FACILITY CONDITION ASSESSMENT

FOOTHILL-DE ANZA COMMUNITY COLLEGE DISTRICT
FHDA Facility Condition Assessment
FOOTHILL COLLEGE
1900 ADMINISTRATION

Report for Project Planning

September 27, 2021

FOOTHILL-DE ANZA
Community College District

FOS
of CannonDesign

TABLE OF CONTENTS

1. EXECUTIVE SUMMARY

Summary Statement:
The purpose of the executive summary is to answer the four fundamental questions underlying an objective assessment: what is owned (Current Replacement Value); what is the current-state of condition (Facility Condition Index); what are the estimated direct and project costs* to maintain (Funding Needs); and how to strategically plan for the future needs (Priority Planning).

This summary and report are based on our field assessments, interviews with client staff, our professional opinions, and comparative analysis of assessment items within our expansive facility condition assessment database. The following is a summary of our findings and recommendations.

Facility Condition Index Ranking Scale Summary:
The FCI Scale is an industry standard scale used to communicate condition. It assigns the numeric value of the FCI Equation to five general condition rankings: Good, Fair, Poor, Critical, and Divest.

Current Replacement Value (CRV) and Facility Condition Index (FCI):
An FCI value can be understood as the ratio of the cost to correct all deferred maintenance deficiencies within an asset divided by its CRV. For example, an asset scoring a "Good" FCI of 0.05 means that only 5% of the CRV is recommended for repairs or replacement. The overall asset condition is determined by the 5-year FCI ranking and score. Please see the following page for an expanded description of CRV and FCI.

Results			Direct (CRV)	50% Project (CRV)
1900 Administration - CRV			**$6,688,456**	**$10,032,685**
	Ranking	FCI		
FCI Scoring - 1-YEAR FCI	**GOOD**	**0.00**	**$18,344**	**$27,515**
FCI Scoring - 5-YEAR FCI	**FAIR**	**0.10**	**$648,309**	**$972,464**
FCI Scoring - 10-YEAR FCI	**POOR**	**0.19**	**$1,248,807**	**$1,873,211**

Rolling Clock:
The 10-year total Deferred Maintenance Deficiencies (DMD) include the 5-year total DMD (cumulative value(s)). The 10-year DMD total may be revised if 5-year needs are cured within the assessment 5-year window. As each year passes, remaining deficiencies generally have action timeframes reduced by one year, which may impact the priority. The industry-standard recommendation is to perform a re-assessment in 5-years to capture new 10-year needs.

Funding Needs - By Priority, Year, and Term

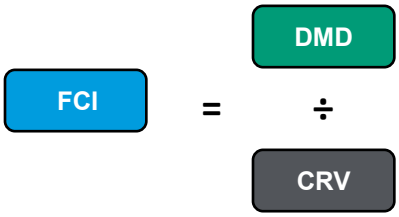
	PRIORITY 1 Year 1	**PRIORITY 2** Year 2	**PRIORITY 3** Years 3 - 5	**PRIORITY 4** Years 6 - 10	**TOTAL** (Years 1 - 10)
Direct Cost:	$18,344	$90,689	$539,276	$600,498	**$1,248,807**
50% (DMD) Project Value:	$27,515	$136,034	$808,915	$900,747	**$1,873,211**
	Immediate	Short-Term		Long-Term	

Each priority group includes the assessed DMD that falls into each respective term regardless of the discipline. Detailed descriptions of observed issues, recommendations, and associated costs are included within the building report.

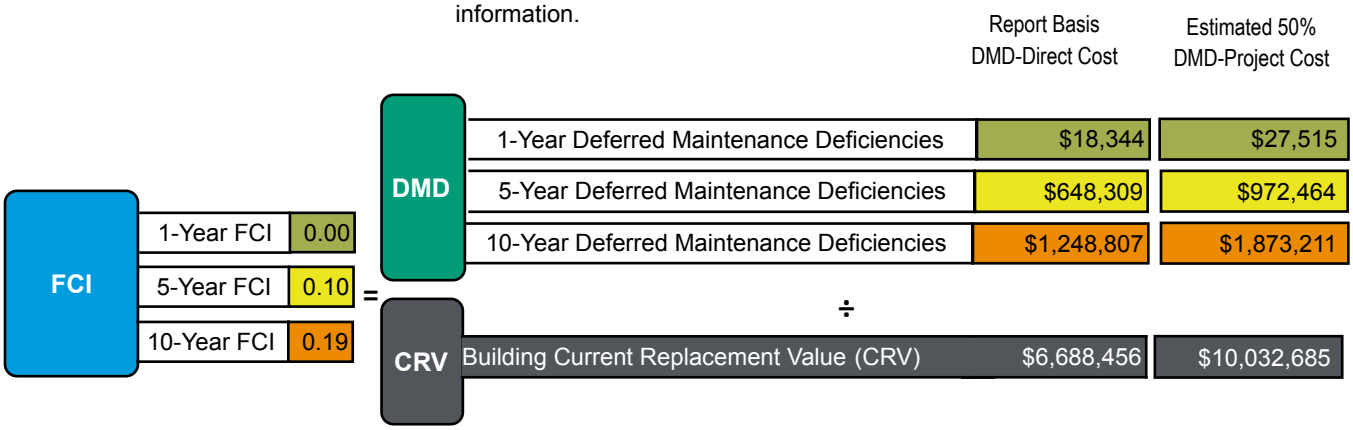
***This report is based on funding needs by year. Costs are inclusive of Direct Costs, i.e. labor and materials only.** For convenience we have provided a projected Project Value that includes a 50% increase for non-inclusive project costs. Please refer to the Results Section - "Understanding the Facility Condition Index Costing Methodology" for an expanded description, definitions, and the applied methodology regarding Direct Costs vs. Project Costs.

RANKING METRICS

Current Replacement Value (CRV) is the cost of labor, material and equipment, including demolition, at the present time which would be required to replace a building or asset. The CRV is based on direct cost methodology and does not include project costs such as design, general conditions, a contractor's overhead and profit or land acquisition.



Facility Condition Index (FCI) Equation: The FCI is calculated by adding the estimated value for all of the assessed Deferred Maintenance Deficiencies (DMD) by assigned Priority. Priority 1 contains assessment year one, Priorities 2 and 3 contain years two though five and Priority 4 contains years six through ten. These two number sets are then grouped into three value categories: The 1-year, 5-year and 10-year DMD. These numbers are each divided by the Current Replacement Value (CRV) of the asset in the equation shown below. Please refer to the Glossary of Terms in the Appendix for more detailed information.



Discipline Condition Index (DCI) and System Condition Index (SCI) Ranking Scales: A similar scale to the Facility Condition Index scale is used in describing SCI and DCI. The two major differences between the FCI scale and the DCI / SCI scale shown below are that the "Divest" ranking has been omitted, and the "Critical" score has been expanded to 1.00. The reason for these changes is to illustrate that an asset's systems or disciplines cannot be divested. They usually require full replacement to enable the asset to function as originally designed and intended.

Discipline Condition Index

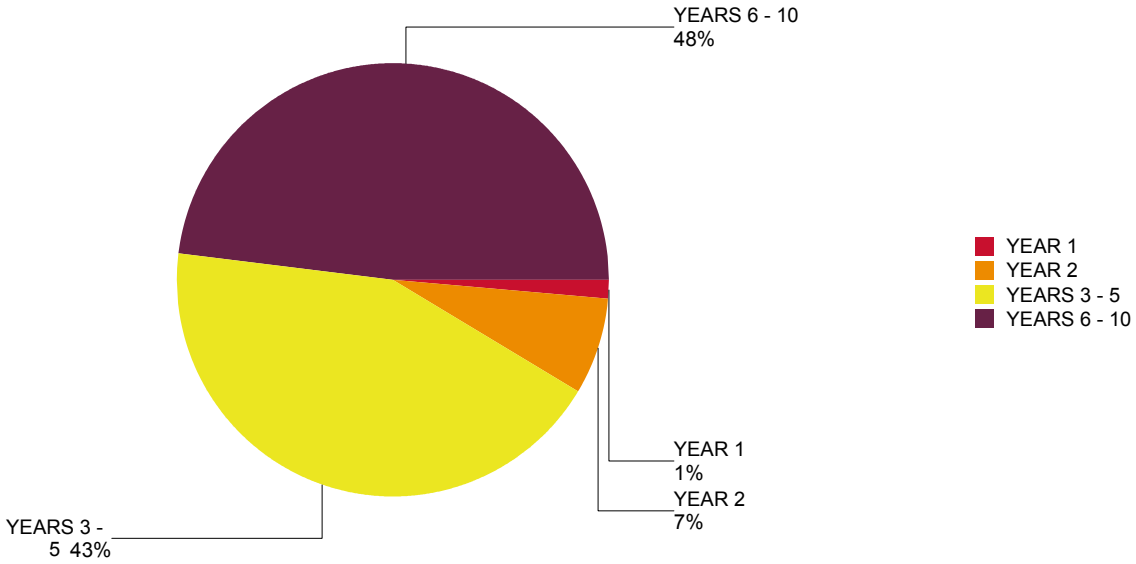
Disciplines	CRV	CRV/SF	1 YR Needs	5 YR Needs	10 YR Needs	1 YR DCI	5 YR DCI	10 YR DCI
Structural	$1,159,600	$51	$0	$0	$0	0.00	0.00	0.00
Architectural	$3,283,895	$144	$0	$597,580	$1,056,884	0.00	0.18	0.32
Plumbing	$368,566	$16	$0	$0	$0	0.00	0.00	0.00
Mechanical	$757,567	$33	$0	$0	$9,966	0.00	0.00	0.01
Fire Protection	$139,487	$6	$0	$0	$0	0.00	0.00	0.00
Electrical	$586,714	$26	$18,344	$18,344	$63,497	0.03	0.03	0.11
Communications	$249,756	$11	$0	$24,976	$24,976	0.00	0.10	0.10
Safety and Security	$135,461	$6	$0	$0	$86,074	0.00	0.00	0.64
Civil	$0	$0	$0	$0	$0	0.00	0.00	0.00
ADA Assessments	$7,410	$0	$0	$7,410	$7,410	0.00	1.00	1.00
						FCI	FCI	FCI
Direct Cost Total	**$6,688,456**	**$293**	**$18,344**	**$648,309**	**$1,248,807**			
Estimated Project Cost Total (Includes 50%)	**$10,032,685**	**$439**	**$27,515**	**$972,464**	**$1,873,211**	**0.00**	**0.10**	**0.19**

PRIORITY PLANNING DASHBOARDS - (Report Basis Direct Cost)

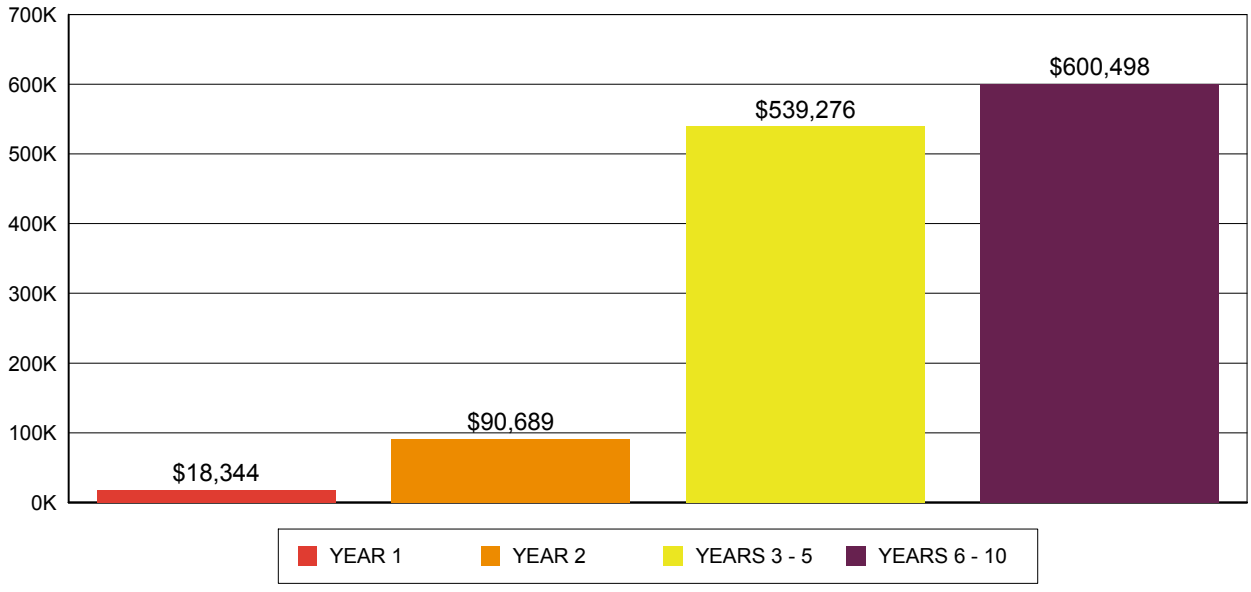
Capital Planning and Direct Costs:
The Direct Costs for the asset are shown below by Priority and Percentage and Year.

FUNDING NEEDS ALLOCATION				
PRIORITY 1 Year 1	**PRIORITY 2** Year 2	**PRIORITY 3** Years 3 - 5	**PRIORITY 4** Years 6 -10	**TOTAL**
$18,344	$90,689	$539,276	$600,498	**$1,248,807**

TOTAL DIRECT COSTS BY PRIORITY AND PERCENT



PRIORITIZATION OF TOTAL DIRECT COSTS BY YEAR

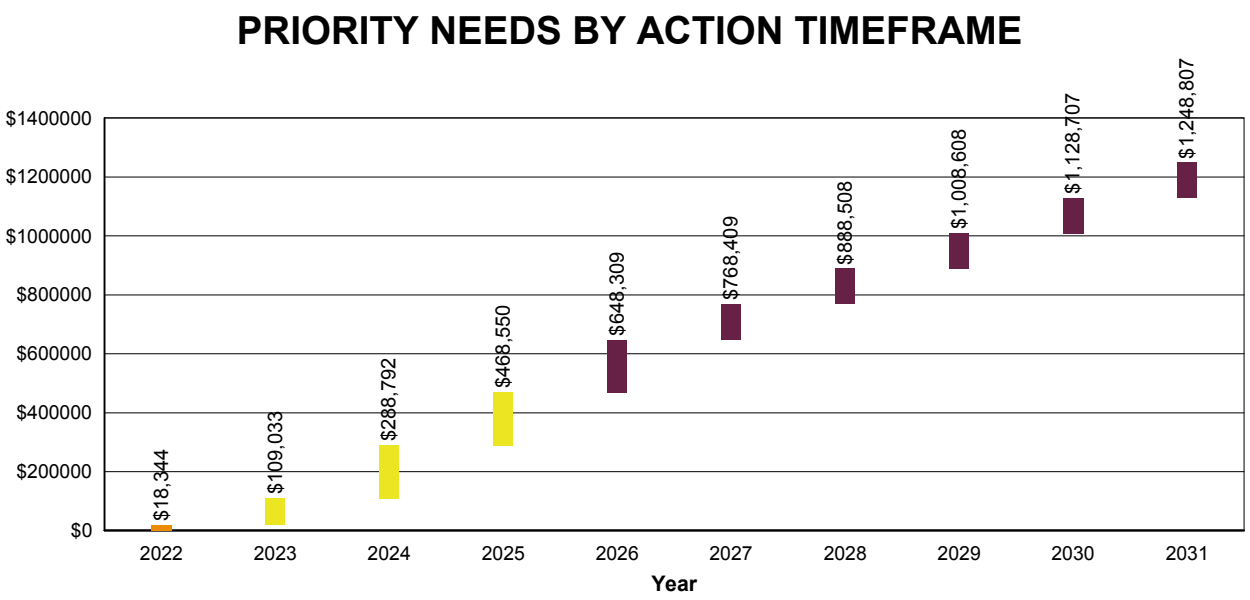


Funding Needs Allocation by Priority:
The Direct Costs for the asset are shown below by Discipline, by Priority and Value.

