CATEC
1000 RIO ROAD EAST
CHARLOTTESVILLE, VIRGINIA

ECS PROJECT NO. 46:6713

FOR

CITY OF CHARLOTTESVILLE - FACILITIES DEVELOPMENT

NOVEMBER 2, 2021

November 2, 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 CATEC, 1000 Rio Road East, 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

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Project Manager
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703-471-8400

Michael G. Doyle, AIA
Principal Architect
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Project Summary

Construction System	Good	Fair	Poor	Action	Immediate	Over Term Years 1-20
3.2.1 Topography	X			None		
3.2.2 Storm Water Drainage	X			None		
3.2.3 Access and Egress	X			None		
3.2.4 Paving, Curbing, and Parking	X	X		Repair		$80,000
3.2.5 Flatwork	X			None		
3.2.6 Landscaping and Appurtenances	X			None		
3.2.7 Recreational Facilities		NA		None		
3.2.8 Special Utility Systems		NA		None		
3.3.1 Foundation	X			None		
3.3.2 Building Frame	X			None		
3.3.3 Building Exteriors	X			Replace		$31,000
3.3.4 Exterior Doors	X			None		
3.3.5 Exterior Windows	X	X		Repair		$10,000
3.3.6 Roofing Systems		X		Replace		$840,000
3.4.1.1 Supply and Waste Piping	X			None		
3.4.1.2 Domestic Hot Water Production		X		Replace		$1,500
3.4.2.1 Equipment	X	X		Replace		$427,000
3.4.2.2 Distribution System	X			None		
3.4.2.3 Control Systems	X			None		
3.4.3.1 Service and Metering	X			None		
3.4.3.2 Distribution	X			Replace		$15,000
3.5 VERTICAL TRANSPORTATION SYSTEMS		NA		None		
3.6.1 Sprinklers and Suppression Systems	X			None		
3.6.2 Alarm Systems	X	X		Replace		$30,000
3.6.3 Security and Other Systems	X			None		
3.7.1 Interior Finishes	X			None		
3.8 Accessibility (ADA) Compliance	X			None		
5.1 MOISTURE AND MOLD	X			None		
Totals					$0	$1,434,500

Summary	Today's Dollars	$/Square Feet
Immediate Repairs	$0	$0.00

	Today's Dollars	$/Square Feet	$/Square Feet/Year
Replacement Reserves, today's dollars	$1,434,500.00	$26.47	$1.32
Replacement Reserves, w/20, 2.5% escalation	$1,605,217.56	$29.63	$1.48

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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 CATEC 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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Reliance

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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

CATEC, located at 1000 Rio Road East, in Charlottesville, Virginia, consists of a One-story building. The building totals approximately 54,184 square feet. Parking is provided with Asphalt pavement. The School building was reportedly constructed in 1973.

SURVEY INFORMATION	
Date of Assessment	July 27, 2021
Assessor	William R. Pratt, P.E.
Weather Conditions	Partly Cloudy | 94F
Property Contact	Josh Bontrager, Project Manager for the City of Charlottesville - Facilities Development

SITE INFORMATION	
Land Area	5.38 acres
Major Cross Streets	John W. Warner Parkway
Pavement - Parking	Asphalt pavement
Number of Parking Spaces	120
Number of Accessible Spaces	Five
Number of Van Accessible Spaces	Four
Pedestrian Sidewalks	Concrete and asphalt sidewalks

BUILDING INFORMATION	
Building Type	School
Number of Buildings	One
Building Height	One-story
Square Footage	54,184
Year Constructed	1973
Year Remodeled	Unknown

BUILDING CONSTRUCTION	
Foundation	Assumed shallow spread footings
Structural System	Masonry bearing walls with steel interior columns
Roof	Single-ply sheet membrane
Exterior Finishes	Brick veneer
Windows	Aluminum frame double pane

BUILDING CONSTRUCTION	
Entrance	Storefront entrance

BUILDING SYSTEMS	
HVAC System	Central plant HVAC system with supplemental heating/cooling equipment
Domestic Hot Water	Gas 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	N/A
Fire Suppression System	Dry 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
Total Repair Cost					$0.00

Capital Reserve Schedule

Item	EUL	EFF AGE	RUL	Quantity	Unit	Unit Cost	Cycle Replace	Replace Percent	Year 1 2021	Year 2 2022	Year 3 2023	Year 4 2024	Year 5 2025	Year 6 2026	Year 7 2027	Year 8 2028	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	Year 18 2038	Year 19 2039	Year 20 2040	Total Cost
3.2.4 Paving, Curbing, and Parking																												
MILL, OVERLAY AND RESTRIPE EXISTING ASPHALT	20	1	19	40,000	SF	$2.00	$80,000	100%																				$80,000	$80,000
3.3.3 Building Exteriors																													
REPLACE SEALANTS	12	5	7	2	LS	$10,000.00	$20,000	100%							$10,000												$10,000		$20,000
REPLACE MISSING SEALANTS FROM RECENT REPLACEMENT	12	11	1	1	LS	$1,000.00	$1,000	100%	$1,000																				$1,000
REPAIR PRE-CAST EXTERIOR AS NEEDED	30	29	1	1	LS	$10,000.00	$10,000	100%	$10,000																				$10,000
3.3.5 Exterior Windows																													
REPLACE FOGGED WINDOWS AND/OR EXTERIOR WINDOW GASKETS AS NEEDED	20	19	1	1	LS	$10,000.00	$10,000	100%	$10,000																				$10,000
3.3.6 Roofing Systems																													
REPLACE SINGLE-PLY ROOFING SYSTEM	15	14	1	60,000	SF	$14.00	$840,000	100%	$840,000																				$840,000
3.4.1.2 Domestic Hot Water Production																													
REPLACE WATER HEATER	12	7	5	1	EA	$1,500.00	$1,500	100%					$1,500																$1,500
3.4.2.1 Equipment																													
REPLACE BOILERS	20	10	10	3	EA	$25,000.00	$75,000	100%										$75,000											$75,000

City of Charlottesville - Facilities Development
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Item	EUL	EFF AGE	RUL	Quantity	Unit	Unit Cost	Cycle Replace	Replace Percent	Year 1 2021	Year 2 2022	Year 3 2023	Year 4 2024	Year 5 2025	Year 6 2026	Year 7 2027	Year 8 2028	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	Year 18 2038	Year 19 2039	Year 20 2040	Total Cost
REPLACE HEAT PUMP	15	14	1	1	Allow	$10,000.00	$10,000	100%	$5,000															$5,000					$10,000
REPLACE AIR HANDLERS	15	10	5	8	Allow	$20,000.00	$160,000	100%	$80,000															$80,000					$160,000
REPLACE UNIT VENTILATORS	20	19	1	6	Allow	$15,000.00	$90,000	100%	$45,000															$45,000					$90,000
REPLACE COOLING TOWER	18	7	11	1	EA	$45,000.00	$45,000	100%											$45,000										$45,000
REPLACE SPACE HEATERS	20	19	1	2	EA	$1,000.00	$2,000	100%	$2,000																				$2,000
REPLACE FAN COIL UNITS	20	15	5	10	EA	$2,000.00	$20,000	100%					$20,000																$20,000
REPLACE CHILLER	20	1	19	1	EA	$25,000.00	$25,000	100%																			$25,000		$25,000
3.4.3.2 Distribution																													
REPLACE OLDER CIRCUIT BREAKER PANELS	50	43	7	1	LS	$15,000.00	$15,000	100%							$15,000														$15,000
3.6.2 Alarm Systems																													
REPLACE FIRE ALARM PANELS	25	15	10	1	EA	$30,000.00	$30,000	100%										$30,000											$30,000
Total (Uninflated)									$993,000.00	$0.00	$0.00	$0.00	$21,500.00	$0.00	$25,000.00	$0.00	$0.00	$105,000.00	$45,000.00	$0.00	$0.00	$0.00	$0.00	$130,000.00	$0.00	$0.00	$35,000.00	$80,000.00	$1,434,500.00
Inflation Factor (2.5%)									1.0	1.025	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)									$993,000.00	$0.00	$0.00	$0.00	$23,731.98	$0.00	$28,992.34	$0.00	$0.00	$131,130.61	$57,603.80	$0.00	$0.00	$0.00	$0.00	$188,278.76	$0.00	$0.00	$54,588.06	$127,892.01	$1,605,217.56

Evaluation Period:	20
# of Square Feet:	54,184
Reserve per Square Feet per year (Uninflated)	$1.32
Reserve per Square Feet per year (Inflated)	$1.48

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 CATEC 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 One-story School building.

