

BURNLEY MORAN ELEMENTARY SCHOOL 1300 LONG STREET CHARLOTTESVILLE, VIRGINIA

ECS PROJECT NO. 46:6713

**FOR** 

CITY OF CHARLOTTESVILLE - FACILITIES DEVELOPMENT
OCTOBER 29, 2021





#### Geotechnical • Construction Materials • Environmental • Facilities

October 29, 2021

Mr. Josh Bontrager City of Charlottesville - Facilities Development 305 4th Street NW Charlottesville, Virginia, 22903

ECS Project No. 46:6713

Reference: Facility Condition Assessment Report for Burnley Moran Elementary School, 1300 Long Street, Charlottesville, Virginia

#### Dear Mr. Bontrager:

ECS Mid-Atlantic, LLC is pleased to provide the results of our Facility Condition Assessment (FCA) for the referenced property. The scope of the FCA was performed in general accordance with ASTM and industry guidelines and items contained within the ECS Proposal No. 46:7239-FP, dated June 12, 2020. We understand that our work is being performed under the City of Charlottesville Purchase Order Number 4500313133.

It has been our pleasure to be of service to you on this project. Should you have any questions or comments with regard to the findings and recommendations, please feel free to contact us at your convenience.

Respectfully,

ECS Mid-Atlantic, LLC

Donald M. Goglio Project Manager DGoglio@ecslimited.com

Br mgc

703-471-8400

Michael G. Doyle, AIA Principal Architect mdoyle@ecslimited.com 703-471-8400

Midral H. Dyle

# **Project Summary**

Construction System	Good	Fair	Poor	Action	Immediate	Over Term Years 1-20
3.2.1 Topography	Х			None		
3.2.2 Storm Water Drainage	Х			None		
3.2.3 Access and Egress	Х			None		
3.2.4 Paving, Curbing, and Parking	Х	Х		Repair		\$20,000
3.2.5 Flatwork		Х		Replace		\$21,200
3.2.6 Landscaping and Appurtenances	Х			None		
3.2.7 Recreational Facilities		Χ		Replace		\$55,000
3.2.8 Special Utility Systems		NA		None		
3.3.1 Foundation	Х			None		
3.3.2 Building Frame	Х			None		
3.3.3 Building Exteriors		Х		Repair		\$75,000
3.3.4 Exterior Doors	Х			None		
3.3.5 Exterior Windows	Х	Х		Replace		\$25,000
3.3.6 Roofing Systems	Х	Х		Replace		\$585,000
3.4.1.1 Supply and Waste Piping	Х			None		
3.4.1.2 Domestic Hot Water Production		Х		Replace		\$4,000
3.4.2.1 Equipment	Х	Х		Replace		\$437,500
3.4.2.2 Distribution System	Х			None		
3.4.2.3 Control Systems	Х			None		
3.4.3.1 Service and Metering	Х	Х		Replace		\$30,000
3.4.3.2 Distribution	Х			None		
3.5 VERTICAL TRANSPORTATION SYSTEMS	Х			Refurbish		\$300,000
3.6.1 Sprinklers and Suppression Systems	Х			None		
3.6.2 Alarm Systems	Х	Х		Replace		\$30,000
3.6.3 Security and Other Systems	Х			None		
3.7.1 Interior Finishes	Х			None		
3.8 Accessibility (ADA) Compliance	Х	Х		REMOVE PROTRUSIONS	\$12,000	
5.1 MOISTURE AND MOLD	Х			None		
Totals					\$12,000	\$1,582,700

Summary	Today's Dollars	\$/Square Feet
Immediate Repairs	\$12,000	\$0.34

	Today's Dollars	\$/Square Feet	\$/Square Feet/Year
Replacement Reserves, today's dollars	\$1,582,700.00	\$44.55	\$2.23
Replacement Reserves, w/20, 2.5% escalation	\$1,861,986.39	\$52.41	\$2.62

TABI	LE OF C	ONTEN	TS	PAGE
1.0	EXECU	JTIVE SU	MMARY	1
	1.1	BACKG	GROUND	
	1.2	METHO	DDOLOGY	
	1.3	PROPE	RTY DESCRIPTION	3
	1.4	OPINIO	ONS OF COST	5
	1.5	COST	TABLES	6
		Immed	diate Repair Cost	7
		Capita	l Reserve Schedule	8
2.0	PURP	OSE AND	SCOPE	11
	2.1	SCOPE	OF SERVICES	11
	2.2	Deviat	ions from Guide (ASTM E2018-15)	11
	2.3	ASSESS	SMENT PROCEDURES	12
	2.4	DEFINI	TIONS	12
		2.4.1	Partial List of ASTM Definitions	12
3.0	SYSTE	M DESCR	RIPTION AND OBSERVATIONS	15
	3.1	PROPE	RTY DESCRIPTION	15
		3.1.1	Property Location	15
		3.1.2	Construction History	
		3.1.3	Current Property Improvements	
	3.2	SITE C	ONDITIONS	15
		3.2.1	Topography	15
		3.2.2	Storm Water Drainage	16
		3.2.3	Access and Egress	17
		3.2.4	Paving, Curbing, and Parking	17
		3.2.5	Flatwork	
		3.2.6	Landscaping and Appurtenances	21
		3.2.7	Recreational Facilities	22
		3.2.8	Special Utility Systems	25
	3.3	STRUC	TURAL FRAME AND BUILDING EXTERIOR	25
		3.3.1	Foundation	25
		332	Ruilding Frame	25



<b>8</b> N	LIMIT	ΔΤΙΩΝΙς Α	AND QUALIFICATIONS 66
7.0	FACIL	ITY CON	DITION INDEX (FCI) 65
6.0	RECOI	MMENDA	ATIONS AND OPINIONS OF COST63
	5.1	MOIST	URE AND MOLD
5.0	ADDIT	TIONAL C	CONSIDERATIONS 62
	4.2	INTER\	VIEW SUMMARY 61
	4.1	DOCU	MENTATION REVIEW
4.0	DOCU	MENT RI	EVIEW 6 <sup>-</sup>
	3.8	Access	sibility (ADA)  Compliance 55
		3.7.1	Interior Finishes 50
	3.7	INTERI	OR BUILDING COMPONENTS 50
		3.6.3	Security and Other Systems
		3.6.2	Alarm Systems
		3.6.1	Sprinklers and Suppression Systems
	3.6	LIFE SA	AFETY AND FIRE PROTECTION
	3.5	VERTIC	CAL TRANSPORTATION SYSTEMS45
			3.4.3.2 Distribution
			3.4.3.1 Service and Metering
		3.4.3	Electrical Systems
			3.4.2.3 Control Systems
			3.4.2.2 Distribution System
		J. 1.2	3.4.2.1 Equipment
		3.4.2	HVAC Systems
			3.4.1.2 Domestic Hot Water Production
		5.4.1	3.4.1.1 Supply and Waste Piping
	3.4	3.4.1	BING, MECHANICAL, AND ELECTRICAL SYSTEMS
	2.4	3.3.6	Roofing Systems
		3.3.5	Exterior Windows
		3.3.4	Exterior Doors
		3.3.3	Building Exteriors
		2 2 2	Duillitie - Futuri



# **TABLE OF APPENDICES**

Appendix I: SITE MAP AND AERIAL PHOTOGRAPH

Appendix II: FIRE EXTINGUISHER INSPECTION

Appendix III: FIRE SPRINKLER INSPECTION

Appendix IV: ELEVATOR CERTIFICATES

Appendix V: RS MEANS ESTIMATE FOR FACILITY CONDITION INDEX (FCI)

Appendix VI: SITE PHOTOGRAPHS

Appendix VII: RESUMES



#### **1.0 EXECUTIVE SUMMARY**

#### **1.1 BACKGROUND**

ECS Mid-Atlantic, LLC (ECS) performed a Facility Condition Assessment (FCA) in general conformance with ASTM guidelines and general scope items contained within the ECS Proposal 46:7239-FP dated June 12, 2020 for the Burnley Moran Elementary School property in Charlottesville, Virginia - hereinafter known as the Property.

The FCA was conducted by ECS in response to the authorization of our Proposal by Ms. Susan Dyer on November 23, 2020. The report was completed and reviewed by the following team members:

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Donald M. Goglio	Project Manager
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#### Reliance

This report is provided for the exclusive use of City of Charlottesville - Facilities Development. This report is not intended to be used or relied upon in connection with other projects or by other unidentified third parties. The use of this report by any undesignated third party or parties will be at such party's sole risk and ECS disclaims liability for any such third party use or reliance.

#### **1.2 METHODOLOGY**

ECS observations and historical property data provided by the owner were utilized to determine the effective age of the property components. Various factors including exposure to weather elements, system manufacturer quality, level of maintenance, and usage determine the effective age of property components. Depending on the impact of these various factors, the effective age of property components can reduce the Remaining Useful Life (RUL) of a property component. The general requirements of the owner to address facility needs were requested to be prioritized based on the RUL and type of property component. The following Priorities were established by the Owner as follows:

**Priority 1: Immediately Critical Items (Year 0)** 



Items in this Priority category include physical deficiencies that require immediate action as a result of (i) existing or potentially unsafe conditions, (ii) significant negative conditions impacting tenancy, (iii) material building code violations or Title II American with Disabilities Act (ADA) items.



#### **Priority 2: Critical Items (Year 0-1)**

Items in this Priority category include physical deficiencies that require immediate action as a result of (i) poor or deteriorated condition of critical element or system, or (ii) a condition that is left "as is," with an extensive delay in addressing same, would result in or contribute to critical element or system failure within one year.

#### **Priority 3: Near Term Items (Years 2-5)**

Items in this category include physical deficiencies that require near term action as a result of (i) poor or deteriorated condition of critical element or system, or (ii) a condition that is left "as is," with an extensive delay in addressing same, would result in or contribute to critical element or system failure within two to five years.

#### **Priority 4: Reserve Items (Years 5-20)**

Items in this Priority category include Capital Reserves for recurring probable expenditures, which are not classified as operational or maintenance expenses, which should be annually budgeted for in advance. Capital reserves are reasonably predictable both in terms of frequency and cost. However, they may also include components or systems that have an indeterminable life but nonetheless have a potential liability for failure within an estimated time period. A component method has also been included within this report as well.

Reserve items excludes systems or components that are estimated to expire after the reserve term and that are not considered material to the structural and mechanical integrity of the subject property. Furthermore, systems and components that were not deemed to have a material affect on the use were also excluded. Costs that are caused by acts of God, accidents or other occurrences that are typically covered by insurance, rather than reserved funds, are also excluded.

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

ECS's reserve methodology involves identification and quantification of those systems or components requiring capital reserve funds within the evaluation period. Additional information concerning systems or components 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 Capital Reserve Schedule presupposes that all required remedial work has been performed or that monies for remediation have been budgeted for items defined in the Immediate Needs Cost Estimates.

#### 1.3 PROPERTY DESCRIPTION

Burnley Moran Elementary School, located at 1300 Long Street, in Charlottesville, Virginia, consists of a Two-story building. The building totals approximately 35,525 square feet. Parking is provided with At-grade parking with asphalt pavement. The School building was reportedly constructed in 1958.



SURVEY INFORMATION		
Date of Assessment	July 8, 2021	
Assessor	William R. Pratt, P.E.	
Weather Conditions	Overcast   82F	
Property Contact	Josh Bontrager, Project Manager for the City of Charlottesville - Facilities Development	

SITE INFORMATION		
Land Area	10.12 acres	
Major Cross Streets	Mowbray Place	
Pavement - Parking	At-grade parking with asphalt pavement	
Number of Parking Spaces	81	
Number of Accessible Spaces	Five	
Number of Van Accessible Spaces	Three	
Pedestrian Sidewalks	Concrete and asphalt sidewalks	

BUILDING INFORMATION		
Building Type	School	
Number of Buildings	One	
Building Height	Two-story	
Square Footage	35,525	
Year Constructed	1958	
Year Remodeled	1995	

BUILDING CONSTRUCTION		
Foundation	Assumed shallow spread footings	
Structural System	Concrete masonry unit bearing walls with steel roof framing	
Roof	Single-ply sheet membrane and slate	
Exterior Finishes	Brick veneer	



BUILDING CONSTRUCTION		
Windows	Aluminum frame double pane - operable, aluminum frame single pane	
Entrance	Steel with glass	

BUILDING SYSTEMS		
HVAC System	Central plant HVAC system with supplemental heating/cooling equipment	
Domestic Hot Water	Gas domestic water heater	
Water Distribution	Copper	
Sanitary Waste Line	PVC and cast iron	
Electrical Service	3-phase, 4-wire, 2,000 amps	
Branch Wiring	Copper	
Elevators	Two passenger elevators	
Fire Suppression System	Wet sprinkler system and fire extinguishers with automated fire alarm system with alarm bell, strobe, and pull down stations	

	UTILITY SERVICE PROVIDERS
Water	Charlottesville Water
Sewer	Charlottesville Public Utilities - Wastewater
Electric	Dominion Virginia Power
Natural Gas	City of Charlottesville

#### **1.4 OPINIONS OF COST**

The opinions of cost are provided in the attached reserve replacement table and a summary of immediate repairs included in this report. The reserve replacement table covers capital expenditure items only. Items less than \$1,000 in cost have been excluded, except for immediate repairs, ADA or safety issues. Please refer to section 6.0 of this report for a detailed explanation on how these costs are derived.



# 1.5 COST TABLES



# **Immediate Repair Cost**

Item	Quantity	Unit	Unit Cost	Replacement Percent	Immediate Total
3.8 Accessibility (ADA) Compliance					
REPLACE OR RELOCATE DRINKING FOUNTAINS	4	EA	\$3,000.00	100%	\$12,000
Total Repair Cost					\$12,000.00

# **Capital Reserve Schedule**

2.4 Roung, Cultury and Parker   1941   1942														Capital	Reserve :	Scried	uie												
PRINCE THE	ltem			UL Quant	ty Unit	: Unit Cost			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total Cost
NAMES	3.2.4 Paving, Cu	rbing, a	and Pa	rking																									
FEMALE 25 24 1 1 4 6 8 5,000 0 100 100 100 100 100 100 100 100 1	ASPHALT PAVEMENT REPAIRS	20 1	19 1	4	Allov	s5,000.00	\$20,000	100%	\$5,000					\$5,000					\$5,000					\$5,000					\$20,000
NORCHET BETWAND 10 8 1 1 20 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	3.2.5 Flatwork																												
ND RAMP	REPLACE CONCRETE SIDEWALK SECTIONS AND CONCRETE STEPS AS NEEDED	25 2	24 1	4	EA	\$5,000.00	\$20,000	100%	\$5,000					\$5,000					\$5,000					\$5,000					\$20,000
EPLACE LAYGROUND QUIPMENT   F.A.   \$45,000   \$	REPAINT STAIR AND RAMP RAILS	10 9	9 1	1	EA	\$1,200.00	\$1,200	100%	\$1,200																				\$1,200
LAYGROUND QUIPMENT   SESURACE/ ESCAL ASKETBALL OUR   STOROW   STOR	3.2.7 Recreation	nal Facil	lities																										
ESEAL OURT  3.3 BUILDING EXECUTE  BEPINT RICKWORK  20 8 12 1 LS \$30,000.0 \$30,000 \$30,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$100% \$10,000 \$100% \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$10,000 \$100% \$100% \$100% \$10,000 \$100% \$10,000 \$100% \$1	REPLACE PLAYGROUND EQUIPMENT	20 1	15 5	1	EA	\$45,000.00	\$45,000	100%					\$45,000																\$45,000
FPOINT RICKWORK   20   8   12   1   15   \$30,000   \$30	RESURFACE/ RESEAL BASKETBALL COURT	20 1	15 5	1	LS	\$10,000.00	\$10,000	100%					\$10,000																\$10,000
RICKWORK	3.3.3 Building E	xteriors	5																										
ANT WOOD RIM-CORNICE NOME PROPOSED ONCRETE LEMENTS  EPLACE ELANTS  20 19 1 1 1 LS \$25,000 0 \$25,000 100% \$25,	REPOINT BRICKWORK	20 8	3 1	2 1	LS	\$30,000.00	\$30,000	100%												\$30,000									\$30,000
EALANTS	REPAIR AND PAINT WOOD TRIM-CORNICE AND EXPOSED CONCRETE ELEMENTS	10 9	9 1	2	LS	\$10,000.00	\$20,000	100%	\$10,000										\$10,000										\$20,000
EPLACE 20 19 1 1 LS \$25,000.00 \$25,000 100% \$25,000 \$2	REPLACE SEALANTS	12 1	11 1	1	LS	\$25,000.00	\$25,000	100%	\$12,500												\$12,500								\$25,000
ASKETS SIGNATURE	3.3.5 Exterior W	indows	5																										
2.6 Peofice Systems	REPLACE WINDOW GASKETS	20 1	19 1	1	LS	\$25,000.00	\$25,000	100%	\$25,000																				\$25,000
.5.0 ROUTING SYSTEMS	3.3.6 Roofing Sy	stems																											

Item		EFF AGE	RUL	Quantity	Unit	Unit Cost	Cycle Replace	Replace Percent		Year 2 2022	Year 3 2023	Year 4 2024	Year 5 2025	Year 6 2026	Year 7 2027	Year 8 2028	9	Year 10 2030	Year 11 2031	Year 12 2032	Year 13 2033	Year 14 2034	Year 15 2035	Year 16 2036	17	Year 18 2038	19	Year 20 2040	Total Cost
REPLACE SINGLE-PLY ROOFING SYSTEM	15			40,000			\$560,000		\$560,000																				\$560,000
REPAIR SLATE SHINGLE ROOFING SYSTEM	50	49	1	4	EA	\$5,000.00	\$20,000	100%	\$5,000					\$5,000					\$5,000					\$5,000					\$20,000
INSTALL SNOW/ICE GUARDS ABOVE MAIN BUILDING ENTRANCE				1	LS	\$5,000.00	\$5,000	100%	\$5,000																				\$5,000
3.4.1.2 Domesti	c Hot V	Wate	r Prod	uction																									
REPLACE WATER HEATERS	12	11	1	4	EA	\$1,000.00	\$4,000	100%	\$2,000												\$2,000								\$4,000
3.4.2.1 Equipme	ent																												
REPLACE BOILERS	20	13	7	3	EA	\$25,000.00	\$75,000	100%							\$75,000														\$75,000
REPLACE CONDENSERS	15	8	7	3	EA	\$10,000.00	\$30,000	100%							\$30,000														\$30,000
REPLACE AIR HANDLERS	15	14	1	4	EA	\$10,000.00	\$40,000	100%	\$20,000						\$20,000														\$40,000
REPLACE WATER SOURCE HEAT PUMPS	20	7	13	85	EA	\$2,500.00	\$212,500	100%													\$53,125	\$53,125	\$53,125	\$53,125					\$212,500
REPLACE PACKAGE UNITS	20	7	13	2	EA	\$20,000.00	\$40,000	100%													\$40,000								\$40,000
REPLACE COOLING TOWER	18	15	3	1	EA	\$30,000.00	\$30,000	100%			\$30,000																		\$30,000
REPLACE SPACE HEATERS	20	15	5	2	EA	\$1,000.00	\$2,000	100%					\$1,000															\$1,000	\$2,000
REPLACE SPLIT SYSTEM	15	9	6	1	EA	\$2,000.00	\$2,000	100%						\$2,000															\$2,000
REPLACE FAN COIL UNITS	20	7	13	3	EA	\$2,000.00	\$6,000	100%													\$6,000								\$6,000
3.4.3.1 Service a	and Me	eterin	ıg																										

Item		EFF AGE	RUL	Quantity	Unit	Unit Cost	Cycle Replace	Replace Percent		Year 2 2022	Year 3 2023	Year 4 2024	Year 5 2025	Year 6 2026	Year 7 2027	8	Year 9 2029	Year 10 2030	Year 11 2031	Year 12 2032	Year 13 2033	Year 14 2034	Year 15 2035	Year 16 2036	Year 17 2037	18	Year 19 2039	Year 20 2040	Total Cost
REPLACE GENERATOR AND TRANSFER SWITCH	25	15	10	1	EA	\$30,000.00	\$30,000	100%										\$30,000											\$30,000
3.5 VERTICAL TI	RANSP	ORTA	TION	SYSTEMS																									
MODERNIZE ELEVATORS	40	26	14	2	EA	\$150,000.00	\$300,000	100%														\$300,000							\$300,000
3.6.2 Alarm Sys	tems																												
REPLACE FIRE ALARM PANELS	25	24	1	1	EA	\$30,000.00	\$30,000	100%	\$30,000																				\$30,000
Total (Uninflate	ed)								\$680,700.00	\$0.00	30,000.00	\$0.00	\$56,000.00	\$17,000.00	\$125,000.00	\$0.00	\$0.00	\$30,000.00	\$25,000.00	\$30,000.00	\$113,625.00	\$353,125.00	\$53,125.00	\$68,125.00	\$0.00	\$0.00	\$0.00	\$1,000.00	\$1,582,700.00
Inflation Factor	(2.5%)	)							1.0	1.025 1	1.051	1.077	1.104	1.131	1.16	1.189	1.218	1.249	1.28	1.312	1.345	1.379	1.413	1.448	1.485	1.522	1.56	1.599	
Total (inflated)									\$680,700.00	\$0.00	31,518.75	\$0.00	\$61,813.52	\$19,233.94	\$144,961.68	\$0.00	\$0.00	\$37,465.89	\$32,002.11	\$39,362.60	\$152,812.99	\$486,786.71	\$75,064.23	\$98,665.31	\$0.00	\$0.00	\$0.00	\$1,598.65	\$1,861,986.39
Evaluation Peri	od:								20																				
# of Square Fee	et:								35,525																				
Reserve per Sq	uare Fe	eet pe	er yea	r (Uninflat	ed)				\$2.23																				
Reserve per Sq	uare Fe	eet pe	er yea	r (Inflated)					\$2.62																				

#### 2.0 PURPOSE AND SCOPE

#### 2.1 SCOPE OF SERVICES

This Facility Condition Assessment (FCA) was conducted in general accordance with items and terminology requested by the Owner herein and ASTM E 2018-15, "Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process".