FUNDING NEEDS ALLOCATION BY PRIORITY					
Disciplines	**PRIORITY 1** Year 1	**PRIORITY 2** Year 2	**PRIORITY 3** Years 3 - 5	**PRIORITY 4** Years 6 -10	**TOTAL**
Architectural	$0	$83,279	$514,301	$459,304	**$1,056,884**
Civil	$0	$0	$0	$0	**$0**
Communications	$0	$0	$24,976	$0	**$24,976**
Electrical	$18,344	$0	$0	$45,154	**$63,497**
Fire Protection	$0	$0	$0	$0	**$0**
Mechanical	$0	$0	$0	$9,966	**$9,966**
Plumbing	$0	$0	$0	$0	**$0**
Structural	$0	$0	$0	$0	**$0**
ADA Assessments	$0	$7,410	$0	$0	**$7,410**
Safety and Security	$0	$0	$0	$86,074	**$86,074**
Total	**$18,344**	**$90,689**	**$539,276**	**600,498**	**$1,248,807**

PRIORITY NEEDS BY ACTION TIMEFRAME:

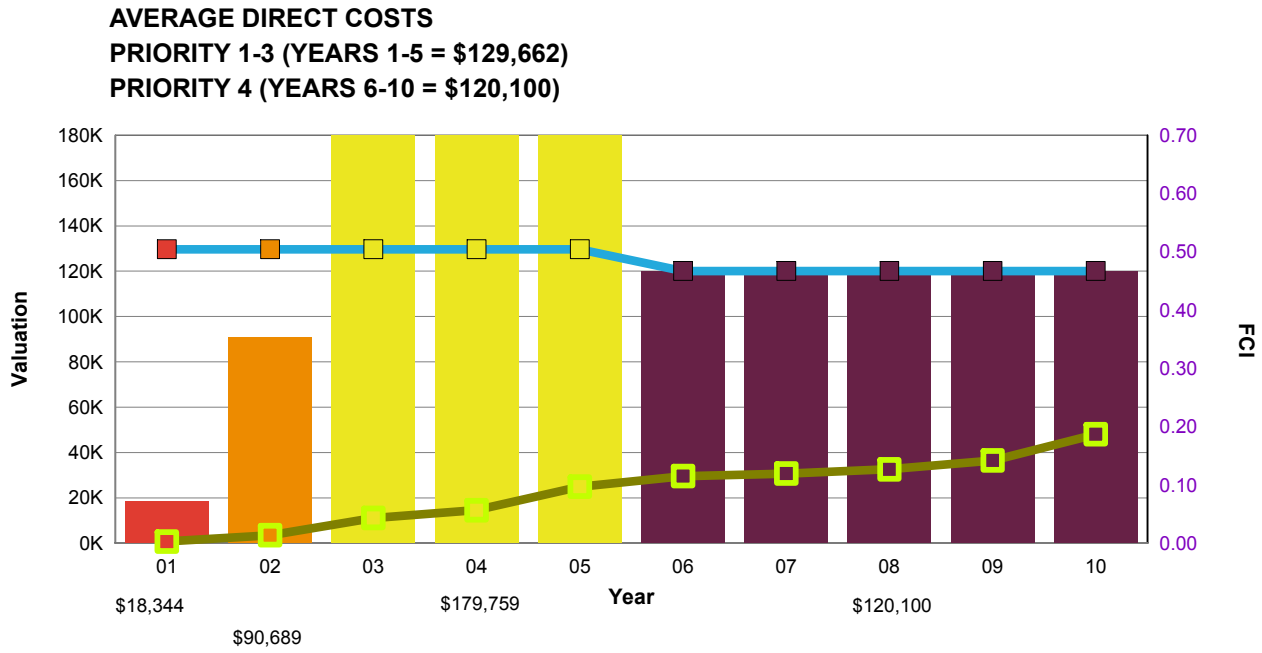
The Priority Funding Needs for the asset are further expanded to break out each estimated annual cost. This is helpful to understand years with lulls or spikes in funding needs and helps proactively plan year over year.



AVERAGE FUNDING:

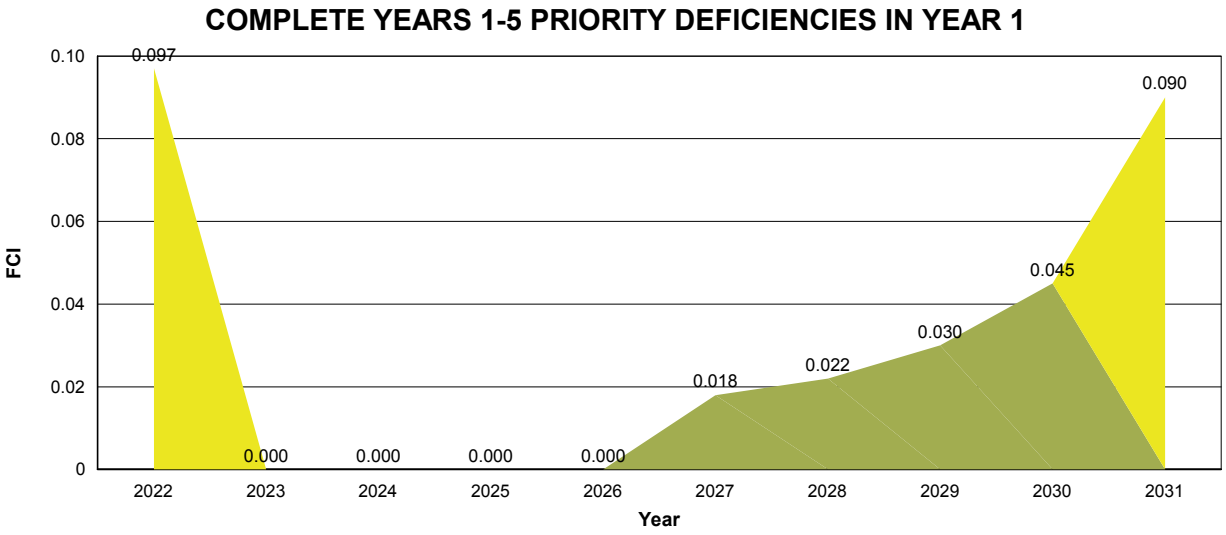
The below graph shows the current asset FCI Trend line when the 5-year needs are averaged and spread over 5-years. Years 6 through 10 needs are handled in the same manner. This approach may be useful if funding is limited, or there are spikes in a single year cost.

Blue Line - Averaged costs years 1-5 and 6-10
Green Line - FCI trend without funding



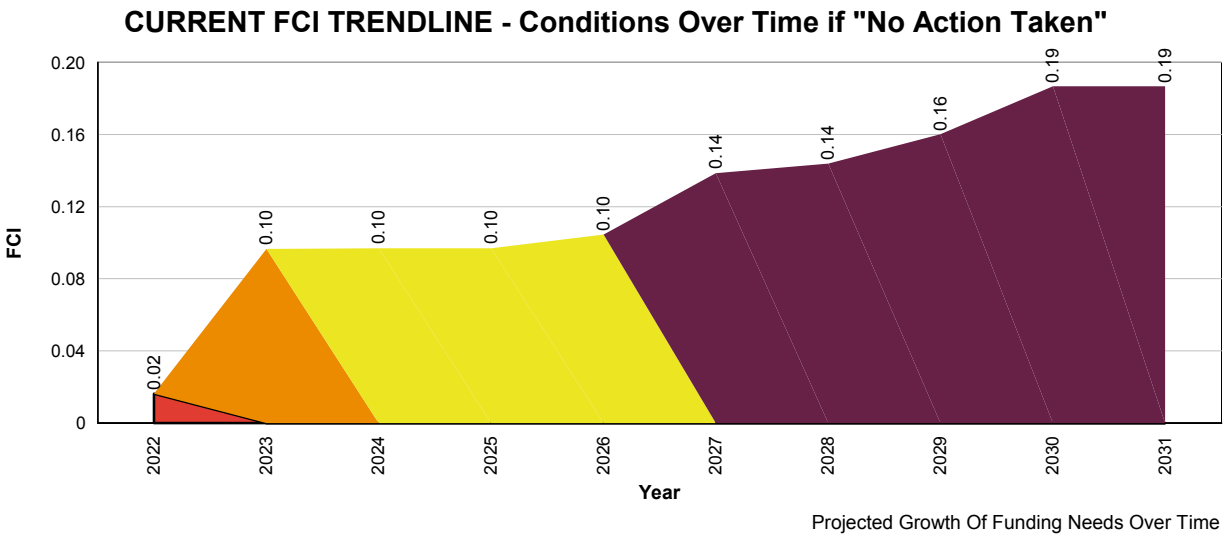
PROACTIVE STATE - RAPID IMPROVEMENT:

Summary: The below graph shows the current asset FCI Trend line after the entire 5-year needs are met in Year 1. This substantially reduces (improves) the 10-Year FCI score if funding is available.



FUTURE STATE - DO NOTHING:

Summary: The below graph shows the current asset FCI Trend line projecting out to year 10. This shows the minimum potential of new 10-year needs awaiting the asset, and the subsequent increases in FCI.



ADA / Accessibility Observations:

ADA Accessibility Ranking Scale:
Summary: The CannonDesign FOS team developed an ADA / Accessibility Ranking system to assist our clients to better understand how their portfolio of buildings ranks toward achieving ADA and applicable state accessibility requirements. A ranking for each building was assigned based on our general observations* to one of three general accessibility rankings: Essentially Accessible, Moderately Accessible, and Insufficiently Accessible.

* General observations of: Site Accessibility, Building Accessibility, Access to Building Services, Restrooms, and Communication Features were observed during the FCA survey. Specifics of our methodology are described in the Methodology section of this report.

This **is not** a full ADA / Accessibility assessment, nor documentation of compliance with the ADA or with state building codes. Further analysis may be warranted based on the building's level of accessibility, age and use.

1900 Administration	Moderately Accessible (3)

ADA Compliance:
The Americans with Disabilities Act (ADA) is federal civil rights legislation, as opposed to a standard building code, and is enforced by the Department of Justice (DOJ). All public, commercial, and state / local government facilities have been subject to the ADA since 1990. Compliance with the ADA is an ongoing obligation. No public facility is exempt or grandfathered, and strict adherence to applicable standards is required in order to achieve compliance. Many organizations which have not upgraded their facilities or prepared a written transition plan toward achieving full compliance are at risk. Cost associated with proactive facility planning is far less than the cost to settle a complaint.

	Description	Essentially Accessible (5 of 5)	Moderately Accessible (3 or 4 of 5)	Insufficiently Accessible (Less than 3 of 5)
1	Exterior Accessible Routes		3	
2	Interior Accessible Routes		4	
3	Access to Service		4	
4	Restroom Access		4	
5	Communication Features		4	
	SUB TOTAL		19	
	AVERAGE TOTAL		3	

2. PURPOSE

Introduction:
Foothill-De Anza Community College District has requested a Foothill De-Anza Community College District Facility Condition Assessment encompassing approximately 12,364,591 square feet of floor area located at the three District sites and the District offices. A diverse portfolio of assets as part of this FCA included 171 structures constructed between 1892 and 2020. These buildings and assets include:

List of Assets

De Anza College	Building Square Footage
A1 Choral Rehearsal	**6,275**
A2 Piano Rehearsal	**2,274**
A3 Instrument Rehearsal	**6,376**
A4 Fine Arts Offices	**1,722**
A5 Design Studio	**4,278**
A6 Photography	**5,982**
A7 Crafts Studio	**4,278**
A8 Broadcast-Media Ctr.	**9,511**
A9 Fine Arts Labs	**6,414**
Administration	**27,408**
Advanced Tech Ctr	**70,571**
Baldwin Winery	**13,566**
California History Ctr	**4,518**
Campus Center	**58,355**
Central Plant	**8,000**
Child Development Ct	**25,671**
Corp Yard	**1,800**
E1 Automotive Technology	**29,354**
E2 Machine Technology	**11,704**
E3 Drafting	**8,028**
East Cottage	**3,338**
Environmental Studies	**737**
F1 Faculty Offices	**1,717**

1900 Administration

F2 Faculty Offices	**2,725**
F3 Faculty Offices	**1,717**
F4 Faculty Offices	**1,717**
F5 Faculty Offices	**2,725**
F6 Faculty Offices	**1,717**
Flint Parking Structure	**342,905**
Forum	**16,669**
Fujitsu Planetarium	**5,460**
G Wing Gen Classrooms	**10,200**
Hoefler Building	**7,436**
Kirsch Ctr - Environ	**22,582**
L1 Division Offices	**4,237**
L2 General Classrooms	**8,708**
L3 General Classrooms	**4,271**
L4 Journalism & Language	**8,834**
L5 Restrooms	**2,151**
L6 General Classrooms	**4,271**
L7 Data Center	**8,664**
L8 General Classrooms	**4,258**
Learning Center West	**37,260**
Library	**56,786**
Mechanics Shop	**722**
Media & Learning Ctr	**56,128**
Mod Quad 1	**1,920**
Mod Quad 2	**1,920**
Mod Quad 3	**1,920**
Multi-Cultural Ctr	**8,616**
PE 1 Auxiliary Gym	**22,509**
PE2 Main Gym	**17,038**
PE3 - PE4 Pool Equip & Division Offices	**4,406**
PE5 Faculty Offices	**2,242**
PE6 Locker Rooms	**28,541**
Press Box	**500**

1900 Administration

Reg & Student Services	**46,748**
S1 Physics/Geology/Math	**10,272**
S2 Restrooms	**2,219**
S3 Science	**11,624**
S4 Math/Engineering	**15,528**
S5 Health Science	**10,272**
S6 Restrooms	**2,219**
S7 Nursing	**9,227**
S8 Allied Health	**6,096**
S9 Faculty Offices	**1,717**
Science Center	**47,109**
Seminar Bldg.	**6,240**
Stelling Parking Struct	**188,762**
Track Outbuildings	**1,260**
Track Restrooms	**1,344**
Vis & Perf Arts Ctr	**26,258**
De Anza College	**1,400,527**

Foothill College	**Building Square Footage**
1000 Smithwick Theater	**24,460**
1100 Music Studio	**5,460**
1200 IDEA & Practice	**6,135**
1400 Choral & Piano	**5,260**
1500 Appreciation Hall	**4,318**
1600 Art Classrooms	**5,239**
1700 Fine Arts Division	**2,699**
1800 Ceramics & Graphics	**5,284**
1900 Administration	**22,851**
2000 - 2300 Campus Center	**46,460**
2500 Auxiliary Gym	**21,083**
2600 Main Gym	**19,432**
2602 PE Snack Bar/Storage	**1,322**
2700 PE Division Offices	**3,334**
2800 Locker Rooms	**23,596**