3.1.1 Property Location

The Property is located at 1000 Rio Road East in Charlottesville, Virginia.

Surrounding Properties	
North	City Church
East	Rio Road East
South	John W. Warner Parkway
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 48 years ago in 1973.

3.1.3 Current Property Improvements

The School building, located at 1000 Rio Road East, in Charlottesville, Virginia, consists of a One-story building. The building totals approximately 54,184 square feet. Parking is provided with Asphalt pavement.

3.2 SITE CONDITIONS

3.2.1 Topography

TOPOGRAPHY		
Item	**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		
Item	**Description**	**Condition**
Storm Water Collection System	Municipal	Good
Storm Water (Retention) Pond		N/A
Storm Water Filtration Structure		N/A
Pavement Drainage	Curb inlets	Good
Landscape Drainage	Yard drain inlets	Good
Sump Pumps		N/A

Comments

The storm water collection system is a municipal system.

3.2.3 Access and Egress

SITE ACCESS AND EGRESS		
Item	**Description**	**Condition**
Entrance Aprons	Concrete	Good
Fire Truck Access	South side of the property	Good
Easements		N/A

Comments

Vehicular access to the site is located on the south 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 south, west, and north sides of the building.

3.2.4 Paving, Curbing, and Parking

PARKING		
Item	**Description**	**Condition**
Striping	Painted	Fair
Quantity of Parking Spaces	120	Good
Quantity of Loading Spaces		N/A
Arrangement of Spaces	Generally perpendicular	Good
Site Circulation	Open drive aisles	Good
Lighting	Pole mounted	Good
Accessible Spaces	Five	Good
Accessible Aisles	Three	Good

SURFACE PAVEMENT		
Item	**Description**	**Condition**
Pavement Surface	Asphalt pavement	Fair
Drainage	Curb inlets	Good
Repair History	Patching and crack sealing noted	Fair
Concrete Curbs and Gutters	Chipping and cracking noted	Fair
Dumpster Pad	Stone	Fair
Asphalt Curbs		N/A
Fire Lane Painting	Painted curb	Good

Comments

Asphalt-paved drive lanes and parking areas are located on the east and south side of the site which also provides access to the site. Additional parking is provided along the southeast end of the site. The asphalt pavement was observed to be in generally fair condition with alligator cracks observed on the pavement. Striping was in fair condition. The asphalt pavements were reportedly recently repaired. The expected useful life of asphalt pavement is 20 years. We have provided allowances to repair the cracked areas of asphalt pavement based on need over the report period.

Photographs

Asphalt pavement south parking area

Asphalt pavement center drive lane looking north - note previous repair

Asphalt pavement center drive lane looking north - note previous repair

Asphalt pavement west drive lane looking north

Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
MILL, OVERLAY AND RESTRIPE EXISTING ASPHALT	20	1	19	20	$80,000
Total					$80,000

3.2.5 Flatwork

SIDEWALKS		
Item	**Description**	**Condition**
Walkways	Concrete and asphalt sidewalks	Good
Patios	Concrete	Good
Steps	Concrete	Good
Landings	Concrete	Good
Handrails	Steel tube	Good
Ramps	Concrete	Good
Curb Ramps	Concrete	Good
Truncated Domes	Inset plastic	Good

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 good condition.

The steps and ramps were observed to be in generally fair condition. The handrails adjacent to the steps and ramps were observed to be in generally good condition.

An asphalt sidewalk is located on the northeast side of the site. The asphalt sidewalk was in good condition.

Photographs

Typical concrete sidewalk - note cracking

Typical concrete sidewalk - note cracking

Typical concrete steps

Typical concrete curb - note deterioration

Typical concrete curb

3.2.6 Landscaping and Appurtenances

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

LANDSCAPING		
Item	**Description**	**Condition**
Retaining Walls		N/A
Fences and Gates		N/A
Dumpster Area	Located at northwest end of the site	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 sign is located at the south entrance. The sign was generally in good condition.

Photographs

Typical landscaping

Typical flag pole

Typical landscaping

Monument sign at south entrance

Typical landscaping

3.2.7 Recreational Facilities

Comments

The property does not contain recreational facilitates.

3.2.8 Special Utility Systems

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

Item	Description	Condition
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		
Item	**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		
Item	**Description**	**Condition**
Floor Framing	Concrete slab on grade	Good
Roof Framing	Structural steel	Good
Columns	Steel	Good
Load Bearing Walls	CMU	Good
Balconies		N/A
Decks		N/A

Comments

The structure of the building consists of Masonry bearing walls with steel interior columns. The structural frame of the building was generally in good condition.

Photographs

Structural framing

3.3.3 Building Exteriors

EXTERIOR FINISHES		
Item	**Description**	**Condition**
Masonry	Brick veneer	Good
Glass Store Front		N/A
Glass Curtain Wall		N/A
Metal		N/A
Precast	Precast stone accents	Good
Wood Siding		N/A
Accent/Trim	Precast concrete and metal	Good
Covered Soffits	Concrete and steel	Good
Awnings		Good
Paint		Good
Sealants	Various	Good

Comments

The primary exterior of the building consists of Brick veneer. Painted exposed metal window framing and concrete precast were located at the upper elevations of the building. The building exteriors were generally in good condition. The expected useful life of mortared joints is approximately 20 years before re-pointing is 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 good condition with replacement in progress during our site visit in 2016. Observations indicated two locations where exterior sealant was missing. We recommend installing sealant missing in year one and recommend that the remaining exterior sealants be replaced later in the report period.

Various awning structures are located around the perimeter of the building. The awnings consist of a concrete deck with steel columns. The underside of the concrete and the metal columns were painted. The paint was observed to be generally in good condition. The awnings should be painted in conjunction with the exposed concrete beams and columns painting project.

Photographs

Building exterior northwest side of the building

Building exterior southeast side of the building - note cracking

Building exterior southeast side of the building

Building exterior east side of the building - note deterioration

Building exterior east side of the building - note efflorescence

Building exterior northwest side of the building - note efflorescence

Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE SEALANTS	12	5	7	7 19	$10,000 $10,000
REPLACE MISSING SEALANTS FROM RECENT REPLACEMENT	12	11	1	1	$1,000

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPAIR PRE-CAST EXTERIOR AS NEEDED	30	29	1	1	$10,000
Total					$31,000

3.3.4 Exterior Doors

DOORS		
Item	**Description**	**Condition**
Main Entrance Doors	Storefront entrance	Good
Personnel Doors	Hollow metal	Good
Door Hardware		Good
Accessibility Controls	Located at main entrance	Good
Overhead/Roll-up Doors	Located on west side of the buidling	Good

Comments

The main entrance is located at the southwest portion of the building and consists of a Storefront entrance. 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 some of the doors had been replaced over time. Exterior doors typically have an expected useful life of 20 to 30 years.

Photographs

Main entrance exterior doors

Typical overhead doors

Typical personnel doors

Typical personnel doors

3.3.5 Exterior Windows

WINDOWS		
Item	**Description**	**Condition**
Window Frame	Metal framed	Good
Glass Pane	Double-pane	Good
Operation		N/A
Screen		N/A
Exterior Header	Steel lintel	Good

WINDOWS		
Item	**Description**	**Condition**
Exterior Sill	Brick	Good
Gaskets or Glazing	Neoprene	Good/Fair

Comments

The window system for the building primarily consists of metal frame double-pane window units. Metal frame double-pane windows have a typical expected useful life of 25 years. The windows were generally in good condition. The metal fame of the windows were being refurbished during our site visit in 2016. The exterior windows were fogged and/or gaskets were deteriorated at various locations. We recommend replacing fogged windows and/or exterior window gaskets as needed.

