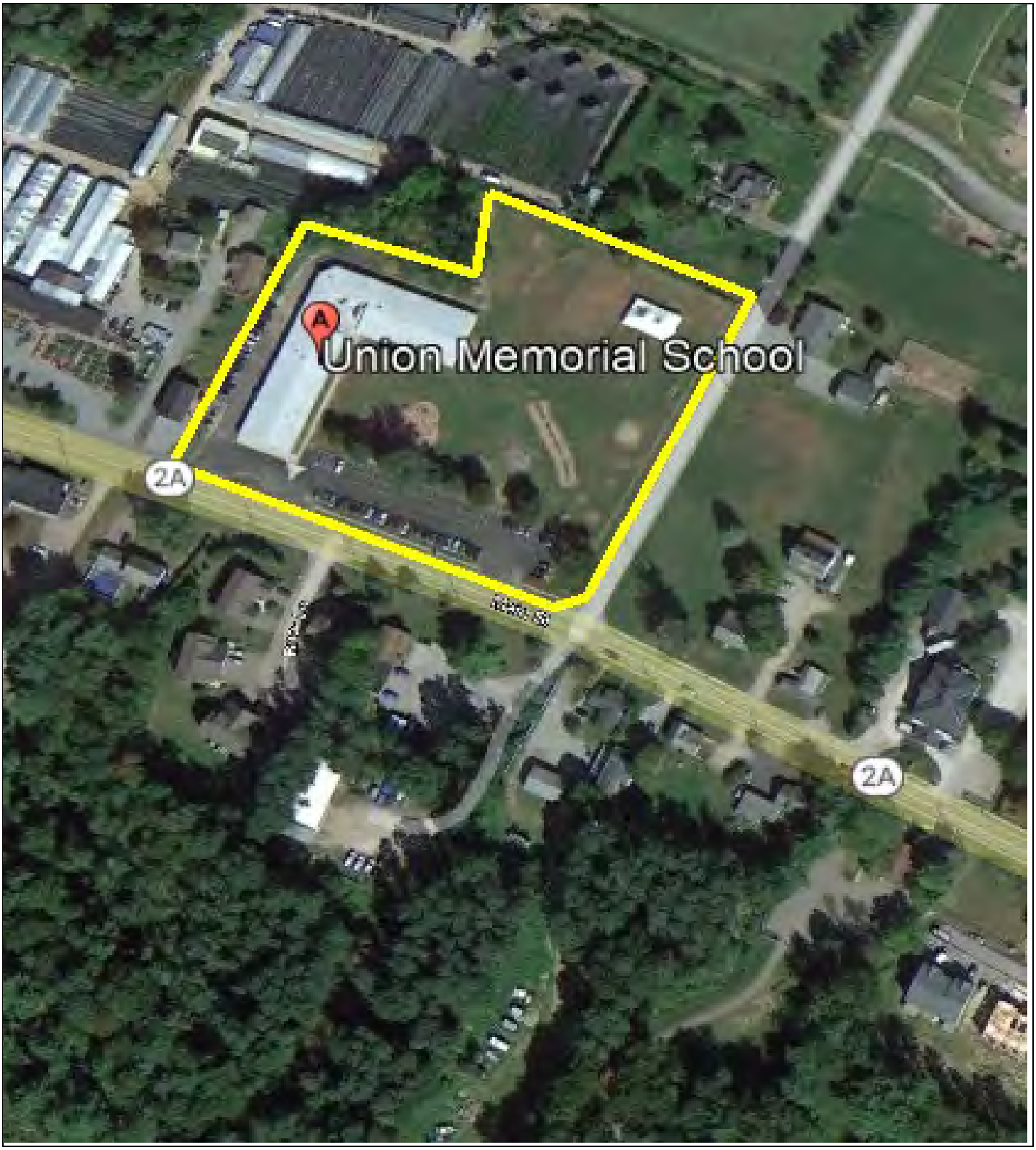
22 - PLAY STRUCTURE

23 - PLAY STRUCTURE

24 - SIDEWALKS DOORS WITHOUT RAMPS

Appendix B:
Site Plans

Site Plan



Project Name	Project Number
Vermont Agency of Education	158982.22R000-341.379 Union Memorial School

Source	On-Site Date
Google MyMaps	August 10, 2023

Appendix C:
Stem/Steam Assessment

STEM/STEAM Evaluation

Property Name	STEM/STEAM Suitability Score	Project Number	School Type	Square Footage
Union Memorial School - Main Building	**2%**	158982.22R000-341.379	High	24,546

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?	No		X	X
Does the facility have a Shop (Machine, Wood, Metal, etc.)?	No		X	X
Does the facility have a Computer Lab?	No	X	X	X
Does the facility have a dedicated STEM/STEAM Room?	No	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?	2- Partial				
Does the room have electrical outlet distribution along perimeter walls and from the ceiling?	2- Partial				
Does the room have open shelving and lockable storage cabinets?	2- Partial				
Does the room have technology connectivity and an interactive display?	1- Meets				
Does the room have appropriate wet floor finishes?	1- Meets				
Does the room have visual display boards?	1- Meets				
Does the room have Prep/Storage Room?	3- Missing				
Does the room have direct access to the exterior?	1- Meets				
Does the room the ability to structurally suspend items from the ceiling?	3- Missing				
Does the have goggle cabinets, fire extinguisher, eye wash and deluge shower?	3- Missing				
Room Type Score	55%	0%	0%	0%	0%

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

Union Memorial School

SU/SD

Colchester Supervisory District

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

No

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

There are years where enrollment causes class size to swell whereas the best solution might be to have another classroom and smaller classes. This ebbs and flows.

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

No

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

There is always need for more smaller work spaces for small group instruction or 1:1.

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

Yes

Possibly but the ideas have not been explored because space is so tight.

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

No

Please describe:

As mentioned above, more small space to meet with small groups or 1:1 is needed.

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

No

Please describe:

Administrative office is small, no room for a conference or meeting room.

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

No

Please describe:

Gym and cafe are one room that share responsibilities. Kitchen is tight and could be larger.