The primary purpose of a FCA is to note construction deficiencies and to identify components which appear to exhibit less than expected service life or which have been poorly maintained. The assessment is not intended to develop detailed remedial plans for identified problems. The services are qualitative in nature and do not include engineering calculations or design. Photographic documentation of our observations is attached.

The following building systems were observed in accordance with ASTM E 2018-15:

- Site Conditions
- Structural Frame and Building Envelope
- Plumbing, Mechanical and Electrical Systems
- Vertical Transportation Systems
- Life Safety and Fire Protection
- Interior Elements
- ADA Considerations
- Building Code Violations

## **Out of Scope Items**

Environmental issues and concerns are considered to be outside of the ASTM scope of services for a Facility Condition Assessment. Although properties may have possible environmental contamination, including, but not limited to radon, mold, lead based paint, asbestos, lead piping, PCB's or volatile chemicals, these issues and concerns should be addressed by an Environmental Assessment, as defined by ASTM Guidelines. ECS recommends that properties be studied by a qualified environmental assessor who can appropriately access, identify, and quantify issues related to environmental safety concerns.

ECS is providing a Facility Condition Assessment consistent with commercial and customary practices and the ASTM E-2018, current at the time the services are provided. The parties expressly acknowledge and agree that ECS is not providing a Reserve Study, which is subject to the National Reserve Study Standards and requires much more detail than a typical Facility Condition Assessment.

#### 2.2 Deviations from Guide (ASTM E2018-15)

ASTM E2018-15 requires that any deviations from the Guide be noted within the report. ECS reduced the cost threshold from \$3,000 to \$1,000 to allow for smaller items needing repair, replacement or refurbishment. Therefore items with costs less than \$1,000 are typically not included in this report unless related to life, safety or accessibility items.



ECS interviewed personnel associated with the Burnley Moran Elementary School facility and other government agencies based upon availability. These individuals are identified in Section 4.2. Information obtained from the interviews are included in the applicable sections of this report.

#### 2.3 ASSESSMENT PROCEDURES

The FCA included site reconnaissance, limited interviews with property management, and inquiries or attempted inquiries with the local building and fire departments. Operational testing of building systems or components was not conducted. During the FCA, ECS conducted observations of the following facility features: site development systems; building structure systems; building exterior systems; building interior systems; roof systems; mechanical systems; electrical systems; plumbing systems; and life and fire safety systems.

This report is intended for review as a complete document. Therefore, interpretations and conclusions drawn from the review of any individual section are the sole responsibility of the User.

#### 2.4 DEFINITIONS

**Fair**, adj - the property or component is functional but will likely require immediate maintenance or repairs during the duration of the term.

**Good**, adj - the property or component is functional and should continue to provide its intended service with continued routine maintenance through the duration of the term.

**Poor**, adj - the property or component is not functional. Immediate or near term repairs are required to bring the component back into service or replacement is expected during the duration of the term.

#### 2.4.1 Partial List of ASTM Definitions

**de minimis condition** - a physical deficiency that is not material to the conclusions of the report.

**deferred maintenance**, n - physical deficiencies that could have been remedied with routine maintenance, normal operating maintenance, etc., excluding de minimis conditions that generally do not present a material physical deficiency to the subject property.

**easily visible**, adj - describes items, components, and systems that are conspicuous, patent, and which may be observed visually during the walk-though survey without: intrusion, relocation or removal of materials, exploratory probing, use of special protective clothing, or use of any equipment (hand tools, meters of any kind, telescope instruments, stools, ladders, lighting devices, etc.).

**effective age**, n - the estimated age of a building component that considers actual age as affected by maintenance history, location, weather conditions, and other factors. Effective age may be more or less than actual age.

**expected useful life (EUL)**, n - the average amount of time in years that an item, component or system is estimated to function without material repair when installed new and assuming routine maintenance is practiced.



**immediate cost**, n - opinions of costs that require immediate action as a result of any of the following: (1) material existing or potentially unsafe conditions, (2) material building or fire code violations, (3) physical deficiencies that if left uncorrected would be expected to result in or contribute to critical element or system failure within on year or will result most probably in significant escalation of its remedial cost.

**observation**, n - the visual survey of items, systems, conditions, or components that are readily accessible and easily visible during a walk-through survey of the subject property.

**observe**, v - to conduct an observation pursuant to this guide within the context of easily visible and readily accessible.

**obvious**, adj - plain, evident, and readily accessible; a condition easily visible or fact not likely to be ignored or overlooked by a field observer when conducting a walk-through survey or that which is practically reviewable and would be understood easily by a person conducting the FCA.

**opinions of costs**, n - opinion of costs that may be encountered in correction of physical deficiencies.

**physical deficiency**, n - a conspicuous defect or deferred maintenance of a subject property's material systems, components, or equipment as observed during the completion of the FCA. - This definition specifically excludes deficiencies that may be remedied with routine maintenance, miscellaneous minor repairs, normal operating maintenance, etc., and excludes de minimis conditions that generally do not present material physical deficiencies of the subject property.

**Point of Contact (POC)**, n - owner, owner's agent, or user-identified person or persons knowledgeable about the physical characteristics, maintenance, and repair of the subject property.

**practically reviewable**, adj - describes information that is provided by the source in a manner and form that, upon review, yields information relevant to the subject property without the need for significant analysis, measurements, or calculations. Records or information that feasibly cannot be retrieved by reference to the location of the subject property are not generally considered practically reviewable.

**primary commercial real estate improvements**, n - the site and building improvements that are of fundamental importance with respect to the commercial real estate. This definition specifically excludes ancillary structures, that may have been constructed to provide support uses such as maintenance sheds, security booths, utility garages, pool filter and equipment buildings, etc.

**property**, n - the site improvements, which are inclusive of both site work and buildings.

**readily accessible**, adj - describes areas of the subject property that are promptly made available for observation by the field observer at the time of the walk-through survey and do not require the removal or relocation of materials or personal property, such as furniture, floor, wall, or ceiling coverings; and that are safely accessible in the opinion of the field observer.

**readily available**, adj - describes information or records that are easily and promptly provided to the consultant upon making a request in compliance with an appropriate inquiry and without the need for the consultant to research archive files.



**reasonably ascertainable**, adj - describes information that is publicly available, as well as readily available, provided to the consultant's offices from either its source or an information research/retrieval service within reasonable time, practically reviewable, and available at a nominal cost for either retrieval, reproduction or forwarding.

**remaining useful life (RUL)**, n - a subjective estimate based upon observations, or average estimates of similar items, components, or systems, or a combination thereof, of the number of remaining years that an item, component, or system is estimated to be able to function in accordance with its intended purpose before warranting replacement. Such period of time is affected by the initial quality of an item, component, or system, the quality of the initial installation, the quality and amount of preventive maintenance exercised, climatic conditions, extent of use, etc.

**representative observations**, n - observations of a reasonable number of samples of repetitive systems, components, areas, etc., which are conducted by the field observer during the walk-through survey. The concept of representative observations extends to all conditions, areas, equipment, components, systems, buildings, etc., to the extent that they are similar and representative of one another.

**routine maintenance**, n - a repair that does not require specialized equipment, profession services, or contractors, but rather can be corrected within budget and skill set of typical property maintenance staff.

**short term cost**, n - opinions of costs to remedy physical deficiencies, such as deferred maintenance, that may not warrant immediate attention, but require repairs or replacements that should be undertaken on a priority basis in addition to routine preventive maintenance.

**technically exhaustive**, adj - describes the use of measurements, instruments, testing, calculations, exploratory probing or discovery, or other means to discover, or a combination thereof, or troubleshoot physical deficiencies or develop architectural or engineering findings, conclusions, and recommendations, or combination thereof.



#### **3.0 SYSTEM DESCRIPTION AND OBSERVATIONS**

#### 3.1 PROPERTY DESCRIPTION

The Property contains a Two-story School building.

# 3.1.1 Property Location

The Property is located at 1300 Long Street in Charlottesville, Virginia.

	Surrounding Properties								
North	Mowbray Place								
East	Residential properties								
South	Residential properties								
West	Residential properties								

A Site Location Map and Aerial View are included in Appendix I.

# 3.1.2 Construction History

We understand that the building was constructed approximately 63 years ago in 1958.

# 3.1.3 Current Property Improvements

The School building, located at 1300 Long Street, in Charlottesville, Virginia, consists of a Two-story school building. The building totals approximately 35,525 square feet. Parking is provided with At-grade parking with asphalt pavement.

#### 3.2 SITE CONDITIONS

#### 3.2.1 Topography

TOPOGRAPHY								
ltem	Description	Condition						
Slope of the property	The property generally slopes to the south	Good						
Adjoining Properties	Generally down slope	Good						

## Comments

The property is generally level and slopes to the south. The adjoining properties are located down gradient from the property.



# 3.2.2 Storm Water Drainage

STORM WATER DRAINAGE							
ltem	Description	Condition					
Storm Water Collection System	Municipal	Good					
Storm Water (Retention) Pond		N/A					
Storm Water Filtration Structure		N/A					
Pavement Drainage	Curb and grated inlets	Good					
Landscape Drainage		Good					
Sump Pumps		N/A					

# **Comments**

The storm water collection system is a municipal system.

# **Photographs**



Typical storm water drainage



Typical storm water drainage



# 3.2.3 Access and Egress

SITE ACCESS AND EGRESS							
ltem	Description	Condition					
Entrance Aprons	Asphalt	Good					
Fire Truck Access	North side of the property	Good					
Easements		N/A					

#### **Comments**

Vehicular access to the site is located on the north and east side of the property. The entrance apron is constructed of asphalt and was observed to be in generally good condition. Fire truck access is available on the north side of the building.

# 3.2.4 Paving, Curbing, and Parking

PARKING									
ltem	Description	Condition							
Striping	Painted	Fair							
Quantity of Parking Spaces	81	Good							
Quantity of Loading Spaces		N/A							
Arrangement of Spaces	Mostly Perpendicular with a few parallel spaces	Good							
Site Circulation	One-way drive aisles	Good							
Lighting		N/A							
Accessible Spaces	Five	Good							
Accessible Aisles	Three	Good							

SURFACE PAVEMENT							
Item	Description	Condition					
Pavement Surface	At-grade parking with asphalt pavement	Fair					
Drainage	Storm inlets provided	Good					
Repair History	Patching and crack repair noted	Fair					



	SURFACE PAVEMENT							
ltem	Description	Condition						
Concrete Curbs and Gutters	Chipping and cracking noted	Fair						
Dumpster Pad	Placed on asphalt	N/A						
Asphalt Curbs		N/A						
Fire Lane Painting	Fading	Fair						

#### **Comments**

Asphalt-paved drive lanes and parking areas are located on the north and south side of the site which also provides access to the site. Additional parking is provided along the southern drive lane. The asphalt pavement was observed to be in generally good to fair condition with minor cracks observed on the pavement. Striping was in fair condition. The expected useful life of asphalt pavement is 20 years. We have provided allowances to repair the cracked areas of asphalt pavement.

# **Photographs**





Asphalt parking area at the center of the site - note cracking and previous repair

Asphalt drive lane at center of the site







Asphalt drive lane at west side of the site

Asphalt parking area at the center of the site - note cracking

# Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
ASPHALT PAVEMENT REPAIRS	20	19	1	1	\$5,000
				6	\$5,000
				11	\$5,000
				16	\$5,000
Total					\$20,000

# 3.2.5 Flatwork

SIDEWALKS			
ltem	Description	Condition	
Walkways	Concrete and asphalt sidewalks	Fair	
Patios	Concrete	Fair	
Steps	Concrete	Fair	
Landings	Concrete	Fair	
Handrails	Typically steel tube	Fair	
Ramps	Concrete	Fair	
Curb Ramps	Concrete	Fair	
Truncated Domes	Inlet plastic	Fair	



#### **Comments**

At the perimeter of the building, concrete sidewalks sidewalks of undetermined thickness are provided. Regularly spaced control joints were observed. The concrete sidewalks were generally in fair condition, with some cracked sections observed. We recommend the cracked and settled sections be replaced as necessary.

The steps and ramps were observed to be in generally fair condition. Previously repaired concrete sidewalks appeared to be in fair condition. The handrails adjacent to the steps and ramps were observed to be in generally fair condition. The paint on the railings was noted to be peeling/ chipping in most locations. We recommend the rails be sanded and repainted to prevent corrosion. There is a concrete patio on the northwest side of the building. The patio was generally in fair condition.

An asphalt sidewalk is located on the west side of the site. The asphalt sidewalk was in fair condition.

# **Photographs**





Concrete sidewalk - note cracking

Typical exterior concrete steps







Typical exterior concrete steps - note deterioration

Typical exterior concrete steps - note handrail peeled

# Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE CONCRETE SIDEWALK SECTIONS AND	25	24	1	1	\$5,000
CONCRETE STEPS AS NEEDED				6	\$5,000
				11	\$5,000
				16	\$5,000
REPAINT STAIR AND RAMP RAILS	10	9	1	1	\$1,200
Total					\$21.200

# 3.2.6 Landscaping and Appurtenances

LANDSCAPING			
ltem	Description	Condition	
Trees	Located throughout the site	Good	
Planting Beds	Located at north side of the building	Good	
Lawn Areas	Located on south side of the building	Good	
Irrigation System		N/A	
Monumental Sign	Located on north side of the building	Good	
Landscape Lighting		N/A	



LANDSCAPING		
ltem	Description	Condition
Retaining Walls		N/A
Fences and Gates	Located at play area	Good
Dumpster Area	Located at northwest end of the building	Good
Fountains		N/A

#### **Comments**

The landscaping consists generally of mature trees, small shrubs, and grassed areas around the site. The landscaping was observed to be in generally good condition.

A metal chain link fence is located on the east side of the site and was generally in good condition.

A sign is located at the north entrance. It is a painted wooden sign. The painted wooden sign was generally in good condition. We recommend painting the wood sign as a maintenance item as needed.

# **Photographs**



Monument sign and landscaping

## 3.2.7 Recreational Facilities

BASKETBALL COURT			
Item Description Condition			
Playing Surface	Asphalt	Fair	



BASKETBALL COURT			
ltem	Description	Condition	
Fencing	Chain link	Fair	
Lighting		N/A	

PLAYGROUND		
ltem	Description	Condition
Playing Surface	Mulch	Good
Fencing	Vinyl coated chain link	Good
Equipment	Plastic/vinyl coated	Good
Lighting		N/A

SOCCER FIELD		
ltem	Description	Condition
Playing Surface	Grass	Fair
Fencing	Chain link on east end	Fair
Equipment		N/A
Lighting		N/A

#### **Comments**

#### **Basketball Court**

The basketball court was located on the northeast side of the property. The surface was in fair condition and contained large cracks with vegetation growth . The expected useful life of the surface is approximately 20 years. We recommend an allowance be provided to resurface or seal the basketball court.

#### **Playground**

Various playground equipment is located on the south side of the property. The playground consisted of various plastic play equipment and was located on a mulched play surface. The playground equipment was in good condition and was reportedly replaced in 2006. Mulching of the playground when required is considering a maintenance item. The expected useful life of playground equipment is 15 to 20 years with proper maintenance. An allowance for replacement of the equipment is included later in the study period.

#### Soccer Field

The soccer field is located at the south side of the property. The soccer field was in fair condition.



# **Photographs**





Playground equipment at south end of site

Playground equipment at south end of site



Basketball court surface - note cracking and deterioration

#### Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE PLAYGROUND EQUIPMENT	20	15	5	5	\$45,000
RESURFACE/RESEAL BASKETBALL COURT	20	15	5	5	\$10,000
Total					\$55,000



# 3.2.8 Special Utility Systems

Item	Description	Condition
Water Well		N/A
Lift Station		N/A
Septic Field		N/A
Solar Power		N/A
Wind Power		N/A

#### **Comments**

The Property does not contain special utility systems.

#### 3.3 STRUCTURAL FRAME AND BUILDING EXTERIOR

#### 3.3.1 Foundation

FOUNDATION		
ltem	Description	Condition
Load Bearing Support	Assumed shallow spread footings	Good
Basement		N/A
Crawl Space		N/A

#### **Comments**

The foundation of the building includes Assumed shallow spread footings. Large cracks were not observed in the exterior walls. The foundation system appeared to provide adequate structural support to the building. The foundation was generally in good condition.

# 3.3.2 Building Frame

BUILDING FRAME			
ltem	Description	Condition	
Floor Framing	Concrete	Good	
Roof Framing	Steel trusses	Good	
Columns	Steel	Good	
Load Bearing Walls	CMU	Good	
Balconies		N/A	



BUILDING FRAME			
Item	Item Description Cond		
Decks		N/A	

# **Comments**

The structure of the building consists of Concrete masonry unit bearing walls with steel roof framing for low slope roofing system and steel truss and beam roof framing for pitched roofing system. The structural frame of the building was generally in good condition.

# **Photographs**



**Building framing** 

# 3.3.3 Building Exteriors

EXTERIOR FINISHES			
ltem	Description	Condition	
Masonry	Brick, split face CMU	Fair	
Glass Store Front		N/A	
Stone	Located around main entrance	Good	
Glass Curtain Wall		N/A	
Metal		N/A	
Concrete	Precast stone and painted concrete elements	Fair	
Wood Siding		N/A	
Accent/Trim	Wood and precast elements	Fair	



EXTERIOR FINISHES				
ltem	Item Description Cond			
Covered Soffits	Painted	Fair		
Awnings	Painted	Fair		
Paint	Peeling noted	Fair		
Sealants	Various	Poor		

#### **Comments**

The primary exterior of the building consists of Brick veneer, precast stone, and split-face CMU. Painted exposed concrete beams and columns were located on the west side of building. The building exteriors were generally in fair condition with limited deterioration observed. The expected useful life of mortared joints is approximately 20 years before re-pointing is required. Limited deterioration of mortar joints was observed. We recommend re-pointing of the deteriorated mortar joints. Cracking was observed in the exposed concrete elements. We recommend a concrete repair project to seal cracks and repair delaminated concrete, as required. The paint was in good condition.

Exterior sealants are located around the window and door frames. The expected useful life of exterior sealants is approximately 10 to 12 years before replacement is needed. The exterior sealants were generally in poor condition. The sealants were observed to be hard and separated from the substrate. We recommend that the exterior sealants be replaced.

Various awning structures are located at the over entrance doors throughout the building. The awnings consist of a concrete deck with metal columns. The underside of the concrete and the metal columns were painted. The paint was observed to be peeling at the underside of the awning at various entrances. The awnings should be painted in conjunction with the exposed concrete beams and columns painting project.