Photographs

Typical exterior windows

Typical exterior windows - note fog inside the glass

Typical exterior windows

Typical exterior windows - note sealant deterioration

Typical exterior windows - note gasket deterioration

Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE FOGGED WINDOWS AND/OR EXTERIOR WINDOW GASKETS AS NEEDED	20	19	1	1	$10,000
Total					$10,000

3.3.6 Roofing Systems

ROOFING		
Item	**Description**	**Condition**
Single-Ply Sheet Membrane	Patching and ponding observed	Fair
Slate Shingle		N/A
Parapet Walls	Membrane wrapped, metal coping	Fair
Cap Flashing/Coping	Metal coping	Fair
Insulation	Rigid	Good
Substrate/Deck	Metal decking	Good
Slope/Pitch	Minor ponding	Good
Drainage	Internal drains	Good
Plumbing Vents	Standard clamp boots	Good
Exhaust Vents	Counter flashed curb	Good
Equipment Curbs	Counter flashed curb	Good
Pitch Pockets		N/A
Skylights	Located on north side of the building	Fair
Flashing	Metal	Good
Expansion Joints	Bellows joint on curb	Good
Roof Age	20-21 years	Fair
Warranty		N/A

Comments

The main roofing system consists of a single-ply roofing system. The roofing system was reportedly replaced sometime near 2000 and some leaks were reported. The expected useful life of a sheet membrane roofing system is typically 15 years. We recommend replacing the roofing system early in the report period.

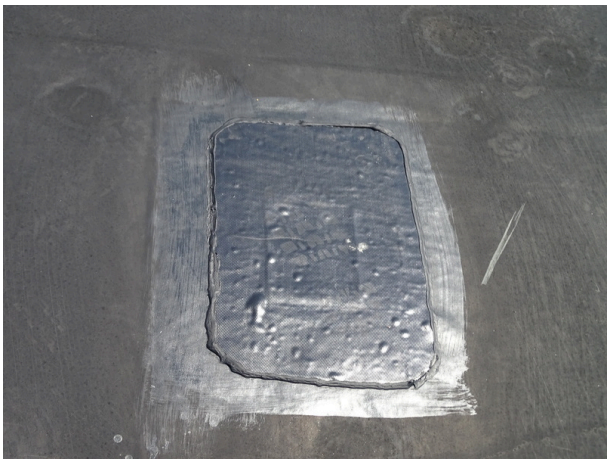
Drainage for the roofing system is provided by internal drains with overflow scuppers. Gutters and downspouts provided drainage from higher roofs to lower roofs at some locations. Roofing penetrations included plumbing vents and exhaust vents throughout the roofing system.

There are five skylights on the north side of the building. The skylights framing was rusted and were generally in fair condition. We recommend the skylights be replaced during roof replacement.

Photographs

Single-ply membrane roofing system looking south

Single-ply membrane roofing system - note patching

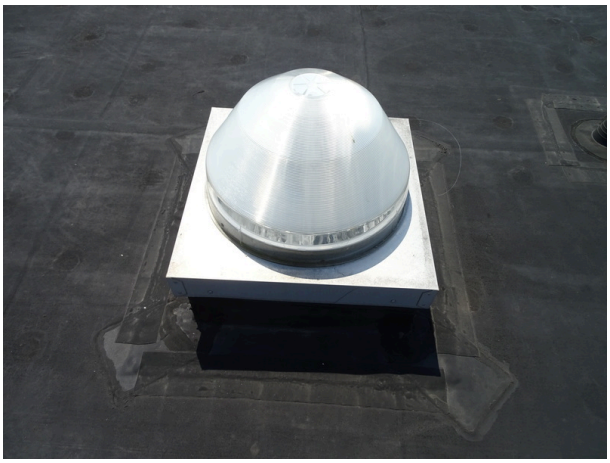


Single-ply membrane roofing system - note patching

Typical plumbing penetration

Typical internal drain

Typical area of ponding



Typical skylight

Single-ply membrane roofing system - note patching

Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE SINGLE-PLY ROOFING SYSTEM	15	14	1	1	$840,000
Total					$840,000

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
Pipe Insulation	Fiberglass	Fair
Water Shut-offs	Ball valves	Good
Water Flow and Pressure		Good

PLUMBING - WASTE SUPPLY SYSTEM		
Item	**Description**	**Condition**
Piping Material	PVC and cast iron	Good
Vertical Vent Stacks	PVC and Cast iron	Good
Clean-outs	PVC and cast iron	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		
Item	**Description**	**Condition**
Heating Equipment	Gas water heater	Fair
Water Storage	In water heater	Good
Circulation Pumps	Hot water recirculation	Good

Comments

Domestic hot water to the building is provided by a Gas water heater. The Gas water heateris located in the main utility. The water heater was were manufactured by A.O Smith.

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

Photographs

Gas water heater located in main utility room

Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE WATER HEATER	12	7	5	5	$1,500
Total					$1,500

3.4.2 HVAC Systems

3.4.2.1 Equipment

EQUIPMENT		
Item	**Description**	**Condition**
Boilers	Located in main utility room	Fair
Chillers	Located in main utility room	Good
Cooling Towers	Located outside at north side of the building	Fair
Fan Coil Units	Located at entrances, library, and other rooms	Fair
Heat Exchangers		N/A
Radiators	Located in corridor areas	Good

EQUIPMENT		
Item	**Description**	**Condition**
Dehumidifier Units		N/A
Condensing Units	Located on west side of the building	Fair
Air Handlers	Located in mechanical room and throughout the building	Fair
Package Units		N/A
Ceiling Fans		N/A
Exhaust Fans		Good
Split System		N/A
Water Source Heat Pumps (WSHP)		N/A
Space Heaters (wall or ceiling mounted)	Located in main utility 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, chiller, air handlers, condensers, radiators, fan coil units, and unit ventilators.

Boilers

The Harsco Boilers have an expected useful life of 20 years with proper maintenance. The two boilers were located in the main utility room. The boilers were reportedly installed sometime near 2010 and were generally in fair condition. We recommend replacing the boilers during the report period.

Chiller

The chiller was located in the main utility room. The chiller has an expected useful life of 20 years with proper maintenance. The chiller was generally in good condition. We recommend replacing the chiller later in the report period.

Cooling Tower

The cooling tower is located at the north side of the building. The Evapco cooling tower was reportedly installed in 2014 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 throughout the building and were replaced in 2005. The approximately 10 fan coil units and radiators have a typical expected life of 20 years. Replacement or refurbishment of the units is recommended during the study period.

Unit Ventilators

Fan coil units are located throughout the building and were replaced in 2005. The approximately 50 fan coil units and radiators have a typical expected life of 20 years. Replacement or refurbishment of the units is recommended during the study period.

Air Handlers

Air handlers are located in the main utility room and throughout the building . The units in the mechanical room were manufactured by Trane in 2005 and were in fair 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.

Space Heaters

Two ceiling mounted space heaters were located in the mechanical room. The space heaters were in good 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 main utility room

Cooling Tower located on the north side of the building

Typical Fan Coil Unit

Typical Unit Ventilator

Typical Air Handler Unit

Typical larger Fan Coil Unit

Typical Condenser Unit

Chiller located in main utility room

Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE BOILERS	20	10	10	10	$75,000
REPLACE HEAT PUMP	15	14	1	1 16	$5,000 $5,000
REPLACE AIR HANDLERS	15	10	5	1 16	$80,000 $80,000
REPLACE UNIT VENTILATORS	20	19	1	1 16	$45,000 $45,000
REPLACE COOLING TOWER	18	7	11	11	$45,000
REPLACE SPACE HEATERS	20	19	1	1	$2,000
REPLACE FAN COIL UNITS	20	15	5	5	$20,000
REPLACE CHILLER	20	1	19	19	$25,000
Total					$427,000

3.4.2.2 Distribution System

HVAC DISTRIBUTION		
Item	**Description**	**Condition**
Ducts	Sheet metal	Good
Return Air	Sheet metal	Good

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		
Item	**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		
Item	**Description**	**Condition**
Service Entrance	West side of the building	Good
Master (House) Meter	Located in the main electrical room	Good
Emergency Power		N/A
Transfer Switch		N/A

Comments

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

The expected useful life of switchgear is generally 50 years. The switchgear was generally in good condition.