Appendix E:
Accessibility Review & Photos

Visual Survey - ADA Standards for Accessible Design

Property Name: Union Memorial School Main Building

BV Project Number: 158982.22R000-341.379

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			pipe wraps	
Playground				None

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

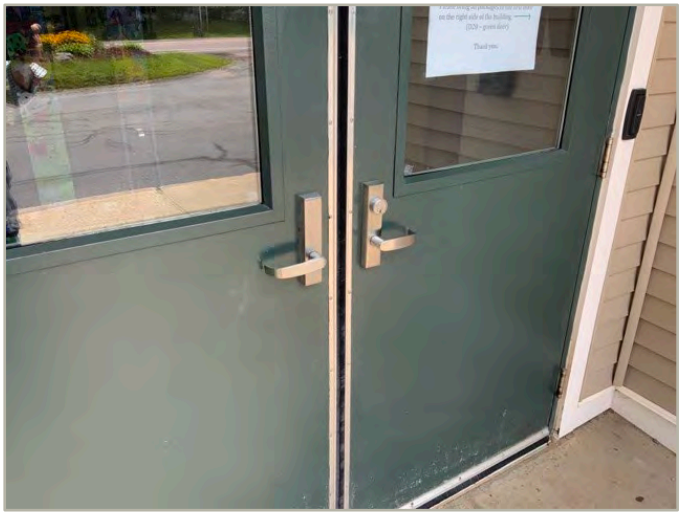
1 - OVERVIEW OF ACCESSIBLE PARKING AREA

2 - 2ND PARK AREA

3 - PRIMARY PATH OF TRAVEL

4 - 2ND PATH OF TRAVEL

5 - MAIN ACCESSIBLE ENTRANCE

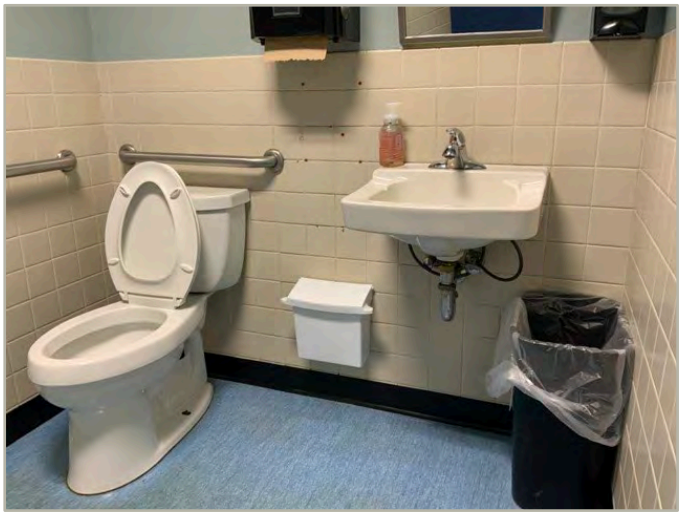


6 - SIGNAGE/HARDWARE

7 - ACCESSIBLE INTERIOR PATH

8 - HARDWARE

9 - TOILET STALL OVERVIEW



10 - SINK, FAUCET HANDLES and ACCESSORIES

11 - ACCESSIBLE ROUTE TO PLAYGROUND

12 - OVERVIEW OF PLAYGROUND

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 | UNION MEMORIAL SCHOOL - Main Building

UF L3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
Facade								
B2010	Building Exterior	Facade	Fair	Exterior Walls, Vinyl Siding	8,900	SF	17	6897458
B2020	Building Exterior	Facade	Fair	Window, Vinyl-Clad Double-Glazed, up to 15 SF	124		17	6897487
B2020	Kitchen	Facade	Fair	Screens & Shutters, Rolling Security Shutter, 10 to 50 SF	1		7	6897386
B2020	Kitchen	Facade	Fair	Screens & Shutters, Rolling Security Shutter, 55 to 100 SF	1		7	6897497
B2050	Building Exterior	Facade	Fair	Exterior Door, Wood, Solid-Core	6		5	6897468
B2050	Building Exterior	Facade	Good	Exterior Door, Steel, Standard	12		27	6897425
B2050	Building Exterior	Facade	Fair	Exterior Door, Aluminum-Framed & Glazed, Standard Swing	6		17	6897516
Roofing								
B3010	Roof	Roofing	Good	Roofing, Metal	6,000	SF	29	6897440
B3010	Roof	Roofing	Fair	Roofing, Single-Ply Membrane, TPO/PVC	18,000	SF	9	6897444
B3080	Roof	Roofing	Fair	Soffit, Metal	1,500	SF	14	6897410
Interiors								
C1020	Classrooms	Interiors	Fair	Interior Window, Fixed, 12 SF	39		15	6897488
C1030	Throughout building	Interiors	Fair	Interior Door, Wood, Solid-Core	93		10	6897438
C1070	Throughout building	Interiors	Fair	Suspended Ceilings, Acoustical Tile (ACT)	24,546	SF	5	6897411
C1070	Cafeteria	Interiors	Fair	Suspended Ceilings, Hard Tile, Replacement w/ ACT	1,100	SF	5	6897485
C2010	Restrooms	Interiors	Fair	Wall Finishes, Ceramic Tile	400	SF	10	6897491
C2010	Restrooms	Interiors	Fair	Wall Finishes, Laminated Paneling (FRP)	1,500	SF	7	6897469
C2010	Throughout building	Interiors	Fair	Wall Finishes, any surface, Prep & Paint	55,000	SF	4	6897418
C2030	Kitchen	Interiors	Fair	Flooring, Quarry Tile	750	SF	10	6897499
C2030	Throughout building	Interiors	Fair	Flooring, Vinyl Tile (VCT)	21,000	SF	3	6897434
C2030	Electrical room	Interiors	Poor	Flooring, Vinyl Tile (VCT), w/ Asbestos Abatement	200	SF	0	6897473
C2030	Restrooms	Interiors	Good	Flooring, Vinyl Sheeting	550	SF	12	6897387
C2030	Throughout building	Interiors	Fair	Flooring, Carpet, Commercial Standard	3,000	SF	3	6897482
C2050	Restrooms	Interiors	Fair	Ceiling Finishes, any flat surface, Prep & Paint	300	SF	3	6897475
Plumbing								
D2010	Kitchen	Plumbing	Good	Heat Pump Domestic Water Heater, Electric, 4500 Watts	1		18	6897501
D2010	Utility closet	Plumbing	Fair	Sink/Lavatory, Service Sink, Floor	2		7	6897500
D2010	Mechanical room	Plumbing	Fair	Water Heater, Electric, Residential	1		5	6897511
D2010	Kitchen	Plumbing	Fair	Water Heater, Electric, Residential	1		8	6897502
D2010	Boiler room	Plumbing	Good	Pump, Circulation, Domestic Water, 2 HP	5		14	6897486
D2010	Utility closet	Plumbing	Good	Water Heater, Electric, Residential	1		14	6897412
D2010	Restrooms	Plumbing	Fair	Toilet, Commercial Water Closet	10		7	6897464
D2010	Utility closet	Plumbing	Fair	Sink/Lavatory, Service Sink, Wall-Hung	1		7	6897514
D2010	Throughout building	Plumbing	Fair	Plumbing System, Supply & Sanitary, Medium Density (excludes fixtures)	24,546	SF	5	6897406
D2010	Restrooms	Plumbing	Fair	Toilet, Residential Water Closet	7		7	6897446
D2010	Throughout building	Plumbing	Fair	Sink/Lavatory, Vanity Top, Stainless Steel	17		7	6897405
D2010	Kitchen	Plumbing	Fair	Water Heater, Booster	1		5	6897395
D2010	Workroom	Plumbing	Fair	Backflow Preventer, Domestic Water	1		7	6897459