# **Photographs**





Building exterior finishes

Building exterior south side of the building



Building exterior finishes - note mortar joint deterioration



Building exteriors - note deterioration of wood cornice







Burnley Moran Elementary School

Typical exterior windows

# Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPOINT BRICKWORK	20	8	12	12	\$30,000
REPAIR AND PAINT WOOD TRIM-CORNICE AND EXPOSED CONCRETE ELEMENTS	10	9	1	1 11	\$10,000 \$10,000
REPLACE SEALANTS	12	11	1	1 13	\$12,500 \$12,500
Total					\$75,000

# 3.3.4 Exterior Doors

DOORS			
ltem	Description	Condition	
Main Entrance Doors	Steel with glass	Good	
Personnel Doors	Steel	Good	
Door Hardware	Operable	Good	
Accessibility Controls		N/A	
Overhead/Roll-up Doors		N/A	



#### **Comments**

The main entrance is located at the southwest portion of the building and consists of Steel with glass doors. The main entrance doors were generally in good condition.

Metal and glass personnel doors are located throughout the building. The personnel doors were generally in good condition. It also appeared that many of the doors had been replaced over time. Exterior doors typically have an expected useful life of 20 to 30 years.

# **Photographs**



Exterior doors at main entrance north side of the building

Burnley Moran Elementary School



Exterior door at east entrance



## 3.3.5 Exterior Windows

WINDOWS			
ltem	Description	Condition	
Window Frame	Aluminum framed	Fair	
Glass Pane	Double-pane	Fair	
Operation	Tilt in lower sash	Fair	
Screen		N/A	
Exterior Header	Varies with condition	Good	
Exterior Sill	Varies with condition	Good	
Gaskets or Glazing	Neoprene	Fair	

#### **Comments**

The window system for the building primarily consists of Aluminum frame double pane - operable window units. It was reported that the windows were drafty and caused temperature control issues in some of the classrooms. Aluminum double-pane windows have a typical expected useful life of 25 years. Replacement of window gaskets has been included in the study period. Glass block was also present in the gym and observed to be in good condition.

Concrete window sills are located beneath the windows. One window sill was observed to be cracked. It is recommended that the cracked window sill be repaired in conjunction with the concrete repair project.

## **Photographs**



Typical exterior windows



Exterior window - note gasket needing replacement







Typical exterior windows

Typical exterior windows



Typical exterior windows

# Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE WINDOW GASKETS	20	19	1	1	\$25,000
Total					\$25,000



## 3.3.6 Roofing Systems

ROOFING				
ltem	Description	Condition		
Single-Ply Sheet Membrane	Patching and ponding observed	Fair		
Slate Shingle	Located at north central portion of the building	Fair		
Parapet Walls	Metal capped	Fair		
Cap Flashing/Coping	Metal coping	Fair		
Insulation	Rigid	Fair		
Substrate/Deck	Metal decking	Good		
Slope/Pitch	Ponding noted on flat roof	Fair		
Drainage	Internal drains, scuppers, gutters, and downspouts	Fair		
Plumbing Vents	Clamped boots	Fair		
Exhaust Vents	Counter flashed	Fair		
Equipment Curbs	Counter flashed	Fair		
Pitch Pockets		N/A		
Skylights		N/A		
Flashing	Metal	Fair		
Expansion Joints		N/A		
Roof Age	Reportedly replaced in 2003	Fair		
Warranty		N/A		

#### **Comments**

The main roofing system consists of an single-ply roofing system. The roofing system was reportedly replaced in 2003 and no leaks were reported. The sealant in the flashing appeared to be experiencing UV deterioration, but was still adhered to the surface. The expected useful life of a sheet membrane roofing system is typically 15 years. We recommend replacing the roofing system during the report period.

During our site visit, it was noted ice guards were not installed above the main entrance. We recommend installing ice guards in the slate roofing system at the main entrance.

The north central portion of the building consists of a slate shingle roofing system for the sloped roof section. Some of the slate shingles were misaligned and/or damaged. We recommend a schedule of periodic repairs to the slate shingle roofing system as needed and installing snow/ice guards above entrance.



Drainage for the roofing system is provided by internal drains with overflow scuppers. Gutters and downspouts provided drainage from higher roofs to lower roofs at some locations. Roofing penetrations included plumbing vents and exhaust vents throughout the roofing system.

# **Photographs**





Single-ply membrane roofing system east side of the building

Single-ply membrane roofing system - note ponding



Slate shingle roofing system



Typical roof patch





Slate shingle roofing system - note repair needed

## Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE SINGLE-PLY ROOFING SYSTEM	15	14	1	1	\$560,000
REPAIR SLATE SHINGLE ROOFING SYSTEM	50	49	1	1 6 11 16	\$5,000 \$5,000 \$5,000 \$5,000
INSTALL SNOW/ICE GUARDS ABOVE MAIN BUILDING ENTRANCE	-	-	-	1	\$5,000
Total					\$585,000

# 3.4 PLUMBING, MECHANICAL, AND ELECTRICAL SYSTEMS

# 3.4.1 Plumbing Systems

# 3.4.1.1 Supply and Waste Piping

PLUMBING - WATER SUPPLY SYSTEM				
Item Description Condition				
Piping Material	Copper	Good		



PLUMBING - WATER SUPPLY SYSTEM			
ltem	Description	Condition	
Pipe Insulation	Fiberglass	Good	
Water Shut-offs	Ball valves	Good	
Water Flow and Pressure		Good	

PLUMBING - WASTE SUPPLY SYSTEM			
ltem	Description	Condition	
Piping Material	PVC and cast iron	Good	
Vertical Vent Stacks		Good	
Clean-outs		Good	

### **Comments**

### **Water Lines**

The main water supply lines inside the building are Copper. The expected useful life of Copper piping is approximately 40 years. The water supply pipes were generally in good condition.

## **Waste Lines**

The waste lines in the building are PVC and cast iron. The expected useful life of PVC and cast iron waste line is approximately 50 years. The waste lines were generally in good condition and it was observed that some pipes had been replaced over time.

### 3.4.1.2 Domestic Hot Water Production

HOT WATER PRODUCTION			
ltem	Description	Condition	
Heating Equipment	Gas domestic water heater	Fair	
Water Storage	In water heater	Fair	
Circulation Pumps		N/A	

#### **Comments**

Domestic hot water to the building is provided by two Gas domestic water heaters. Both Gas domestic water heaters are located in the mechanical room on the north side of the building. The water heaters were manufactured by RUUD and State Industries.



The expected useful life of a Gas domestic water heater is approximately 12 to 15 years with proper maintenance. We recommend the Gas domestic water heaters be replaced during the study period.

# **Photographs**



Domestic water heaters

# Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE WATER HEATERS	12	11	1	1	\$2,000
				13	\$2,000
Total					\$4,000

# 3.4.2 HVAC Systems

# 3.4.2.1 Equipment

EQUIPMENT			
ltem	Description	Condition	
Boilers	Located in mechanical room	Good	
Chillers		N/A	
Cooling Towers	Located outside at north side of the building	Fair	
Fan Coil Units	Located in stairwells	Good	
Heat Exchangers		N/A	



EQUIPMENT			
ltem	Description	Condition	
Radiators	Located in restrooms	Good	
Variable Air Volume (VAV) Boxes		N/A	
Condensing Units	Located on north side of building	Good	
Air Handlers	Located in cafeteria and throughout the building	Good	
Package Units	Located on roof	Fair	
Ceiling Fans		N/A	
Exhaust Fans	Various	Good	
Split System	Located in Library IT room	Fair	
Water Source Heat Pumps (WSHP)	Located throughout the building	Good	
Space Heaters (wall or ceiling mounted)	Located in mechanical room	Fair	
Air Conditioners (Window)		N/A	

#### **Comments**

The building is served by a Central plant HVAC system with supplemental heating/cooling equipment and includes a cooling tower, boilers, package units, air handlers, condensers, radiators, fan coil units, and water source heat pumps.

### **Boilers**

The PX Mach Boilers have an expected useful life of 20 years with proper maintenance. The three boilers were located in the mechanical room at the north side of the building. The boilers were installed in 2008 and were generally in good condition. We recommend replacing the boilers during the report period.

### **Cooling Tower**

The cooling tower is located at the north side of the building at the exterior enclosure near the mechanical room. The Marley cooling tower was installed in 2006 and was in fair condition. Cooling towers have a typical expected useful life of approximately 18 years. The cooling tower should be replaced during the study period.

#### Fan Coil Units

Fan coil units are located in the stairwells and were replaced in 2014. Fan coils and radiators have a typical expected life of 20 years. Replacement or refurbishment of the units is recommended during the study period.



## **Condenser Units**

Three condenser units are located at the north side of the building at the exterior enclosure near the mechanical room. The condensing units were manufactured by Trane in 2014. The expected useful life of a condensing unit is 15 years with proper maintenance. The condensing units were observed to be in good condition. We recommend that the condensing units be replaced during the report period.

## **Air Handlers**

Three of the air handlers are located in the mechanical room on the north side of the building and two of the units are located at the northwest corner of the building exterior. The units in the mechanical room were manufactured by Trane in 2014 and were in good condition. The expected useful life of air handlers is 15 years with proper maintenance. We recommend that the air handlers be replaced during the report period.

### **Rooftop Package Units**

Two package units are located on the roof. The two AAON roof top units were installed in approximately 2014. The two AAON roof top units were manufactured in 2014. The expected useful life of package units is 15 years with proper maintenance. We recommend that the units be replaced during the report period.

# Water Source Heat Pumps (WSHP)

There are 85 WSHP units located throughout the building. The typical expected useful life of the water source heat pumps is 20 years and they were recently replaced in 2014 and 2015. We recommend a scheduled replacement of the units near the end of the term.

## Split System

A Sanyo split system was located in the IT room. The system installation date was unknown and was in fair condition. Split systems have an expected useful life of 15 years and should be replaced during the study period.

### **Space Heaters**

Two ceiling mounted space heaters were located in the mechanical room. The space heaters were in fair condition. Replacement of the space heaters is included during the study period.

The City of Charlottesville self performs the mechanical service for the equipment.



# **Photographs**



Boilers located in mechanical room



Cooling Tower at north side of the building



Air Handler Unit in mechanical room



Typical Package Unit







Typical Water Source Heat Pump

Split system

# Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE BOILERS	20	13	7	7	\$75,000
REPLACE CONDENSERS	15	8	7	7	\$30,000
REPLACE AIR HANDLERS	15	14	1	1 7	\$20,000 \$20,000
REPLACE WATER SOURCE HEAT PUMPS	20	7	13	13 14 15 16	\$53,125 \$53,125 \$53,125 \$53,125
REPLACE PACKAGE UNITS	20	7	13	13	\$40,000
REPLACE COOLING TOWER	18	15	3	3	\$30,000
REPLACE SPACE HEATERS	20	15	5	5 20	\$1,000 \$1,000
REPLACE SPLIT SYSTEM	15	9	6	6	\$2,000
REPLACE FAN COIL UNITS	20	7	13	13	\$6,000
Total					\$437,500



## 3.4.2.2 Distribution System

HVAC DISTRIBUTION					
Item Description Condition					
Ducts	Insulated sheet metal	Good			
Return Air	Return Air Sheet metal				

#### **Comments**

The distribution system includes ducted supply and a plenum return. Exposed ductwork was observed in limited locations within the building and was in generally good condition.

## 3.4.2.3 Control Systems

HVAC CONTROL SYSTEMS			
ltem	Description	Condition	
Thermostats	Digital	Good	
Variable Frequency Drives	Located in main mechanical room	Good	
Energy Management System	BAS	Good	

#### **Comments**

The thermostats are located throughout the interior spaces. The thermostats were observed to be in generally good condition. The BAS system was in good condition.

# 3.4.3 Electrical Systems

# 3.4.3.1 Service and Metering

SERVICE AND METERING			
ltem	Description	Condition	
Service Entrance	North side of building	Good	
Master (House) Meter	Located in the main electrical room	Good	
Emergency Power	Kohler generator	Fair	
Transfer Switch	Kohler	Fair	



## **Comments**

Electricity is provided to the building by Dominion Virginia Power. The main electrical entrance is located on the north side of the building and provides 2,000 amp, 3-phase, 4-wire service.

A Kohler emergency power generator is located at the north side of the building at the exterior enclosure near the mechanical room. The generator installation date was unknown. A typical expected useful life of 25 years. Based on the age of the emergency generator and typical replacement schedule, we recommend replacing the emergency generator during the report period.

The emergency back up power generator transfer switch was manufactured by Kohler and is located in the main mechanical room. The transfer switch installation date was unknown with an expected useful life of 25 years with proper maintenance. The transfer switch should be replaced in conjunction with the generator.

## **Photographs**





Main electrical switchgear

Emergency power generator





Emergency power transfer switch

## **Recommendations**

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE GENERATOR AND TRANSFER SWITCH	25	15	10	10	\$30,000
Total					\$30,000

## 3.4.3.2 Distribution

ELECTRICAL DISTRIBUTION SYSTEM			
ltem	Description	Condition	
Electrical Sub-panels	Siemens	Good	
Branch Wiring	Copper	Good	
GFCI Devices		Good	
Building Transformers	Pad/floor mounted	Good	
Sub-Meters		N/A	

### **Comments**

Power is distributed by copper wire from circuit breaker panels located throughout the building. The expected useful life of sub-panels is 50 years with proper maintenance. The circuit breaker panels were reportedly recently replaced. The circuit breaker panels were observed to be in generally good condition.



## **3.5 VERTICAL TRANSPORTATION SYSTEMS**

ELEVATORS			
ltem	Description	Condition	
Quantity	Two passenger elevators	Good	
Capacity	2,000/2,100 pounds	Good	
Manufacturer and Type	Dover - hydraulic	Good	
Maintenance Contractor	KONE	Good	
Date of Last Maintenance Inspection	2/22/2021	Good	
Cab Finishes	Enamel	Good	
Elevator Certificates	Reportedly current	Good	
Door Sensors	Operable	Good	
Speed	100 feet per minute	Good	
Floor Leveling	Operable	Good	
Control System	Operable	Good	
Fire Recall System	Operable	Good	
Lighting	Operable	Good	
Equipment Room		Good	

## **Comments**

The two Dover elevators were reportedly added to the building in 1995. The elevators are located at east and west sides of the building. The expected useful life of the elevator controls is 30 to 40 years with proper maintenance. The last annual inspection was performed in February 2021 and monthly maintenance is provided by KONE. Based on the age of the elevator systems, we recommend the modernization of elevator systems later in the report period.



# **Photographs**





Typical elevator cab

Typical elevator machine and controls

# Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
MODERNIZE ELEVATORS	40	26	14	14	\$300,000
Total					\$300,000

# 3.6 LIFE SAFETY AND FIRE PROTECTION

# **3.6.1 Sprinklers and Suppression Systems**

SPRINKLER AND SUPPRESSION SYSTEMS			
ltem	Description	Condition	
Sprinkler System (wet)	Automatic sprinkler system	Good	
Sprinkler Heads	Various	Good	
Date of Last Inspection (sprinkler system)	April 6, 2021	Good	
Sprinkler Pump		N/A	
Fire Extinguishers	Throughout building	Good	
Date of Last Inspection (Fire Extinguishers)	June 11, 2021	Good	
Fire Standpipes	Victalic	Good	



SPRINKLER AND SUPPRESSION SYSTEMS			
ltem	Description	Condition	
Fire Department Connections	Located on east side of building	Good	
Hose Cabinets		N/A	
Fire Hydrants	On site	Good	

### **Comments**

The fire suppression system is a Wet sprinkler system and fire extinguishers. The fire suppression system was observed but not tested. The sprinklers are connected to the fire alarm. The sprinkler risers are located in the sprinkler room. The sprinkler system was reportedly inspected in April 2021.

Sprinkler heads are located throughout the building. The sprinkler heads were generally in good condition.

Fire extinguishers were observed throughout the building including in mechanical rooms. The fire extinguishers were observed to have recent inspection tags issued by Fire Solutions in June of 2021. These devices are required to be inspected annually. Replacement of the fire extinguishers is considered routine maintenance.

Fire hydrants are located at the building exterior. The fire hydrants were observed to be in good condition.

## **Photographs**





Fire sprinkler system

Typical fire sprinkler head



## 3.6.2 Alarm Systems

ALARM SYSTEMS			
ltem	Description	Condition	
Public Address System	Located in main office	Good	
Central Fire Alarm Control Panel	Located in main utility room	Fair	
Automatic Notification	Monitored	Good	
Bells	Located throughout the building	Good	
Strobes	Located throughout the building	Good	
Exit Signs	Located throughout the building	Good	
Exit Lights	Located throughout the building	Good	
Pull Stations	Located throughout the building	Good	
Smoke Detectors	Located throughout the building	Good	
Carbon Monoxide Detectors		N/A	

## **Comments**

The fire alarm system was observed but not tested. A fire control pane is located in the main utility room. The fire control panel was observed to be older and generally in fair condition. We recommend replacing the older fire alarm panel during the report period. Emergency exit signs and lighting, pull stations, fire extinguishers, smoke detectors, and alarm bells and strobes are located throughout the building.



# **Photographs**





Fire alarm controls

Fire alarm strobe and bell

## **Recommendations**

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE FIRE ALARM PANELS	25	24	1	1	\$30,000
Total					\$30,000

# 3.6.3 Security and Other Systems

SECURITY AND OTHER SYSTEMS			
ltem	Description	Condition	
Security Cameras		N/A	
Alarm System	Monitored	Good	
Access Control		Good	
Security Fencing		N/A	
Lightning Protection		N/A	
Roof Anchors		N/A	

## **Comments**

The building is monitored by a motion detector security system with alarms. The security system was reported to be in good condition.



# **3.7 INTERIOR BUILDING COMPONENTS**

# 3.7.1 Interior Finishes

MAIN OFFICE		
ltem	Description	Condition
Floor Finishes	Carpet	Good
Wall Finishes	Painted gypsum board, exposed brick	Good
Ceiling Finishes	Suspended acoustical tile, painted gypsum board	Good
Lighting	Fluorescent fixtures	Good
Accessories	Millwork	Good

RESTROOMS		
ltem	Description	Condition
Floor Finishes	ceramic tile	Good
Wall Finishes	ceramic tile, painted concrete masonry unit	Good
Ceiling Finishes	suspended acoustical tile	Good
Fixtures	toilets, wall hung lavatories	Good
Accessories	partitions, grab bars, mirrors, soap and paper dispensers	Good
Ventilation	Exhaust fans	Good
Lighting	Fluorescent fixtures	Good
Doors	Wood	Good
Door Hardware	Operable	Good

CORRIDORS		
Item	Description	Condition
Floor Finishes	Vinyl tile and finished concrete	Good
Wall Finishes	Glazed and painted CMU block	Good
Ceiling Finishes	Suspended acoustical tile	Good
Lighting	Fluorescent fixtures	Good
Doors	Wood	Good



CORRIDORS		
Item Description Condit		Condition
Door Hardware	Operable	Good

STAIRS		
ltem	Description	Condition
Location	East and west ends of the building	Good
Enclosure	CMU	Good
Framing Support	Steel	Good
Treads	Vinyl	Good
Risers	Steel	Good
Nosing	Vinyl	Good
Handrails	Steel tube	Good
Lighting	Fluorescent	Good
Pressurized Stairwells		N/A
Doors	Wood	Good
Door Hardware	Operable	Good

KITCHEN		
Item	Description	Condition
Floor Finishes	Vinyl tile	Good
Wall Finishes	Painted gypsum board	Good
Ceiling Finishes	Suspended acoustical tile	Good
Counters	Laminate	Good
Sink	Stainless	Good
Cabinets	Laminate	Good
Appliances		N/A
Stove/Range		N/A
Exhaust Vent/Hood		N/A
Refrigerator		N/A
Dish Washer		N/A



KITCHEN		
Item	Description	Condition
Microwave Oven		N/A

UTILITY ROOMS/ MECHANICAL ROOMS			
ltem	Description	Condition	
Floor Finishes	Unfinished concrete	Good	
Wall Finishes	Painted gypsum board/ CMU	Good	
Ceiling Finishes	Unfinished	Good	
Janitor Sink Area	Soiled	Fair	
Lighting	Fluorescent fixtures	Good	

AUDITORIUM		
Item	Description	Condition
Floor Finishes	Coated concrete and carpet	Good
Wall Finishes	Painted gypsum board	Good
Ceiling Finishes	Painted gypsum board	Good
Lighting	Incandescent recessed fixtures	Good
Accessories	Curtains	Good
Seating	Theater	Good
Stage	Wood	Good

CAFETERIA		
Item	Description	Condition
Floor Finishes	Vinyl tile	Good
Wall Finishes	Glazed block CMU, painted gypsum board	Good
Ceiling Finishes	Suspended acoustical tile	Good
Lighting	Fluorescent fixtures	Good
Accessories	Folding tables, millwork	Good



CLASSROOMS		
ltem	Description	Condition
Floor Finishes	Vinyl tile and/or carpet	Good
Wall Finishes	Painted gypsum board/ painted CMU	Good
Ceiling Finishes	Suspended acoustical tile	Good
Lighting	Fluorescent fixtures	Good
Doors	Wood	Good
Door Hardware	Operable	Good

LIBRARY		
ltem	Description	Condition
Floor Finishes	Carpet	Good
Wall Finishes	Painted gypsum board/exposed brick	Good
Ceiling Finishes	Suspended acoustical tile	Good
Lighting	Fluorescent fixtures	Good
Doors	Wood	Good
Door Hardware	Operable	Good

#### **Comments**

The interior building areas include a main office, restrooms, corridors, classrooms, kitchens, an auditorium, a cafeteria, a library, and mechanical/utility spaces. We understand that the interiors are largely original to construction.