2900 Field House	**3,988**
2913 Stadium Restrooms - Asset Demolished NO FCA	**1,250**
2920 Field House	**5,076**
2930 Stadium Press Box	**1,247**
2940 Stadium Restrooms	**1,867**
3000 BSS Division	**5,886**
3030 Grounds Storage - Asset Retired NO FCA	**1,511**
3100 Anthropology	**5,801**
3200 BSS Classrooms	**5,801**
3300 BSS Classrooms	**5,801**
3400 BSS Classrooms	**4,318**
3500 - 3600 Library and ISC Buildings	**54,455**
4000 Astro Observatory	**1,012**
4000 Center for Innovation	**17,111**
4052 Print Shop	**1,229**
4057 Storage	**1,030**
4100 CTIS Division	**6,650**
4200 PSME Center	**14,887**
4300 Computer Center	**10,285**
4400 - 4800 Physical Science Engineering Center	**67,600**
4900 Soccer Fieldhouse	**2,650**
5000 Forum	**11,113**
5100 Biology	**10,369**
5200 BHS Division	**5,970**
5300 Health Sciences	**10,303**
5400 DRC and Workforce	**10,318**
5500 General Classrooms	**4,318**
5600 General Classrooms	**15,759**
5700 - 5710 Classroom & ETS	**2,446**
5800 FH Tech Serv	**4,178**
5900 District Central Services	**1,030**
6000 LA Faculty Offices	**5,853**
6100 Photography	**5,825**

6200 Radio Station KFJC	**3,084**
6300 LA Classrooms	**5,869**
6400 LA Div & Classrooms	**5,887**
6500 LA Classrooms	**5,869**
6600 Japanese Cult Ctr	**972**
6700 Health Technologies	**3,701**
7000 Landscape Const	**2,112**
7100 Greenhouse	**1,553**
7200 Lath House	**3,300**
7300 Vet Tech Out Bldg	**1,764**
7400 Central Plant	**1,888**
8000 - 8300 Lohman Theater & Student Account Services Building	**39,512**
8400 Lower Campus Class	**7,675**
8500 - 8700 Life Science Center	**32,644**
Footbridge & Transit Ctr	**3,970**
Foothill College	**623,670**

Foothill College - Sunnyvale	**Building Square Footage**
FHC Sunnyvale Center	**46,991**
Foothill College - Sunnyvale	**46,991**

De Anza College Site	**Building Square Footage**
A Quad - Parking Lot A & J (BLUE)	**639,000**
Kirsch Center - Parking Lot C1 (ORANGE)	**187,000**
L Quad - Parking Lot B (RED)	**521,000**
Main Quad (GREEN)	**782,000**
PE Quad - Parking Lot C (TEAL)	**1,260,000**
Roadways	**283,000**
S Quad - Parking Lot D, E, & F (PURPLE)	**742,000**
De Anza College Site	**4,414,000**

Foothill College Site	**Building Square Footage**
1000 Quad - Parking Lot 1A (LIGHT GREEN)	**500,000**
2000 Quad - Student Lot 2 & 2A (YELLOW)	**833,000**
3000 Quad - Student Lot 3 (PURPLE)	**587,000**
4000 Quad - Student Lot 4 & 4A (RED)	**832,000**

5000 Quad - Staff Lot 5 (DARK BLUE)	**434,000**
6000-7000 Quad - Student Lot 6 (TAN)	**460,000**
8000 Quad - Parking Lot 8 (LIGHT BLUE)	**291,000**
Athletic Field - Student Lot 1 (ARMY GREEN)	**477,000**
District Offices - Parking Lot 1B, 1C, 1D, 1E, 1H, 1G,& 7 (BRIGHT GREEN)	**1,136,000**
Roadways	**254,000**
Foothill College Site	**5,804,000**

Foothill-De Anza District Offices	**Building Square Footage**
Carp-Fire-HVAC	**4,000**
D120 ETS Building	**13,348**
D140 Union Building	**2,361**
D160 Police Offices	**5,028**
D170 Offices	**3,000**
D180 Warehouse	**4,000**
D182 Paint Shop	**2,087**
D183 Facilities Training Barn	**3,400**
D188 Mechanics Shop	**750**
D190 Gr/Keys/Elect.Shops	**2,528**
D200 Plumb/Utility Shops	**2,890**
D210 ETS Modular	**1,920**
D240 ETS Modular	**960**
D250 ETS Modular	**960**
D260 ETS Modular	**960**
New District Office	**23,700**
Police Motorcycle Storage	**333**
Surplus Barn	**3,178**
Foothill-De Anza District Offices	**75,403**

Objective:

The objective(s) of the assessment and report is to:
Highlight current physical conditions at the subject facilities, identify necessary Deferred Maintenance Deficiencies (DMD) and system replacements, quantify and budget estimated improvement costs, and provide recommended action dates. The content of the report is based on our field assessments, interviews with staff, our professional opinions, and comparative analysis of assessment items within our expansive facility assessment database. The following is a summary of our findings and recommendations.

Project Team Partners:

Client:
Located in the heart of Silicon Valley, the Foothill-De Anza Community College District serves the communities of Cupertino, Los Altos, Los Altos Hills, Mountain View, Palo Alto, Stanford, Sunnyvale, and parts of Saratoga and San Jose. For more than 50 years, Foothill-De Anza has demonstrated excellence and innovation in academic programs and student services. As one of the largest community college districts in the United States, Foothill-De Anza provides credit classes for about 64,000 students a year. The colleges are active members of the League for Innovation in the Community College, a national consortium of leading two-year institutions. The mission of the Foothill–De Anza Community College District is student success. Driven by an equity agenda and guided by core values of excellence, inclusion, and sustainability, every member of the district contributes to a dynamic learning environment that fosters student engagement, equal opportunity, and innovation in meeting the various educational and career goals of these diverse students.

Project Leader:
CannonDesign, founded in 1915 is one of the world's leading design firms, with over 900 professionals in 15 offices worldwide. We integrate all the skills needed to deliver complex projects, and we are guided by common vision and purpose: Together, we create design solutions to the greatest challenges facing our clients and society. We think our clients are our most important partners. CannonDesign's Facility Optimization Solutions (FOS) team is a consultancy dedicated to enhancing our clients' capabilities in managing their existing facilities and operations more efficiently and effectively.

Acknowledgements:

The CannonDesign Facility Optimization Solutions (FOS) team appreciates the effort and commitment that Foothill-De Anza Community College District put forth in assisting us in completing the assessment phase of the 2021 Foothill De-Anza Community College District Facility Condition Assessment. Our team is committed to empowering Foothill-De Anza Community College District with accurate and valuable facility systems data that will support future success.

We are all better when we work together, and our team is proud to be working with Foothill-De Anza Community College District. We appreciate the time, energy, and input of everyone who played a role in this important effort.

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Project Overview:

This document summarizes the results and recommendations of the Facility Condition Assessment for the 1900 Administration at Foothill-De Anza Community College District. This report is a professional opinion prepared by CannonDesign's Facility Optimization Solutions (FOS) group in collaboration with Foothill-De Anza Community College District, based on the areas of the asset that could be accessed.

Following the initial project scoping meetings, an orientation and project commencement meeting was held at via Zoom on February 4, 2021. The assessment team evaluated physical conditions at the site during visits conducted between March 8, 2021 through July 31, 2021.

Scope of Services:

The scope of the FCA includes the visual inspection of components, assemblies and systems, based on an industry-standard system-level approach. This assessment is based on a Level 3/5 scope of work with asset tagging. The scope includes the visual assessment of: Exterior and Interior Architecture, Structural, Roof, Fire Protection, Plumbing, Mechanical, Electrical, Communications and Civil systems. The services summarized in the report include:

- Executive summary & detailed report for each asset assessed
- Description of methodology
- Identification and documentation of the present conditions and risks at each asset
- Recommendations for corrective actions
- Budget level cost estimates for corrective actions
- Forecast of 1, 5 and 10-year facility needs

The assessment team conducted the Facility Conditions Assessment and wherever possible, the team visually reviewed the material conditions, accessibility outside and within the facility, function of operating equipment, performance, and estimated remaining functional life. Estimated costs for repairs or replacement, and other aspects of the facility, as required in the contract scope of work are based on these efforts.

Extensive inspection methods requiring scaffolding, high-reach equipment, using ladders, removal of ceiling tile, access doors, opening equipment and service panels, performing equipment shut-downs, entering confined spaces, and/or destructive testing were not employed unless specifically noted as included in the original Scope of Services. Street, roof level, and room by room (when accessible) area observations were made to determine the current conditions. Additionally, any equipment with missing identification output, or load and capacity ratings has been assessed and cost estimated based on the

observed size of the systems served.

The assessment scope is limited to a visual inspection and is not intended to provide a design analysis or cost estimate in the detail needed to prepare construction documents. Inferences and assumptions are often required when information is unavailable, limited, cannot be confirmed by direct observation, or validated by the Owner.

Disclaimer:

The preceding document, dated September 27, 2021 was created by CannonDesign FOS, in close collaboration with Foothill-De Anza Community College District. Other than to Foothill-De Anza Community College District, CannonDesign FOS disclaims any obligation to any third party with respect to any material presented in this document, and no third party may rely upon this document without advance and express written consent from CannonDesign FOS and Foothill-De Anza Community College District. In this event, any third party will be bound by the limitations, qualifications, terms, conditions, and indemnities to CannonDesign FOS set forth in the agreement. Additionally, no destructive testing is performed during the visual assessment. Consequently, no guarantee or warranty can be offered or implied based on the content of this report. All materials presented in the preceding document are, to the knowledge of CannonDesign FOS, reasonable based on the qualifications, limitations, and assumptions identified above.

3. METHODOLOGY

Direct Cost Methodology

Direct Cost and Project Cost

CannonDesign maintains an extensive current and historic cost estimating database containing contractor pricing, manufacturer quotations, bidding results and estimating resources for use in the determination of unit pricing. It is critical to note that all costs within this document are Direct Costs. Direct Costs are the industry standard measure to apply the FCI, DCI, or SCI values consistently across the deficiencies that are identified, understood and defined by CannonDesign as “replacement” costs based upon the sum of units, and not based upon Project Costs to accomplish the replacement of those components. Project costs should be anticipated to be between 40% and 60% higher than direct costs depending on the project specific delivery methods.

Direct Cost:

Direct costs includes labor and material required for the component, assembly or system replacement as well as a general contractor's overhead and profit. A direct cost typically excludes incidental work or materials not specifically identified such as demolition, piping and ductwork connections, controls, HVAC balancing and electrical connections. Direct cost items do not include work required elsewhere within the building or site such as the partial cutting and patching of a ceiling assembly accessing a component scheduled for replacement. Clear delineation is necessary to avoid double-counting for multiple system replacements. Additional project costs including coordination costs, escalation and any premiums for working conditions are also not considered as part of direct costs.

Project Cost:

Project costs are customized to match the delivery method and typically include general conditions and other soft costs including contingencies, design costs, permitting costs, bid phase costs and contractor's overhead and profit. Project Costs are not the basis for Facility Condition Assessments.

How to Develop Budgets Based on Project Costs?

Capital improvement and Project Planning budgets can be developed post-assessment by assembling project models within the FOScore™ software’s project planning module. Subscribers can assign a number of project specific factors (such as a preferred project delivery method excluded in Direct Cost methodology). Users can also define multiple client driven parameters or project driven related costs

(such as a remodel to an adjacent area), to generate accurate Project Costs or develop multiple budgeting scenarios for a single project. An example of a FOScore™ project plan is provided at the end of this section.

How are Direct Costs Determined?

Unit Cost x Quantity x Repair Factor = Direct Cost (Action Cost)

Unit Costs - assigned to each UniFormat catalog item and adjusted to suit the observed condition.

Quantity - determined by count and field estimating

Repair Factor - determined by the assessor during the on-site assessment. An assigned repair factor of 100% illustrates specifying full replacement of the assessed component or system.

Direct Cost - Unit Cost multiplied by the quantity and the Repair Factor.

Regional Factor - The unit cost assigned to each component, assembly and system includes cost adjustments for the specific geographical location of the building or facility. Known as the Regional Factor. This metric is determined by national databases and the CannonDesign cost estimation and bid results database.

Adjustment Factor - Utilized to allow for customized estimating or atypical applications.

Questions and Answers Regarding Costs in this Report:

1. Is the Direct Cost approach really required?

A. Yes, because each situation is unique, and information that will ultimately be utilized to develop a project is currently undefined or unknown. Accurately planning a deficiency repair usually require owner-based decisions, considerations, and knowledge from facilities staff to make certain that the scope considers all of the potential issues, and aligns with the objective.

2. Why does it seem as though the report deficiency costs are low and do not accurately represent the costs I have historically seen for the same kinds of work on campus?

A. CannonDesign utilizes an industry standard systems based approach to our costing methodology that are applied to deficiencies noted within the report. Our software system and subsequent report utilizes this industry standard methodology in applying "Direct Costs" in lieu of "Project Costs" to deficiencies. All costs should be escalated 40 - 60% based on descriptions of the below questions 3 and 4.

3. What is the difference between "**Direct Costs**" and "**Project Costs**"?

A. **Direct Costs** are based on the known facts at a snapshot in time and include:
Labor and material required for the replacement of the system or component. A direct cost typically excludes incidental work or materials not specifically identified: demolition, piping and ductwork connections, controls, balancing, and electrical connections. Direct cost items do not include work that is not immediately identified and quantifiable such as cutting and patching of partial ceiling or wall removals for access to a component to be replaced. Clear delineation is necessary to avoid double-counting for multiple system replacements. Each direct cost is comprised of a combination of anticipated items required for the replacement of an item or system.

Direct Costs Exclude:
General Contractor / Construction Manager (GC/CM) markups, soft costs, inflation, and any overtime or off-hours work, along with additional project costs, coordination costs, design fees, legal fees, escalation, any premiums for working conditions, providing access through adjacencies, or removal and or replacement of componentry to expose or permit safe access to the area to receive work. Examples of excluded costs are:

- Equipment mobilization to "hard to access" locations
- Architectural or structural remodel work required to accommodate MEP equipment replacement
- Overtime work rates (although we acknowledge this is often required within healthcare, and other mission-critical facilities)
- Timing of work or escalation impact
- Commissioning
- Design
- ADA compliance assessments or ADA upgrades triggered by permitting project work with Authorities Having Jurisdiction (AHJ)
- Life Safety / Code compliance assessments or Life Safety / Code compliance upgrades triggered by permitting project work with Authorities Having Jurisdiction (AHJ)

Other Comments on Costs:

4. Projects and their related Project Costs can be assembled and assigned with a client's desired delivery conditions and other client controlled factors and difficulty parameters within CannonDesign's FOScore™ software project planning module. The planning module can select one or any number of individual deficiencies and bundle them together to model cost savings or economy of scale bidding scenarios in a dynamic environment.

5. CannonDesign offers a 45-day free trial period for our clients to access the FOScore™ software and utilize the database. Annual software subscription agreements can be negotiated during the trial period for one or many users. CannonDesign offers free training to staff that would interface the system during the trial period, and can also customize reporting or other software functionality at reasonable rates during a subscription period.

6. The assessment data that has been collected by CannonDesign and resident in the secure FOScore™ software system is available for dynamic use within the system. This data is also available outside the FOScore™ software system to our client's in multiple common static outputs such as excel, word, pdf, and tiff, that can in turn be exported to other market software.

Example of a Project Plan from FOScore™ Software

Project Reports can be generated on-demand through the use of the FOScore™ software system. A sample report is provided here for your review.

Projects can be comprised of groups containing like or interdependent systems that exist throughout one or many assets. These projects can be stand-alone or combined to achieve efficiency through an economy of scale in both design and construction. Potential projects should consider also including any adjacent or related system, especially one nearing the end of it its service life. This allows systems replacement projects to be grouped by area and limit future occurrences of proposed work impacting recently completed work.