UF L3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
D2010	Kitchen	Plumbing	Fair	Sink/Lavatory, Commercial Kitchen, 2-Bowl	1		12	6897493
D2010	Cafeteria	Plumbing	Fair	Drinking Fountain, Wall-Mounted, Single-Level	1		7	6897404
D2010	Kitchen	Plumbing	Fair	Sink/Lavatory, Commercial Kitchen, 1-Bowl	1		12	6897442
D2010	Restrooms	Plumbing	Fair	Sink/Lavatory, Wall-Hung, Vitreous China	4		7	6897478
D2060	Boiler room	Plumbing	Fair	Air Compressor, Tank-Style	1		5	6897460
D2060	Workroom	Plumbing	Fair	Supplemental Components, Compressed Air Dryer, Process Support	1		3	6897505
HVAC								
D3020	Boiler room	HVAC	Good	Boiler, Gas High-Efficiency Condensing Style, HVAC, 126 to 750 MBH	2		14	6897447
D3020	Throughout	HVAC	Fair	Radiator, Hydronic, Baseboard (per LF)	100	LF	7	6897503
D3020	Kitchen	HVAC	Good	Unit Heater, Electric	1		19	6897512
D3020	Boiler room	HVAC	Good	Boiler Supplemental Components, Expansion Tank	1		39	6897451
D3020	Throughout building	HVAC	Fair	Radiator, Hydronic, Column/Cabinet Style (per EA)	4		7	6897397
D3030	Classrooms	HVAC	Excellent	Unit Ventilator, approx/nominal 3 Ton, 751 to 1250 CFM	8		20	6897479
D3030	Building exterior	HVAC	Fair	Air Conditioner, Window/Thru-Wall, 1 TON	24		2	6897507
D3050	Boiler room	HVAC	Good	Supplemental Components, Air Separator, HVAC	1		14	6897419
D3050	Classrooms	HVAC	Fair	Fan Coil Unit, Hydronic Terminal	6		3	6897453
D3050	Throughout building	HVAC	Fair	HVAC System, Hydronic Piping, 2-Pipe	24,546	SF	5	6897508
D3050	Roof	HVAC	Fair	Air Handler, Exterior AHU	2		2	6897416
D3050	Mechanical room	HVAC	Fair	Air Handler, Interior AHU, Easy/Moderate Access	2		2	6897510
D3050	Throughout building	HVAC	Fair	HVAC System, Ductwork, Medium Density	14,000	SF	5	6897409
D3060	Roof	HVAC	Fair	Exhaust Fan, Roof or Wall-Mounted, 16" Damper	3		5	6897423
Fire Protection								
D4010	Utility room	Fire Protection	Fair	Fire Suppression System, Existing Sprinkler Heads, by SF	500	SF	2	6897651
D4030	Kitchen	Fire Protection	Fair	Fire Extinguisher, Wet Chemical/CO2	1		5	6897384
D4030	Throughout building	Fire Protection	Fair	Fire Extinguisher, Type ABC, up to 20 LB	10		5	6897495
Electrical								
D5020	Kitchen	Electrical	Fair	Secondary Transformer, Dry, Stepdown	1		18	6897390
D5020	Storeroom	Electrical	Fair	Secondary Transformer, Dry, Stepdown	1		5	6897420
D5020	Electrical room	Electrical	Fair	Distribution Panel, 120/240 V	9		7	6897481
D5020	Electrical room	Electrical	Fair	Secondary Transformer, Dry, Stepdown	1		19	6897400
D5020	Electrical room	Electrical	Fair	Supplemental Components, Circuit Breaker/Disconnect	1		10	6897490
D5020	Storeroom	Electrical	Fair	Distribution Panel, 277/480 V	5		7	6897450
D5020	Boiler room	Electrical	Fair	Secondary Transformer, Dry, Stepdown	1		7	6897401
D5030	Throughout building	Electrical	Fair	Electrical System, Wiring & Switches, High Density/Complexity	24,546	SF	5	6897437
D5040	Throughout building	Electrical	Fair	Interior Lighting System, Full Upgrade, Medium Density & Standard Fixtures	24,546	SF	3	6897471
Fire Alarm & Electronic Systems								
D7010	Throughout building	Fire Alarm & Electronic Systems	Fair	Intrusion Detection System, Full Alarm System Renovation/Upgrade, Upgrade/Install	24,546	SF	10	6897454
D7050	Throughout building	Fire Alarm & Electronic Systems	Fair	Fire Alarm System, Full System Upgrade, Standard Addressable, Install	24,546	SF	13	6897463