3.4.3.2 Distribution

ELECTRICAL DISTRIBUTION SYSTEM		
Item	**Description**	**Condition**
Electrical Sub-panels	GE	Fair
Branch Wiring	Copper	Good
GFCI Devices		Good
Building Transformers	Wall 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. Some circuit breaker panels were reportedly original equipment. The circuit breaker panels were observed to be in generally fair condition. We recommend replacing the older, original panels.

Photographs

Typical electrical circuit breaker panel

Typical building transformer

Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE OLDER CIRCUIT BREAKER PANELS	50	43	7	7	$15,000
Total					$15,000

3.5 VERTICAL TRANSPORTATION SYSTEMS

Comments

The building does not contain vertical transportation systems.

3.6 LIFE SAFETY AND FIRE PROTECTION

3.6.1 Sprinklers and Suppression Systems

SPRINKLER AND SUPPRESSION SYSTEMS		
Item	**Description**	**Condition**
Sprinkler System (wet)		N/A
Sprinkler Heads		N/A
Date of Last Inspection (sprinkler system)		N/A
Sprinkler Pump		N/A
Fire Extinguishers	Located throughout the building	Good
Date of Last Inspection (Fire Extinguishers)	June 2021	Good
Fire Standpipes		N/A
Fire Department Connections		N/A
Hose Cabinets		N/A
Fire Hydrants	On site	Good

Comments

The fire suppression system consists of Dry sprinkler system and fire extinguishers. Fire extinguishers were observed throughout the building including in mechanical rooms. The fire extinguishers were observed to have recent inspection tags issued June 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

Typical fire extinguisher

Typical fire hydrant

3.6.2 Alarm Systems

ALARM SYSTEMS		
Item	**Description**	**Condition**
Fire Alarm Annunciator panel		N/A
Central Fire Alarm Control Panel	Located in main utility room	Good
Automatic Notification		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 panel is located in the main utility room and annunciator panel is located at the main entrance. The fire control panel was observed to be in good condition. Emergency exit signs and lighting, pull stations, fire extinguishers, smoke detectors, and alarm bells and strobes are located throughout the building.

Photographs

Typical exit sign

Typical fire alarm pull station

Typical fire alarm bell and strobe

Typical smoke detector

Recommendations

Cost Recommendation	EUL	EFF AGE	RUL	Year	Cost
REPLACE FIRE ALARM PANELS	25	15	10	10	$30,000
Total					$30,000

3.6.3 Security and Other Systems

SECURITY AND OTHER SYSTEMS		
Item	**Description**	**Condition**
Security Cameras	Reported to be in good condition.	Good
Alarm System	Reported to be in good condition.	Good
Access Control	Reported to be in good condition.	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.

Photographs

Security system electronic controls

Typical security camera

3.7 INTERIOR BUILDING COMPONENTS

3.7.1 Interior Finishes

MAIN OFFICE		
Item	**Description**	**Condition**
Floor Finishes	Carpet, vinyl tile	Good
Wall Finishes	Painted CMU and gypsum board	Good
Ceiling Finishes	Suspended acoustical tile	Good
Lighting	Fluorescent fixtures	Good
Accessories	Millwork	Good

RESTROOMS		
Item	**Description**	**Condition**
Floor Finishes	Ceramic tile	Good
Wall Finishes	Ceramic tile	Good
Ceiling Finishes	Painted gypsum board	Good
Fixtures	Toilets, urinals, wall hung lavatories	Good
Accessories	Partitions, grab bars, mirrors, soap and paper dispensers	Good
Ventilation	Exhaust fans	Good

RESTROOMS		
Item	**Description**	**Condition**
Lighting	Fluorescent fixtures	Good
Doors	Metal	Good
Door Hardware	Operable	Good

CORRIDORS		
Item	**Description**	**Condition**
Floor Finishes	Terrazzo	Good
Wall Finishes	Painted CMU and exposed brick	Good
Ceiling Finishes	Suspended acoustical tile	Good
Lighting	Fluorescent fixtures	Good
Doors	Metal	Good
Door Hardware	Operable	Good

KITCHEN		
Item	**Description**	**Condition**
Floor Finishes	Flooring demolition in progress	Good
Wall Finishes	Painted CMU	Good
Ceiling Finishes	Suspended acoustical tile	Good
Counters	Stainless/laminate	Good
Sink	Stainless	Good
Cabinets	Laminate	Good
Appliances	Stainless	Good
Stove/Range	Stainless	Good
Exhaust Vent/Hood	Stainless	Good
Refrigerator	Stainless	Good
Dishwasher	Stainless	Good
Microwave Oven	Countertop	Good

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

SHOP AREA		
Item	**Description**	**Condition**
Floor Finishes	Unfinished concrete	Good
Wall Finishes	Painted CMU	Good
Ceiling Finishes	Unfinished	Good
Lighting	Fluorescent fixtures	Good
Accessories	Various	Good
Seating	Classroom	Good
Stage	Wood	Good

CAFETERIA		
Item	**Description**	**Condition**
Floor Finishes	Vinyl tile	Good
Wall Finishes	Painted CMU	Good
Ceiling Finishes	Unfinished	Good
Lighting	Fluorescent fixtures	Good
Accessories	Millwork	Good

CLASSROOMS		
Item	**Description**	**Condition**
Floor Finishes	Vinyl tile and carpet tile	Good
Wall Finishes	Painted CMU	Good
Ceiling Finishes	Suspended acoustical tile	Good

CLASSROOMS		
Item	**Description**	**Condition**
Lighting	Fluorescent fixtures	Good
Doors	Metal	Good
Door Hardware	Operable	Good

Comments

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

The finishes in the main office include carpet and vinyl floors, painted CMU and gypsum board walls, and suspended acoustical tile ceilings. A glass wall and door assembly was installed at the office entrance. The finishes in the main office were observed to be in generally good condition.

Restrooms are located throughout the building as accessed from corridors. The finishes in the restrooms include ceramic tile floors, ceramic tile walls, and painted gypsum board ceilings. The restrooms were observed to be in generally good condition.

The finishes in the corridors include terrazzo floors, painted CMU and exposed brick 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 painted CMU walls and suspended acoustical tile ceilings. The ceramic tile flooring was being demolished during the site visit. 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 typical shop area consists of unfinished concrete floors and unfinished ceilings. The walls consist of painted CMU. The finishes were generally in good condition.

The finishes in the cafeteria area consisted of vinyl tile flooring, painted CMU walls, and unfinished ceiling. The finishes were generally in good condition.

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

Photographs

Interior finishes of classroom area

Interior finishes of main office and entrance area

Interior finishes of corridor area

Interior finishes of corridor area

Interior finishes of restroom area

Interior finishes of restroom area

Interior finishes of classroom area

Interior finishes of cafeteria area

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 CATEC 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.

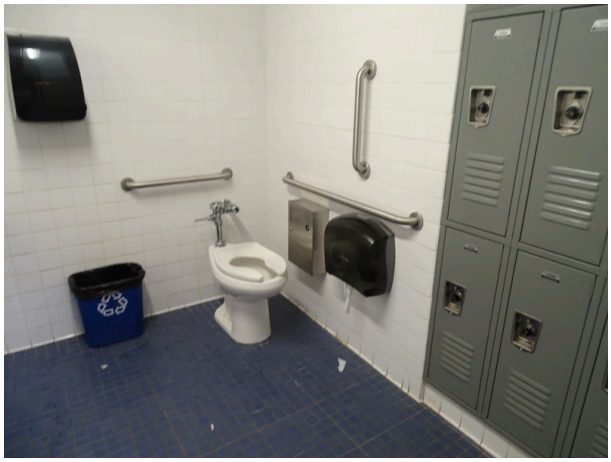
The parking area serving the property has a total of approximately 120 parking spaces. Of the parking spaces, Five are accessible with Four being van accessible. Accessibility requires that five accessible parking spaces be provided in parking areas with a total of 101 to 150 spaces. One in six of the 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.