The finishes in the main office include carpet floors, painted gypsum board and exposed brick walls, and both painted gypsum board and suspended acoustical ceiling tile ceilings. The finishes in the main office were observed to be in generally good condition.

Restrooms are located throughout the building as accessed from corridors and are also located in classrooms. The finishes in the restrooms include ceramic tile floors, ceramic tile and painted concrete masonry unit walls, and suspended acoustical tile ceilings. The restrooms were observed to be in generally good condition.

The finishes in the corridors include vinyl tile floors, glazed and painted CMU block walls, and suspended acoustical tile ceilings. The finishes in the corridors were observed to be in generally good condition.

The finishes in the kitchens include vinyl tile floors, painted gypsum board walls, and suspended acoustical tile ceilings. The finishes in the kitchens were observed to be in generally good condition.



The utility and mechanical rooms were generally unfinished, with concrete floors and CMU walls. Some utility rooms had painted gypsum board walls.

The finishes in the auditorium consist of coated concrete and carpet flooring in the seating area and wood at the stage. The walls and ceiling were painted gypsum board. The finishes were generally in good condition.

The finishes in the cafeteria area consisted of vinyl tile flooring, glazed block CMU and painted gypsum board walls, and suspend acoustical tile ceiling. The finishes were generally in good condition.

The classrooms consist of vinyl tile flooring and/or carpet, painted gypsum board and painted CMU walls, and suspended acoustical tile ceilings. The finishes were generally in good condition.

The finishes in the library consist of carpet flooring, exposed brick and painted gypsum board walls, and acoustical ceiling tile ceilings. The finishes in the library were generally in good condition.

## **Photographs**





Auditorium area interior finishes

Restroom area interior finishes







Typical corridor interior finishes

Typical classroom area interior finishes



Typical classroom area interior finishes

## 3.8 Accessibility (ADA) Compliance

#### **Comments**

Facilities, including site features and buildings, completed and occupied after January 26, 1992 are required to comply fully with the Americans with Disabilities Act (ADA). Facilities constructed after this date must be maintained and operated to comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG). Existing facilities constructed prior to this date are held to the lesser standard of complying with the extent allowed by structural feasibility and the financial resources available, or a reasonable accommodation must be made. Title III, for the purposes of the ECS scope of work is to address public accommodations. ECS will note work that shall remove architectural barriers in existing facilities, including communication barriers, that are structural in nature, where such removal is readily achievable and able to be carried out without much difficulty or expense.



The Burnley Moran Elementary School property is considered by the City of Charlottesville - Facilities Development to be within "areas of public accommodations" or a "commercial facility" and is therefore is subject to compliance with Title III of the ADA.

The parking area serving the property has a total of approximately 81 parking spaces. Of the parking spaces, Five are accessible with Three being van accessible. Accessibility requires that four accessible parking spaces be provided in parking areas with a total of 76 to 100 spaces. One in six of the accessible parking spaces are required to be van accessible. A minimum of a 60-inch wide access aisle is required to be provided for every two accessible parking spaces. Accessible aisles were observed to be provided. The number of parking spaces provided does meet accessibility requirements.

The restrooms were generally accessible.

## **Photographs**





Accessible parking spaces

Accessible restroom

#### Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE OR RELOCATE DRINKING FOUNTAINS	-	-	-	Immediate	\$12,000
Total					\$12,000

Un	iform Abbreviated Screening Checklist for the	2010 Americ	ans with Disabilities Act
	ltem	Yes/ No	Comments
A.	History		



Uniform Abbreviated Screening Checklist for the 2010 Americans with Disabilities Act			
	ltem	Yes/ No	Comments
1.	Has an ADA Survey been completed for this property?	Yes	EMG report dated November 3, 2005
2.	Have any ADA improvements been made to the property since original construction?	Yes	installation of elevator for interior and curb cuts with truncated domes at exterior
3.	Has building ownership/management reported any ADA complaints or litigation?	No	not reported
B.	Parking		
1.	Does the required number of standard ADA-designated spaces appear to be provided?	Yes	Five out of the 81 are accessible.
2.	Does the required number of van-accessible designated spaces appear to be provided?	Yes	3 out of the Five accessible spaces are van accessible
3.	Are accessible spaces part of the shortest accessible route to an accessible building entrance?	Yes	
4.	Is a sign with the International Symbol of Accessibility at the head of each space?	No	lower level accessible space needs sign
5.	Does each accessible space have an adjacent access aisle?	Yes	
6.	Do parking spaces and access aisles appear to be relatively level and without obstruction?	Yes	
C.	Exterior Accessible Route		
1.	Is an accessible route present from public transportation stops and municipal sidewalks in the property?	Yes	
2.	Are curb cut ramps present at transitions through curbs on an accessible route?	Yes	
3.	Do curb cut ramps appear to have the proper slope for all components?	Yes	
4.	Do ramps on an accessible route appear to have a compliant slope?	Yes	



Uniform Abbreviated Screening Checklist for the 2010 Americans with Disabilities Act			
	ltem	Yes/ No	Comments
5.	Do ramps on an accessible route appear to have a compliant length and width?	Yes	
6.	Do ramps on an accessible route appear to have a compliant end and intermediate landings?	Yes	
7.	Do ramps on an accessible route appear to have compliant handrails?	Yes	
D.	Building Entrances		
1.	Do a sufficient number of accessible entrances appear to be provided?	Yes	
2.	If the main entrance is not accessible, is an alternate accessible entrance provided?	N/A	
3.	Is signage provided indicating the location of alternate accessible entrances?	N/A	
4.	Do doors at accessible entrances appear to have compliant clear floor area on each side?	Yes	
5.	Do doors at accessible entrances appear to have compliant hardware?	Yes	
6.	Do doors at accessible entrances appear to have complaint opening width?	Yes	
7.	Do pairs of accessible entrance doors in series appear to have the minimum clear space between them?	N/A	
8.	Do thresholds at accessible entrances appear to have compliant height?	Yes	
E.	Interior Accessible Routes and Amenities		
1.	Does an accessible route appear to connect with all public areas inside the building?	Yes	
2.	Do accessible routes appear free of obstructions and/or protruding objects?	No	Drinking fountain protrudes into route
3.	Do ramps on accessible routes appear to have compliant slope?	Yes	
4.	Do ramps on accessible routes appear to have compliant length and width?	Yes	



Uni	iform Abbreviated Screening Checklist for the	2010 Americ	ans with Disabilities Act
	ltem	Yes/ No	Comments
7.	Are adjoining public areas and areas of egress identified with accessible signage?	Yes	
8.	Do public transaction areas have an accessible, lowered counter section?	Yes	
9.	Do public telephones appear mounted with an accessible height and location?	N/A	
10.	Are publicly-accessible swimming pools equipped with an entrance lift?	N/A	
F.	Interior Doors		
1.	Do doors at interior accessible routes appear to have compliant clear floor area on each side?	Yes	
2.	Do doors at interior accessible routes appear to have compliant hardware?	Yes	
3.	Do doors at interior accessible routes appear to have compliant opening force?	Yes	
4.	Do doors at interior accessible routes appear to have a compliant clear opening width?	Yes	
G.	Elevators		
1.	Are hallway call buttons configured with the "UP" button above the "DOWN" button?	Yes	
2.	Is accessible floor identification signage present on the hoistway sidewalls?	Yes	
Н.	Toilet Rooms		
1.	Do publicly-accessible toilet rooms appear to have a minimum compliant floor area?	Yes	
2.	Does the lavatory appear to be mounted at a compliant height and with compliant knee area?	Yes	
3.	Does the lavatory faucet have compliant handles?	Yes	
4.	Is the plumbing piping under lavatories configured to protect against contact?	Yes	



Uniform Abbreviated Screening Checklist for the 2010 Americans with Disabilities Ac			
	ltem	Yes/ No	Comments
5.	Are grab bars provided at compliant locations around the toilet?	Yes	
6.	Do toilet stall doors appear to provide the minimum compliant clear width?	N/A	
7.	Do toilet stalls appear to provide the minimum compliant clear floor area?	N/A	
8.	Do urinals appear to be mounted at a compliant height and with compliant approach width?	N/A	
9.	Do accessories and mirrors appear to be mounted at a compliant height?	Yes	



#### **4.0 DOCUMENT REVIEW**

### **4.1 DOCUMENTATION REVIEW**

ECS requested relevant documentation from Josh Bontrager, to gain insight into the subject property's physical improvements, extent and type of use, and/or assist in identifying material discrepancies between reported information and observed conditions. ECS' review of documents submitted does not include commenting on the accuracy of such documents or their preparation, methodology, or protocol.

#### **4.2 INTERVIEW SUMMARY**

ECS was escorted through the property by Josh Bontrager and Chris Woods who provided information about the property.



# **5.0 ADDITIONAL CONSIDERATIONS**

## **5.1 MOISTURE AND MOLD**

## Comments

If present, evidence of mold and moisture issues are noted in the interior section of the report.



#### **6.0 RECOMMENDATIONS AND OPINIONS OF COST**

The opinion of cost are based upon approximate quantities, costs, and published information, and they include labor, material, design fees, and appropriate overhead, general conditions, and profit. A detailed analysis of quantities for cost estimating purposes is not included. The opinion of cost to repair, replace, or upgrade the improvements are considered typical for the marketplace. No contractors have provided pricing. The actual cost of repairs may vary from our opinions. ECS has not included contingency funds in our opinions. Amounts indicated represent today's dollars. ECS offers the following comments relative to Immediate and Capital Reserves criteria:

#### **Immediate Issues**

Physical deficiencies that require immediate action as a result of (i) existing or potentially unsafe conditions, (ii) significant negative conditions impacting tenancy, (iii) material building code violations, (iv) poor or deteriorated condition of critical element or system, or (v) a condition that is left "as is," with an extensive delay in addressing same, would result in or contribute to critical element or system failure within one year.

ECS has also included physical deficiencies inclusive of deferred maintenance that may not warrant immediate attention, but requiring repairs or replacements that should be undertaken on a priority basis, taking precedence over routine preventative maintenance work within a zero to one year time frame. Included are such physical deficiencies resulting from improper design, faulty installation, and/ or substandard quality of original systems or materials. Components or systems that have realized or exceeded their Expected Useful Life (EUL) that may require replacement to be implemented within a zero to one year time frame are also included.

## **Capital Reserves**

Capital Reserves are for recurring probable expenditures, which are not classified as operational or maintenance expenses, which should be annually budgeted for in advance. Capital reserves are reasonably predictable both in terms of frequency and cost. However, they may also include components or systems that have an indeterminable life but nonetheless have a potential liability for failure within an estimated time period. A component method has also been included within this report as well.

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

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



ECS's reserve methodology involves identification and quantification of those systems or components requiring capital reserve funds within the evaluation period. Additional information concerning systems or components 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 Capital Reserve Schedule presupposes that all required remedial work has been performed or that monies for remediation have been budgeted for items defined in the Immediate Needs Cost Estimates.



## 7.0 FACILITY CONDITION INDEX (FCI)

In accordance with our proposal add alternate, ECS determined the Facility Condition Index (FCI) value for the Burnley Moran Elementary School building. ECS determined the FCI value in accordance with industry standards and methodology sponsored by The National Association of College and University Business Officers (NACUBO). The FCI calculation methodology consists of dividing the total cost of Maintenance, Repair, and Replacement Deficiencies of the Facility by the Current Replacement Value of the Facility. FCI values and condition of the buildings based on the industry accepted interpretation of FCI values with ratings: good (under 0.05), fair (0.05 to 0.10), and poor (over 0.10).

Based on our Facility Condition Assessment, the total repair and replacement costs for the Burnley Moran Elementary School is \$1,582,700.00. The replacement construction cost value obtained from the RS MEANS square foot estimator application is \$7,497,115. Please see attached documentation from RS MEANS program output as an appendix to the report. The calculated FCI value is determined to be 0.21. In accordance with the industry standards and methodology sponsored by The National Association of College and University Business Officers (NACUBO), the condition of Burnley Moran Elementary School is rated as poor.

The letter rating for the school buildings is based on the FCI values with the ratings system provided by you referenced from the City of Alexandria as follows: A (under 0.10), B (0.11 to 0.20), C (0.21 to 0.40), D (0.41 to 0.60), and F (0.61 to 1.00+).

The letter rating for the Burnley Moran Elementary School was determined to be C.



## **8.0 LIMITATIONS AND QUALIFICATIONS**

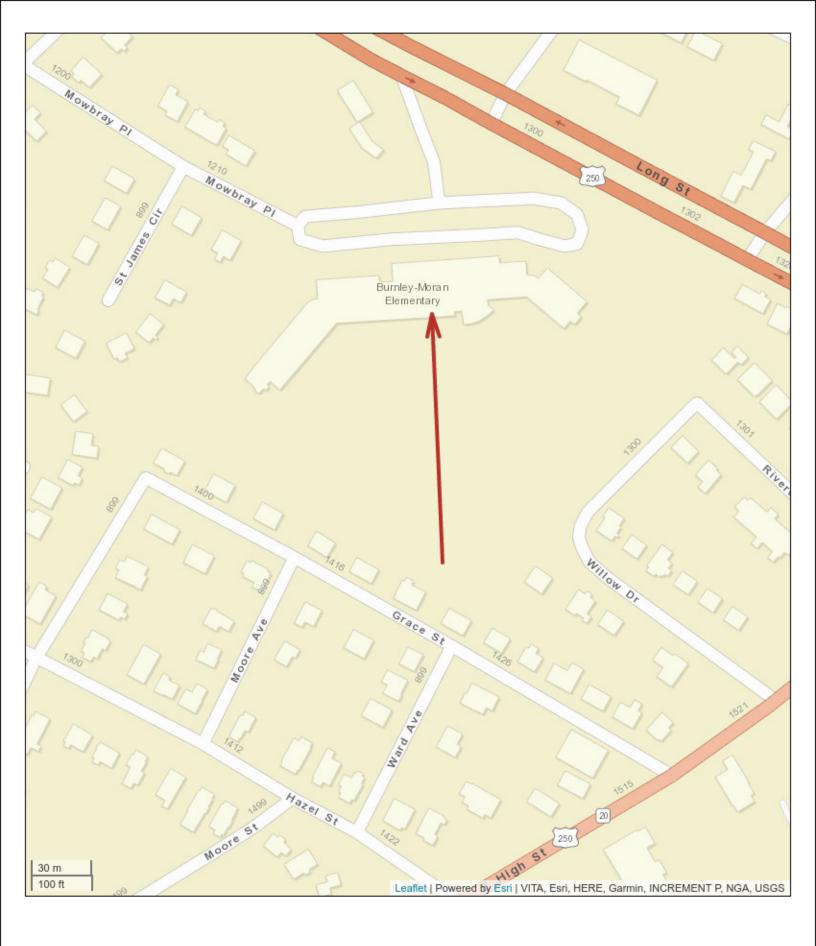
ECS's FCA cannot wholly eliminate the uncertainty regarding the presence of physical deficiencies and the performance of a property's building systems. Preparation of a FCA in accordance with ASTM E 2018-15 "Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process" is intended to reduce, but not eliminate, the uncertainty regarding the potential for component or system failure and cannot reduce the potential that such component or system may not be initially observed.

This FCA was prepared recognizing the inherent subjective nature of ECS's opinions as to such issues as workmanship, quality of original installation, and estimating the remaining useful life of any given component or system. It should be understood that ECS's suggested remedy may be determined under time constraints, formed without the aid of engineering calculations, testing, exploratory probing, the removal of materials, or design. Furthermore, there may be other alternate or more appropriate schemes or methods to remedy the physical deficiency. ECS's opinions are generally formed without detailed knowledge from individuals familiar with the component's or system's performance.

The opinions ECS expresses in this report were formed utilizing the degree of skill and care ordinarily exercised by a prudent professional in the same community under similar circumstances. ECS assumes no responsibility or liability for the accuracy of information contained in this report which has been obtained from the Client or the Client's representatives, from other interested parties, or from the public domain. The conclusions presented represent ECS' professional judgment based on information obtained during the course of this assignment. ECS's evaluations, analyses and opinions are not representations regarding the design integrity, structural soundness, or actual value of the property. Factual information regarding operations, conditions and test data provided by the Client or their representative has been assumed to be correct and complete. The conclusions presented are based on the data provided, observations made, and conditions that existed specifically on the date of the assessment.

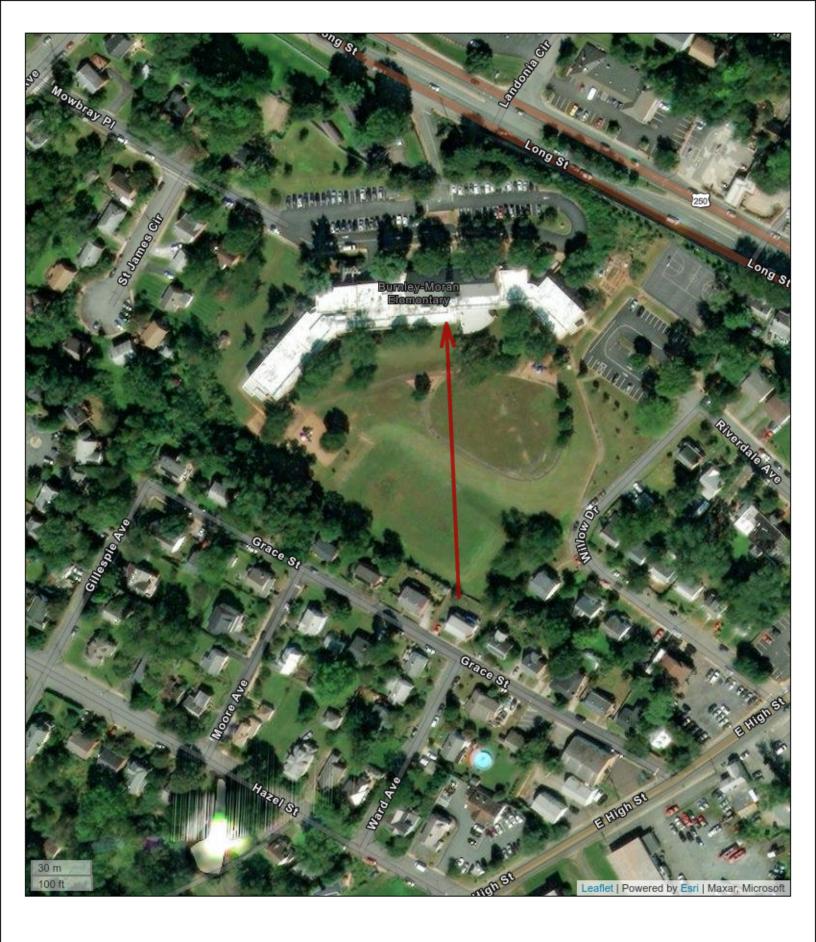


## Appendix I: SITE MAP AND AERIAL PHOTOGRAPH













## Appendix II: FIRE EXTINGUISHER INSPECTION

### Inspection Certificate

For

#### Charlottesville-Burnley Moran ES 1300 Long St. Charlottesville, VA 22901

This Inspection was performed in accordance with applicable Standards. The subsequent pages of this report provide performance measurements, listed ranges of acceptable results, and complete documentation of the inspection. Whenever discrepancies exist between acceptable performance standards and actual test results, notes and/or recommended solutions have been proposed or provided for immediate review and approval.