UF L3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
D7050	Vestibule	Fire Alarm & Electronic Systems	Fair	Fire Alarm Panel, Annunciator	1		8	6897429
D7050	Electrical room	Fire Alarm & Electronic Systems	Fair	Fire Alarm Panel, Fully Addressable	1		8	6897414
D8010	Throughout building	Fire Alarm & Electronic Systems	Fair	BAS/HVAC Controls, Basic System or Legacy Upgrades, Upgrade/Install	24,546	SF	2	6897432
Equipment & Furnishings								
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels	1		9	6897494
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Steamer, Tabletop	1		4	6897421
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Freezer, 1-Door Reach-In	1		12	6897484
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Refrigerator, 2-Door Reach-In	1		8	6897445
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Evaporator for Refigerator/Freezer	1		10	6897408
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Exhaust Hood, 8 to 10 LF	1		5	6897504
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Condenser for Refigerator/Freezer	1		3	6897435
E1030	Kitchen	Equipment & Furnishings	Good	Foodservice Equipment, Dishwasher Commercial	1		7	6897457
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Walk-In, Refrigerator	1		5	6897413
E1030	Kitchen	Equipment & Furnishings	Fair	Foodservice Equipment, Convection Oven, Double	1		4	6897385
E1040	Hallway	Equipment & Furnishings	Fair	Healthcare Equipment, Defibrillator (AED), Cabinet-Mounted	1		5	6897476
E2010	Throughout building	Equipment & Furnishings	Fair	Casework, Countertop, Plastic Laminate	225	LF	4	6897448
E2010	Nurse	Equipment & Furnishings	Fair	Casework, Bathroom Vanity Cabinet, Wood w/ Cultured Marble Sink Top	1		7	6897467
E2010	Throughout building	Equipment & Furnishings	Fair	Casework, Cabinetry, Hardwood Standard	205	LF	4	6897396
Special Construction & Demo								
F1020	Site	Special Construction & Demo	Fair	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Basic/Minimal	360	SF	17	6897513
F1020	Site	Special Construction & Demo	Fair	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Basic/Minimal	96	SF	17	6897477
F1020	Site	Special Construction & Demo	Good	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Basic/Minimal	480	SF	22	6897470
F1020	Site	Special Construction & Demo	Fair	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Basic/Minimal	50	SF	2	6897465
Pedestrian Plazas & Walkways								
G2020	Site	Pedestrian Plazas & Walkways	Poor	Parking Lots, Pavement, Asphalt, Seal & Stripe	43,500	SF	0	6938986
G2020	Site	Pedestrian Plazas & Walkways	Fair	Parking Lots, Pavement, Asphalt, Mill & Overlay	43,500	SF	2	6897452
G2030	Site	Pedestrian Plazas & Walkways	Fair	Sidewalk, Concrete, Large Areas	2,600	SF	27	6897456
Athletic, Recreational & Playfield Areas								
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Baseball, Backstop Chain-Link	1		5	6897424
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Basketball, Backboard/Rim/Pole	2		12	6897402
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Play Structure, Multipurpose, Very Small	3		7	6897506
G2050	Site	Athletic, Recreational & Playfield Areas	Poor	Playground Surfaces, Engineered Wood Fiber, Chips 3" Depth	5,000	SF	0	6897388
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Sports Apparatus, Soccer, Movable Practice Goal	2		5	6897480
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Play Structure, Multipurpose, Large	1		7	6897389
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Play Structure, Multipurpose, Very Small	6		2	6897391

UF L3 Code	Location	Category	Condition	Asset/Component/Repair	Quantity	Unit	RUL	ID
G2050	Site	Athletic, Recreational & Playfield Areas	Fair	Play Structure, Swing Set, 4 Seats	4		12	6897403
Sitework								
G2060	Site	Sitework	Fair	Flagpole, Metal	1		7	6897428
G2060	Site	Sitework	Fair	Fences & Gates, Fence, Chain Link 4'	1,150	LF	7	6897498
G2060	Site	Sitework	Fair	Signage, Property, Building-Mounted Individual Letters, Replace/Install	19		7	6897439
G2060	Site	Sitework	Fair	Park Bench, Metal Powder-Coated	5		7	6897483
G2060	Site	Sitework	Fair	Picnic Table, Wood/Composite/Fiberglass	2		7	6897427
G2060	Site	Sitework	Fair	Signage, Property, Building or Pole-Mounted, Replace/Install	1		7	6897383
G2060	Site	Sitework	Good	Trash Receptacle, Medium-Duty Metal or Precast	3		15	6897392
G4050	Building exterior	Sitework	Fair	Exterior Fixture w/ Lamp, any type, w/ LED Replacement	24		7	6897461
Utilities								
G3010	Site	Utilities	Fair	Pump, Well Water	1		7	6897509
Follow-up Studies								
P2030	Throughout	Follow-up Studies	NA	Engineering Study, Mechanical, General Design	1		0	6897654

Appendix G:
Replacement Reserves

Replacement Reserves Report
UNION MEMORIAL SCHOOL - 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
$33,175	$0	$448,336	$295,732	$193,306	$825,874	$5,970	$326,974	$27,970	$408,003	$271,134	$0	$138,940	$142,063	$366,621	$79,573	$0	$379,932	$222,508	$34,632	$183,998	$4,384,743