Photographs

Accessible interior ramp

Accessible interior ramp

Accessible interior ramp



Accessible toilet

Accessible toilet

Accessible parking spaces

Accessible curb ramp with truncated domes

Uniform Abbreviated Screening Checklist for the 2010 Americans with Disabilities Act			
	Item	**Yes/ No**	**Comments**
A.	**History**		
1.	Has an ADA Survey been completed for this property?	Yes	
2.	Have any ADA improvements been made to the property since original construction?	Yes	installation of curb ramps with truncated domes at exterior and door hardware for interior doors
3.	Has building ownership/management reported any ADA complaints or litigation?	No	not reported

Uniform Abbreviated Screening Checklist for the 2010 Americans with Disabilities Act			
	Item	**Yes/ No**	**Comments**
B.	**Parking**		
1.	Does the required number of standard ADA-designated spaces appear to be provided?	Yes	Five out of the 120 are accessible.
2.	Does the required number of van-accessible designated spaces appear to be provided?	Yes	four 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?	Yes	
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	
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**		

Uniform Abbreviated Screening Checklist for the 2010 Americans with Disabilities Act			
	Item	**Yes/ No**	**Comments**
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?	Yes	
3.	Do ramps on accessible routes appear to have compliant slope?	N/A	
4.	Do ramps on accessible routes appear to have compliant length and width?	Yes	
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?	N/A	
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	

Uniform Abbreviated Screening Checklist for the 2010 Americans with Disabilities Act			
	Item	**Yes/ No**	**Comments**
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?	N/A	
2.	Is accessible floor identification signage present on the hoistway sidewalls?	N/A	
H.	**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	
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?	Yes	
7.	Do toilet stalls appear to provide the minimum compliant clear floor area?	Yes	
8.	Do urinals appear to be mounted at a compliant height and with compliant approach width?	Yes	

Uniform Abbreviated Screening Checklist for the 2010 Americans with Disabilities Act			
	Item	**Yes/ No**	**Comments**
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 Shannon Yowell 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 CATEC 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 CATEC School is $1,434,500.00. The replacement construction cost value obtained from the RS MEANS square foot estimator application is $7,601,684.71. Please see attached documentation from RS MEANS program output as an appendix to the report. The calculated FCI value is determined to be 0.18. In accordance with the industry standards and methodology sponsored by The National Association of College and University Business Officers (NACUBO), the condition of the CATEC building 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 CATEC School was determined to be B.

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

N
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Site Map

CATEC - FCA 2021

Aerial Photograph

CATEC - FCA 2021

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

Square Foot Cost Estimate Report

Date: **1/12/2022**

Estimate Name	**CATEC**
	City of Charlottesville 1000 Rio Road East Charlottesville Virginia 22901
Building Type	School, Vocational with Decorative Concrete Block / Bearing Walls
Location	CHARLOTTESVILLE, VA
	2.00
Stories Height	16.00
Floor Area (S.F.)	54,184.00
LaborType	OPN
Basement Included	No
Data Release	Year 2021
Cost Per Square Foot	$140.29
Total Building Cost	**$7,601,684.71**

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

Assembly Customization Type :

⊕ Added

◐ Partially Swapped

● Fully Swapped

		Quantity	% of Total	Cost Per SF	Cost
A Substructure			**8.0%**	**$8.39**	**$454,786.90**
A1010	**Standard Foundations**			**$2.40**	**$130,057.86**
	Foundation wall, CIP, 4' wall height, direct chute, .148 CY/LF, 7.2 PLF, 12" thick	890.00		$1.11	**$60,200.49**
	Strip footing, concrete, reinforced, load 5.1 KLF, soil bearing capacity 3 KSF, 12" deep x 24" wide	979.00		$0.65	**$35,442.74**
	Spread footings, 3000 PSI concrete, load 150K, soil bearing capacity 3 KSF, 7' - 6" square x 18" deep	33.87		$0.64	**$34,414.63**
A1030	**Slab on Grade**			**$5.93**	**$321,422.20**
	Slab on grade, 5" thick, heavy industrial, reinforced	27,092.00		$5.93	**$321,422.20**

		Quantity	% of Total	Cost Per SF	Cost
A2010	**Basement Excavation**			**$0.06**	**$3,306.85**
	Excavate and fill, 30,000 SF, 4' deep, sand, gravel, or common earth, on site storage	27,092.00		$0.06	**$3,306.85**
B Shell			**28.6%**	**$30.00**	**$1,625,705.18**
B1010	**Floor Construction**			**$10.64**	**$576,523.48**
	Floor, concrete, slab form, open web bar joist @ 2' OC, on W beam and wall, 30'x35' bay, 35" deep, 100 PSF superimposed load, 148 PSF total load	27,092.00		$9.37	**$507,959.02**
	Floor, concrete, slab form, open web bar joist @ 2' OC, on W beam and wall, 30'x35' bay, 35" deep, 100 PSF superimposed load, 148 PSF total load, for columns add	27,092.00		$0.31	**$16,879.40**
	Fireproofing, gypsum board, fire rated, 2 layer, 1" thick, 10" steel column, 3 hour rating, 17 PLF	1,820.58		$0.95	**$51,685.06**
B1020	**Roof Construction**			**$3.59**	**$194,753.82**
	Roof, steel joists, joist girder, 1.5" 22 ga metal deck, on columns/bearing wall, 30'x35' bay, 40 PSF superimposed load, 36.5" deep, 60 PSF total load	27,092.00		$3.34	**$180,994.34**
	Roof, steel joists, joist girder, 1.5" 22 ga metal deck, on columns/bearing wall, 30'x35' bay, 40 PSF superimposed load, 36.5" deep, 60 PSF total load, add for column	27,092.00		$0.25	**$13,759.48**
B2010	**Exterior Walls**			**$6.60**	**$357,864.44**
	Concrete block (CMU) wall, split rib, 8 ribs, hollow, regular weight, 8x8x16, reinforced, vertical #5@32", grouted	24,208.00		$6.60	**$357,864.44**
B2020	**Exterior Windows**			**$5.29**	**$286,388.90**
	Aluminum flush tube frame, for insulating glass, 2" x 4-1/2", 5'x6' opening, no intermediate horizontals	4,272.00		$1.96	**$106,446.06**
	Glazing panel, insulating, 1/2" thick, 2 lites 1/8" float glass, tinted	4,272.00		$3.32	**$179,942.83**
B2030	**Exterior Doors**			**$0.69**	**$37,151.55**
	Door, aluminum & glass, without transom, wide stile, double door, hardware, 6'-0" x 7'-0" opening	1.35		$0.19	**$10,099.02**
	Door, steel 18 gauge, hollow metal, 1 door with frame, no label, 3'-0" x 7'-0" opening	4.06		$0.21	**$11,357.73**
	Door, steel 24 gauge, overhead, sectional, manual operation, 10'-0" x 10'-0" opening	1.35		$0.04	**$2,414.79**
	Door, steel 24 gauge, overhead, sectional, electric operator, 10'-0" x 10'-0" opening	4.06		$0.25	**$13,280.01**
B3010	**Roof Coverings**			**$2.98**	**$161,407.42**
	Roofing, single ply membrane, EPDM, 60 mils, fully adhered	27,092.00		$0.96	**$51,845.42**
	Insulation, rigid, roof deck, polyisocyanurate, 2#/CF, 2" thick	54,184.00		$1.54	**$83,491.04**