Inspection Date Jun 11, 2021

Building: Charlottesville-Burnley Moran ES
Contact: Jason Davis

Title: Security Maint.

Company: Fire Solutions Contact: Tommy VO Title: Technician

#### **Executive Summary**

Generated by: BuildingReports.com

**Building Information** 

Building: Charlottesville-Burnley Moran ES Contact: Jason Davis

Address: 1300 Long St. Phone: 434-964-6771

Address: Fax: City/State/Zip: Charlottesville, VA 22901 Mobile:

Country: United States of America Email: davisja@charlottesville.org

Inspection Performed By

Company: Fire SolutionsInspector: Tommy VOAddress: 205 Haley RoadPhone: 804-385-3301

Address: Fax:

City/State/Zip: Ashland, Virginia 23005 Mobile: 804-385-3301

Country: United States Email: tommyv@firesolutionsinc.com

**Inspection Summary** 

Catagory	Total	Items	Serv	riced	Pas	sed	Failed/Other		
Category:	Qty	%	Qty	%	Qty	%	Qty	%	
Fire	15	100.00%	15	100.00%	15	100.00%	0	0%	
Totals	15	100%	15	100.00%	15	100.00%	0	0%	

#### Verification



Company: Fire Solutions Building: Charlottesville-Burnley Moran ES

Inspector: Tommy VO Contact: Jason Davis

#### Fire Solutions Certifications

Certification Type	Number
WBENC Certified	2005121836

#### Inspection & Testing

Generated by: BuildingReports.com

#### Building: Charlottesville-Burnley Moran ES

The Inspection & Testing section lists all of the items inspected in your building. Items are grouped by Passed or Failed /Other. Items are listed by Category. Each item includes the services performed, and the time & date at which testing occurred.

Device Type	Location	ScanID : S/N	Service	Date Time
	1	Passed		
Fire				
Fire Extinguisher, 5 Lbs, A.B.C.	Basement Boiler room 413.06	39853236 F75958850	Inspected	06/11/21 11:03:00 AM
Fire Extinguisher, 5 Lbs, A.B.C.	Basement By room 109 413.14	39853244 F75958866	Inspected	06/11/21 10:55:38 AM
Fire Extinguisher, 5 Lbs, A.B.C.	Basement by custodial office 413.13	49753252 WE643156	Inspected	06/11/21 11:03:28 AM
Fire Extinguisher, 10 Lbs, A.B.C.	Basement elevator room by 109 413.15	39853245 XT-390135	Inspected	06/11/21 10:57:03 AM
Fire Extinguisher, 5 Lbs, A.B.C.	1st elevator control room 413.16	39853234 F75958842	Inspected	06/11/21 11:07:45 AM
Fire Extinguisher, 5 Lbs, A.B.C.	1st hallway by room 102 413.02	39853233 F75958865	Inspected	06/11/21 11:07:37 AM
Fire Extinguisher, 10 Lbs, A.B.C.	1st hallway by room 108 413.01	39853232 E535593	Inspected	06/11/21 11:06:56 AM
Fire Extinguisher, 10 Lbs, A.B.C.	2nd Hall by room 201 413.03	39853235 PU-651981	Inspected	06/11/21 10:46:48 AM
Fire Extinguisher, 5 Lbs, A.B.C.	2nd Stage by dock doors 413.07	39853237 F75958848	Inspected	06/11/21 10:49:33 AM
Fire Extinguisher, 5 Lbs, A.B.C.	2nd hall by room 208 413.04	39853231 F75958849	Inspected	06/11/21 10:45:52 AM
Fire Extinguisher, 5 Lbs, A.B.C.	2nd hallway 413.10	39853242 F75958844	Inspected	06/11/21 10:50:22 AM
Fire Extinguisher, 5 Lbs, A.B.C.	2nd hallway by room 237 413.11	39853243 F75958860	Inspected	06/11/21 10:50:54 AM
Fire Extinguisher, 5 Lbs, A.B.C.	2nd hallway. 413.08	39853240 F75958847	Inspected	06/11/21 10:48:50 AM
Fire Extinguisher, 6 Ltr, Class K	2nd kitchen. 413.05	39853230 AA-679541	Inspected	06/11/21 10:45:12 AM
Fire Extinguisher, 5 Lbs, A.B.C.	Attic Mechanical room 300 413.09	39853241 G17167772	Inspected	06/11/21 10:53:14 AM

#### Service Summary

Generated by: BuildingReports.com

#### Building: Charlottesville-Burnley Moran ES

The Service Summary section provides an overview of the services performed in this report.

Device Type	Service	Quantity
	Passed	
Fire Extinguisher, 10 Lbs, A.B.C.	Inspected	3
Fire Extinguisher, 5 Lbs, A.B.C.	Inspected	11
Fire Extinguisher, 6 Ltr, Class K	Inspected	1
Total		15
Grand Total		15

#### Fire Extinguisher Maintenance Report

Generated by: BuildingReports.com

#### Building: Charlottesville-Burnley Moran ES

This report provides details on the Hydrostatic Test and Maintenance/Breakdown dates for fire extinguishers. Items that will need either of these services at any time in the next two years are displayed. Items are grouped together by year for budgeting purposes.

will need ei budgeting p	ther of these services at any time in the no purposes.	ext two years are o	displayed. Items are	grouped togethe	er by year for
ScanID	Location	Serial #	Hydro	Breakdown	Mfr Date
		Due in 2021	!		
		Hydrostatic Tes	t		
Fire Extin	guisher, A.B.C., 10 Lbs				
39853232	1st hallway by room 108 413.01	E535593	04/05/09	04/05/16	04/05/09
			Total Fi	re Extinguisher,	A.B.C., 10 Lbs: 1
		Due in 2022	?		
	Bre	akdown/Mainten	ance		
Fire Extin	guisher, A.B.C., 10 Lbs				
39853235	2nd Hall by room 201 413.03	PU-651981	04/05/11	04/05/16	04/05/98
			Total Fi	re Extinguisher,	A.B.C., 10 Lbs: 1
		Due in 2023	3		
	Bre	akdown/Mainten	ance		
Fire Extin	guisher, A.B.C., 5 Lbs				
49753252	Basement by custodial office 413.13	WE643156	04/05/17	04/05/17	04/05/04
			Total F	Fire Extinguisher	, A.B.C., 5 Lbs: 1
		<b>Hydrostatic Tes</b>	t		
Fire Extin	guisher, A.B.C., 10 Lbs				
39853235	2nd Hall by room 201 413.03	PU-651981	04/05/11	04/05/16	04/05/98
			Total Fi	re Extinguisher,	A.B.C., 10 Lbs: 1
Fire Extin	guisher, Class K, 6 Ltr				
39853230	2nd kitchen. 413.05	AA-679541	08/20/18		04/05/04

Total Fire Extinguisher, Class K, 6 Ltr: 1

#### Inventory & Warranty Report

Generated by: BuildingReports.com

#### Building: Charlottesville-Burnley Moran ES

The Inventory & Warranty Report lists each of the devices and items that are included in your Inspection Report. A complete inventory count by device type and category is provided. Items installed within the last 90 days, within the last year, and devices installed for two years or more are grouped together for easy reference.

Device or Type		Category		% of Inventory	Quantity				
Fire Extinguisher		Fire		100.00%	15				
Туре	Qty	Model #	Descri	ption	Manufacture Date				
		New	(und	er 90 days)					
Buckeye									
Fire Extinguisher	1	5 HI SA40 ABC	A.B.C.		10/06/2021				
In Service - 2 Years to 3 Years									
Buckeye									
Fire Extinguisher	9	5 HI SA40 ABC	A.B.C.		08/05/2019				
		In Service	- 10 Y	Years to 15 Years					
Amerex									
Fire Extinguisher	1	AB456-09	A.B.C.		04/05/2009				
		In Service	- 15 Y	Years to 25 Years					
Badger									
Fire Extinguisher	1	B10M-06	A.B.C.		04/05/2006				
Ansul									
Fire Extinguisher	1	XAA05	A.B.C.		04/05/2004				
Badger									
Fire Extinguisher	1	WC-100-04	Class I	<	04/05/2004				
Ansul									
Fire Extinguisher	1	SY-1014	A.B.C.		04/05/1998				

## Appendix III: FIRE SPRINKLER INSPECTION



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#### INSPECTION AND TESTING FORM OF WATER BASED FIRE PROTECTION SYSTEMS

#### 1. PROPERTY INFORMATION

Name of property: Burnley-Moran Elementary (4433-22901-00038)

Address: Burnley-Moran Elementary

Description of property:

Name of property representative: City of Charlottesville (30548899), Jason Davis (434-964-6771) davisja@charlottesville.org

Address: 315 4th St NW, Charlottesville, VA 22903

Phone: 434-962-3643 Fax: 434-970-3026 E-mail: staplesk@charlottesville.org

#### 2. TESTING INFORMATION

Testing Organization: SIEMENS Organization License No.:

Address: 5106 Glen Alden Drive, Richmond, VA 23231
Phone: 804-222-6680 Fax: None E-mail: None
Start Date/Time: Completion Date/Time: 4.6.21

Contract Info: City of CVille Sprinkler (2600105673) Notification Number: 5102050591

Inspection Type: Quarterly

**NOTES:** 1) All questions are to be answered Yes, No, or Not Applicable (NA). Explain all No answers in Parts 6, 7, or 8 of this form. 2) Inspection, Testing, and Maintenance are to be performed with water supplies (including fire pumps) in service, unless

the impairment procedures of NFPA 25 are followed.

3. GENERAL INFORMATION (TO BE COMPLETED BY OWNER)

Is the building fully sprinklered?	
Has the occupancy classification and hazard of contents remained the same since last inspection?	
Are all fire protection systems in service?	
Has the system remained in service without modification since last inspection?	
Have any fire systems, devices or alarms activated since the last inspection?	
If a fire has occurred since the last inspection, have all damaged sprinkler system components been replaced?	
4. INSPECTOR'S SECTION	
4.1 Inspections	
Control valves in the correct (open or closed) position and free from external leaks?	Yes
Control valves locked, sealed or supervised?	Yes
Hydraulic nameplate (calculated systems) securely attached and legible?	Yes
Alarm and/or dry pipe valves free from physical damage, trim valves in appropriate position and no leakage?	Yes
Water flow alarm devices free from physical damage?	Yes
Fire department connections visible, signage, accessible, free from damage, couplings free, and caps in place?	Yes
Gauges in good condition showing normal pressure?	Yes
Adequate heat in areas with wet piping?	Yes
Post indicator valves are provided with a correct wrench and in the normal position?	Yes
Backflow preventers relief port on RPZ device not discharging?	(NA)
For freezer systems, is the gauge near the compressor reading the same as the gauge near the dry-valve?	(NA)
Pressure Reducing valves are in the open position, not leaking, maintain downstream pressure accordance with the design criteria, good condition, and handwheels not broken?	(NA)
Valve encloser for pre-action, deluge and dry systems are above 40f?	(NA)
4.2 Testing	
Post indicating valves opened until spring or torsion is felt in the rod, then backed off one-quarter turn?	(NA)
Valve supervisory switches indicate movement?	(NA)
Mechanical water flow alarm device passed tests by opening the inspector's test or bypass connection with alarms actuating and flow observed?	Yes

#### **NFPA 25 REPORT**

#### **SIEMENS**

#### Ingenuity for life

Electrical Waterflow (Vane type, Paddle-type, and Pressure Switch-type) alarm devices passed tests by opening the inspector's test connection or bypass connection with alarm actuating, and flow is observed?	(NA)
Priming level of dry pipe valves correct?	(NA)
Quick opening devices of dry pipe systems passed?	(NA)
Air compressor or nitrogen system in good condition per manufacture maintenance procedure?	Yes
Low air pressure signal of dry pipe system passed?	(NA)
Main Drain Test water pressure is within 10% reduction in full flow pressure compared to previous test?	(NA)



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#### 5. MAIN DRAIN / TRIP TESTS RESULTS

#### 5.1 Report Totals

Total Qty	Functionally Tested Qty	Functionally Tested %	Visually Tested Qty	Visually Tested %	Failed Qty	Failed %						
4	1	25%	1	25%	0	0%						

#### 5.2 Report Totals by Type

Total Qty	Functionally Tested Qty	Functionally Tested %	Visually Tested Qty	Visually Tested %	Failed Qty	Failed %	Device or System Type
1	0	0%	1	100%	0	0%	Dry Sprinkler Systems
1	1	100%	0	0%	0	0%	Wet Sprinkler Systems
1	0	0%	0	100%	0	0%	Sprinkler FDC - 2 Inlets
1	0	0%	0	100%	0	0%	Sprinkler Waterflow Alarm Devices (WMG)

#### 5.3 Report Details by Type

Dry S	prinkler Syst	ems																
Row	Date	Address	Location	Model	Water	Source	Test	Static	Trip	Initial	Tripped	Water	Trip	Restored	Restore	5 Year	Visual/	Pass/
					Source	PSI	Pipe	PSI	Test	Air PSI	Air PSI	PSI	Time	Static	Time	Performed	<b>Functional</b>	Fail
							Size						(sec)	PSI	(sec)			
1	04/05/21	01:Dry	Attic	2.5 inch CSC	City	100	1 1/4	105	(NA)	35	NA	100	NA	100	NA	Yes	Visual	Pass
Wet 9	prinkler Sys	tems																
Row	Date	Address	Location							Model	Water	Sour	ce Test	Static	Restore	5 Year	Visual/	Pass/
											Source	e PSI	Pipe	PSI	Time	Performed	Functional	Fail
													Size		(sec)			
1	04/05/21	01:Wet	Basement Mechanical Room							4 inch CSC	City	105	2	105	1	Yes	Functional	Pass
Sprin	kler FDC - 2 I	nlets																
Row	Date	Address	Location										Mod	el Ty	pe	Size	Visual/	Pass/
																	Functional	Fail
1		01:Wet:FDC	Loading Dock.										Powl	natan 2	nlet.	2.5 inch		
Sprin	kler Waterflo	ow Alarm Devices																
Row	Date	Address	Location													Model	Visual/	Pass/
																	<b>Functional</b>	Fail
1		01:Wet:WMG	Loading Dock													Tyco	Functional	Pass



Ingenuity for life

#### 6. COMMENTS

Address	Location	NFPA Classification	Comment:
01:Dry	Attic	Dry Sprinkler	5 year performed August 2020.
01:Wet	Basement	Wet Sprinkler	5 Year performed 2020.
	Mechanical Room		

#### 7. DEFICIENCIES (ONLY RELATED TO NFPA 25)

A condition that will or has the potential to adversely impact the performance of a system or portion thereof but does not rise to the level of an impairment.

Address	Location	NFPA Classification	Deficiencies:
01:Dry	Attic	Dry Sprinkler	None to Report.
01:Wet	Basement	Wet Sprinkler	None to report.
	Mechanical Room		
01:Wet:FDC	Loading Dock.	Sprinkler FDC - 2 Inlet	None to report.
01:Wet:WMG	Loading Dock	Sprinkler Waterflow	None to report.
		Alarm Device	

#### 8. IMPAIRMENTS

A condition where a fire protection system or unit or portion thereof is out of order, and the condition can result in the fire protection system or unit not functioning in a fire event.

•	•		
Address	Location	NFPA Classification	Impairments:
01:Dry	Attic	Dry Sprinkler	None to Report.
01:Wet	Basement	Wet Sprinkler	None to Report.
	Mechanical Room		
01:Wet:FDC	Loading Dock.	Sprinkler FDC - 2 Inlet	None to report.
01:Wet:WMG	Loading Dock	Sprinkler Waterflow	None to report.
	_	Alarm Device	

#### 9. CERTIFICATION

This Testing Was Performed in Accordance with Applicable NFPA Standards.

I state that the information on this form is correct at the time and place of my inspection and that all equipment tested at this time was left in operational condition upon completion of this inspection except as noted in Parts 6, 7, and 8 above.

Name of Inspector:_	Inspector License #:
Signature: <u>Craíg Brown</u>	Date: <u>4/5/21</u>
10. ACCEPTANCE BY OWNER OR OWNER'S REPRESENTATIVE Name of Owner or Representative:	Æ
Signature:	Date:

The owner and/or designated representative acknowledges the responsibility of the operating condition of the component parts at the time of this inspection. Pursuant to the National Fire Protection Association Form 25, Chapter 4, the owner is responsible for proper maintenance and care of the sprinkler system. It is agreed that the inspection service provided by the contractor as prescribed herein is limited to performing a visual inspection and/or routine testing, and any investigation or unscheduled testing, modification, maintenance, repair, etc., of the component parts is not included as part of the inspection work performed. It is understood that this inspection pertains to the condition of the sprinkler system on the day of inspection only. This inspection meets or exceeds NFPA 25 requirements and or local AHJ requirements. AHJ requirements supersede all other code requirements. The inspector shall not be liable for future defaults or defects in the sprinkler system which are beyond the inspector's control, including, but not limited to, failure from malicious tampering, accidents, lack of proper inspection, material failure or inadequate heating. The inspector can give no assurance, nor will be held liable, with regard to work that may have been previously performed or work performed at a future date by other companies. It is further understood that all information contained herein is provided to the best of the knowledge of the party providing such information.

## Appendix IV: ELEVATOR CERTIFICATES

### E & F ELEVATOR INSPECTIONS AND CONSULTING, INC. PO BOX 176 CROZIER, VIRGINIA 23039 (804) 784-1945

#### CHECKLIST FOR INSPECTION OF HYDRAULIC ELEVATORS

GENERAL NOTES:

(a) See ASME A17.2.1 for detailed code requirements.

(b) OK - meets requirements, NG - insert number to identify comment of back of the Checklist, NA - not applicable.

Address: Burnley - Moran Elementary [ ] Routine inspection and test
1300 Long St. [X] Periodic inspection and test
Charlottesville, VA [ ] Acceptance inspection and test

Id No: 1 Our Number: CS106

[X] Passenger Rated Load: 2000 Inspected by: Steve Bowers

[ ] Freight Class Speed: 100 Signature: \_\_\_\_\_ Date: 2/22/21

QEI NO: E000983 Certifying organization: QEITF

	ОK	NG	NA		OK	NG	NA
1. INSIDE OF CAR		110		2.16 Tanks	X		1111
1.1 Door reopening device	X			2.17 Flexible hydraulic hose asemblies	21		X
1.2 Stop switch	X			2.18 Supply line and shut-off valve	X		21
1.3 Operating control device	X			2.19 Hydraulic cylinder	21		X
1.4 Car floor and landing sill.	X			2.20 Pressure switch	X		21
1.5 Car lighting	X			2.21 Governor, overspeed switch & seal			X
1.6 Car emergency signal		X		2.22 Code data plate			X
1.7 Car door or gate	X						
1.8 Door closing force	X			3. TOP OF CAR			
1.9 Power closing of doors and gates	X			3.1 Stop switch	X		
1.10 Power opening of doors or gates	X			3.2 Car top light and outlet	X		
1.11 Car vision panels and glass car doors			X	3.3 Top of car operating device	X		
1.12 Car enclosure	X			3.4 Top of car clearance, refuge space	X		
1.13 Emergency exit			X	3.5 Normal terminal stopping device	X		
1.14 Ventilation				3.6 Emergency terminal speed limiting	X		
1.15 Operating device symbols	X			3.7 Anti-creep leveling device	X		
1.16 Rated load, platform area, data plate	X			3.8 Crosshead data plate	X		
1.17 Standby power operation			X	3.9 Top emergency exit	X		
1.18 Restricted opening of doors	X			3.10 Floor number identification	X		
1.19 Car ride	X			3.11 Hoistway construction	X		
				3.12 Hoistway smoke control			X
2. MACHINE ROOM				3.13 Pipes, wiring, & ducts	X		
2.1 Access to machine	X			3.14 Windows, projections, recesses, setbacks	X		
2.2 Headroom	X			3.15 Hoistway clearances	X		
2.3 Lighting and receptacles	X			3.16 Multiple hoistway			X
2.4 Enclosure of machinery space	X			3.17 Traveling cables, junction boxes	X		
2.5 Housekeeping	X			3.18 Door and gate equipment	X		
2.6 Ventilation	X			3.19 Car frame and stiles	X		
2.7 Fire extinguisher	X			3.20 Guide rails fastening & equipment	X		
2.8 Pipes, wiring, and ducts	X			3.21 Governors releasing carrier			X
2.9 Guarding of exposed equipment	X			3.22 Governor rope			X
2.10 Numbering of elevator equipment	X			3.23 Wire rope fastening and hitch plate			X
2.11 Disconnecting means and control	X			3.24 Suspension rope			X
2.12 Controller wiring, fuses, grounding	X			3.25 Slack rope device			X
2.13 Hydraulic power unit	X			3.26 Traveling sheave			X
2.14 Relief valves	X			3.27 Counterweight			X
2.15 Control valve	X						

#### CHECKLIST FOR INSPECTION OF HYDRAULIC ELEVATORS

	OK	NG	NA	OK	NG NA	1
4. OUTSIDE HOISTWAY				5. PIT		
4.1 Car platform guard	X			5.1 Pit access, lighting & stop switch X		
4.2 Hoistway doors	X			5.2 Bottom clearance and runby X		
4.3 Vision panels			X	5.3 Plunger and cylinder X		$\neg$
4.4 Hoistway door locking device	X			5.4 Car buffer X		$\neg$
4.5 Access to hoistway	X			5.5 Normal terminal stopping devices X		
4.6 Power closing of hoistway doors			X	5.6 Traveling cables X		$\neg$
4.7 Sequence operation			X	5.7 Car frame & platform X		$\neg$
4.8 Hoistway enclosure	X			5.8 Guiding members X		$\neg$
4.9 Elevator parking device			X	5.9 Supply piping X		$\neg$
4.10 Emergency doors in blind hoistways			X	5.10 Car safety - including roped-hydraulic	X	
4.11 Standby power selection switch			X	5.11 Governor rope tension device	X	
				6. 0 FIREFIGHTERS SERVICE X		

#### **MAINTENANCE**

1.6 Repair phone for two way communication.

#### **OWNER**

#### E & F ELEVATOR INSPECTIONS AND CONSULTING, INC.

#### PO BOX 176 CROZIER, VIRGINIA 23039

#### (804) 784-1945

#### CHECKLIST FOR INSPECTION OF HYDRAULIC ELEVATORS

#### GENERAL NOTES:

(a) See ASME A17.2.1 for detailed code requirements.