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	6897458	Exterior Walls, Vinyl Siding, Replace	30	13	17	8900	SF	$6.00	$53,400																		$53,400				$53,400
B2020	6897487	Window, Vinyl-Clad Double-Glazed, up to 15 SF, Replace	30	13	17	124	EA	$600.00	$74,400																		$74,400				$74,400
B2020	6897386	Screens & Shutters, Rolling Security Shutter, 10 to 50 SF, Replace	20	13	7	1	EA	$1,200.00	$1,200								$1,200														$1,200
B2020	6897497	Screens & Shutters, Rolling Security Shutter, 55 to 100 SF, Replace	20	13	7	1	EA	$2,000.00	$2,000								$2,000														$2,000
B2050	6897468	Exterior Door, Wood, Solid-Core, Replace	25	20	5	6	EA	$700.00	$4,200						$4,200																$4,200
B2050	6897516	Exterior Door, Aluminum-Framed & Glazed, Standard Swing, Replace	30	13	17	6	EA	$1,300.00	$7,800																		$7,800				$7,800
B3010	6897444	Roofing, Single-Ply Membrane, TPO/PVC, Replace	20	11	9	18000	SF	$17.00	$306,000										$306,000												$306,000
B3080	6897410	Soffit, Metal, Replace	25	11	14	1500	SF	$5.00	$7,500															$7,500							$7,500
C1020	6897488	Interior Window, Fixed, 12 SF, Replace	40	25	15	39	EA	$500.00	$19,500																$19,500						$19,500
C1030	6897438	Interior Door, Wood, Solid-Core, Replace	40	30	10	93	EA	$700.00	$65,100											$65,100											$65,100
C1070	6897485	Suspended Ceilings, Hard Tile, Replacement w/ ACT, Replace	25	20	5	1100	SF	$3.50	$3,850						$3,850																$3,850
C1070	6897411	Suspended Ceilings, Acoustical Tile (ACT), Replace	25	20	5	24546	SF	$3.50	$85,911						$85,911																$85,911
C2010	6897491	Wall Finishes, Ceramic Tile, Replace	40	30	10	400	SF	$18.00	$7,200											$7,200											$7,200
C2010	6897469	Wall Finishes, Laminated Paneling (FRP), Replace	30	23	7	1500	SF	$16.00	$24,000								$24,000														$24,000
C2010	6897418	Wall Finishes, any surface, Prep & Paint	10	6	4	55000	SF	$1.50	$82,500					$82,500										$82,500							$165,000
C2030	6897499	Flooring, Quarry Tile, Replace	50	40	10	750	SF	$26.00	$19,500											$19,500											$19,500
C2030	6897473	Flooring, Vinyl Tile (VCT), w/ Asbestos Abatement, Replace	15	67	0	200	SF	$8.00	$1,600	$1,600															$1,600						$3,200
C2030	6897434	Flooring, Vinyl Tile (VCT), Replace	15	12	3	21000	SF	$5.00	$105,000				$105,000																$105,000			$210,000
C2030	6897387	Flooring, Vinyl Sheeting, Replace	15	3	12	550	SF	$7.00	$3,850													$3,850									$3,850
C2030	6897482	Flooring, Carpet, Commercial Standard, Replace	10	7	3	3000	SF	$7.50	$22,500				$22,500										$22,500									$45,000
C2050	6897475	Ceiling Finishes, any flat surface, Prep & Paint	10	7	3	300	SF	$2.00	$600				$600										$600									$1,200
D2010	6897395	Water Heater, Booster, Replace	15	10	5	1	EA	$3,500.00	$3,500						$3,500																$7,000
D2010	6897511	Water Heater, Electric, Residential, Replace	15	10	5	1	EA	$900.00	$900						$900																$1,800
D2010	6897502	Water Heater, Electric, Residential, Replace	15	7	8	1	EA	$900.00	$900									$900													$900
D2010	6897412	Water Heater, Electric, Residential, Replace	15	1	14	1	EA	$900.00	$900															$900							$900
D2010	6897486	Pump, Circulation, Domestic Water, 2 HP, Replace	15	1	14	5	EA	$4,600.00	$23,000															$23,000							$23,000
D2010	6897501	Heat Pump Domestic Water Heater, Electric, 4500 Watts, Replace	25	7	18	1	EA	$6,800.00	$6,800																			$6,800			$6,800
D2010	6897406	Plumbing System, Supply & Sanitary, Medium Density (excludes fixtures), Replace	40	35	5	24546	SF	$11.00	$270,006						$270,006																$270,006
D2010	6897459	Backflow Preventer, Domestic Water, Replace	30	23	7	1	EA	$3,200.00	$3,200								$3,200														$3,200
D2010	6897500	Sink/Lavatory, Service Sink, Floor, Replace	35	28	7	2	EA	$800.00	$1,600								$1,600														$1,600
D2010	6897464	Toilet, Commercial Water Closet, Replace	30	23	7	10	EA	$1,300.00	$13,000								$13,000														$13,000
D2010	6897514	Sink/Lavatory, Service Sink, Wall-Hung, Replace	35	28	7	1	EA	$1,400.00	$1,400								$1,400														$1,400
D2010	6897446	Toilet, Residential Water Closet, Replace	30	23	7	7	EA	$700.00	$4,900								$4,900														$4,900
D2010	6897405	Sink/Lavatory, Vanity Top, Stainless Steel, Replace	30	23	7	17	EA	$1,200.00	$20,400								$20,400														$20,400
D2010	6897478	Sink/Lavatory, Wall-Hung, Vitreous China, Replace	30	23	7	4	EA	$1,500.00	$6,000								$6,000														$6,000
D2010	6897404	Drinking Fountain, Wall-Mounted, Single-Level, Replace	15	8	7	1	EA	$1,200.00	$1,200								$1,200														$1,200
D2010	6897493	Sink/Lavatory, Commercial Kitchen, 2-Bowl, Replace	30	18	12	1	EA	$2,100.00	$2,100													$2,100									$2,100