Project detail tables are provided for each project group. These are a first step in beginning the necessary maintenance improvements. The project detail tables provide the specific project information:

Project Name:	2017 Parking Garage Re-Vitalization
Project Description:	Garage architectural, mechanical, electrical and plumbing repairs (Structural is by others)
Project Length (Years):	2
Priority:	High
Status:	Open
Escalation Percent:	3
Funding Source:	Multiple / Public

Item Name	Priority	Building	Direct Cost
Shell	1 - Currently Critical	Parking Ramp	1,473,000.00
Exterior Walls	1 - Currently Critical	Parking Ramp	24,948.00
Aluminum Windows (fixed)	1 - Currently Critical	Parking Ramp	124,396.05
Aluminum Windows (fixed)	1 - Currently Critical	Parking Ramp	52,840.80
Steel Windows (fixed)	1 - Currently Critical	Parking Ramp	50,400.00
Roofing - Unprotected Membrane	1 - Currently Critical	Parking Ra	641,893.56
Horizontal Waterproofing Membrane	1 - Currently Critical	Parking	231,480.00
Slip-Resistant Flooring Treatment	1 - Currently Critical	Parking Ramp	19,320.00
Sanitary Drainage System	4 - Recommended	Parking Ramp	38,700.00
Building Support Plumbing Systems	3 - Necessary - Not Yet C	Ramp	118,253.52
Unit Ventilators	4 - Recommended	Parking	19,700.00
Unit Ventilators	4 - Recom ded	Parking Ramp	19,700.00
Ductwork and Accessories- Ducted Return	2 - Potentia	Parking Ramp	24,000.00
Fire Protection Specialties	Currently Cri	Parking Ramp	15,000.00
Electrical Service And Distribution	Critical	Parking Ramp	48,664.00
Light Fixtures	4 - Rec ended	Parking Ramp	625,680.00
Nurse Call System	ssary - Not Yet Critical	Parking Ramp	9,000.00
Parking Lot Paver gs	1 - Currently Critical	Parking Ramp	54,036.00
ADA Assess ts	2 - Potentially Critical	Parking Ramp	125,000.00
ADA Assessm	2 - Potentially Critical	Parking Ramp	198,000.00
Other items	1 - Currently Critical	Parking Ramp	69,552.00

	Percent		Fixed Amount	Total
Direct Cost Subtotal:				$3,983,563.93
Additional Above The Line Costs:	0.00%	+	$0.00	$0.00
Escalation Cost:				$242,599.04
Soft Costs:	10.0%	+	$0.00	$398,356.39
Contingency Costs:	10.0%	+	$0.00	$398,356.39
Architectural Engineering Costs:	10.0%	+	$0.00	$398,356.39
Permit Costs:	3.0%	+	$0.00	$119,506.92
Bidding & Advertising Costs:	0.0%	+	$0.00	$0.00
Overhead & Profit Costs:	10.0%	+	$0.00	$398,356.39
Project Cost Subtotal:				$5,939,095.46
Additional Below The Line Costs:	0.00%	+	$0.00	$0.00
Total Cost:				$5,939,095.46

Priority Definitions and Action Timeframes

CannonDesign's Facility Optimization Solution's team has developed a standard priority scale primarily to define the level of criticality of each component, assembly or system that is assessed. The priority scale includes action timeframes allowing high-priority, critical deficiencies requiring immediate action to be identified, along with deferred maintenance deficiencies. This scale provides a framework for short and long-term capital planning. Customized priority scales can be crafted to capture additional prioritization, or align priorities and timeframes with other definitions already in use.

PRIORITY 1 - Currently Critical **Year 1** **(0-12 months)** Requires immediate attention	• General Life-safety non-compliance observations • Return a necessary building system assembly or service system to useful operation
PRIORITY 2 - Potentially Critical **Year 2** **(13-24 months)** Will become critical	• Rapid deterioration of building system assembly or service system will potentially lead to loss of facility operation • General ADA non-accessible observations
PRIORITY 3 - Necessary, But Not Yet Critical **Years 3 - 5** **(25-60 months)** Should be addressed	• Repairs that would provide a rapid return on investment, including energy-efficiency • Necessary building or site improvements • Repairs that preclude predictable deterioration, potential downtime, and/or higher short-term maintenance costs • Replacement of building assembly or service system components that have exceeded their useful lifespan
PRIORITY 4 - Recommended **Years 6 - 10** **(61-120 months)** Should be considered	• Sensible improvements to existing conditions • Not required for the facility to generally function • Improvement of overall usability and / or reduce long-term maintenance costs
PRIORITY 0 - No Action **Years 11 - 99** **(Beyond 120 months)** Good condition	• No capital improvements to existing conditions anticipated as being necessary within 10 years • Only minor deferred maintenance deficiency projected with a repair valuation at five percent or less of total system value

ADA Accessibility Ranking System:

The CannonDesign FOS team developed an ADA Accessibility Ranking system to help our clients to better understand how their portfolio quantitatively measures toward achieving ADA accessibility . A ranking for each asset was assigned one of the following:

INSUFFICIENTLY ACCESSIBLE (Higher Priority Issues Noted)	• Buildings that are not accessible OR • Accessible from the exterior to the first level only
MODERATELY ACCESSIBLE (Moderate Priority Issues Noted)	• Building accessible to the first level • Buildings that include accessible vertical accessibility • Accessible rooms, spaces and restrooms
ESSENTIALLY ACCESSIBLE (Lower Priority Issues Noted)	• Building accessible to the first level • Buildings that include accessible vertical accessibility to all levels • Accessible rooms, spaces and restrooms • Accessible Drinking Fountains • Accessible communication features, i.e. A/V fire alarm notification devices, and accessible signage with braille

ADA Compliance Ranking - Enhanced Scope of Services for Assets and Asset Groups:

An overall accessibility ranking for the asset(s) including scoring metrics can be provided for a full ADA Compliance Study (usually performed under specified enhanced scopes or separate stand-alone contract), and are derived from the majority of buildings in the campus or portfolio that are quantified in the categories above. One of the rankings below will be determined for the group.

Overall ADA Compliance Ranking: Generally Compliant

Semi-Compliant

Generally Non-Compliant

Data Analysis, Recommendations and Life Cycle

Each building system, assembly, or service has a life cycle established by the Building Owners and Managers Association (BOMA) International, and the American National Standards Institute (ANSI).

This is an accepted industry standard for the universal benchmarking of building component life cycles. The published BOMA life cycle durations in this report are intended to provide a reference point only. Priorities and action timeframes are determined by accessible visual observation* during on-site surveys and interviews with facilities staff when possible.

As an example, the BOMA life cycle for a gas fired boiler is 20 years. However, our past experience has demonstrated that if a manufacturers recommended maintenance program is implemented at pre-determined intervals the system often exceeds its life cycle and effectively remains in service well beyond 20 years. This method of analysis provides a more accurate estimation of the expected remaining life, rather than exclusive dependency on recommend system replacement based on BOMA standards.

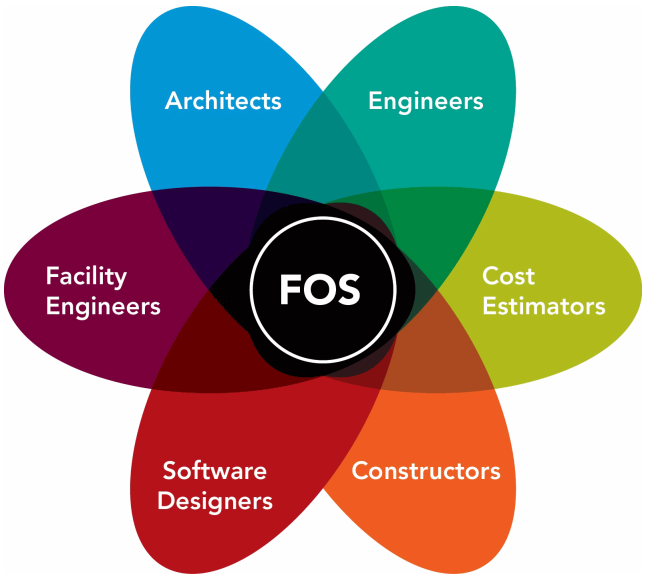
BOMA standards and FOS applied action timeframes may not directly correspond in this report.

4. PROCESS

Each building system, assembly, or service has a life cycle established by the Building Owners and Managers Association (BOMA) International, and the American National Standards Institute (ANSI).

Facility Optimization Solutions
Facility Optimization Solutions (FOS) is a division of CannonDesign and is comprised of:

- Architects
- Engineers
- Constructors
- Cost Estimators
- Facility Engineers
- Software Designers



FOS is a dedicated Facility Condition Assessment (FCA) practice that develops intuitive facility management tools that empower building managers and owners to perform data-driven and analytically based strategic facility planning.

Assessment Phase Approach

Assessments are conducted utilizing industry standard UniFormat, as published by ASTM, CSI; and CSC which is integrated with MasterFormat. The chart below illustrates five assessment levels and the related complexity of each based upon the number of divisions required to be assessed.

UNIFORMAT LEVEL	DESCRIPTION	# OF DIVISIONS
1	Construction Categories	8*
2	Major Systems	20
3	Major and Minor Systems	109
5	System Components	700+
3/5 HYBRID	Major and Minor Systems plus System Components	+/- 360

**Level 1 is the most basic assessment level, and is not recommended.*

This assessment was conducted utilizing UniFormat Level 3 major building systems with Level 5 MEP components approach with system deficiencies identified and select MEP components tagged as described above, throughout the facility(ies). The UniFormat level of this assessment was determined prior to commencement, and was the basis for the contract scope of work.

Field Analysis

FOS assessment teams performed the field analysis and documentation of existing major categories including physical condition, life cycle, and the last known date of remodel, replacement, or repair.

The assessment team's focus typically includes the following architectural and service based (engineering) Uniformat system disciplines, (If applicable to scope of work and/or present at Site)

GENERAL

- General Life Safety concerns
- General ADA Accessibility concerns

STRUCTURE

- Visible Structural Elements

SHELL

- Envelope / Vertical Enclosures
- Roof / Horizontal Enclosures

INTERIORS

- Architectural Interiors
- Architectural Vertical Conveyance

SERVICES

- HVAC
- Plumbing
- Fire Protection
- Electrical
- Communications
- Safety and Security

SITE

- Site / Civil Improvements (0'-10' beyond building perimeter unless noted otherwise)

***EQUIPMENT AND FURNISHINGS**

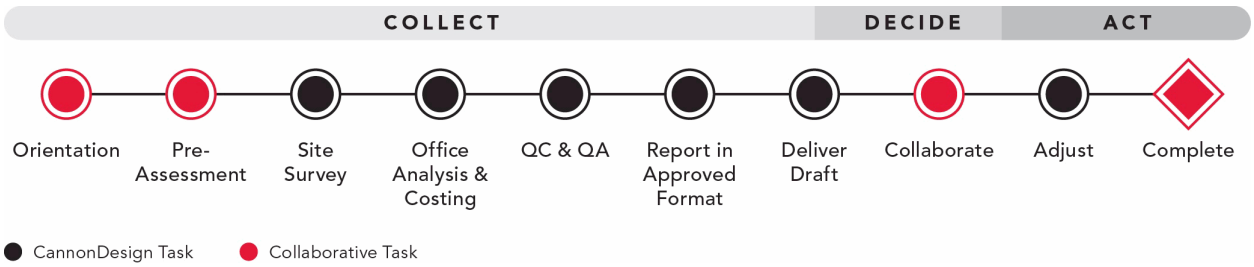
***DEMOLITION**

* Not typically apart of an FCA unless noted otherwise in contract or scope of work

Report Process

The primary purpose of this report is to document field identified deficiencies, indicate priority ranking of each, assign a timeframe for action, estimate remediation costs, and facilitate the development of short and long-term Deferred Maintenance Deficiencies (DMD) and Capital Improvement Planning (CIP). Cost estimates in this report are intended to provide a basis for capital budgeting and a framework for evaluating capital improvement projects.

Collaboration with our client partners is particularly important to the CannonDesign FOS team. Our process, which we refer to as “Collect, Decide, Act” is performed as a collaborative group effort which leads to the most accurate data useful and results. The FCA is conducted using these three phases and their sub-tasks shown below with collaboration points in red



Draft Report

The draft report allows our client team partners an opportunity to review and comment on the results of the FCA during the “Decide” phase of the process. It is the opportunity to collaborate on the report data prioritization, and recommendations to best suit the facility needs.

Final Report

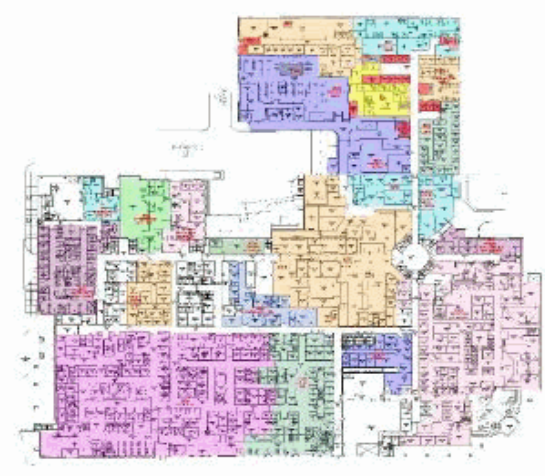
The final FCA report provides a comprehensive assessment of the current conditions at the facility. This report contains the necessary data, results, budget costs and recommendations to inform the planning process for the future of this facility.

Field Survey, Data Collection, and Software

CannonDesign utilized a dedicated assessment team of professionals to conduct a comprehensive on-site survey. The team's primary focus in the field was to identify deficient, obsolete or at-risk building components, assemblies and/or systems. Deficiencies were collected that require repair and or replacement, and include building system assemblies and service system components that are considered unsafe, defective/damaged or that no longer perform their intended function.

Each deficiency was individually classified by applicable UniFormat number, assigned an installation date (if known to be different from the original construction date), and given an anticipated remaining service life based on the observed condition. The assessment team describes each system visually observed and the relative physical condition, along with estimating remaining useful life, replacement value, priority timeframe (necessary repair/replacement time in years), risk of failure classification, and provides a description of current issues and system improvement recommendations. The assessment team interviewed available facilities staff, reviews available base plan drawings, and collects digital photo documentation to assist in performing these tasks.

Data was collected and cataloged utilizing mobile electronic devices that transmit real-time information into our proprietary FOScore™ software.



FOScore™ is an industry-leading web-based facility condition assessment and management tool developed and maintained by CannonDesign's Facility Optimization Solutions group.

5. RESULTS

Asset Summary Report

This summary provides an overview of this asset in both high-level and specific deficiency values. This report provides the asset's Facility Condition Index for a 1-year, 5-year and 10-year planning period, the overall Current Replacement Value of the asset, and basic record information, followed by a Building Summary. The Building Summary includes descriptions of the: structure, envelope, architectural interiors, HVAC, plumbing, electrical, communications, safety and security, and civil / site improvements. Additionally, the Current Replacement Value is shown by system alongside the 5-year and 10-year deficiencies. One Asset Summary Report is provided for each facility.

BUILDING DATA

Portfolio: Foothill-De Anza Community College District

Building: 1900 Administration

Site: Foothill College

Building Type: Academic Building

Building #: 1900

Floors: 1

Gross S.F. Size: 22,851

Year Constructed: 1961

LOCATION

Address: 12345 El Monte Rd.

City: Los Altos Hills

State: CA

CRV DATA:

CRV: $6,688,456

FCI DATA:

1/ 5 / 10 Yr. FCI: 0.00 / 0.10 / 0.19

(0.00 - 0.05 Good) (0.06 - 0.10 Fair) (0.11 - 0.30 Poor) (0.31 - 0.50 Critical) (0.51 - 1.00 Divest)

$ 1 / 5 / 10 Yr. Deficiencies: $18,344/ $648,309 / $1,248,807

ASSESSMENT DATE:

3/8/2021

BUILDING SUMMARY:

General Description:

A one-story office building occupied by the Foothills Community College Administration Department. The attic space is used for mechanical equipment and roof access.