(b) OK - meets requirements, NG - insert number to identify comment of back of the Checklist, NA - not applicable.

Address: Burnley - Moran Elementary [ ] Routine inspection and test
1300 Long St. [X] Periodic inspection and test
Charlottesville, VA [ ] Acceptance inspection and test

Id No: 2 Our Number: CS107

[X] Passenger Rated Load: 2100 Inspected by: Steve Bowers

[ ] Freight Class Speed: 100 Signature: \_\_\_\_\_\_ Date: 2/22/21 QEI NO: E000983 Certifying organization: QEITF

	ок	NG	NA	OK NO	NA
1. INSIDE OF CAR				2.16 Tanks X	
1.1 Door reopening device	X			2.17 Flexible hydraulic hose asemblies	X
1.2 Stop switch	X			2.18 Supply line and shut-off valve X	
1.3 Operating control device	X			2.19 Hydraulic cylinder	X
1.4 Car floor and landing sill.	X			2.20 Pressure switch	X
1.5 Car lighting	X			2.21 Governor, overspeed switch & seal	X
1.6 Car emergency signal		X		2.22 Code data plate	X
1.7 Car door or gate	X				
1.8 Door closing force	X			3. TOP OF CAR	
1.9 Power closing of doors and gates	X			3.1 Stop switch X	
1.10 Power opening of doors or gates	X			3.2 Car top light and outlet X	
1.11 Car vision panels and glass car doors			X	3.3 Top of car operating device X	
1.12 Car enclosure	X			3.4 Top of car clearance, refuge space X	
1.13 Emergency exit			X	3.5 Normal terminal stopping device X	
1.14 Ventilation	X			3.6 Emergency terminal speed limiting X	
1.15 Operating device symbols	X			3.7 Anti-creep leveling device X	
1.16 Rated load, platform area, data plate	X			3.8 Crosshead data plate X	
1.17 Standby power operation			X	3.9 Top emergency exit X	
1.18 Restricted opening of doors	X			3.10 Floor number identification X	
1.19 Car ride	X			3.11 Hoistway construction X	
				3.12 Hoistway smoke control	X
2. MACHINEROOM				3.13 Pipes, wiring, & ducts X	
2.1 Access to machine	X			3.14 Windows, projections, recesses, setbacks X	
2.2 Headroom	X			3.15 Hoistway clearances X	
2.3 Lighting and receptacles	X			3.16 Multiple hoistway	X
2.4 Enclosure of machinery space	X			3.17 Traveling cables, junction boxes X	
2.5 Housekeeping	X			3.18 Door and gate equipment X	
2.6 Ventilation	X			3.19 Car frame and stiles X	
2.7 Fire extinguisher	X			3.20 Guide rails fastening & equipment X	
2.8 Pipes, wiring, and ducts	X			3.21 Governors releasing carrier	X
2.9 Guarding of exposed equipment	X			3.22 Governor rope	X
2.10 Numbering of elevator equipment	X			3.23 Wire rope fastening and hitch plate	X
2.11 Disconnecting means and control	X			3.24 Suspension rope	X
2.12 Controller wiring, fuses, grounding	X			3.25 Slack rope device	X
2.13 Hydraulic power unit	X			3.26 Traveling sheave	X
2.14 Relief valves	X			3.27 Counterweight	X
2.15 Control valve	X				

#### CHECKLIST FOR INSPECTION OF HYDRAULIC ELEVATORS

	OK	NG	NA	OK	NG	NA
4. OUTSIDE HOISTWAY				5. PIT		
4.1 Car platform guard	X			5.1 Pit access, lighting & stop switch X		
4.2 Hoistway doors	X			5.2 Bottom clearance and runby X		
4.3 Vision panels			X	5.3 Plunger and cylinder X		
4.4 Hoistway door locking device	X			5.4 Car buffer X		
4.5 Access to hoistway	X			5.5 Normal terminal stopping devices X		
4.6 Power closing of hoistway doors			X	5.6 Traveling cables X		
4.7 Sequence operation			X	5.7 Car frame & platform X		
4.8 Hoistway enclosure	X			5.8 Guiding members X		
4.9 Elevator parking device			X	5.9 Supply piping X		
4.10 Emergency doors in blind hoistways			X	5.10 Car safety - including roped-hydraulic		X
4.11 Standby power selection switch			X	5.11 Governor rope tension device		X
				6. 0 FIREFIGHTERS SERVICE X		

#### **MAINTENANCE**

1.6 Repair elevator phone for two way communication.

#### **OWNER**

# Appendix V: RS MEANS ESTIMATE FOR FACILITY CONDITION INDEX (FCI)

#### Square Foot Cost Estimate Report

Date: 10/27/2021

Estimate Name	Burnley Moran Elementary School
	City of Charlottesville 1300 Long Street Charlottesville Virginia 22902
Building Type	School, Jr High, 2-3 Story with Brick Veneer / Reinforced Concrete
Location	CHARLOTTESVILLE, VA
	2.00
Stories Height	15.00
Floor Area (S.F.)	35,525.00
LaborType	OPN
Basement Included	No
Data Release	Year 2021
Cost Per Square Foot	\$211.04
Total Building Cost	\$7,497,115.30



Costs are derived from a building model with basic components. Scope differences and market conditions can cause costs to vary significantly.

\*\* Area entered is outside the range recommended by RSMeans.

#### **Assembly Customization Type:**

Added

Partially Swapped

Fully Swapped

	Quantity	% of Total	Cost Per SF	Cost
		4.5%	\$7.15	\$253,969.48
Standard Foundations			\$4.58	\$162,636.39
Foundation wall, CIP, 4' wall height, direct chute, .148 CY/LF, 7.2 PLF, 12" thick	1,343.00		\$2.56	\$90,841.86
Strip footing, concrete, reinforced, load 14.8 KLF, soil bearing capacity 6 KSF, 12" deep x 32" wide	1,343.00		\$1.58	\$56,179.03
Spread footings, 3000 PSI concrete, load 200K, soil bearing capacity 6 KSF, 6' - 0" square x 20" deep	20.67		\$0.44	\$15,615.50
Slab on Grade			\$2.46	\$87,538.93
Slab on grade, 4" thick, non industrial, reinforced	17,762.50		\$2.46	\$87,538.93
	Foundation wall, CIP, 4' wall height, direct chute, .148 CY/LF, 7.2 PLF, 12" thick  Strip footing, concrete, reinforced, load 14.8 KLF, soil bearing capacity 6 KSF, 12" deep x 32" wide  Spread footings, 3000 PSI concrete, load 200K, soil bearing capacity 6 KSF, 6' - 0" square x 20" deep  Slab on Grade	Standard Foundations  Foundation wall, CIP, 4' wall height, direct chute, .148 CY/LF, 7.2 1,343.00  PLF, 12" thick  Strip footing, concrete, reinforced, load 14.8 KLF, soil bearing 1,343.00  capacity 6 KSF, 12" deep x 32" wide  Spread footings, 3000 PSI concrete, load 200K, soil bearing 20.67  capacity 6 KSF, 6' - 0" square x 20" deep  Slab on Grade	4.5%  Standard Foundations  Foundation wall, CIP, 4' wall height, direct chute, .148 CY/LF, 7.2 1,343.00  PLF, 12" thick  Strip footing, concrete, reinforced, load 14.8 KLF, soil bearing 1,343.00  capacity 6 KSF, 12" deep x 32" wide  Spread footings, 3000 PSI concrete, load 200K, soil bearing 20.67  capacity 6 KSF, 6' - 0" square x 20" deep  Slab on Grade	4.5% \$7.15  Standard Foundations  Foundation wall, CIP, 4' wall height, direct chute, .148 CY/LF, 7.2 1,343.00 \$2.56  PLF, 12" thick  Strip footing, concrete, reinforced, load 14.8 KLF, soil bearing 1,343.00 \$1.58  capacity 6 KSF, 12" deep x 32" wide  Spread footings, 3000 PSI concrete, load 200K, soil bearing 20.67 \$0.44  capacity 6 KSF, 6' - 0" square x 20" deep  Slab on Grade \$2.46

		Quantity	% of Total	Cost Per SF	Cost
A2010	Basement Excavation			\$0.11	\$3,794.16
	Excavate and fill, 30,000 SF, 4' deep, sand, gravel, or common earth, on site storage	31,084.38		\$0.11	\$3,794.16
B Shell			43.6%	\$68.77	\$2,443,125.05
B1010	Floor Construction			\$11.14	\$395,704.92
	Cast-in-place concrete column, 16", square, tied, minimum reinforcing, 300K load, 10'-14' story height, 240 lbs/LF, 4000PSI	1,517.59		\$3.22	\$114,407.32
	Cast-in-place concrete beam and slab, 7.5" slab, two way, 12" column, 25'x25' bay, 40 PSF superimposed load, 149 PSF total load	17,762.50		\$7.92	\$281,297.61
B1020	Roof Construction			\$7.33	\$260,470.19
	Roof, concrete, beam and slab, 25'x25' bay, 40 PSF superimposed load, 20" deep beam, 9" slab, 152 PSF total load	17,762.50		\$7.33	\$260,470.19
B2010	Exterior Walls			\$25.35	\$900,402.93
	Brick wall, composite double wythe, standard face/CMU back-up, 8" thick, perlite core fill, 3" XPS	30,217.50		\$25.35	\$900,402.93
B2020	Exterior Windows			\$19.01	\$675,246.30
	Aluminum flush tube frame, for insulating glass, 2" x 4-1/2", 5'x6' opening, no intermediate horizontals	10,072.50		\$7.06	\$250,977.99
	Glazing panel, insulating, 1/2" thick, 2 lites 1/8" float glass, tinted	10,072.50		\$11.94	\$424,268.31
B2030	Exterior Doors			\$0.87	\$30,939.14
	Door, aluminum & glass, without transom, wide stile, double door, hardware, 6'-0" x 7'-0" opening	0.97		\$0.20	\$7,223.22
	Door, steel 18 gauge, hollow metal, 1 door with frame, no label, 3'-0" x 7'-0" opening	7.75		\$0.61	\$21,662.67
	Door, steel 24 gauge, overhead, sectional, electric operator, 8'-0" x 8'-0" opening	0.65		\$0.06	\$2,053.25
B3010	Roof Coverings			\$4.88	\$173,198.87
	Roofing, single ply membrane, EPDM, 60 mils, loosely laid, stone ballast	17,762.50		\$0.86	\$30,720.24
	Insulation, rigid, roof deck, extruded polystyrene, 40 PSI compressive strength, 4" thick, R20	17,762.50		\$1.98	\$70,380.00
	Base flashing, aluminum, .016" thick, fabric 2 sides, .025" aluminum reglet, .032" counter flashing	1,343.00		\$0.92	\$32,757.85
	Roof edges, aluminum, duranodic, .050" thick, 6" face	1,343.00		\$0.95	\$33,789.61
	Flashing, aluminum, no backing sides, .019"	1,343.00		\$0.16	\$5,551.17
B3020	Roof Openings			\$0.20	\$7,162.69
	Roof hatch, with curb, 1" fiberglass insulation, $2'-6$ " x $3'-0$ ", galvanized steel, $165$ lbs	2.58		\$0.09	\$3,248.15

		Quantity	% of Total	Cost Per SF	Cost
	Smoke hatch, unlabeled, galvanized, 2'-6" x 3', not incl hand winch operator	2.58		\$0.11	\$3,914.5
C Interiors			19.5%	\$30.72	\$1,091,364.8
C1010	Partitions			\$4.66	<b>\$165,487.4</b> 3
	Concrete block (CMU) partition, light weight, hollow, 6" thick, no finish	2,131.50		\$0.41	\$14,712.79
	Concrete block (CMU) partition, light weight, hollow, 6" thick, no finish, foamed in insulation	19,183.50		\$4.24	\$150,774.6 <sub>4</sub>
C1020	Interior Doors			\$1.45	\$51,337.6
	Door, single leaf, kd steel frame, hollow metal, commercial quality, flush, $3'-0" \times 7'-0" \times 1-3/8"$	47.37		\$1.45	\$51,337.6
C1030	Fittings			\$6.72	\$238,840.9
	Toilet partitions, cubicles, ceiling hung, painted metal	35.53		\$0.71	\$25,311.8
	Lockers, steel, 1- tier, std. duty, 5' to 6' high, per opening, 1 wide, knock down constr.	968.86		\$5.67	\$201,479.0
	Chalkboards, liquid chalk type, aluminum frame & chalktrough	710.50		\$0.34	\$12,050.0
C2010	Stair Construction			\$0.79	\$28,018.2
	Stairs, steel, pan tread for conc in-fill, picket rail,12 risers w/ landing	2.58		\$0.79	\$28,018.2
C3010	Wall Finishes			\$4.55	<b>\$161,503.5</b>
	2 coats paint on masonry with block filler	38,367.00		\$2.16	\$76,591.2
	2 coats paint on masonry with block filler	30,217.50		\$1.70	\$60,322.5
	Ceramic tile, thin set, 4-1/4" x 4-1/4"	4,263.00		\$0.69	\$24,589.7
C3020	Floor Finishes			\$4.99	\$177,387.7
	Carpet, tufted, nylon, roll goods, 12' wide, 36 oz	3,552.50		\$0.49	<b>\$17,329.9</b> !
	Terrazzo, maximum	3,552.50		\$1.88	\$66,836.0
	Vinyl, composition tile, maximum	24,867.50		\$1.71	\$60,676.4
	Oak strip, sanded and finished, minimum	3,552.50		\$0.72	\$25,663.3
	Underlayment, plywood, 3/8" thick	3,552.50		\$0.19	\$6,882.0
C3030	Ceiling Finishes			\$7.57	\$268,789.2
	Acoustic ceilings, 3/4" fiberglass board, 24" x 48" tile, tee grid, suspended support	35,525.00		\$7.57	\$268,789.2
D Services			27.7%	\$43.72	\$1,553,328.3
D1010	Elevators and Lifts			\$0.75	\$26,604.3
	Hydraulic passenger elevator, 2500 lb., 2 floor, 125 FPM	0.32		\$0.75	\$26,604.3
D2010	Plumbing Fixtures			\$6.02	\$213,976.8

		Quantity	% of Total	Cost Per SF	Cost
	Water closet, vitreous china, bowl only with flush valve, floor mount	35.53		\$1.40	\$49,714.57
	Urinal, vitreous china, wall hung	11.95		\$0.40	\$14,293.95
	Lavatory w/trim, wall hung, PE on CI, 20" x 18"	35.53		\$1.66	\$58,849.83
	Kitchen sink w/trim, countertop, stainless steel, 44" x 22" triple bowl	2.91		\$0.19	\$6,614.31
	Lab sink w/trim, polyethylene, single bowl, flanged, 23-1/2" x 20-1/2" OD	3.88		\$0.15	\$5,295.54
	Service sink w/trim, PE on CI, corner floor, 28" x 28", w/rim guard	1.94		\$0.20	\$7,131.95
	Shower, stall, baked enamel, terrazzo receptor, 36" square	11.95		\$0.99	\$35,193.73
	Water cooler, electric, wall hung, wheelchair type, 7.5 GPH	17.76		\$1.04	\$36,882.94
D2020	Domestic Water Distribution			\$2.30	\$81,694.35
	Gas fired water heater, commercial, 100< F rise, 300 MBH input, 278 GPH	4.25		\$2.30	\$81,694.35
D2040	Rain Water Drainage			\$1.13	\$40,064.18
	Roof drain, CI, soil, single hub, 5" diam, 10' high	15.00		\$1.02	\$36,397.13
	Roof drain, CI, soil, single hub, 5" diam, for each additional foot add	75.00		\$0.10	\$3,667.05
D3050	Terminal & Package Units			\$18.55	\$658,901.71
	Rooftop, multizone, air conditioner, schools and colleges, 25,000 SF, 95.83 ton	35,525.00		\$18.55	\$658,901.71
D4010	Sprinklers			\$2.14	\$76,022.08
	Wet pipe sprinkler systems, steel, light hazard, 1 floor, 50,000 SF	17,762.50		\$1.23	\$43,828.79
	Wet pipe sprinkler systems, steel, light hazard, each additional floor, 50,000 SF	17,762.50		\$0.91	\$32,193.29
D4020	Standpipes			\$0.42	\$14,894.11
	Wet standpipe risers, class III, steel, black, sch 40, 6" diam pipe, 1 floor	0.65		\$0.28	\$9,879.31
	Wet standpipe risers, class III, steel, black, sch 40, 6" diam pipe, additional floors	1.29		\$0.14	\$5,014.81
D5010	Electrical Service/Distribution			\$0.89	\$31,495.30
	Overhead service installation, includes breakers, metering, 20' conduit & wire, 3 phase, 4 wire, 120/208 V, 1600 A	0.40		\$0.23	\$7,997.97
	Feeder installation 600 V, including RGS conduit and XHHW wire, 1600 A $$	32.30		\$0.28	\$10,104.92
	Switchgear installation, incl switchboard, panels & circuit breaker, 120/208 V, 3 phase, 1600 A	0.39		\$0.38	\$13,392.41