		Quantity	% of Total	Cost Per SF	Cost
	Roof edges, aluminum, duranodic, .050" thick, 6" face	890.00		$0.41	**$22,392.22**
	Flashing, aluminum, no backing sides, .019"	890.00		$0.07	**$3,678.73**
B3020	**Roof Openings**			**$0.21**	**$11,615.58**
	Roof hatch, with curb, 1" fiberglass insulation, 2'-6" x 3'-0", galvanized steel, 165 lbs	2.71		$0.06	**$3,406.01**
	Smoke hatch, unlabeled, galvanized, 2'-6" x 3', not incl hand winch operator	5.42		$0.15	**$8,209.57**
C Interiors			**19.0%**	**$19.94**	**$1,080,405.20**
C1010	**Partitions**			**$4.14**	**$224,404.66**
	Concrete block (CMU) partition, light weight, hollow, 6" thick, no finish	32,510.40		$4.14	**$224,404.66**
C1020	**Interior Doors**			**$1.81**	**$97,877.53**
	Door, single leaf, kd steel frame, hollow metal, commercial quality, flush, 3'-0" x 7'-0" x 1-3/8"	90.31		$1.81	**$97,877.53**
C1030	**Fittings**			**$0.70**	**$37,682.42**
	Toilet partitions, cubicles, ceiling hung, painted metal	27.09		$0.36	**$19,303.24**
	Chalkboards, liquid chalk type, aluminum frame & chalktrough	1,083.68		$0.34	**$18,379.18**
C2010	**Stair Construction**			**$2.02**	**$109,554.16**
	Stairs, steel, pan tread for conc in-fill, picket rail,16 risers w/ landing	8.13		$2.02	**$109,554.16**
C3010	**Wall Finishes**			**$3.57**	**$193,495.87**
	2 coats paint on masonry with block filler	24,208.00		$0.89	**$48,325.95**
	Painting, masonry or concrete, latex, brushwork, primer & 2 coats	32,510.40		$0.69	**$37,223.43**
	Painting, masonry or concrete, latex, brushwork, addition for block filler	32,510.40		$0.51	**$27,676.43**
	Wall coatings, acrylic glazed coatings, maximum	26,008.32		$0.79	**$42,764.96**
	Ceramic tile, thin set, 4-1/4" x 4-1/4"	6,502.08		$0.69	**$37,505.10**
C3020	**Floor Finishes**			**$4.57**	**$247,351.10**
	Carpet, tufted, nylon, roll goods, 12' wide, 36 oz	10,836.80		$0.98	**$52,864.51**
	Terrazzo, maximum	5,418.40		$1.88	**$101,940.69**
	Vinyl, composition tile, maximum	37,928.80		$1.71	**$92,545.89**
C3030	**Ceiling Finishes**			**$3.14**	**$170,039.47**
	Acoustic ceilings, 3/4"mineral fiber, 12" x 12" tile, concealed 2" bar & channel grid, suspended support	32,510.40		$3.14	**$170,039.47**
D Services			**44.1%**	**$46.30**	**$2,508,715.05**
D1010	**Elevators and Lifts**			**$2.06**	**$111,589.37**

		Quantity	% of Total	Cost Per SF	Cost
	Hydraulic passenger elevator, 2500 lb., 2 floor, 125 FPM	1.35		$2.06	**$111,589.37**
D2010	**Plumbing Fixtures**			**$4.82**	**$261,005.49**
	Water closet, vitreous china, bowl only with flush valve, floor mount	35.76		$0.92	**$50,045.45**
	Urinal, vitreous china, wall hung	17.88		$0.39	**$21,389.19**
	Lavatory w/trim, wall hung, PE on CI, 20" x 18"	35.76		$1.09	**$59,241.51**
	Kitchen sink w/trim, countertop, stainless steel, 44" x 22" triple bowl	2.29		$0.10	**$5,209.53**
	Service sink w/trim, PE on CI,wall hung w/rim guard, 24" x 20"	4.59		$0.37	**$19,961.49**
	Shower, stall, baked enamel, terrazzo receptor, 36" square	13.41		$0.73	**$39,497.39**
	Water cooler, electric, wall hung, dual height, 14.3 GPH	17.88		$1.00	**$54,391.81**
	Bathroom, lavatory & water closet, 1 wall plumbing, share common plumbing wall*	4.06		$0.21	**$11,269.12**
D2020	**Domestic Water Distribution**			**$0.91**	**$49,360.17**
	Gas fired water heater, commercial, 100< F rise, 500 MBH input, 480 GPH	1.69		$0.91	**$49,360.17**
D2040	**Rain Water Drainage**			**$0.72**	**$39,167.97**
	Roof drain, CI, soil,single hub, 4" diam, 10' high	9.90		$0.36	**$19,655.96**
	Roof drain, CI, soil,single hub, 4" diam, for each additional foot add	456.00		$0.36	**$19,512.01**
D3010	**Energy Supply**			**$8.71**	**$472,011.78**
	Commercial building heating system, fin tube radiation, forced hot water, 10,000 SF, 100,000 CF, total 2 floors	32,510.40		$5.51	**$298,735.46**
	Commercial building heating systems, terminal unit heaters, forced hot water, 10,000 SF bldg,100,000 CF, total, 2 floors	21,673.60		$3.20	**$173,276.31**
D3030	**Cooling Generating Systems**			**$13.17**	**$713,679.14**
	Packaged chiller, water cooled, with fan coil unit, schools and colleges, 40,000 SF, 153.33 ton	54,184.00		$13.17	**$713,679.14**
D4010	**Sprinklers**			**$2.62**	**$141,989.44**
	Wet pipe sprinkler systems, steel, light hazard, 1 floor, 10,000 SF	27,092.00		$1.50	**$81,524.43**
	Wet pipe sprinkler systems, steel, light hazard, each additional floor, 10,000 SF	27,092.00		$1.12	**$60,465.01**
D4020	**Standpipes**			**$1.15**	**$62,471.85**
	Wet standpipe risers, class III, steel, black, sch 40, 6" diam pipe, 1 floor	2.71		$0.76	**$41,437.76**
	Wet standpipe risers, class III, steel, black, sch 40, 6" diam pipe, additional floors	5.42		$0.39	**$21,034.09**

		Quantity	% of Total	Cost Per SF	Cost
D5010	**Electrical Service/Distribution**			**$1.07**	**$58,111.17**
	Overhead service installation, includes breakers, metering, 20' conduit & wire, 3 phase, 4 wire, 120/208 V, 800 A	1.69		$0.32	**$17,201.30**
	Feeder installation 600 V, including RGS conduit and XHHW wire, 800 A	81.28		$0.23	**$12,715.22**
	Switchgear installation, incl switchboard, panels & circuit breaker, 120/208 V, 3 phase, 800 A	1.63		$0.52	**$28,194.64**
D5020	**Lighting and Branch Wiring**			**$8.34**	**$451,824.99**
	Receptacles incl plate, box, conduit, wire, 8 per 1000 SF, .9 W per SF, with transformer	54,184.00		$2.43	**$131,813.42**
	Wall switches, 2.0 per 1000 SF	54,184.00		$0.33	**$17,772.35**
	Miscellaneous power, 2 watts	54,184.00		$0.41	**$22,296.72**
	Central air conditioning power, 4 watts	54,184.00		$0.51	**$27,834.32**
	Fluorescent fixtures recess mounted in ceiling, 1.6 watt per SF, 40 FC, 10 fixtures @32watt per 1000 SF	60,686.08		$4.65	**$252,108.18**
D5030	**Communications and Security**			**$2.62**	**$142,159.94**
	Communication and alarm systems, includes outlets, boxes, conduit and wire, sound systems, 12 outlets	0.75		$0.24	**$13,003.94**
	Communication and alarm systems, fire detection, addressable, 50 detectors, includes outlets, boxes, conduit and wire	1.35		$0.80	**$43,458.28**
	Fire alarm command center, addressable with voice, excl. wire & conduit	1.35		$0.29	**$15,917.90**
	Communication and alarm systems, includes outlets, boxes, conduit and wire, master clock systems, 10 rooms	0.81		$0.28	**$15,050.08**
	Communication and alarm systems, includes outlets, boxes, conduit and wire, master TV antenna systems, 30 outlets	1.25		$0.74	**$39,971.65**
	Internet wiring, 2 data/voice outlets per 1000 S.F.	32.51		$0.27	**$14,758.10**
D5090	**Other Electrical Systems**			**$0.10**	**$5,343.74**
	Generator sets, w/battery, charger, muffler and transfer switch, gas/gasoline operated, 3 phase, 4 wire, 277/480 V, 11.5 kW	4.74		$0.10	**$5,343.74**
E Equipment & Furnishin			**0.2%**	**$0.26**	**$13,890.25**
E1020	**Institutional Equipment**			**$0.26**	**$13,890.25**
	Architectural equipment, laboratory equipment, counter tops, stainless steel	54.18		$0.26	**$13,890.25**
E1090	**Other Equipment**			**$0.00**	**$0.00**
F Special Construction			**0.0%**	**$0.00**	**$0.00**
G Building Sitework			**0.0%**	**$0.00**	**$0.00**