B10 - Structure:

The building foundations were not observable. Based on the height of the building, and location, it is assumed that the building has reinforced concrete footings supporting the concrete pilasters of the superstructure. The floors of the building are reinforced concrete slab-on-grade construction. The roof structure is a glulam frame that bears on the concrete pilasters and dimensional wood posts. The ceilings of the building are dimensional wood framed. Structural drawings were not provided and a seismic assessment was not performed. The building was constructed prior to modern seismic codes. There are galvanized steel walkways on the roof.

B20 - Exterior Vertical Enclosures (Exterior Walls, Windows, and Doors):

The exterior walls have a combination of exposed aggregate concrete pilasters and wood tongue-and-groove siding. The windows are both wood-framed casement types and fixed with single-pane glazing. Doors include fiber-reinforced plastic-type (FRP) with dual-pane glazing and aluminum frames, wood slab-type with single-pane glazing, and wood slab type without glazing. The wood doors have wood frames. Storefronts are wood framed with single-pane glazing.

B30 - Exterior Horizontal Enclosures (Roofing):

The roof system includes mansard roofs with cedar shingles that are visible from the ground. Concealed from the ground, behind the mansard roofs, is a gable roof terminating into the parapet walls of the mansard roofs. This roof has a modified bituminous roofing system with a fluid-applied reflective topcoat and metal flashings. The parapet walls of the mansard roofs have asphalt shingle roofing. The gable roof drainage system uses wall scuppers that empty onto the mansard roofs. The mansard roofs drain into gutters that empty onto metal-capped rafter tails.

C20 - Interior Finishes (Architectural) and E20 - Fixed Furnishings (Cabinetry):

Floor finishes include tile carpeting, sheet carpeting, ceramic tile, vinyl composite tile, fluid-applied non-slip coatings, and exposed concrete. Wall finishes include painted gypsum wallboard, wood paneling, ceramic tile, exposed aggregate concrete, and painted wood moldings. Some walls contain whiteboards. Ceiling finishes include painted gypsum wallboard, acoustical tile, and painted decorative wood paneling. Doors are painted slab-type with hollow metal frames. Many doors have wired glazing. Windows are fixed with wood frames and single-pane glazing. Cabinets are plastic laminate. Countertops are plastic laminate and solid surfaces. Toilet partitions are stainless steel.

D10 - Conveying:

N/A

D20- Plumbing:

The plumbing system consists of domestic water service, sanitary waste, and vent, plumbing fixtures, equipment. A 3" water service supplies the domestic water system is a traditional 3 pipe (hot, cold, and hot water recirculation) system featuring soldered copper pipe and fittings. Hot water is generated by an electric tank-type water heater rated at 12 gallons. The sanitary waste and vent system consists of cast iron piping. Plumbing fixtures such as sinks, lavatories, water closets, urinals, mop service sinks, and drinking fountains. Comprised of mostly vitreous china bathroom fixtures, stainless steel, with manually operated flush valves and faucets

D30 - Heating, Ventilation, and Air Conditioning (HVAC):

The building is heated and cooled by 16 fan coil units with hot water heating and chilled water cooling. Hot and chilled water is generated off-site and feeds the building through a tunnel system. The server room is cooled with 2 wall-mounted evaporators and the servers themselves have in-rack direct expansion (DX) cooling. Ventilation air is circulated throughout the building by means of galvanized ductwork. Exhaust fans are spun aluminum located on the roof. All supply ductwork is assumed to be wrapped with blanket-type insulation. Temperature controls are a combination of a Novar/Trend Direct Digital Control (DDC) system.

D40 - Fire Protection:

The building is fully sprinkled with a wet-pipe fire suppression system consisting of a 4" service entrance. The system uses grooved steel piping mains, threaded distribution piping, and fittings and includes upright, side-wall, and pendent quick response sprinkler heads. The server room has an FM-200 dry chemical fire suppression system.

D50 – Electrical:

Consists of a 480Y/277V, 3-phase, 4-wire electric service to panelboards, a lighting control panel, and transformers to reduce the voltage for 208Y/120V, 3-phase, 4-wire panelboards, equipment, and general-purpose use. Interior lighting consists mainly of surface- mounted fluorescent fixtures and CFL fixtures which are controlled using light switches. There are other light fixture types that exist in smaller quantities. Exit signs are green or red letters with a white or brushed aluminum background with battery back-up, some contain integral emergency egress lighting. Emergency lighting is also accomplished with wall-mounted egress lighting with integral battery backup. Site lighting consists of canopy-mounted LED fixtures, controls, and associated wiring. Basic line voltage switching, which

includes multi-level switching, occupancy sensors, and a lighting control panel is being used to control the building. General-purpose power consists of general-purpose receptacles and associated wiring.

D60 – Communications:

The building has a modern data network, phone, and wireless system managed and monitored by the IT staff.

D70 - Electronic Safety and Security:

The physical security of the building is accomplished with keyed locks. The video surveillance system consists of security surveillance cameras located on the exterior of the building. Motion detectors connected to the security system are located throughout the facility. A commercial addressable fire alarm system extended throughout the facility and it is connected to an autodialer.

System Summary List - By Discipline

Architectural

Item ID	Uniformat	Description	Critical Issue(s)	Recommendation(s)	Pri	Act Time	Life Cycle	Estimated Cost
796334	B2080 Exterior Metal Fabrications	Aluminum copings	Joints in the copings were observed to be lacking proper sealed connections.	Inspect the joints in the copings and install sealed connections where missing.	2	2	75	$3,088
793508	B3010 Roofing Membrane	Modified bituminous roofing system with a fluid applied reflective top coating	The top coating is starting to deteriorate and fail, evidence of coatings on the cedar shingles at scuppers. The bituminous membrane has several areas that are cracking and deteriorated. There is debris on the mansard roof valleys.	Initiate a periodic maintenance program to clear the scuppers and gutters, remove debris, and monitor the condition of the roof. Repair damaged areas of the bituminous roofing and apply a new layer of reflective top coating.	2	2	20	$80,192
796331	B3010 Roofing - Cedar Shingles	Cedar shingle roofing	The shingles appear to be moderately deteriorated throughout but are more severely deteriorated beneath the scuppers from the upper roof where heavy organic growth was observed.	Replace the cedar shingle roofing.	3	3	20	$512,162
793789	C2030 Vinyl Composition Tile Flooring	Vinyl Composite Tile (VCT) Flooring	Damaged and missing tile were observed.	Replace the damaged VCT flooring. Consider removing the VCT flooring and adhesive from the mechanical and IT rooms and sealing the concrete slabs beneath.	3	4	12	$2,139
793583	B2010 Exterior Coatings	Painted wood siding, overhangs, soffits, fascias, window trim, louvers, and doors.	The paint finishes are moderately deteriorated throughout the exterior of the building and can be expected to require repainting within the scope of this report based on the anticipated rate of deterioration.	Prepare surfaces and apply new finishes to the painted exterior elements of the building. Replace elastomeric sealants around wall penetrations as needed.	4	7	10	$84,663
793524	B2020 Exterior Windows	Exterior windows include wood-frame casement windows, fixed transoms wood windows with single-pane glazing	The windows have thermally inefficient single-pane glazing. Many of the windows have deteriorated frame elements.	Replace the windows with a high-performance energy-efficient system.	4	10	30	$132,454
793774	C1010 Interior Coatings	Interior coatings consist of painted plaster/gypsum wallboard, wood surfaces, window and door casement, and wood baseboard moldings	Minor surface damage was observed on the plaster/gypsum wallboard surfaces throughout the building. The interior painted surfaces of the building can be expected to require repair and repainting within the scope of this report.	Repair minor wall surface damage under scheduled maintenance project in the mailroom. Apply new finish coatings within the prescribed action time frame.	4	9	100	$98,773
793766	C2030 Carpeting	Sheet and tile Carpeting	The carpeting is moderately worn with stains and traffic pattern registration in a number of areas.	Replace the carpeting.	4	7	5	$97,555
793665	E2010 Fixed Furnishings	Interior fixed furnishings consist of plastic laminate countertops, plastic laminate base cabinetry, and plastic laminate wall cabinetry.	Damaged plastic laminate finishes were observed.	Replace deteriorated cabinets and countertop system within the prescribed action timeframe.	4	7	15	$45,859
						Architectural Total:		**$1,056,884**

Mechanical

Item ID	Uniformat	Description	Critical Issue(s)	Recommendation(s)	Pri	Act Time	Life Cycle	Estimated Cost
793943	D3040 Split-System Air Conditioners	Split system air conditioning unit with an indoor evaporator and remote air-cooled condensing unit, includes refrigeration piping and insulation.	No critical issues observed or reported other than normal aging, the equipment appears to be well maintained. However, the equipment will be due for replacement within the time frame of this report.	Monitor for characteristics inconsistent with normal operation, recurring and/or increasing maintenance repair needs. Replace the equipment within the action timeframe.	4	9	15	$9,966
793966	D3040 Air Source Heat Pumps	Two identical air source heat pumps with wall-mounted evaporators and rooftop air-cooled condensing units including refrigeration piping and insulation.	There were no deficiencies or negative impact issues observed.	Perform monthly, quarterly, and/or annual maintenance and inspections per local ordinances and manufacturer's recommendations to maintain function and operation. Monitor for characteristics inconsistent with normal operation, recurring and/or increasing maintenance repair needs, and material changes in condition.	0	11	15	$0
793957	D3040 Computer Room Air Conditioners	Four in rack computer room air conditioning units with remote air-cooled condensing units	There were no deficiencies or negative impact issues observed.	Perform monthly, quarterly, and/or annual maintenance and inspections per local ordinances and manufacturer's recommendations to maintain function and operation. Monitor for characteristics inconsistent with normal operation, recurring and/or increasing maintenance repair needs, and material changes in condition.	0	11	15	$0
793962	D3040 Fan Coil Units-2 Pipe	Sixteen horizontal fan coil units with chilled water cooling located in the attic	There were no deficiencies or negative impact issues observed.	Perform monthly, quarterly, and/or annual maintenance and inspections per local ordinances and manufacturer's recommendations to maintain function and operation. Monitor for characteristics inconsistent with normal operation, recurring and/or increasing maintenance repair needs, and material changes in condition.	0	11	20	$0
794004	D3060 Exhaust Air HVAC Fans- General	Exhaust fans consisting of spun aluminum rooftop fans, utility set fans, both curb mounted, through wall sidewall fans and inline cube fans.	No critical issues observed or reported other than normal aging	Perform monthly, quarterly, and/or annual maintenance and inspections per local ordinances and manufacturer's recommendations to maintain function and operation. Monitor for characteristics inconsistent with normal operation, recurring and/or increasing maintenance repair needs, and material changes in condition.	0	11	15	$0
							Mechanical Total:	**$9,966**

Fire Protection

Item ID	Uniformat	Description	Critical Issue(s)	Recommendation(s)	Pri	Act Time	Life Cycle	Estimated Cost
794071	D4010 Fire-Extinguishing Systems - Chemical Systems	Clean Agent FM-200 fire suppression system including storage tank, piping, heads, pull station, and switches.	There were no deficiencies or negative impact issues observed.	Perform monthly, quarterly, and/or annual maintenance and inspections per local ordinances and manufacturer's recommendations to maintain function and operation.	0	11	20	$0
				Fire Protection Total:				**$0**

Electrical

Item ID	Uniformat	Description	Critical Issue(s)	Recommendation(s)	Pri	Act Time	Life Cycle	Estimated Cost
794199	D5020 Arc Flash Hazard Analysis and Short Circuit Coordination	Electrical arc flash hazard analysis and short circuit coordination	No evidence of a short circuit coordination study or arc flash hazard assessment. Electrical equipment was not observed as having the required safety information posted.	Perform a short circuit coordination study and an arc flash hazard analysis. Make the required changes to the electrical system to ensure proper circuit coordination and to minimize electrical flash hazards. Once completed, appropriate PPE should be purchased for qualified personnel. All electrical equipment must be labeled with the necessary safety information specific to each piece of equipment. (Price reflects the cost of engineering for short circuit coordination and arc flash assessment only.)	1	0	30	$12,699
794207	D5080 Miscellaneous Electrical Systems (Mech Connections)	Electrical wiring and components that support mechanical systems.	Some components are starting to show signs of weathering and wear and tear. As technology advances, equipment deteriorates, and mechanical equipment is replaced, upgrades to the electrical systems and wiring may be required. The cover is missing from a receptacle on the roof.	Replace the deteriorated and/or rusted electrical equipment and associated wiring for mechanical equipment with new equipment and wiring. Wiring ages with equipment and should be replaced as the equipment is replaced. Replace the receptacle cover on the roof.	1	1	20	$5,644
794205	D5040 Interior Lighting	Interior lighting consists mainly of pendant-mounted, surface-mounted fluorescent fixtures along with track lighting with incandescent lamps which are controlled using light switches, occupancy sensors, and lighting control panels. There are other light fixture types that exist in smaller quantities. Exit signs are green or red letters with a white or brushed aluminum background, some contain integral battery backup and emergency lighting. Emergency lighting is also accomplished with wall-mounted egress lighting with integral battery backup.	The lighting systems have been updated recently with new fluorescent fixtures. No deficiencies or negative impact issues observed.	Consider a program to replace all fluorescent lamps with new LED-type lamps, especially as the fluorescent lamps and/or ballasts fail and need replacement or during other renovations.	4	10	30	$45,154

Electrical

Item ID	Uniformat	Description	Critical Issue(s)	Recommendation(s)	Pri	Act Time	Life Cycle	Estimated Cost
794202	D5020 Electrical Service And Distribution	Consists of a 480Y/277V, 3-phase, 4-wire electric service to panelboards, a lighting control panel, and transformers to reduce the voltage for 208Y/120V, 3-phase, 4-wire panelboards, equipment, and general-purpose use.	No deficiencies or negative impact issues were observed however maintenance and testing histories are unknown.	Inspect, service, and test the distribution equipment. The results of these tests and inspections should be analyzed to determine the exact condition of the equipment. Once the internal condition of the equipment and components are known, a plan should be developed to upgrade or replace the equipment. Wiring ages with equipment and should be replaced as needed. Instituting a thorough PM program could extend the life of the equipment beyond the anticipated BOMA Lifecycle Expectancy.	0	15	30	$0
							Electrical Total:	**$63,497**

Communications

Item ID	Uniformat	Description	Critical Issue(s)	Recommendation(s)	Pri	Act Time	Life Cycle	Estimated Cost
794192	D6010 Data Communications	The building has a voice and data network consisting of structured equipment boards, cable racks, wiring systems, WIFI, and outlets that are maintained by an internal IT department. .A wired phone system is present.	Insufficient card reader access, door sweeps, and sealing of conduit in the IT rooms 1911 and 1944. As technology advances and equipment ages upgrades to the systems will be required.	Upgrade card reader access, door sweeps, and properly seal wall penetrations and conduit as required. Upgrade the data and voice cabling systems throughout the facility in accordance with the facility's needs and equipment demands as remodeling and upgrades are accomplished.	3	3	20	$24,976
				Communications Total:				**$24,976**