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
D2010	6897442	Sink/Lavatory, Commercial Kitchen, 1-Bowl, Replace	30	18	12	1	EA	$1,600.00	$1,600													$1,600									$1,600
D2060	6897505	Supplemental Components, Compressed Air Dryer, Process Support, Replace	20	17	3	1	EA	$5,600.00	$5,600				$5,600																		$5,600
D2060	6897460	Air Compressor, Tank-Style, Replace	20	15	5	1	EA	$5,150.00	$5,150						$5,150																$5,150
D3020	6897447	Boiler, Gas High-Efficiency Condensing Style, HVAC, 126 to 750 MBH, Replace	15	1	14	2	EA	$55,000.00	$110,000															$110,000							$110,000
D3020	6897397	Radiator, Hydronic, Column/Cabinet Style (per EA), Replace	30	23	7	4	EA	$800.00	$3,200								$3,200														$3,200
D3020	6897503	Radiator, Hydronic, Baseboard (per LF), Replace	30	23	7	100	LF	$150.00	$15,000								$15,000														$15,000
D3020	6897512	Unit Heater, Electric, Replace	20	1	19	1	EA	$1,800.00	$1,800																				$1,800		$1,800
D3030	6897507	Air Conditioner, Window/Thru-Wall, 1 TON, Replace	10	8	2	24	EA	$2,200.00	$52,800			$52,800										$52,800									$105,600
D3030	6897479	Unit Ventilator, approx/nominal 3 Ton, 751 to 1250 CFM, Replace	20	0	20	8	EA	$9,000.00	$72,000																					$72,000	$72,000
D3050	6897508	HVAC System, Hydronic Piping, 2-Pipe, Replace	40	35	5	24546	SF	$5.00	$122,730						$122,730																$122,730
D3050	6897419	Supplemental Components, Air Separator, HVAC, Replace	15	1	14	1	EA	$1,980.00	$1,980															$1,980							$1,980
D3050	6897416	Air Handler, Exterior AHU, Replace	20	18	2	2	EA	$37,200.00	$74,400			$74,400																			$74,400
D3050	6897510	Air Handler, Interior AHU, Easy/Moderate Access, Replace	25	23	2	2	EA	$22,000.00	$44,000			$44,000																			$44,000
D3050	6897453	Fan Coil Unit, Hydronic Terminal, Replace	20	17	3	6	EA	$2,530.00	$15,180				$15,180																		$15,180
D3050	6897409	HVAC System, Ductwork, Medium Density, Replace	30	25	5	14000	SF	$4.00	$56,000						$56,000																$56,000
D3060	6897423	Exhaust Fan, Roof or Wall-Mounted, 16" Damper, Replace	20	15	5	3	EA	$2,400.00	$7,200						$7,200																$7,200
D4010	6897651	Fire Suppression System, Existing Sprinkler Heads, by SF, Replace	25	23	2	500	SF	$1.07	$535			$535																			$535
D4030	6897495	Fire Extinguisher, Type ABC, up to 20 LB, Replace	10	5	5	10	EA	$150.00	$1,500						$1,500										$1,500						$3,000
D4030	6897384	Fire Extinguisher, Wet Chemical/CO2, Replace	10	5	5	1	EA	$300.00	$300						$300										$300						$600
D5020	6897420	Secondary Transformer, Dry, Stepdown, Replace	30	25	5	1	EA	$6,000.00	$6,000						$6,000																$6,000
D5020	6897401	Secondary Transformer, Dry, Stepdown, Replace	30	23	7	1	EA	$6,000.00	$6,000								$6,000														$6,000
D5020	6897390	Secondary Transformer, Dry, Stepdown, Replace	30	12	18	1	EA	$7,600.00	$7,600																			$7,600			$7,600
D5020	6897400	Secondary Transformer, Dry, Stepdown, Replace	30	11	19	1	EA	$6,700.00	$6,700																				$6,700		$6,700
D5020	6897481	Distribution Panel, 120/240 V, Replace	30	23	7	9	EA	$2,500.00	$22,500								$22,500														$22,500
D5020	6897450	Distribution Panel, 277/480 V, Replace	30	23	7	5	EA	$3,000.00	$15,000								$15,000														$15,000
D5020	6897490	Supplemental Components, Circuit Breaker/Disconnect, Replace	30	20	10	1	EA	$6,000.00	$6,000												$6,000										$6,000
D5030	6897437	Electrical System, Wiring & Switches, High Density/Complexity, Replace	40	35	5	24546	SF	$4.00	$98,184						$98,184																$98,184
D5040	6897471	Interior Lighting System, Full Upgrade, Medium Density & Standard Fixtures, Replace	20	17	3	24546	SF	$4.50	$110,457				$110,457																		$110,457
D7010	6897454	Intrusion Detection System, Full Alarm System Renovation/Upgrade, Upgrade/Install	15	5	10	24546	SF	$3.25	$79,775												$79,775										$79,775
D7050	6897414	Fire Alarm Panel, Fully Addressable, Replace	15	7	8	1	EA	$15,000.00	$15,000									$15,000													$15,000
D7050	6897429	Fire Alarm Panel, Annunciator, Replace	15	7	8	1	EA	$1,580.00	$1,580									$1,580													$1,580
D7050	6897463	Fire Alarm System, Full System Upgrade, Standard Addressable, Install	20	7	13	24546	SF	$3.00	$73,638														$73,638								$73,638
D8010	6897432	BAS/HVAC Controls, Basic System or Legacy Upgrades, Upgrade/Install	15	13	2	24546	SF	$2.50	$61,365			$61,365										$61,365									$122,730
E1030	6897435	Foodservice Equipment, Walk-In, Condenser for Refigerator/Freezer, Replace	15	12	3	1	EA	$6,300.00	$6,300				$6,300																$6,300		$12,600
E1030	6897421	Foodservice Equipment, Steamer, Tabletop, Replace	10	6	4	1	EA	$7,000.00	$7,000					$7,000										$7,000							$14,000
E1030	6897385	Foodservice Equipment, Convection Oven, Double, Replace	10	6	4	1	EA	$9,500.00	$9,500					$9,500										$9,500							$19,000