	Quantity	% of Total	Cost Per SF	Cost
Sub Total		**100%**	**$104.89**	**$5,683,502.58**
Contractor's Overhead & Profit		**25.0 %**	**$26.22**	**$1,420,875.65**
Architectural Fees		**7.0 %**	**$9.18**	**$497,306.48**
User Fees		**0.0 %**	**$0.00**	**$0.00**
Total Building Cost			**$140.29**	**$7,601,684.71**

Appendix III: SITE PHOTOGRAPHS

1 - Asphalt pavement south parking area

2 - Asphalt pavement center drive lane looking north - note previous repair

3 - Asphalt pavement center drive lane looking north - note previous repair

4 - Asphalt pavement west drive lane looking north

5 - Typical concrete sidewalk - note cracking

6 - Typical concrete sidewalk - note cracking

7 - Typical concrete steps

8 - Typical concrete curb - note deterioration

9 - Typical concrete curb

10 - Typical storm water drainage

11 - Typical storm water drainage

12 - Typical dumpster

13 - Typical landscaping

14 - Typical landscape - note flag pole

15 - Typical landscaping

16 - Monument sign at south entrance

17 - Typical landscaping

18 - Typical landscaping

19 - Structural framing

20 - Structural framing

21 - Structural framing

22 - Building exterior northwest side of the building

23 - Building exterior northwest side of the building

24 - Building exterior southeast side of the building - note cracking

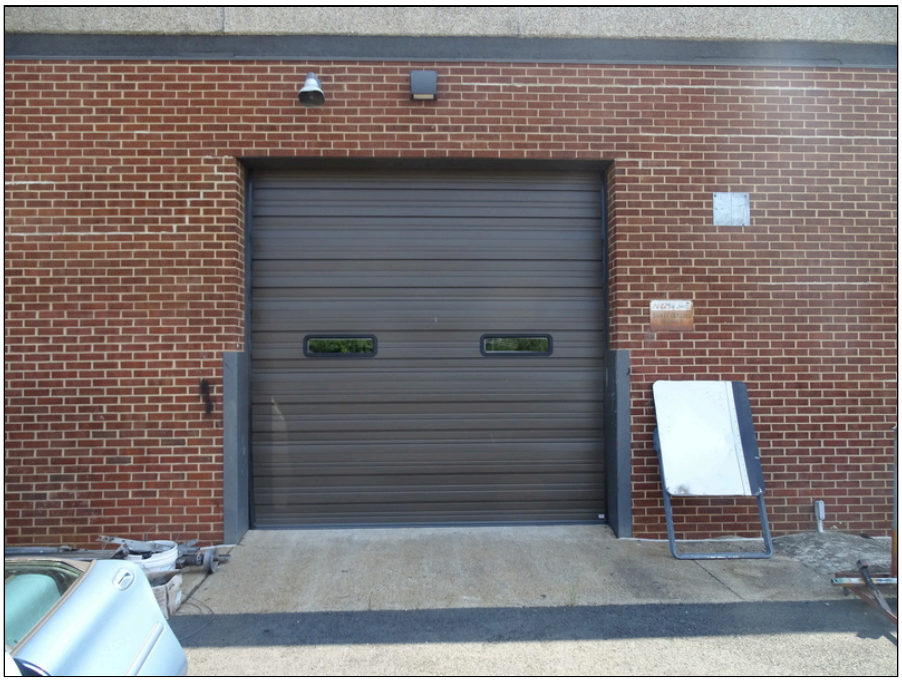
25 - Building exterior southeast side of the building

26 - Building exterior east side of the building - note deterioration

27 - Building exterior east side of the building - note efflorescence

28 - Building exterior northwest side of the building - note efflorescence

29 - Main entrance exterior doors



30 - Typical overhead doors

31 - Typical personnel doors

32 - Typical personnel doors

33 - Typical exterior windows

34 - Typical exterior windows - note fog inside the glass

35 - Typical exterior windows

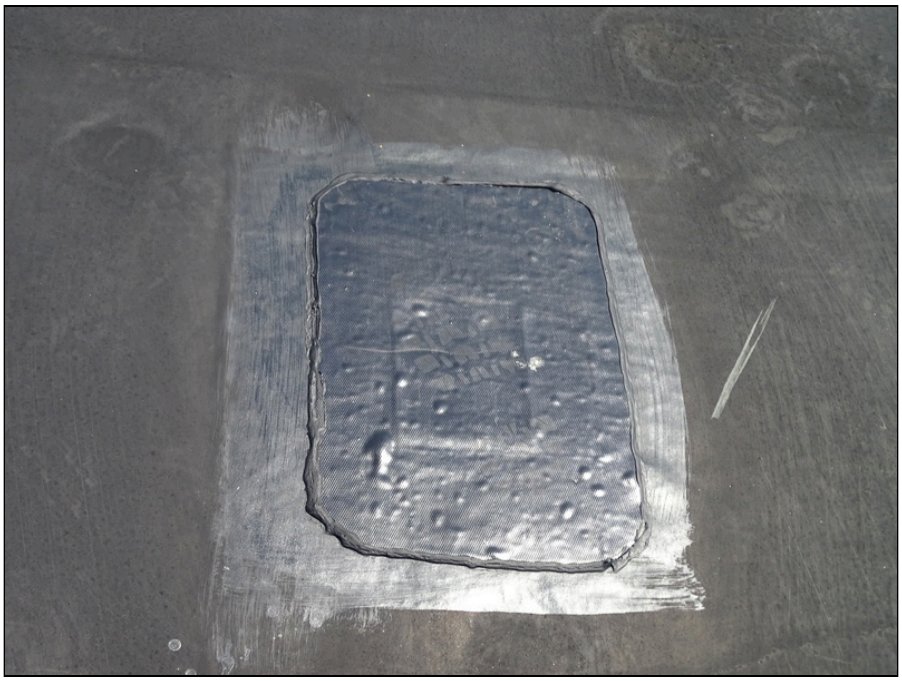
36 - Typical exterior windows - note sealant deterioration