Safety and Security

Item ID	Uniformat	Description	Critical Issue(s)	Recommendation(s)	Pri	Act Time	Life Cycle	Estimated Cost
794215	D7010 Access Control and Intrusion Detection	Access control and intrusion detection consist of keyed door locks and motion detectors routed through a monitored security panel to a wall-mounted controller.	No deficiencies or negative impact issues observed however, as technology advances and equipment ages, upgrades to the systems will be required.	Upgrade the system equipment, cabling, and devices throughout the building in accordance with the needs of the facility and as equipment demands, or as remodeling and upgrades are accomplished. Consider installing proximity card readers for added security.	4	6	10	$21,166
794219	D7030 Electronic Surveillance	The system consists of security surveillance cameras located on the exterior of the building that is routed to a central system.	As technology advances and equipment ages, upgrades to the surveillance systems will be required. No other deficiencies or negative impact issues observed.	Upgrade the cabling systems and end devices throughout the facility per the needs of the facility and equipment demands or as remodeling and upgrades are accomplished.	4	6	10	$29,632
794217	D7050 Fire Detection and Alarm	Fire detection and alarm consist of the main fire alarm panel located in Building 6000, horn/strobes, heat/smoke detectors, extender panels, and wiring.	No deficiencies or negative impact issues observed however, as technology advances and equipment ages, upgrades to the systems will be required.	Continue to perform the manufacturer's recommended testing. Upgrade and/or replace the system components as necessary to ensure early detection of a fire and to allow maximum evacuation time and limited damage.	4	8	10	$35,276
				Safety and Security Total:				**$86,074**

ADA Assessments

Item ID	Uniformat	Description	Critical Issue(s)	Recommendation(s)	Pri	Act Time	Life Cycle	Estimated Cost
801610	H2010 ADA Assessments	General accessibility observation of 5-points	Accessibility features for this facility were observed to be either partially or fully non-compliant with the applicable scoping provisions and current accessibility standards which may include, but are not limited to, interior and exterior accessible routes, restrooms, communication systems, drinking fountains, occupancy controls, fixed furnishings, doors and door hardware, handrails and guards, wayfinding and signage systems, walkways, and vehicular parking areas.	Consider a comprehensive accessibility study for remedial recommendations and compliance with the current applicable accessibility standards. Associated action cost is an allowance for the accessibility study for this recommendation based on the building square footage and/or minimum cost of assessment. Action cost represents a rough order of magnitude cost. Actual cost will be provided based on detailed programmatic requirements provided by the client.	2	2	75	$7,410
							ADA Assessments Total:	**$7,410**

6. RECOMMENDATIONS

Action Item List - By Priority

PRIORITY 1

FOScore #: 794199
Uniformat Name: D5020 - Arc Flash Hazard Analysis and Short Circuit Coordination
Category: Life Safety - Life Safety
Location: Partial Building
Area Served: Partial Building
Observed Remaining Life: 0 year(s)
Act By: 2021
Action Timeframe: 0 year(s)
Reference Life (BOMA): 30 year(s)

Description: Electrical arc flash hazard analysis and short circuit coordination

Critical Issues: No evidence of a short circuit coordination study or arc flash hazard assessment. Electrical equipment was not observed as having the required safety information posted.

Recommendations: Perform a short circuit coordination study and an arc flash hazard analysis. Make the required changes to the electrical system to ensure proper circuit coordination and to minimize electrical flash hazards. Once completed, appropriate PPE should be purchased for qualified personnel. All electrical equipment must be labeled with the necessary safety information specific to each piece of equipment. (Price reflects the cost of engineering for short circuit coordination and arc flash assessment only.)
Repair Factor: 100%

Pricing Unit: 22,851 BGSF Cost: $12,699

PRIORITY 1

FOScore #: 794207
Uniformat Name: D5080 - Miscellaneous Electrical Systems (Mech Connections)
Category: Building Integrity - Beyond Rated Life
Location: Roof
Area Served: Partial Building
Observed Remaining Life: 3 year(s)
Act By: 2022
Action Timeframe: 1 year(s)
Reference Life (BOMA): 20 year(s)

Description: Electrical wiring and components that support mechanical systems.

Critical Issues: Some components are starting to show signs of weathering and wear and tear. As technology advances, equipment deteriorates, and mechanical equipment is replaced, upgrades to the electrical systems and wiring may be required. The cover is missing from a receptacle on the roof.

Recommendations: Replace the deteriorated and/or rusted electrical equipment and associated wiring for mechanical equipment with new equipment and wiring. Wiring ages with equipment and should be replaced as the equipment is replaced. Replace the receptacle cover on the roof.
Repair Factor: 10%

Pricing Unit: 22,851 BGSF Cost: $5,644

PRIORITY 2

FOScore #: 796334
Uniformat Name: B2080 - Exterior Metal Fabrications
Category: Building Integrity - Reliability
Location: Roof
Area Served: Parapets
Observed Remaining Life: 2 year(s)
Act By: 2023
Action Timeframe: 2 year(s)
Reference Life (BOMA): 75 year(s)

Description: Aluminum copings

Critical Issues: Joints in the copings were observed to be lacking proper sealed connections.

Recommendations: Inspect the joints in the copings and install sealed connections where missing.
Repair Factor: 100%

Pricing Unit: 1 specify Cost: $3,088

PRIORITY 2

FOScore #: 793508
Uniformat Name: B3010 - Roofing Membrane
Category: Building Integrity - Reliability
Location: Roof
Area Served: Entire Building
Observed Remaining Life: 12 year(s)
Act By: 2023
Action Timeframe: 2 year(s)
Reference Life (BOMA): 20 year(s)

Description: Modified bituminous roofing system with a fluid applied reflective top coating

Critical Issues: The top coating is starting to deteriorate and fail, evidence of coatings on the cedar shingles at scuppers. The bituminous membrane has several areas that are cracking and deteriorated. There is debris on the mansard roof valleys.

Recommendations: Initiate a periodic maintenance program to clear the scuppers and gutters, remove debris, and monitor the condition of the roof. Repair damaged areas of the bituminous roofing and apply a new layer of reflective top coating.
Repair Factor: 22%

Pricing Unit: 8,300 SF Cost: $80,192

PRIORITY 2

FOScore #: 801610
Uniformat Name: H2010 - ADA Assessments
Category: Accessibility Standards -
Location: Entire Building
Area Served: Entire Building
Observed Remaining Life: 2 year(s)
Act By: 2023
Action Timeframe: 2 year(s)
Reference Life (BOMA): 75 year(s)

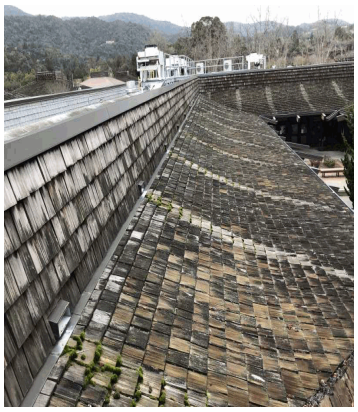
Description: General accessibility observation of 5-points

Critical Issues: Accessibility features for this facility were observed to be either partially or fully non-compliant with the applicable scoping provisions and current accessibility standards which may include, but are not limited to, interior and exterior accessible routes, restrooms, communication systems, drinking fountains, occupancy controls, fixed furnishings, doors and door hardware, handrails and guards, wayfinding and signage systems, walkways, and vehicular parking areas.

Recommendations: Consider a comprehensive accessibility study for remedial recommendations and compliance with the current applicable accessibility standards. Associated action cost is an allowance for the accessibility study for this recommendation based on the building square footage and/or minimum cost of assessment. Action cost represents a rough order of magnitude cost. Actual cost will be provided based on detailed programmatic requirements provided by the client.
Repair Factor: 100%

Pricing Unit: 1 EA Cost: $7,410

PRIORITY 3



FOScore #: 796331
Uniformat Name: B3010 - Roofing - Cedar Shingles
Category: Building Integrity - Reliability
Location: Roof
Area Served: Entire Building
Observed Remaining Life: 3 year(s)
Act By: 2024
Action Timeframe: 3 year(s)
Reference Life (BOMA): 20 year(s)

Description: Cedar shingle roofing

Critical Issues: The shingles appear to be moderately deteriorated throughout but are more severely deteriorated beneath the scuppers from the upper roof where heavy organic growth was observed.

Recommendations: Replace the cedar shingle roofing.
Repair Factor: 100%

Pricing Unit: 23,820 SF Cost: $512,162

PRIORITY 3

FOScore #: 793789
Uniformat Name: C2030 - Vinyl Composition Tile Flooring
Category: Building Integrity - Appearance
Location: Partial Building
Area Served: Breakrooms and Information Tech. Rooms
Observed Remaining Life: 13 year(s)
Act By: 2025
Action Timeframe: 4 year(s)
Reference Life (BOMA): 12 year(s)

Description: Vinyl Composite Tile (VCT) Flooring

Critical Issues: Damaged and missing tile were observed.

Recommendations: Replace the damaged VCT flooring. Consider removing the VCT flooring and adhesive from the mechanical and IT rooms and sealing the concrete slabs beneath.
Repair Factor: 40%

Pricing Unit: 790 SF Cost: $2,139

PRIORITY 3

FOScore #: 794192
Uniformat Name: D6010 - Data Communications
Category: Building Integrity - Reliability
Location: Entire Building
Area Served: Entire Building
Observed Remaining Life: 10 year(s)
Act By: 2024
Action Timeframe: 3 year(s)
Reference Life (BOMA): 20 year(s)

Description: The building has a voice and data network consisting of structured equipment boards, cable racks, wiring systems, WIFI, and outlets that are maintained by an internal IT department. .A wired phone system is present.

Critical Issues: Insufficient card reader access, door sweeps, and sealing of conduit in the IT rooms 1911 and 1944. As technology advances and equipment ages upgrades to the systems will be required.

Recommendations: Upgrade card reader access, door sweeps, and properly seal wall penetrations and conduit as required. Upgrade the data and voice cabling systems throughout the facility in accordance with the facility's needs and equipment demands as remodeling and upgrades are accomplished.

Repair Factor: 10%

Pricing Unit: 22,851 BGSF Cost: $24,976

PRIORITY 4

FOScore #: 793583
Uniformat Name: B2010 - Exterior Coatings
Category: Building Integrity - Appearance
Location: Building Exterior
Area Served: Building Exterior
Observed Remaining Life: 7 year(s)
Act By: 2028
Action Timeframe: 7 year(s)
Reference Life (BOMA): 10 year(s)

Description: Painted wood siding, overhangs, soffits, fascias, window trim, louvers, and doors.

Critical Issues: The paint finishes are moderately deteriorated throughout the exterior of the building and can be expected to require repainting within the scope of this report based on the anticipated rate of deterioration.

Recommendations: Prepare surfaces and apply new finishes to the painted exterior elements of the building. Replace elastomeric sealants around wall penetrations as needed.

Repair Factor: 100%

Pricing Unit: 22,851 BGSF Cost: $84,663

PRIORITY 4

FOScore #: 793524
Uniformat Name: B2020 - Exterior Windows
Category: Building Integrity - Reliability
Location: Building Exterior
Area Served: Building Exterior
Observed Remaining Life: 10 year(s)
Act By: 2031
Action Timeframe: 10 year(s)
Reference Life (BOMA): 30 year(s)

Description: Exterior windows include wood-frame casement windows, fixed transoms wood windows with single-pane glazing

Critical Issues: The windows have thermally inefficient single-pane glazing. Many of the windows have deteriorated frame elements.

Recommendations: Replace the windows with a high-performance energy-efficient system.
Repair Factor: 100%

Pricing Unit: 1,500 WSF Cost: $132,454

PRIORITY 4

FOScore #: 793774
Uniformat Name: C1010 - Interior Coatings
Category: Building Integrity - Appearance
Location: Partial Building
Area Served: Various Areas
Observed Remaining Life: 9 year(s)
Act By: 2030
Action Timeframe: 9 year(s)
Reference Life (BOMA): 100 year(s)

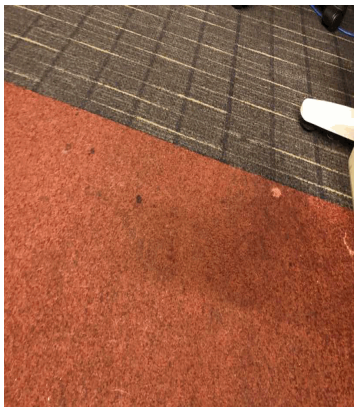
Description: Interior coatings consist of painted plaster/gypsum wallboard, wood surfaces, window and door casement, and wood baseboard moldings

Critical Issues: Minor surface damage was observed on the plaster/gypsum wallboard surfaces throughout the building. The interior painted surfaces of the building can be expected to require repair and repainting within the scope of this report.

Recommendations: Repair minor wall surface damage under scheduled maintenance project in the mailroom. Apply new finish coatings within the prescribed action time frame.
Repair Factor: 100%

Pricing Unit: 22,851 BGSF Cost: $98,773

PRIORITY 4



FOScore #: 793766
Uniformat Name: C2030 - Carpeting
Category: Building Integrity - Appearance
Location: Partial Building
Area Served: Offices, Classrooms, and Hallways
Observed Remaining Life: 7 year(s)
Act By: 2028
Action Timeframe: 7 year(s)
Reference Life (BOMA): 5 year(s)

Description: Sheet and tile Carpeting

Critical Issues: The carpeting is moderately worn with stains and traffic pattern registration in a number of areas.

Recommendations: Replace the carpeting.
Repair Factor: 100%

Pricing Unit: 16,951 SF Cost: $97,555

PRIORITY 4

FOScore #: 793943
Uniformat Name: D3040 - Split-System Air Conditioners
Category: Operations - Maintenance
Location: Entire Building
Area Served: Entire Building
Observed Remaining Life: 9 year(s)
Act By: 2030
Action Timeframe: 9 year(s)
Reference Life (BOMA): 15 year(s)

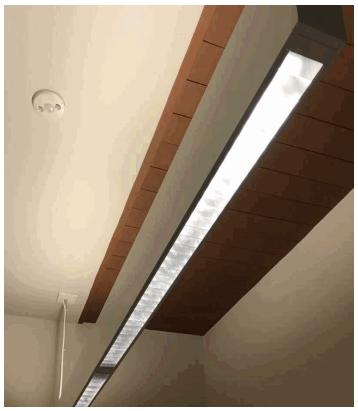
Description: Split system air conditioning unit with an indoor evaporator and remote air-cooled condensing unit, includes refrigeration piping and insulation.

Critical Issues: No critical issues observed or reported other than normal aging, the equipment appears to be well maintained. However, the equipment will be due for replacement within the time frame of this report.

Recommendations: Monitor for characteristics inconsistent with normal operation, recurring and/or increasing maintenance repair needs. Replace the equipment within the action timeframe.
Repair Factor: 100%

Pricing Unit: 1 EA Cost: $9,966

PRIORITY 4



FOScore #: 794205
Uniformat Name: D5040 - Interior Lighting
Category: Operations - Energy
Location: Entire Building
Area Served: Entire Building
Observed Remaining Life: 15 year(s)
Act By: 2031
Action Timeframe: 10 year(s)
Reference Life (BOMA): 30 year(s)

Description: Interior lighting consists mainly of pendant-mounted, surface-mounted fluorescent fixtures along with track lighting with incandescent lamps which are controlled using light switches, occupancy sensors, and lighting control panels. There are other light fixture types that exist in smaller quantities. Exit signs are green or red letters with a white or brushed aluminum background, some contain integral battery backup and emergency lighting. Emergency lighting is also accomplished with wall-mounted egress lighting with integral battery backup.

Critical Issues: The lighting systems have been updated recently with new fluorescent fixtures. No deficiencies or negative impact issues observed.

Recommendations: Consider a program to replace all fluorescent lamps with new LED-type lamps, especially as the fluorescent lamps and/or ballasts fail and need replacement or during other renovations.
Repair Factor: 20%

Pricing Unit: 22,851 BGSF Cost: $45,154

PRIORITY 4

FOScore #: 794215
Uniformat Name: D7010 - Access Control and Intrusion Detection
Category: Operations - Security
Location: Entire Building
Area Served: Entire Building
Observed Remaining Life: 6 year(s)
Act By: 2027
Action Timeframe: 6 year(s)
Reference Life (BOMA): 10 year(s)

Description: Access control and intrusion detection consist of keyed door locks and motion detectors routed through a monitored security panel to a wall-mounted controller.