		Quantity	% of Total	Cost Per SF	Cost
D5020	Lighting and Branch Wiring			\$7.70	\$273,611.24
	Receptacles incl plate, box, conduit, wire, 8 per 1000 SF, .9 W per SF, with transformer	35,525.00		\$2.43	\$86,421.67
	Wall switches, 2.0 per 1000 SF	35,525.00		\$0.33	\$11,652.20
	Miscellaneous power, 1.2 watts	35,525.00		\$0.25	\$8,838.62
	Central air conditioning power, 4 watts	35,525.00		\$0.51	\$18,249.19
	Motor installation, three phase, 460 V, 15 HP motor size	0.32		\$0.02	\$599.81
	Motor feeder systems, three phase, feed to 200 V 5 HP, 230 V 7.5 HP, 460 V 15 HP, 575 V 20 HP	32.30		\$0.01	\$268.25
	Fluorescent fixtures recess mounted in ceiling, 1.6 watt per SF, 40 FC, 10 fixtures @32watt per 1000 SF	35,525.00		\$4.15	\$147,581.51
D5030	Communications and Security			\$3.47	\$123,410.15
	Communication and alarm systems, includes outlets, boxes, conduit and wire, sound systems, 100 outlets	0.26		\$0.73	\$26,015.93
	Communication and alarm systems, fire detection, addressable, 100 detectors, includes outlets, boxes, conduit and wire	0.40		\$0.69	\$24,434.34
	Fire alarm command center, addressable with voice, excl. wire & conduit	0.32		\$0.11	\$3,795.04
	Communication and alarm systems, includes outlets, boxes, conduit and wire, intercom systems, 100 stations	0.35		\$1.03	\$36,755.63
	Communication and alarm systems, includes outlets, boxes, conduit and wire, master clock systems, 30 rooms	0.46		\$0.59	\$21,120.61
	Internet wiring, 2 data/voice outlets per 1000 S.F.	24.87		\$0.32	\$11,288.60
D5090	Other Electrical Systems			\$0.36	\$12,654.01
	Generator sets, w/battery, charger, muffler and transfer switch, diesel engine with fuel tank, 100 kW	32.30		\$0.36	\$12,654.00
E Equipment & Furnishin			4.7%	\$7.42	\$263,532.13
E1020	Institutional Equipment			\$3.64	\$129,263.99
	Architectural equipment, laboratory equipment, counter tops, acid proof, economy	355.25		\$0.65	\$23,039.13
	Architectural equipment, laboratory equipment, cabinets, wall, open	107.44		\$0.79	\$27,946.00
	Architectural equipment, laboratory equipment, cabinets, base, drawer units	107.44		\$2.20	\$78,278.85
E1090	Other Equipment			\$3.78	\$134,268.14
	Architectural equipment, school equipment basketball backstops, suspended type, electrically operated	1.29		\$0.30	\$10,582.83

		Quantity	% of Total	Cost Per SF	Cost
	Architectural equipment, school equipment	968.86		\$3.40	\$120,624.98
	bleachers-telescoping, manual operation, 15 tier, economy (per seat)				
	Architectural equipment, school equipment, weight lifting gym, universal, economy	1.29		\$0.03	\$1,052.55
	Architectural equipment, school equipment, scoreboards,	0.65		\$0.06	\$2,007.79
	basketball, 1 side, economy				
F Special Construction			0.0%	\$0.00	\$0.00
G Building Sitework			0.0%	\$0.00	\$0.00
Sub Total			100%	\$157.79	\$5,605,319.85
Contractor's Overhead & Pr	ofit		25.0 %	\$39.45	\$1,401,329.96
Architectural Fees			7.0 %	\$13.81	\$490,465,49
User Fees			0.0 %	\$0.00	\$0.00
Total Building Cost				\$211.04	\$7,497,115.30

## Appendix VI: SITE PHOTOGRAPHS



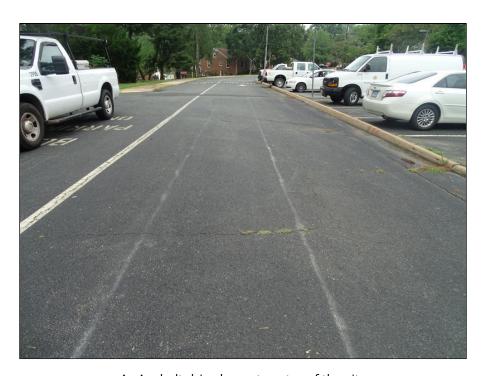
1 - Monument sign



2 - Burnley Moran Elementary School



3 - Asphalt parking area at the center of the site - note cracking and previous repair



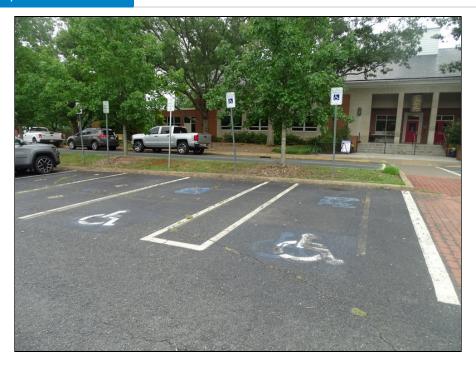
4 - Asphalt drive lane at center of the site



5 - Asphalt parking and drive lanes lower level north end of the site - note cracking



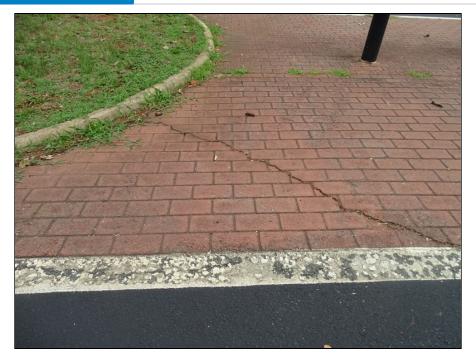
6 - Asphalt drive lane at west side of the site



7 - Accessible Asphalt parking area at the center of the site



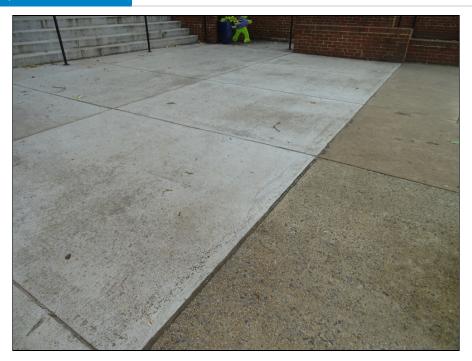
8 - Asphalt parking area at the center of the site - note cracking



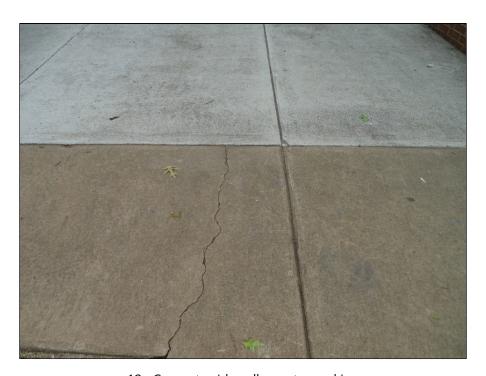
9 - Brick sidewalk - note cracking



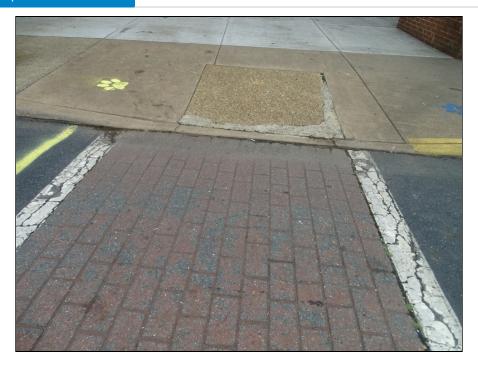
10 - Asphalt sidewalk at west end of site



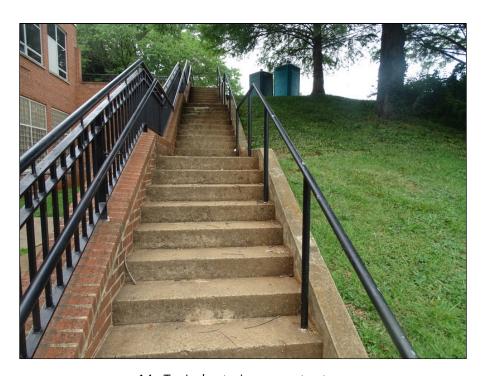
11 - Concrete sidewalk - note recent replacement



12 - Concrete sidewalk - note cracking



13 - Concrete ramp- note need to install truncated domes



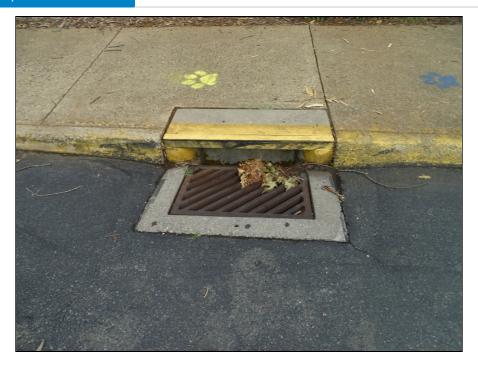
14 - Typical exterior concrete steps



15 - Typical exterior concrete steps - note deterioration



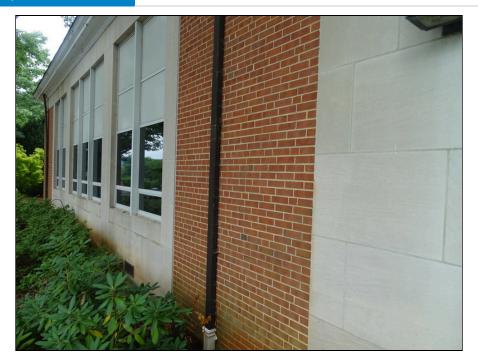
16 - Typical exterior concrete steps - note handrail peeled



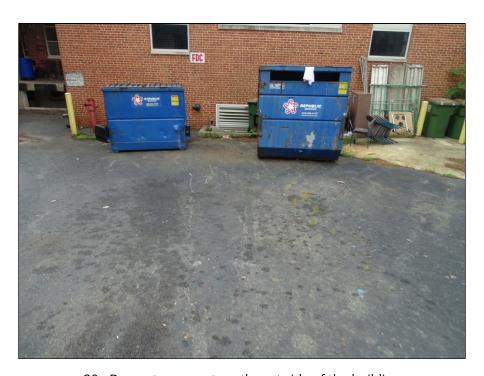
17 - Typical storm water drainage



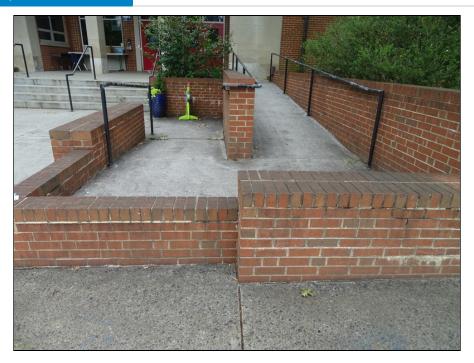
18 - Typical storm water drainage



19 - Typical downspout



20 - Dumpster area at northwest side of the building



21 - Planting bed at north side of the building



22 - Playground equipment at south end of site



23 - Playground equipment at south end of site



24 - Lawn area at west side of the building



25 - Lawn area at south side of the building



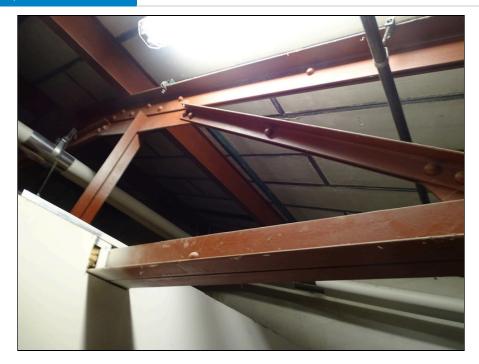
26 - Basketball court surface - note cracking and deterioration



27 - Typical landscape overview



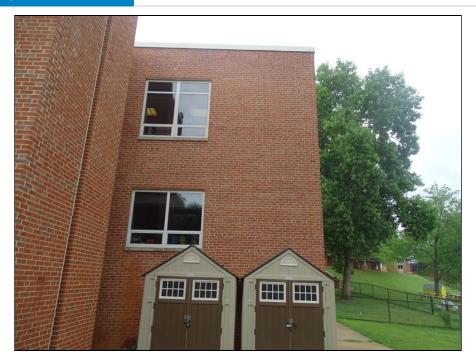
28 - Typical landscape overview



29 - Building framing



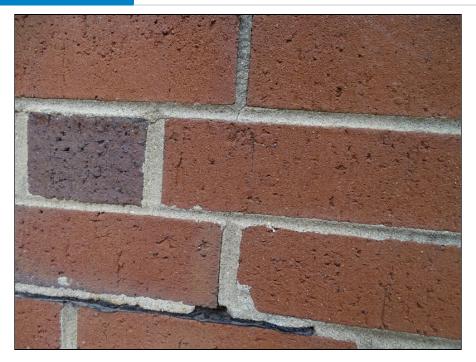
30 - Building exterior finishes



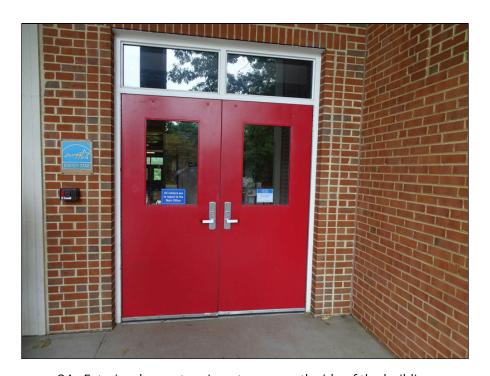
31 - Building exterior finishes



32 - Building exterior south side of the building



33 - Building exterior finishes - note mortar joint deterioration



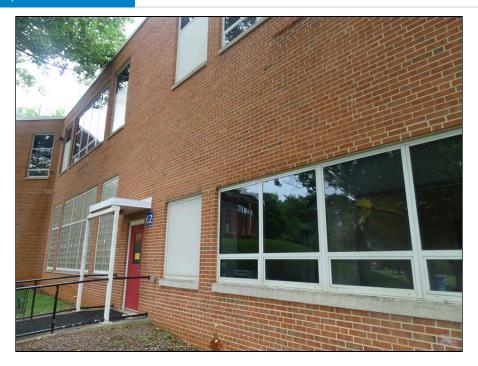
34 - Exterior doors at main entrance north side of the building



35 - Exterior door at east entrance



36 - Typical exterior windows



37 - Typical exterior windows



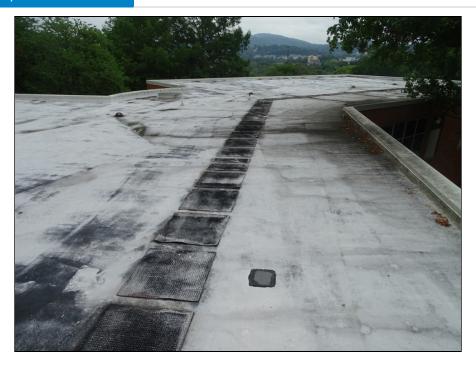
38 - Typical exterior windows



39 - Typical exterior windows



40 - Exterior window - note gasket needing replacement



41 - Single-ply membrane roofing system east side of the building



42 - Single-ply membrane roofing system



43 - Single-ply membrane roofing system - note ponding



44 - Single-ply membrane roofing system - note ponding



45 - Slate shingle roofing system



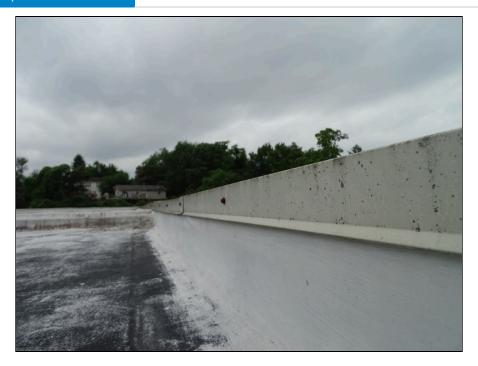
46 - Typical roof patch



47 - Internal roof drain - note debris needing routine maintenance



48 - Typical plumbing penetration



49 - Typical metal coping and parapet wall - note deterioration



50 - Slate shingle roofing system



51 - Slate shingle roofing system - note repair needed



52 - Building exteriors - note deterioration of wood cornice



53 - Building exteriors - note deterioration



54 - Building exteriors - note deterioration



55 - Domestic water heaters



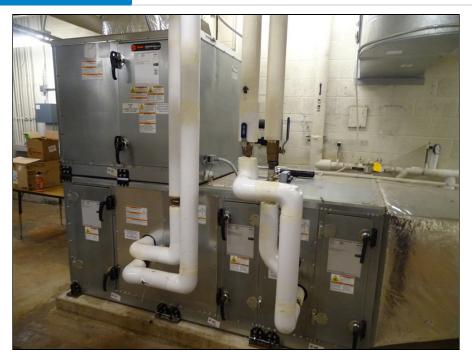
56 - Boilers located in mechanical room



57 - Cooling Tower at north side of the building



58 - Central plant pumps located in mechanical room



59 - Air Handler Unit in mechanical room



60 - Typical Package Unit



61 - Typical Package Unit



62 - Typical Water Source Heat Pump



63 - Split system



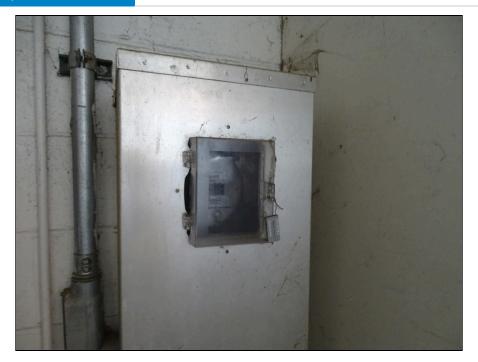
64 - Typical space heater



65 - Typical mechanical duct



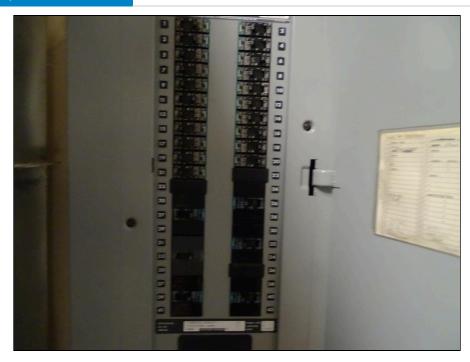
66 - Typical digital thermostat8333



67 - Main electrical meter



68 - Main electrical switchgear



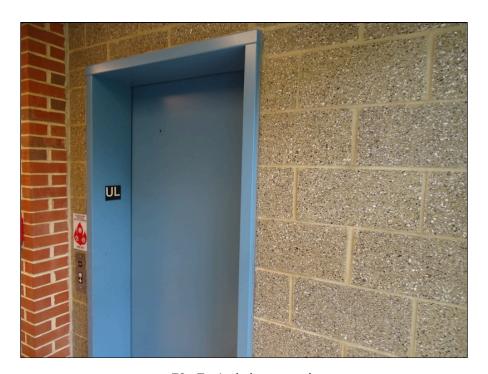
69 - Typical electrical circuit breaker panel