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	6897504	Foodservice Equipment, Exhaust Hood, 8 to 10 LF, Replace	15	10	5	1	EA	$4,500.00	$4,500						$4,500															$4,500	$9,000
E1030	6897413	Foodservice Equipment, Walk-In, Refrigerator, Replace	20	15	5	1	EA	$15,000.00	$15,000						$15,000																$15,000
E1030	6897457	Foodservice Equipment, Dishwasher Commercial, Replace	10	3	7	1	EA	$21,500.00	$21,500								$21,500										$21,500				$43,000
E1030	6897445	Foodservice Equipment, Refrigerator, 2-Door Reach-In, Replace	15	7	8	1	EA	$4,600.00	$4,600									$4,600													$4,600
E1030	6897494	Foodservice Equipment, Food Warmer, Proofing Cabinet on Wheels, Replace	15	6	9	1	EA	$1,700.00	$1,700										$1,700												$1,700
E1030	6897408	Foodservice Equipment, Walk-In, Evaporator for Refigerator/Freezer, Replace	15	5	10	1	EA	$4,600.00	$4,600											$4,600											$4,600
E1030	6897484	Foodservice Equipment, Freezer, 1-Door Reach-In, Replace	15	3	12	1	EA	$3,100.00	$3,100													$3,100									$3,100
E1040	6897476	Healthcare Equipment, Defibrillator (AED), Cabinet-Mounted, Replace	10	5	5	1	EA	$1,500.00	$1,500						$1,500										$1,500						$3,000
E2010	6897448	Casework, Countertop, Plastic Laminate, Replace	15	11	4	225	LF	$50.00	$11,250					$11,250															$11,250		$22,500
E2010	6897396	Casework, Cabinetry, Hardwood Standard, Replace	20	16	4	205	LF	$300.00	$61,500					$61,500																	$61,500
E2010	6897467	Casework, Bathroom Vanity Cabinet, Wood w/ Cultured Marble Sink Top, Replace	20	13	7	1	EA	$1,200.00	$1,200								$1,200														$1,200
F1020	6897465	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Basic/Minimal, Replace	30	28	2	50	SF	$25.00	$1,250			$1,250																			$1,250
F1020	6897477	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Basic/Minimal, Replace	30	13	17	96	SF	$25.00	$2,400																		$2,400				$2,400
F1020	6897513	Shed/Gazebo/Shade Structure, Wood or Metal-Framed, Basic/Minimal, Replace	30	13	17	360	SF	$25.00	$9,000																		$9,000				$9,000
G2020	6938986	Parking Lots, Pavement, Asphalt, Seal & Stripe	5	5	0	43500	SF	$0.45	$19,575	$19,575					$19,575					$19,575					$19,575				$19,575	$97,875
G2020	6897452	Parking Lots, Pavement, Asphalt, Mill & Overlay	25	23	2	43500	SF	$3.50	$152,250			$152,250																			$152,250
G2050	6897424	Sports Apparatus, Baseball, Backstop Chain-Link, Replace	20	15	5	1	EA	$5,000.00	$5,000						$5,000																$5,000
G2050	6897480	Sports Apparatus, Soccer, Movable Practice Goal, Replace	15	10	5	2	EA	$700.00	$1,400						$1,400															$1,400	$2,800
G2050	6897402	Sports Apparatus, Basketball, Backboard/Rim/Pole, Replace	25	13	12	2	EA	$9,500.00	$19,000													$19,000									$19,000
G2050	6897388	Playground Surfaces, Engineered Wood Fiber, Chips 3" Depth, Replace	3	3	0	5000	SF	$1.00	$5,000	$5,000			$5,000			$5,000			$5,000			$5,000			$5,000			$5,000			$35,000
G2050	6897391	Play Structure, Multipurpose, Very Small, Replace	20	18	2	6	EA	$6,000.00	$36,000			$36,000																			$36,000
G2050	6897389	Play Structure, Multipurpose, Large, Replace	20	13	7	1	EA	$35,000.00	$35,000								$35,000														$35,000
G2050	6897506	Play Structure, Multipurpose, Very Small, Replace	20	13	7	3	EA	$6,000.00	$18,000								$18,000														$18,000
G2050	6897403	Play Structure, Swing Set, 4 Seats, Replace	20	8	12	4	EA	$2,500.00	$10,000													$10,000									$10,000
G2060	6897498	Fences & Gates, Fence, Chain Link 4', Replace	40	33	7	1150	LF	$18.00	$20,700								$20,700														$20,700
G2060	6897483	Park Bench, Metal Powder-Coated, Replace	20	13	7	5	EA	$700.00	$3,500								$3,500														$3,500
G2060	6897427	Picnic Table, Wood/Composite/Fiberglass, Replace	20	13	7	2	EA	$600.00	$1,200								$1,200														$1,200
G2060	6897392	Trash Receptacle, Medium-Duty Metal or Precast, Replace	20	5	15	3	EA	$700.00	$2,100																$2,100						$2,100
G2060	6897428	Flagpole, Metal, Replace	30	23	7	1	EA	$2,500.00	$2,500								$2,500														$2,500
G2060	6897439	Signage, Property, Building-Mounted Individual Letters, Replace/Install	20	13	7	19	EA	$150.00	$2,850								$2,850														$2,850
G2060	6897383	Signage, Property, Building or Pole-Mounted, Replace/Install	20	13	7	1	EA	$1,500.00	$1,500								$1,500														$1,500
G3010	6897509	Pump, Well Water, Replace	15	8	7	1	EA	$2,910.00	$2,910								$2,910														$2,910
G4050	6897461	Exterior Fixture w/ Lamp, any type, w/ LED Replacement, Replace	20	13	7	24	EA	$600.00	$14,400								$14,400														$14,400
P2030	6897654	Engineering Study, Mechanical, General Design	0	0	0	1	EA	$7,000.00	$7,000	$7,000																					$7,000
								Totals, Unescalated		$33,175	$0	$422,600	$270,637	$171,750	$712,406	$5,000	$265,860	$22,080	$312,700	$201,750	$0	$97,450	$96,738	$242,380	$51,075	$0	$229,865	$130,700	$19,750	$101,875	$3,387,791
								Totals, Escalated (3.0% inflation, compounded annually)		$33,175	$0	$448,336	$295,732	$193,306	$825,874	$5,970	$326,974	$27,970	$408,003	$271,134	$0	$138,940	$142,063	$366,621	$79,573	$0	$379,932	$222,508	$34,632	$183,998	$4,384,743