Critical Issues: No deficiencies or negative impact issues observed however, as technology advances and equipment ages, upgrades to the systems will be required.

Recommendations: Upgrade the system equipment, cabling, and devices throughout the building in accordance with the needs of the facility and as equipment demands, or as remodeling and upgrades are accomplished. Consider installing proximity card readers for added security.
Repair Factor: 60%

Pricing Unit: 22,851 BGSF Cost: $21,166

PRIORITY 4

FOScore #: 794219
Uniformat Name: D7030 - Electronic Surveillance
Category: Operations - Security
Location: Building Exterior
Area Served: Exterior
Observed Remaining Life: 6 year(s)
Act By: 2027
Action Timeframe: 6 year(s)
Reference Life (BOMA): 10 year(s)

Description: The system consists of security surveillance cameras located on the exterior of the building that is routed to a central system.

Critical Issues: As technology advances and equipment ages, upgrades to the surveillance systems will be required. No other deficiencies or negative impact issues observed.

Recommendations: Upgrade the cabling systems and end devices throughout the facility per the needs of the facility and equipment demands or as remodeling and upgrades are accomplished.
Repair Factor: 100%

Pricing Unit: 22,851 BGSF Cost: $29,632

PRIORITY 4

FOScore #: 794217
Uniformat Name: D7050 - Fire Detection and Alarm
Category: Operations - Security
Location: Entire Building
Area Served: Entire Building
Observed Remaining Life: 8 year(s)
Act By: 2029
Action Timeframe: 8 year(s)
Reference Life (BOMA): 10 year(s)

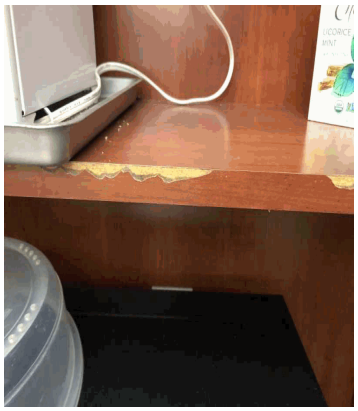
Description: Fire detection and alarm consist of the main fire alarm panel located in Building 6000, horn/strobes, heat/smoke detectors, extender panels, and wiring.

Critical Issues: No deficiencies or negative impact issues observed however, as technology advances and equipment ages, upgrades to the systems will be required.

Recommendations: Continue to perform the manufacturer's recommended testing. Upgrade and/or replace the system components as necessary to ensure early detection of a fire and to allow maximum evacuation time and limited damage.
Repair Factor: 50%

Pricing Unit: 22,851 BGSF Cost: $35,276

PRIORITY 4



FOScore #: 793665
Uniformat Name: E2010 - Fixed Furnishings
Category: Building Integrity - Appearance
Location: Partial Building
Area Served: Breakrooms and Office Areas
Observed Remaining Life: 16 year(s)
Act By: 2028
Action Timeframe: 7 year(s)
Reference Life (BOMA): 15 year(s)

Description: Interior fixed furnishings consist of plastic laminate countertops, plastic laminate base cabinetry, and plastic laminate wall cabinetry.

Critical Issues: Damaged plastic laminate finishes were observed.

Recommendations: Replace deteriorated cabinets and countertop system within the prescribed action timeframe.
Repair Factor: 25%

Pricing Unit: 22,851 BGSF Cost: $45,859

Photo Log - By Priority

Item #: 794199
Uniformat Number: D5020
Item Title: Arc Flash Hazard Analysis and Short Circuit Coordination
Caption: No arc flash hazard stickers
Priority: 1 - Currently Critical

Item #: 794199
Uniformat Number: D5020
Item Title: Arc Flash Hazard Analysis and Short Circuit Coordination
Caption: No arc flash hazard stickers
Priority: 1 - Currently Critical

Item #: 794199
Uniformat Number: D5020
Item Title: Arc Flash Hazard Analysis and Short Circuit Coordination
Caption: No arc flash hazard stickers
Priority: 1 - Currently Critical

Item #: 794199
Uniformat Number: D5020
Item Title: Arc Flash Hazard Analysis and Short Circuit Coordination
Caption: No arc flash hazard stickers
Priority: 1 - Currently Critical

Item #: 794199
Uniformat Number: D5020
Item Title: Arc Flash Hazard Analysis and Short Circuit Coordination
Caption: Generic arc flash hazard stickers
Priority: 1 - Currently Critical

Item #: 794207
Uniformat Number: D5080
Item Title: Miscellaneous Electrical Systems (Mech Connections)
Caption: Weathered components
Priority: 1 - Currently Critical

Item #: 794207
Uniformat Number: D5080
Item Title: Miscellaneous Electrical Systems (Mech Connections)
Caption: Weathered components
Priority: 1 - Currently Critical

Item #: 794207
Uniformat Number: D5080
Item Title: Miscellaneous Electrical Systems (Mech Connections)
Caption: Weathered components
Priority: 1 - Currently Critical

Item #: 794207
Uniformat Number: D5080
Item Title: Miscellaneous Electrical Systems (Mech Connections)
Caption: Weather-proof receptacle
Priority: 1 - Currently Critical

Item #: 796334
Uniformat Number: B2080
Item Title: Exterior Metal Fabrications
Caption: Copings
Priority: 2 - Potentially Critical

Item #: 793508
Uniformat Number: B3010
Item Title: Roofing Membrane
Caption: Roofing Membrane - Deteriorated
Priority: 2 - Potentially Critical

Item #: 793508
Uniformat Number: B3010
Item Title: Roofing Membrane
Caption: Roofing Membrane - Debris Collecting Vallies
Priority: 2 - Potentially Critical

Item #: 793508
Uniformat Number: B3010
Item Title: Roofing Membrane
Caption: Roofing Membrane - Flashing Coating Deteriorated
Priority: 2 - Potentially Critical

Item #: 793508
Uniformat Number: B3010
Item Title: Roofing Membrane
Caption: Roofing Membrane - Deteriorated
Priority: 2 - Potentially Critical

Item #: 793508
Uniformat Number: B3010
Item Title: Roofing Membrane
Caption: Roofing Membrane - Overview
Priority: 2 - Potentially Critical

Item #: 793508
Uniformat Number: B3010
Item Title: Roofing Membrane
Caption: Roofing Membrane - Membrane Hole
Priority: 2 - Potentially Critical

Item #: 793508
Uniformat Number: B3010
Item Title: Roofing Membrane
Caption: Roofing Membrane - Deteriorated
Priority: 2 - Potentially Critical

Item #: 793508
Uniformat Number: B3010
Item Title: Roofing Membrane
Caption: Roofing Membrane - Deteriorated
Priority: 2 - Potentially Critical

Item #: 793508
Uniformat Number: B3010
Item Title: Roofing Membrane
Caption: Roofing Membrane - Membrane Hole
Priority: 2 - Potentially Critical

Item #: 793508
Uniformat Number: B3010
Item Title: Roofing Membrane
Caption: Roofing Membrane - Membrane Cracked
Priority: 2 - Potentially Critical

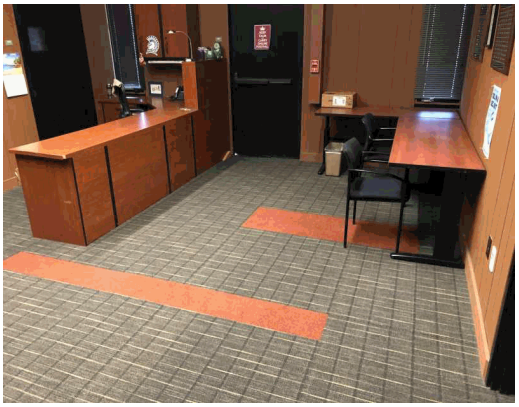
Item #: 793508
Uniformat Number: B3010
Item Title: Roofing Membrane
Caption: Roofing Membrane - Debris Collecting Vallies
Priority: 2 - Potentially Critical

Item #: 801610
Uniformat Number: H2010
Item Title: ADA Assessments
Caption: ADA Accessibility - Walkways
Priority: 2 - Potentially Critical

Item #: 801610
Uniformat Number: H2010
Item Title: ADA Assessments
Caption: ADA Accessibility - Front Entrance Door
Priority: 2 - Potentially Critical

Item #: 801610
Uniformat Number: H2010
Item Title: ADA Assessments
Caption: ADA Accessibility - Exterior Signage
Priority: 2 - Potentially Critical

Item #: 801610
Uniformat Number: H2010
Item Title: ADA Assessments
Caption: ADA Accessibility - Main Lobby
Priority: 2 - Potentially Critical



Item #: 801610
Uniformat Number: H2010
Item Title: ADA Assessments
Caption: ADA Accessibility - Cabinetry
Priority: 2 - Potentially Critical

Item #: 801610
Uniformat Number: H2010
Item Title: ADA Assessments
Caption: ADA Accessibility - Restrooms
Priority: 2 - Potentially Critical

Item #: 796331
Uniformat Number: B3010
Item Title: Roofing - Cedar Shingles
Caption: Organic growth at scuppers
Priority: 3 - Necessary - Not Yet Critical

Item #: 796331
Uniformat Number: B3010
Item Title: Roofing - Cedar Shingles
Caption: Organic growth at scuppers
Priority: 3 - Necessary - Not Yet Critical

Item #: 796331
Uniformat Number: B3010
Item Title: Roofing - Cedar Shingles
Caption: Cedar shingle roofing
Priority: 3 - Necessary - Not Yet Critical

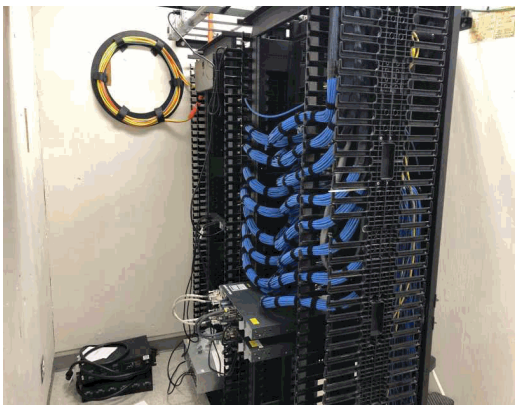
Item #: 796331
Uniformat Number: B3010
Item Title: Roofing - Cedar Shingles
Caption: Organic growth - East elevation
Priority: 3 - Necessary - Not Yet Critical

Item #: 793789
Uniformat Number: C2030
Item Title: Vinyl Composition Tile Flooring
Caption: Vinyl Composition Tile Flooring - Room # 1909 IT Room
Priority: 3 - Necessary - Not Yet Critical

Item #: 793789
Uniformat Number: C2030
Item Title: Vinyl Composition Tile Flooring
Caption: Vinyl Composition Tile Flooring - Room # 1903 Janitorial
Priority: 3 - Necessary - Not Yet Critical

Item #: 794192
Uniformat Number: D6010
Item Title: Data Communications
Caption: Phone
Priority: 3 - Necessary - Not Yet Critical

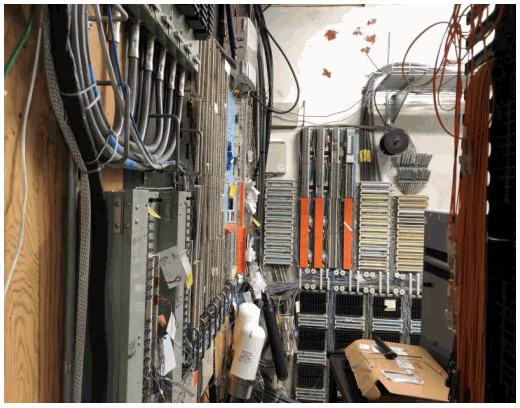
Item #: 794192
Uniformat Number: D6010
Item Title: Data Communications
Caption: Datacom outlets
Priority: 3 - Necessary - Not Yet Critical



Item #: 794192
Uniformat Number: D6010
Item Title: Data Communications
Caption: Equipment racks
Priority: 3 - Necessary - Not Yet Critical

Item #: 794192
Uniformat Number: D6010
Item Title: Data Communications
Caption: Wifi router
Priority: 3 - Necessary - Not Yet Critical

Item #: 794192
Uniformat Number: D6010
Item Title: Data Communications
Caption: Equipment racks
Priority: 3 - Necessary - Not Yet Critical



Item #: 794192
Uniformat Number: D6010
Item Title: Data Communications
Caption: Datacom wiring
Priority: 3 - Necessary - Not Yet Critical

Item #: 793583
Uniformat Number: B2010
Item Title: Exterior Coatings
Caption: Exterior Coatings - Breezeway ceiling
Priority: 4 - Recommended

Item #: 793583
Uniformat Number: B2010
Item Title: Exterior Coatings
Caption: Exterior Coatings - Wood structure and siding
Priority: 4 - Recommended

Item #: 793583
Uniformat Number: B2010
Item Title: Exterior Coatings
Caption: Exterior Coatings - Rafter Tails
Priority: 4 - Recommended

Item #: 793583
Uniformat Number: B2010
Item Title: Exterior Coatings
Caption: Exterior Coatings - Windows panels
Priority: 4 - Recommended

Item #: 793583
Uniformat Number: B2010
Item Title: Exterior Coatings
Caption: Exterior Coating - Window Sills
Priority: 4 - Recommended

Item #: 793583
Uniformat Number: B2010
Item Title: Exterior Coatings
Caption: Exterior Coatings - Breezeway Walls
Priority: 4 - Recommended

Item #: 793583
Uniformat Number: B2010
Item Title: Exterior Coatings
Caption: Exterior Coatings - Wood structure and siding
Priority: 4 - Recommended

Item #: 793583
Uniformat Number: B2010
Item Title: Exterior Coatings
Caption: Exterior Coatings - Restroom door
Priority: 4 - Recommended

Item #: 793524
Uniformat Number: B2020
Item Title: Exterior Windows
Caption: Exterior Windows - Typical
Priority: 4 - Recommended

Item #: 793524
Uniformat Number: B2020
Item Title: Exterior Windows
Caption: Exterior Windows - Typical
Priority: 4 - Recommended

Item #: 793524
Uniformat Number: B2020
Item Title: Exterior Windows
Caption: Exterior Windows - Typical
Priority: 4 - Recommended

Item #: 793524
Uniformat Number: B2020
Item Title: Exterior Windows
Caption: Exterior Windows - Casement Crank
Priority: 4 - Recommended

Item #: 793524
Uniformat Number: B2020
Item Title: Exterior Windows
Caption: Damaged frame - East elevation
Priority: 4 - Recommended

Item #: 793524
Uniformat Number: B2020
Item Title: Exterior Windows
Caption: Deteriorated frames - North elevation
Priority: 4 - Recommended

Item #: 793774
Uniformat Number: C1010
Item Title: Interior Coatings
Caption: Interior Coatings - International Programs Lobby
Priority: 4 - Recommended

Item #: 793774
Uniformat Number: C1010
Item Title: Interior Coatings
Caption: Interior Coatings - Room # 1939
Priority: 4 - Recommended

Item #: 793774
Uniformat Number: C1010
Item Title: Interior Coatings
Caption: Interior Coatings - Room # 1943
Priority: 4 - Recommended

Item #: 793774
Uniformat Number: C1010
Item Title: Interior Coatings
Caption: Interior Coatings - Administration Office Lobby
Priority: 4 - Recommended

Item #: 793774
Uniformat Number: C1010
Item Title: Interior Coatings
Caption: Interior Coatings - Room # 1904
Priority: 4 - Recommended

Item #: 793774
Uniformat Number: C1010
Item Title: Interior Coatings
Caption: Interior Coatings - Hallway
Priority: 4 - Recommended