70 - Emergency power generator



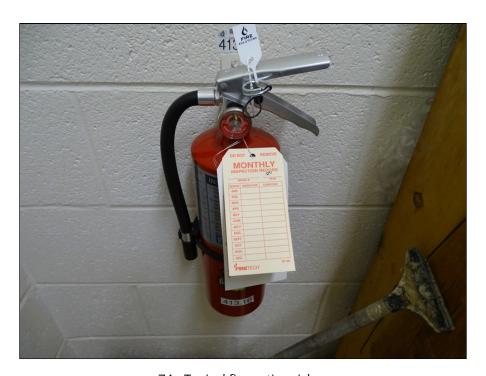
71 - Emergency power transfer switch



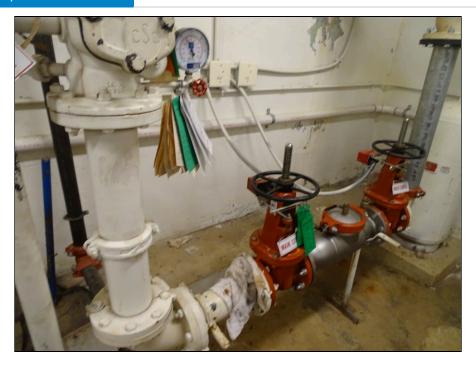
72 - Typical elevator cab



73 - Typical elevator machine and controls



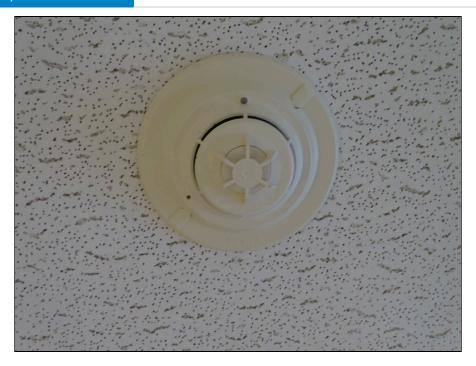
74 - Typical fire extinguisher



75 - Fire sprinkler system



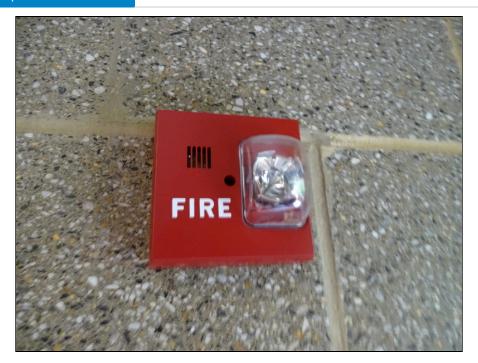
76 - Typical fire sprinkler head



77 - Typical smoke detector



78 - Fire alarm controls



79 - Fire alarm strobe and bell



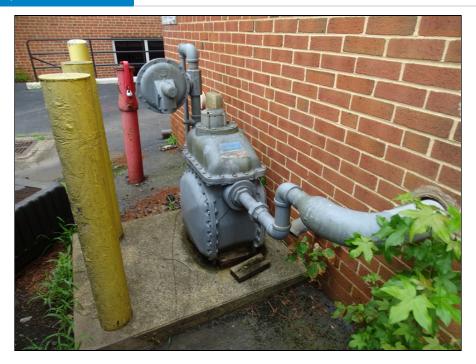
80 - Typical pul down station



81 - Typical fire hydrant



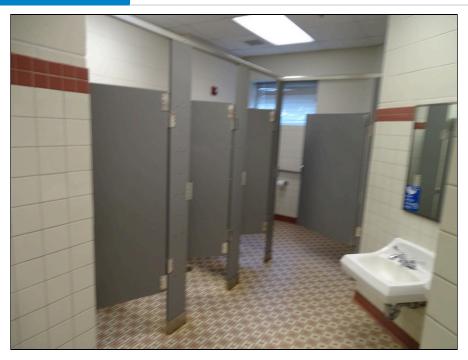
82 - Fire Department connection



83 - Typical gas meter



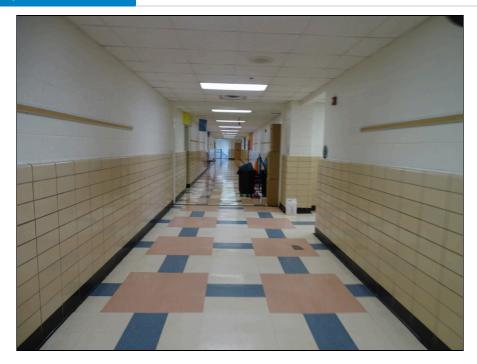
84 - Auditorium area interior finishes



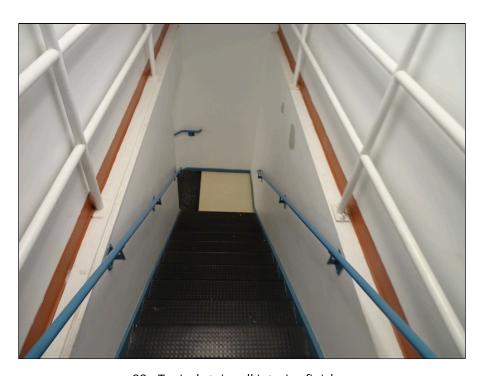
85 - Restroom area interior finishes



86 - Restroom area interior finishes



87 - Typical corridor interior finishes



88 - Typical stairwell interior finishes



89 - Typical utility room interior finishes



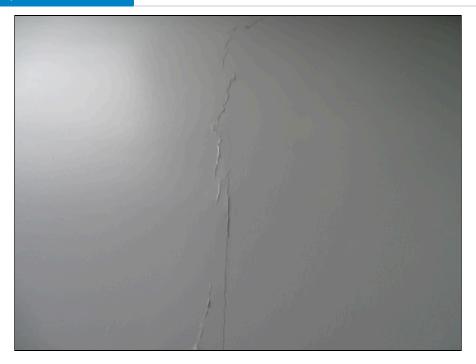
90 - Typical kitchen area interior finishes



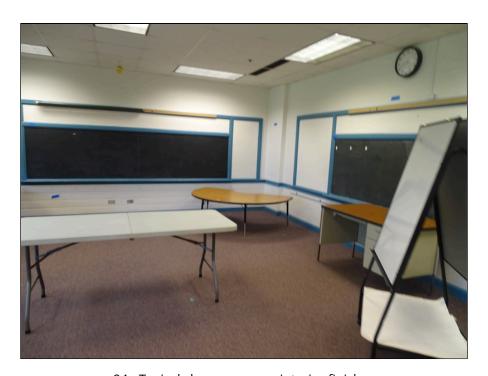
91 - Typical kitchen area interior finishes



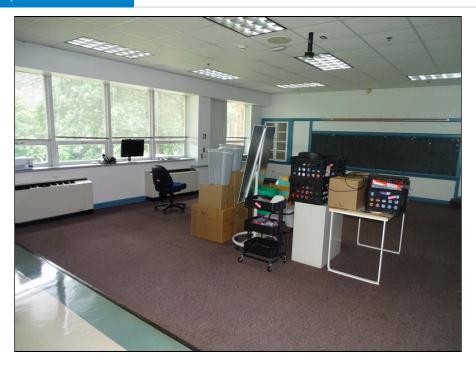
92 - Interior ceiling - note peeled paint



93 - Interior ceiling - note peeled paint



94 - Typical classroom area interior finishes



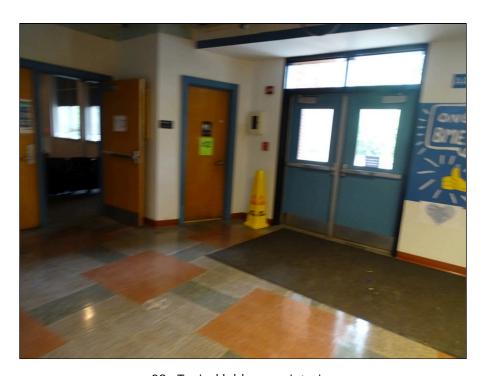
95 - Typical classroom area interior finishes



96 - Cafeteria area interior finishes



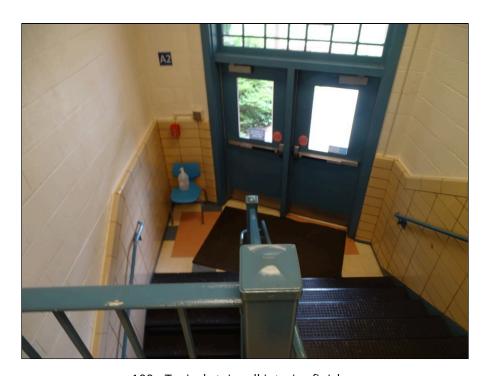
97 - Interior ceiling - note water leakage



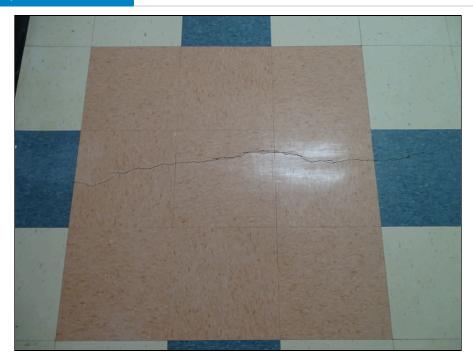
98 - Typical lobby area interior



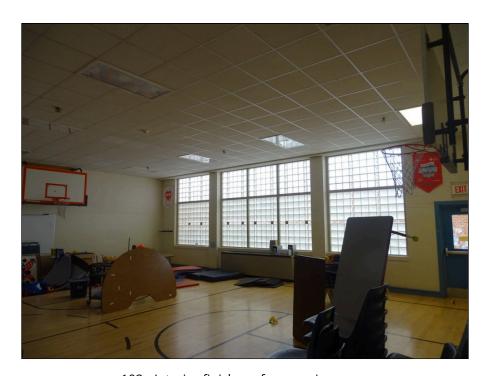
99 - typical corridor area interior



100 - Typical stairwell interior finishes



101 - Typical floor area - note deterioration



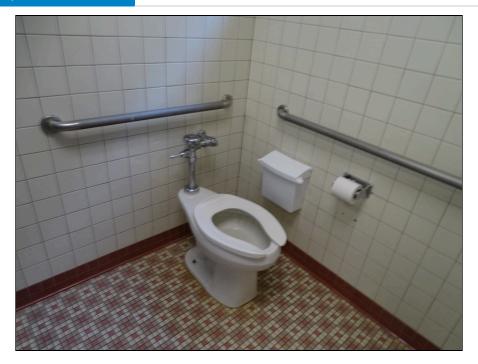
102 - Interior finishes of gymnasium area



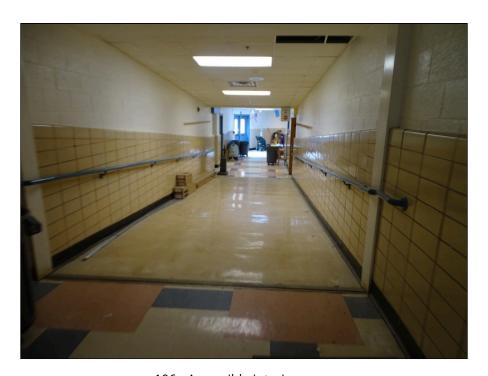
103 - Concrete curb cut ramp with truncated domes



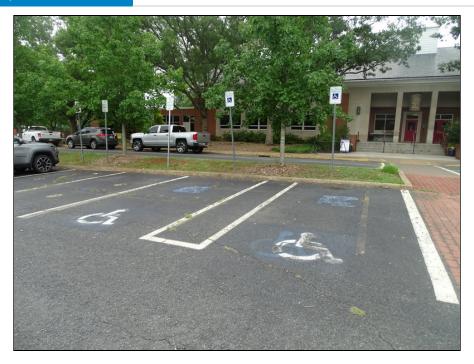
104 - Accessible ramp



105 - Accessible restroom



106 - Accessible interior ramp



107 - Accessible parking spaces

# **Appendix VII: RESUMES**

## Michael G. Doyle, AIA

## Principal Architect – Facilities Department

## **EDUCATION**

Bachelor of Architecture, 1987, Architecture, Virginia Polytechnic Institute and State University, Blacksburg, VA

## **REGISTRATIONS**

Registered Architect: AZ, DC, MD, VA, NC, IL The Leadership in Energy and Environmental Design (LEED) Accredited Professional: 2009

Mr. Doyle serves as a Principal Architect for the Facilities Engineering Group in ECS Chantilly. He has over 25 years of experience in the construction industry, and his expertise includes the Americans with Disabilities Act, Property Condition Surveys, Pre and Post Construction Survey Services, Pavement Assessments, and Third-Party Plan Review. He has worked with numerous government agencies and has significant experience with local government and educational facilities; commercial high-rise buildings; multi-unit, residential, and correctional facilities. Mr. Doyle also has had experience on several high-profile historic projects, including the Jefferson Memorial, the Tivoli Theater, the Tariff Building, The White House, the Court of Appeals in Washington, DC; the Valley Bank Building in Leesburg, Virginia; and the Shenandoah Courthouse at Woodstock, Virginia.

Property Condition Assessments - Mr. Doyle has extensive experience performing property condition assessments from small commercial properties, large high rise buildings, to government-owned properties. Mr. Doyle has performed assessment in general accordance with ASTM E 2018, Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process. Mr. Doyle also has experience in performing property condition assessments in accordance with lender and specific client requirements. Mr. Doyle has worked with teams of experts in providing detailed reports and simple reserve analysis for properties.

### RELEVANT PROJECT EXPERIENCE

Darien Lake, Darien Center, NY – Mr. Doyle was the Principal Architect for the property assessment of the Darien Lake amusement park. The property included over 200 buildings including buildings within the park, maintenance and administration buildings, hotel, campground buildings, and sewer treatment center.

Ballston Park Apartments, Arlington, VA (2014) - originally developed in 1938, this complex includes 50 two-story apartment buildings, one three-story apartment building, one single-family residence, and a single-story office/clubhouse. A PCA and a Phase I Environmental Site Assessment was conducted and documented.

Hyatt House Lodging, Sterling, VA (2014) - This six-story, 162-room, 98,793-square-foot hotel with surface parking was constructed in 2007 as a Sierra Suites and subsequently converted to a Hyatt House. Recreational facilities include a swimming pool, fitness center, a grill area, and a fire pit. Building systems observed per ASTM E 2018 included site conditions, the structural frame and building envelope; plumbing, mechanical and electrical systems, vertical transportation Systems, life safety and fire protection, and ADA Considerations. A Phase I Environmental Site Assessment was also conducted.

## WHMO Facilities Assessment, Washington, DC (2015) -

This is a privately owned, government-leased facility with a sensitive mission. The structure is believed to be a 1920s vintage building designed as a multi-story car dealership. The government has occupied this space continuously since 1963. Mr. Doyle conducted a survey of the complete facility, identified and documented areas of concerns. He also provide a recommendation for remediation for each area of concern, a Rough Order Magnitude (ROM) cost for remediation, and categorized each area of concern as critical, non-critical or aesthetic.

## **ADDITIONAL PROJECT EXPERIENCE**

- City of Charlottesville Portfolio, Charlottesville, VA
- Liberty Park, Herndon, VA
- Oakcrest School, McLean, VA
- Signature Flight Support, Arlington, VA
- The Gap, Washington, DC
- Lanham Crossing, Lanham, MD
- ZIM American Headquarters Building, Sulfolk, VA
- The Portrait Building, Washington, DC
- The Aventine of Alexandria, Alexandria, VA



## **DONALD GOGLIO**

CODE COMPLIANCE PROJECT MANAGER



## **CERTIFICATIONS**

Master Plumber

Master Gasfitter
Cross Connection Technician
Commercial Building Inspector
Commercial Plumbing Inspector
Commercial Mechanical Inspector
Accessibility Inspector/Plan
Reviewer

Fire Inspector I and II
LEED Green Associate
CPR/First Aid Training
OSHA 30 hr Training
SKILLS

Code Compliance Construction Administration Special Inspection Services Condition Assessments Forensic Consultation

## PROFESSIONAL MEMBERHSHIPS

American Wood Council

**USGBC** 

## **EDUCATION**

Montgomery College, 1991 Silver Spring, MD

## YEARS OF EXPERIENCE

ECS: <1 Other: 38

### PROFESSIONAL PROFILE

Mr. Goglio has 38 years of construction, mechanical trade, and management experience. He manages code compliance projects, including reviewing plans, providing technical support, and conducting inspections.

### **PROJECT EXPERIENCE**

Fort Lee AIT Barracks, Ft. Lee, VA – Quality Control Manager – The Fort Lee AIT Barracks project is a soldiers' basic combat training facility for over 1,200 Army personnel. The complex is a cohesive development, providing both housing and affiliated functions for soldiers in the AIT program. In addition to housing, the facility includes an outdoor jogging track, physical training pits, and access drivers and parking areas that meet USACE requirements. The project's five-story brick buildings meet DoD Minimum Antiterrorism Standards for Buildings and obtained LEED® Gold certification from the US Green Building Council. The Fort Lee project is part of the Northeast Region Multiple Award Task Order Contract (MATOC).

Terrapin Row, College Park, MD – Assistant Superintendent – Terrapin Row is a transformative student housing complex located on the University of Maryland's historic South Campus. The mixed-use community features 1,493 beds across 418 apartments as well as a 489-space parking garage. Terrapin Row boasts ample amenities centered around a college lifestyle, including a swimming pool, volleyball court, outdoor kitchens and fire pits, exterior TVs, a fitness center, bike storage, a cyber cafe and game room, and numerous live-learn spaces. The multi-phase project consists of seven buildings and encompasses a pedestrian and bike-friendly Village Green surrounded by over 11,856 square feet of retail space. The Village Green flows into a grand stairway and amphitheater that opens to a pedestrian plaza to welcome pedestrians towards the main academic centers of campus.

## The Hartley at the Parks, Washington, DC – Assistant Superintendent

– The Hartley is a 323-unit mixed-use apartment community with a Whole Foods Market as its retail anchor in Northwest DC. This six-story community consists of five stories of wood framing over a one-story concrete podium with 317 apartments and six townhomes. It is a part of The Parks at Walter Reed, a mixed-use master-planned redevelopment of the 66-acre historic Walter Reed Army Medical Center with 2,200 residential units plus office and retail. The Hartley features two interior courtyards: the north courtyard includes pool and amenity space, and the south courtyard includes a Zen Garden. The second-floor amenity space includes a lounge, multi-purpose room, fitness center, and pet spa. The studio, one-, two-, and three-bedroom units feature high-end finishes, including quartz countertops and EnergyStar® appliances.

## **DONALD GOGLIO**

CODE COMPLIANCE PROJECT MANAGER



## **CERTIFICATIONS**

Master Plumber Master Gasfitter Cross Connection Technician Commercial Building Inspector

Commercial Plumbing Inspector

Commercial Mechanical Inspector
Accessibility Inspector/Plan
Reviewer

Fire Inspector I and II

LEED Green Associate

**CPR/First Aid Training** 

OSHA 30 hr Training

### **SKILLS**

Code Compliance Construction Administration Special Inspection Services Condition Assessments Forensic Consultation

## PROFESSIONAL MEMBERHSHIPS

American Wood Council

**USGBC** 

## **EDUCATION**

Montgomery College, 1991 Silver Spring, MD

## YEARS OF EXPERIENCE

ECS: <1 Other: 38

### **PROFESSIONAL PROFILE**

Mr. Goglio has 38 years of construction, mechanical trade, and management experience. He manages code compliance projects, including reviewing plans, providing technical support, and conducting inspections.

### **PROJECT EXPERIENCE**

- Fort Lee AIT Barracks, Ft. Lee, VA
- Terrapin Row, College Park, MD
- The Hartley at the Parks, Washington, DC
- River Point, Washington, DC
- Juniper, Columbia, MD
- The Smith, King of Prussia, PA
- Banner Hill, Baltimore, MD
- Jefferson Square, Baltimore, MD
- Metropolitan at Largo Station, Largo, MD
- The Village at Leesburg, Leesburg, VA
- The Elms at Clarksburg Village, Clarksburg, MD
- Hidden Creek, Gaithersburg, MD
- Paramount, Gaithersburg, MD
- Thayer & Spring, Silver Spring, MD



## William R. Pratt, PE



## Principal Engineer, ECS Mid-Atlantic, LLC Professional-In-Charge

### **EDUCATION**

Bachelor of Science, 1989, Mechanical Engineering, University of Massachusetts

## **REGISTRATIONS**

Professional Engineer: DC, VA, MD

ICC Commercial Building, Plumbing, and Mechanical Inspector

Mr. Pratt serves as Senior Project Engineer for ECS Mid-Atlantic, LLC. Mr. Pratt is responsible as Professional-In-Charge of compliance group and provides supervision of code compliance inspection programs for the local jurisdictions. Additionally, he oversees execution of project management materials testing, construction property condition assessments.

PROPERTY CONDITION ASSESSMENTS extensive experience in performing property condition assessments for a variety of properties and structures. These assessments include evaluation of site improvements, building components, roofing, pavements, electrical systems, mechanical systems, and HVAC systems. He performs assessment in general accordance with ASTM E 2018 - 08, Standard Guide for Property Condition Assessments: Property Condition Assessment Process. Bill also has experience in performing property condition assessments that meet with lender and specific client requirements. He works with teams of experts in providing detailed reports and simple reserve analysis for properties.

#### SELECT PROJECT EXPERIENCE - PCA

- City of Charlottesville, VA 51 Property
- Portfolio including schools, libraries, museums, fire and police stations, and court buildings
- Home Properties 800+ Apartment Units,
   4-Property Portfolio to Freddie Mac
   Standard, Hampton and Virginia Beach, VA
- Boulders Office Park 300,000+ SF, 3-Property Portfolio , Richmond, VA
- Darien Lake Theme Park, Darien Center, NY
- Madison Place Office Building, Alexandria, VA
- King of Glory Lutheran Church, Williamsburg, VA
- Comfort Inn, Charlottesville, VA
- The Wisconsin Building, Washington, DC

## SELECT PROJECT EXPERIENCE — CODE COMPLIANCE AND SPECIAL INSPECTIONS

- City Center DC, Washington, DC
- DC Courts Judiciary Square, IDIQ Contract, Washington, DC
- Hilton Garden Inn, Washington, DC
- Waterfront Mall, Washington, DC
- 4<sup>th</sup> Street Reconstruction, Washington, DC
- Sibley Memorial Hospital Addition, Cancer Center, Washington, DC
- Washington Headquarters Services, Arlington, VA
- Walmart #5968-00, Washington, DC
- Progression Place, 7<sup>th</sup> Street, NW, Washington, DC
- National Gallery of Art, Washington, DC
- City Market @ O, Washington, DC