37 - Typical exterior windows - note gasket deterioration

38 - Single-ply membrane roofing system looking south

39 - Single-ply membrane roofing system looking south

40 - Single-ply membrane roofing system - note patching

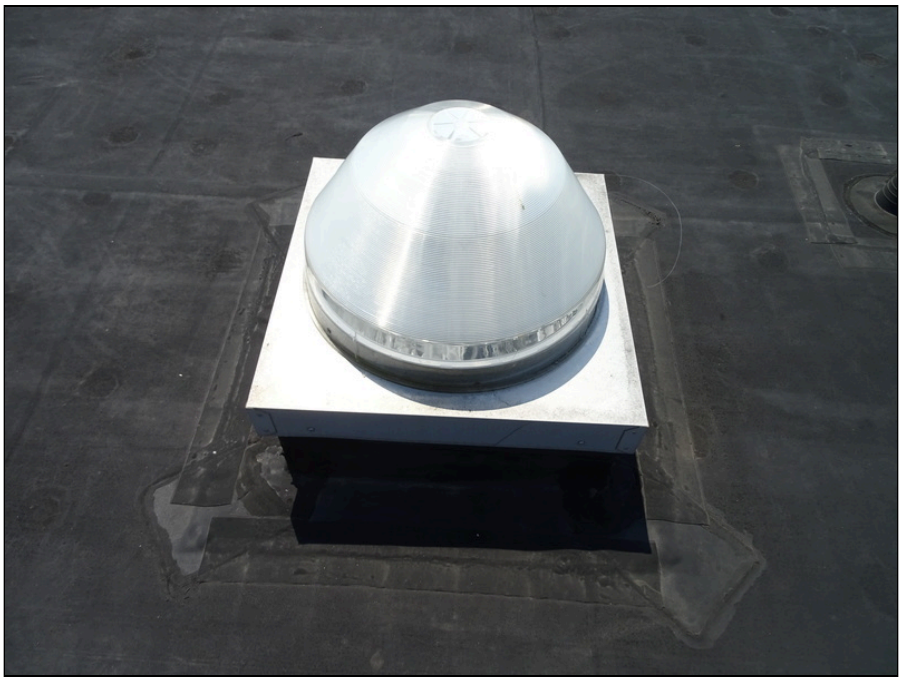


41 - Single-ply membrane roofing system - note patching

42 - Typical plumbing penetration

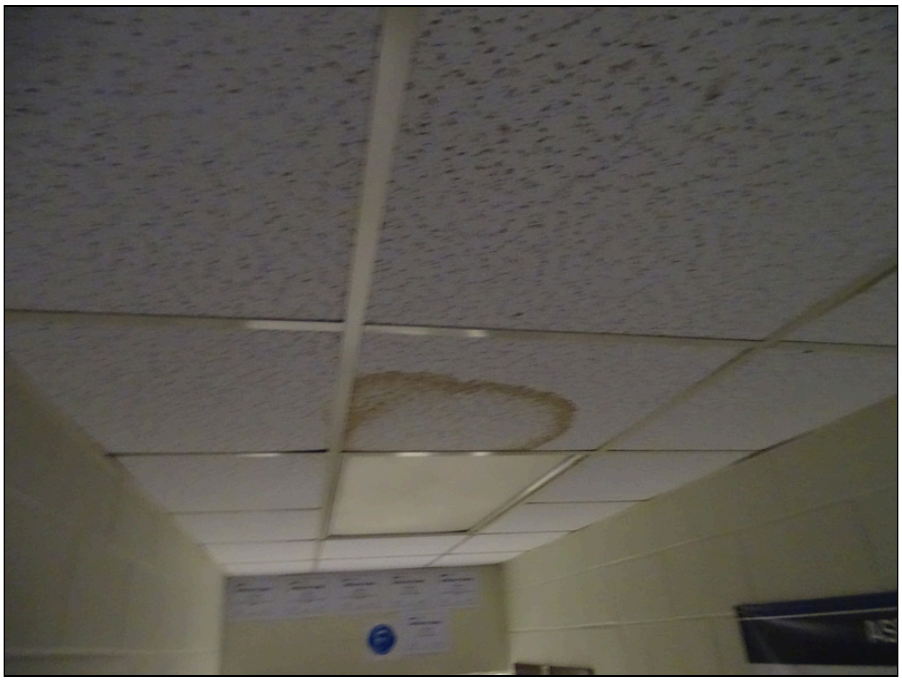
43 - Typical internal drain

44 - Typical area of ponding



45 - Typical skylight

46 - Single-ply membrane roofing system - note patching



47 - Typical ceiling - note water leakage

48 - Gas water heater located in main utility room

49 - Boilers located in main utility room

50 - Cooling Tower located on the north side of the building

51 - Chiller located in main utility room

52 - Typical Fan Coil Unit

53 - Typical Unit Ventilator

54 - Typical Air Handler Unit

55 - Typical Air Handler Unit

56 - Typical larger Fan Coil Unit

57 - Typical Condenser Unit

58 - Typical mechanical duct

59 - Thermostat

60 - Typical gas meter

61 - Utility electrical transformer

62 - Main electrical switchgear

63 - Typical electrical circuit breaker panel

64 - Typical building transformer

65 - Typical fire extinguisher

66 - Typical fire hydrant

67 - Typical exit sign

68 - Typical exit sign and emergency light

69 - Typical fire alarm pull station

70 - Typical fire alarm bell and strobe

71 - Typical smoke detector

72 - Typical smoke detector

73 - Security system electronic controls

74 - Typical security camera

75 - Interior finishes of mechanical-utility room area

76 - Interior finishes of classroom area

77 - Interior finishes of main office and entrance area

78 - Interior finishes of corridor area

79 - Typical water fountain

80 - Interior finishes of classroom area

81 - Interior finishes of corridor area

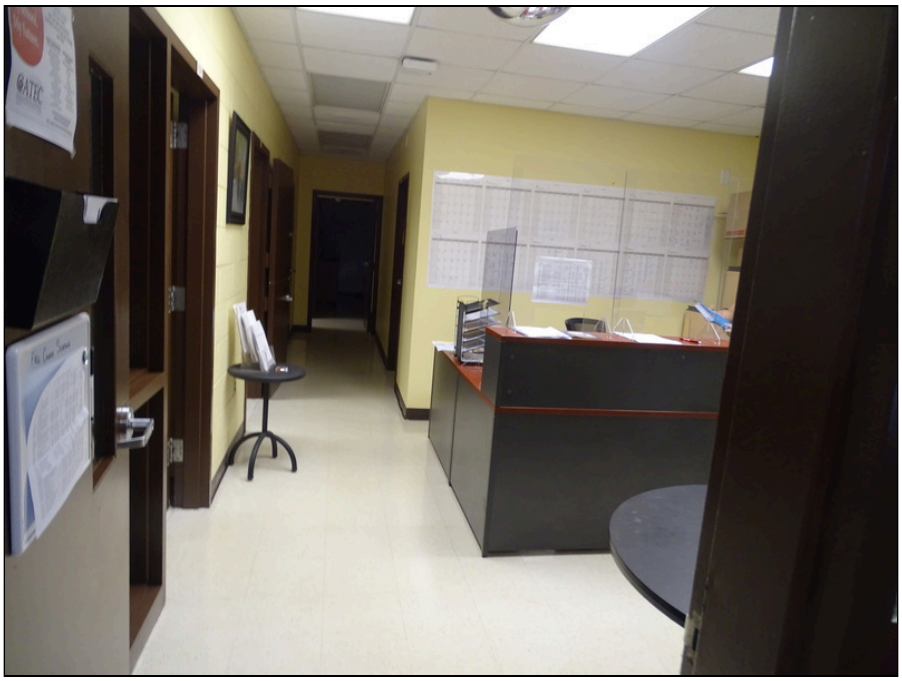
82 - Interior finishes of stair

83 - Interior finishes of restroom area

84 - Interior finishes of restroom area

85 - Interior finishes of classroom area

86 - Interior finishes of cafeteria area

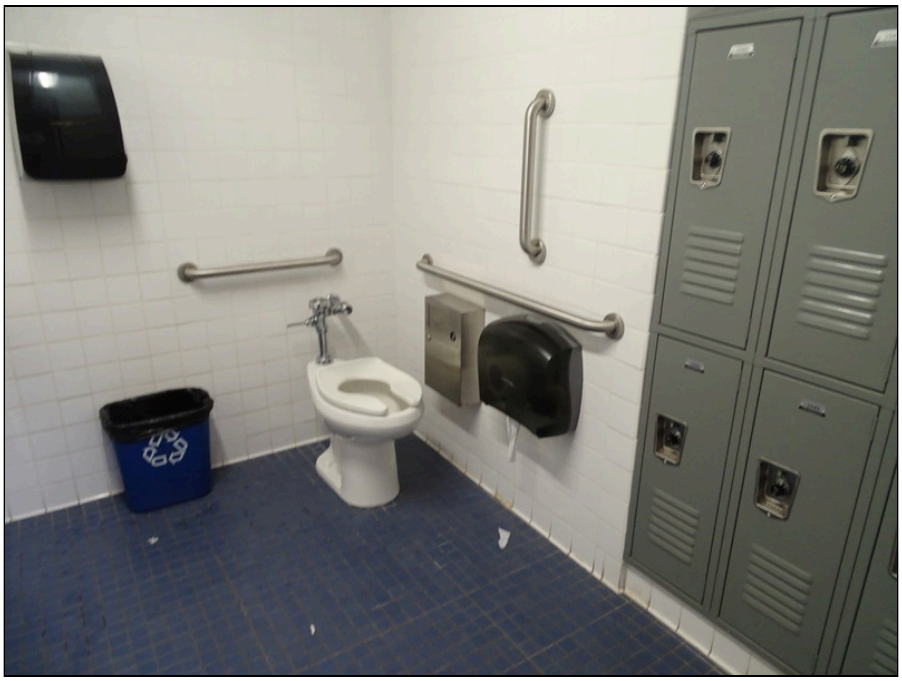


87 - Interior finishes of corridor area

88 - Accessible interior ramp

89 - Accessible interior ramp

90 - Accessible interior ramp



91 - Accessible toilet

92 - Accessible toilet

93 - Accessible parking spaces

94 - Accessible curb ramp with truncated domes

Appendix IV: 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

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Montgomery College, 1991
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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