Appendix H:
Depleted Value Report

UNION MEMORIAL SCHOOL - Main Building

Depleted Value Index

52.3%

System	System Contribution	System Value
Air Compressor	$ 3,605	$ 5,150
Air Conditioner	$ 40,480	$ 52,800
Air Handler	$ 57,040	$ 74,400
Air Handler	$ 23,467	$ 44,000
Backflow Preventer	$ 2,800	$ 3,200
BAS/HVAC Controls	$ -	$ 61,365
Boiler	$ 82,500	$ 110,000
Boiler Supplemental Components	$ 3,520	$ 4,400
Casework	$ 3,656	$ 11,250
Casework	$ 520	$ 1,200
Casework	$ 39,975	$ 61,500
Ceiling Finishes	$ 260	$ 600
Distribution Panel	$ 19,125	$ 22,500
Distribution Panel	$ 12,375	$ 15,000
Drinking Fountain	$ 560	$ 1,200
Electrical System	$ 45,819	$ 98,184
Engineering Study	$ 2,450	$ 7,000
Exhaust Fan	$ 3,600	$ 7,200
Exterior Door	$ 2,100	$ 4,200
Exterior Door	$ 6,624	$ 7,200
Exterior Door	$ 5,980	$ 7,800
Exterior Fixture w/ Lamp	$ 11,520	$ 14,400
Exterior Walls	$ 42,720	$ 53,400
Fan Coil Unit	$ 15,180	$ 15,180
Fences & Gates	$ 4,140	$ 20,700
Fire Alarm Panel	$ 1,106	$ 1,580
Fire Alarm Panel	$ 6,000	$ 15,000
Fire Alarm System	$ 44,183	$ 73,638
Fire Extinguisher	$ 60	$ 300
Fire Extinguisher	$ 700	$ 1,500
Fire Suppression System	$ 178	$ 535
Flagpole	$ 1,667	$ 2,500
Flooring	$ 15,600	$ 19,500
Flooring	$ 31,500	$ 105,000
Flooring	$ 1,200	$ 1,600
Flooring	$ 2,310	$ 3,850
Flooring	$ 11,250	$ 22,500

System	System Contribution	System Value
Foodservice Equipment	$ 476	$ 1,700
Foodservice Equipment	$ 6,125	$ 7,000
Foodservice Equipment	$ 2,583	$ 3,100
Foodservice Equipment	$ 3,450	$ 4,600
Foodservice Equipment	$ 3,910	$ 4,600
Foodservice Equipment	$ 2,813	$ 4,500
Foodservice Equipment	$ 2,100	$ 6,300
Foodservice Equipment	$ 13,975	$ 21,500
Foodservice Equipment	$ 15,000	$ 15,000
Foodservice Equipment	$ 8,740	$ 9,500
Healthcare Equipment	$ 975	$ 1,500
Heat Pump Domestic Water Heater	$ 4,420	$ 6,800
HVAC System	$ 79,775	$ 122,730
HVAC System	$ 50,400	$ 56,000
Interior Door	$ 26,040	$ 65,100
Interior Lighting System	$ 110,457	$ 110,457
Interior Window	$ 17,063	$ 19,500
Intrusion Detection System	$ 5,318	$ 79,775
Park Bench	$ 1,867	$ 3,500
Parking Lots	$ 15,008	$ 19,575
Parking Lots	$ 116,725	$ 152,250
Picnic Table	$ 330	$ 1,200
Play Structure	$ 9,900	$ 18,000
Play Structure	$ 22,750	$ 35,000
Play Structure	$ 23,400	$ 36,000
Play Structure	$ 4,000	$ 10,000
Playground Surfaces	$ 4,167	$ 5,000
Plumbing System	$ 99,002	$ 270,006
Pump	$ 17,633	$ 23,000
Pump	$ 1,261	$ 2,910
Radiator	$ 6,500	$ 15,000
Radiator	$ 853	$ 3,200
Roofing	$ 72,800	$ 78,000
Roofing	$ 140,760	$ 306,000
Screens & Shutters	$ 780	$ 1,200
Screens & Shutters	$ 1,300	$ 2,000
Secondary Transformer	$ 6,080	$ 7,600
Secondary Transformer	$ 4,800	$ 6,000
Secondary Transformer	$ 5,137	$ 6,700
Secondary Transformer	$ 3,600	$ 6,000
Shed/Gazebo/Shade Structure	$ 5,400	$ 9,000
Shed/Gazebo/Shade Structure	$ 1,840	$ 2,400
Shed/Gazebo/Shade Structure	$ 5,280	$ 12,000

System	System Contribution	System Value
Shed/Gazebo/Shade Structure	$ 938	$ 1,250
Sidewalk	$ 12,168	$ 23,400
Signage	$ 1,900	$ 2,850
Signage	$ 100	$ 1,500
Sink/Lavatory	$ 1,360	$ 1,600
Sink/Lavatory	$ 933	$ 1,400
Sink/Lavatory	$ 16,320	$ 20,400
Sink/Lavatory	$ 1,680	$ 2,100
Sink/Lavatory	$ 1,227	$ 1,600
Sink/Lavatory	$ 4,600	$ 6,000
Soffit	$ 1,875	$ 7,500
Sports Apparatus	$ 250	$ 5,000
Sports Apparatus	$ -	$ 19,000
Sports Apparatus	$ 1,050	$ 1,400
Supplemental Components	$ 1,518	$ 1,980
Supplemental Components	$ 3,360	$ 5,600
Supplemental Components	$ 4,000	$ 6,000
Suspended Ceilings	$ 40,092	$ 85,911
Suspended Ceilings	$ 257	$ 3,850
Toilet	$ 8,667	$ 13,000
Toilet	$ 2,123	$ 4,900
Trash Receptacle	$ -	$ 2,100
Unit Heater	$ -	$ 1,800
Unit Ventilator	$ -	$ 72,000
Wall Finishes	$ -	$ 7,200
Wall Finishes	$ -	$ 24,000
Wall Finishes	$ -	$ 82,500
Water Heater	$ -	$ 900
Water Heater	$ -	$ 900
Water Heater	$ -	$ 900
Water Heater	$ -	$ 3,500
Window	$ -	$ 74,400
Totals	**$ 1,574,978**	**$ 3,008,976**