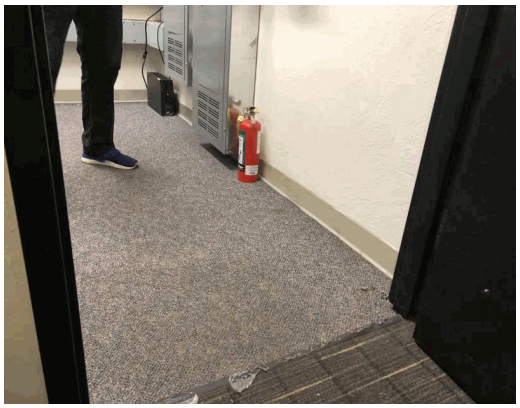
Item #: 793774
Uniformat Number: C1010
Item Title: Interior Coatings
Caption: Interior Coatings - Mail Room
Priority: 4 - Recommended

Item #: 793766
Uniformat Number: C2030
Item Title: Carpeting
Caption: Tile Carpeting - Room # 1936
Priority: 4 - Recommended

Item #: 793766
Uniformat Number: C2030
Item Title: Carpeting
Caption: Tile Carpeting - Room # 1946
Priority: 4 - Recommended

Item #: 793766
Uniformat Number: C2030
Item Title: Carpeting
Caption: Tile Carpeting - Room # 1948
Priority: 4 - Recommended

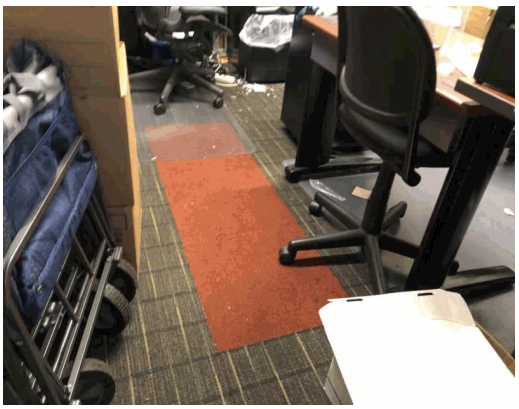
Item #: 793766
Uniformat Number: C2030
Item Title: Carpeting
Caption: Tile Carpeting - Lobby Area
Priority: 4 - Recommended



Item #: 793766
Uniformat Number: C2030
Item Title: Carpeting
Caption: Sheet Carpeting - Room # 1907
Priority: 4 - Recommended

Item #: 793766
Uniformat Number: C2030
Item Title: Carpeting
Caption: Tile Carpeting - Mail Room
Priority: 4 - Recommended

Item #: 793766
Uniformat Number: C2030
Item Title: Carpeting
Caption: Tile Carpeting - Room # 1904
Priority: 4 - Recommended



Item #: 793766
Uniformat Number: C2030
Item Title: Carpeting
Caption: Tile Carpeting - Room # 1928
Priority: 4 - Recommended

Item #: 793943
Uniformat Number: D3040
Item Title: Split-System Air Conditioners
Caption: Nameplate
Priority: 4 - Recommended

Item #: 793943
Uniformat Number: D3040
Item Title: Split-System Air Conditioners
Caption: Split system air-cooled condensing unit
Priority: 4 - Recommended

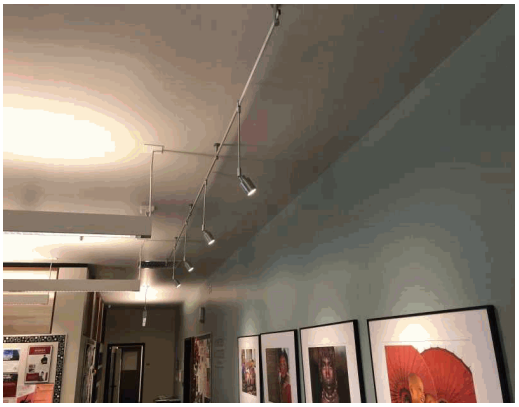
Item #: 794205
Uniformat Number: D5040
Item Title: Interior Lighting
Caption: Pendant-mounted light fixtures
Priority: 4 - Recommended

Item #: 794205
Uniformat Number: D5040
Item Title: Interior Lighting
Caption: Wall switches
Priority: 4 - Recommended

Item #: 794205
Uniformat Number: D5040
Item Title: Interior Lighting
Caption: Emergency egress light
Priority: 4 - Recommended

Item #: 794205
Uniformat Number: D5040
Item Title: Interior Lighting
Caption: Exit sign
Priority: 4 - Recommended

Item #: 794205
Uniformat Number: D5040
Item Title: Interior Lighting
Caption: Wall switches
Priority: 4 - Recommended



Item #: 794205
Uniformat Number: D5040
Item Title: Interior Lighting
Caption: Track lighting
Priority: 4 - Recommended

Item #: 794205
Uniformat Number: D5040
Item Title: Interior Lighting
Caption: Surface-mounted CFL fixtures
Priority: 4 - Recommended

Item #: 794205
Uniformat Number: D5040
Item Title: Interior Lighting
Caption: Exit sign
Priority: 4 - Recommended

Item #: 794205
Uniformat Number: D5040
Item Title: Interior Lighting
Caption: Lighting control panel
Priority: 4 - Recommended

Item #: 794205
Uniformat Number: D5040
Item Title: Interior Lighting
Caption: Emergency egress light
Priority: 4 - Recommended

Item #: 794205
Uniformat Number: D5040
Item Title: Interior Lighting
Caption: Dimmer switch
Priority: 4 - Recommended

Item #: 794205
Uniformat Number: D5040
Item Title: Interior Lighting
Caption: Occupancy sensor switch
Priority: 4 - Recommended

Item #: 794215
Uniformat Number: D7010
Item Title: Access Control and Intrusion Detection
Caption: Keyed door lock
Priority: 4 - Recommended

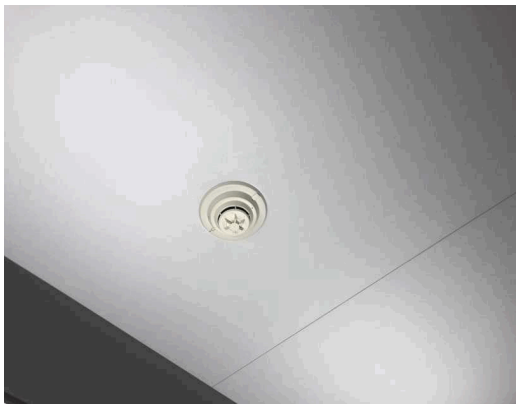
Item #: 794215
Uniformat Number: D7010
Item Title: Access Control and Intrusion Detection
Caption: Security keypad
Priority: 4 - Recommended

Item #: 794215
Uniformat Number: D7010
Item Title: Access Control and Intrusion Detection
Caption: Motion detector
Priority: 4 - Recommended

Item #: 794215
Uniformat Number: D7010
Item Title: Access Control and Intrusion Detection
Caption: Security panel
Priority: 4 - Recommended

Item #: 794219
Uniformat Number: D7030
Item Title: Electronic Surveillance
Caption: Security camera
Priority: 4 - Recommended

Item #: 794217
Uniformat Number: D7050
Item Title: Fire Detection and Alarm
Caption: Pull station
Priority: 4 - Recommended

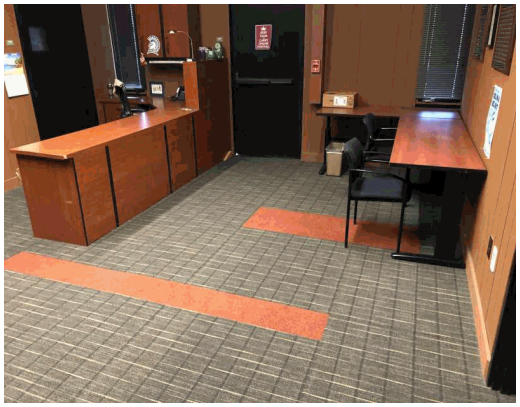


Item #: 794217
Uniformat Number: D7050
Item Title: Fire Detection and Alarm
Caption: Smoke detector
Priority: 4 - Recommended

Item #: 794217
Uniformat Number: D7050
Item Title: Fire Detection and Alarm
Caption: Extender panel
Priority: 4 - Recommended

Item #: 794217
Uniformat Number: D7050
Item Title: Fire Detection and Alarm
Caption: Strobe light
Priority: 4 - Recommended

Item #: 794217
Uniformat Number: D7050
Item Title: Fire Detection and Alarm
Caption: Horn/strobes
Priority: 4 - Recommended



Item #: 793665
Uniformat Number: E2010
Item Title: Fixed Furnishings
Caption: Fixed Furnishings - Countertop De-laminating
Priority: 4 - Recommended

Item #: 793665
Uniformat Number: E2010
Item Title: Fixed Furnishings
Caption: Fixed Furnishings - Breakroom
Priority: 4 - Recommended

Item #: 793665
Uniformat Number: E2010
Item Title: Fixed Furnishings
Caption: Fixed Furnishings - Breakroom
Priority: 4 - Recommended

Item #: 793665
Uniformat Number: E2010
Item Title: Fixed Furnishings
Caption: Fixed Furnishings - Shelf De-laminating
Priority: 4 - Recommended

7. PLANNING

System Summary List - By Priority

Item ID	Uniformat	Description	Critical Issues	Recommendation	Pri	Act Time	Life Cycle	Estimated Cost
794199	D5020 Arc Flash Hazard Analysis and Short Circuit Coordination	Electrical arc flash hazard analysis and short circuit coordination	No evidence of a short circuit coordination study or arc flash hazard assessment. Electrical equipment was not observed as having the required safety information posted.	Perform a short circuit coordination study and an arc flash hazard analysis. Make the required changes to the electrical system to ensure proper circuit coordination and to minimize electrical flash hazards. Once completed, appropriate PPE should be purchased for qualified personnel. All electrical equipment must be labeled with the necessary safety information specific to each piece of equipment. (Price reflects the cost of engineering for short circuit coordination and arc flash assessment only.)	1	0	30	$12,699
794207	D5080 Miscellaneous Electrical Systems (Mech Connections)	Electrical wiring and components that support mechanical systems.	Some components are starting to show signs of weathering and wear and tear. As technology advances, equipment deteriorates, and mechanical equipment is replaced, upgrades to the electrical systems and wiring may be required. The cover is missing from a receptacle on the roof.	Replace the deteriorated and/or rusted electrical equipment and associated wiring for mechanical equipment with new equipment and wiring. Wiring ages with equipment and should be replaced as the equipment is replaced. Replace the receptacle cover on the roof.	1	1	20	$5,644
796334	B2080 Exterior Metal Fabrications	Aluminum copings	Joints in the copings were observed to be lacking proper sealed connections.	Inspect the joints in the copings and install sealed connections where missing.	2	2	75	$3,088
793508	B3010 Roofing Membrane	Modified bituminous roofing system with a fluid applied reflective top coating	The top coating is starting to deteriorate and fail, evidence of coatings on the cedar shingles at scuppers. The bituminous membrane has several areas that are cracking and deteriorated. There is debris on the mansard roof valleys.	Initiate a periodic maintenance program to clear the scuppers and gutters, remove debris, and monitor the condition of the roof. Repair damaged areas of the bituminous roofing and apply a new layer of reflective top coating.	2	2	20	$80,192

Item ID	Uniformat	Description	Critical Issues	Recommendation	Pri	Act Time	Life Cycle	Estimated Cost
801610	H2010 ADA Assessments	General accessibility observation of 5-points	Accessibility features for this facility were observed to be either partially or fully non-compliant with the applicable scoping provisions and current accessibility standards which may include, but are not limited to, interior and exterior accessible routes, restrooms, communication systems, drinking fountains, occupancy controls, fixed furnishings, doors and door hardware, handrails and guards, wayfinding and signage systems, walkways, and vehicular parking areas.	Consider a comprehensive accessibility study for remedial recommendations and compliance with the current applicable accessibility standards. Associated action cost is an allowance for the accessibility study for this recommendation based on the building square footage and/or minimum cost of assessment. Action cost represents a rough order of magnitude cost. Actual cost will be provided based on detailed programmatic requirements provided by the client.	2	2	75	$7,410
796331	B3010 Roofing - Cedar Shingles	Cedar shingle roofing	The shingles appear to be moderately deteriorated throughout but are more severely deteriorated beneath the scuppers from the upper roof where heavy organic growth was observed.	Replace the cedar shingle roofing.	3	3	20	$512,162
793789	C2030 Vinyl Composition Tile Flooring	Vinyl Composite Tile (VCT) Flooring	Damaged and missing tile were observed.	Replace the damaged VCT flooring. Consider removing the VCT flooring and adhesive from the mechanical and IT rooms and sealing the concrete slabs beneath.	3	4	12	$2,139
794192	D6010 Data Communications	The building has a voice and data network consisting of structured equipment boards, cable racks, wiring systems, WIFI, and outlets that are maintained by an internal IT department. .A wired phone system is present.	Insufficient card reader access, door sweeps, and sealing of conduit in the IT rooms 1911 and 1944. As technology advances and equipment ages upgrades to the systems will be required.	Upgrade card reader access, door sweeps, and properly seal wall penetrations and conduit as required. Upgrade the data and voice cabling systems throughout the facility in accordance with the facility's needs and equipment demands as remodeling and upgrades are accomplished.	3	3	20	$24,976
793583	B2010 Exterior Coatings	Painted wood siding, overhangs, soffits, fascias, window trim, louvers, and doors.	The paint finishes are moderately deteriorated throughout the exterior of the building and can be expected to require repainting within the scope of this report based on the anticipated rate of deterioration.	Prepare surfaces and apply new finishes to the painted exterior elements of the building. Replace elastomeric sealants around wall penetrations as needed.	4	7	10	$84,663
793524	B2020 Exterior Windows	Exterior windows include wood-frame casement windows, fixed transoms wood windows with single-pane glazing	The windows have thermally inefficient single-pane glazing. Many of the windows have deteriorated frame elements.	Replace the windows with a high-performance energy-efficient system.	4	10	30	$132,454

1900 Administration

Item ID	Uniformat	Description	Critical Issues	Recommendation	Pri	Act Time	Life Cycle	Estimated Cost
793774	C1010 Interior Coatings	Interior coatings consist of painted plaster/gypsum wallboard, wood surfaces, window and door casement, and wood baseboard moldings	Minor surface damage was observed on the plaster/gypsum wallboard surfaces throughout the building. The interior painted surfaces of the building can be expected to require repair and repainting within the scope of this report.	Repair minor wall surface damage under scheduled maintenance project in the mailroom. Apply new finish coatings within the prescribed action time frame.	4	9	100	$98,773
793766	C2030 Carpeting	Sheet and tile Carpeting	The carpeting is moderately worn with stains and traffic pattern registration in a number of areas.	Replace the carpeting.	4	7	5	$97,555
793943	D3040 Split-System Air Conditioners	Split system air conditioning unit with an indoor evaporator and remote air-cooled condensing unit, includes refrigeration piping and insulation.	No critical issues observed or reported other than normal aging, the equipment appears to be well maintained. However, the equipment will be due for replacement within the time frame of this report.	Monitor for characteristics inconsistent with normal operation, recurring and/or increasing maintenance repair needs. Replace the equipment within the action timeframe.	4	9	15	$9,966
794205	D5040 Interior Lighting	Interior lighting consists mainly of pendant-mounted, surface-mounted fluorescent fixtures along with track lighting with incandescent lamps which are controlled using light switches, occupancy sensors, and lighting control panels. There are other light fixture types that exist in smaller quantities. Exit signs are green or red letters with a white or brushed aluminum background, some contain integral battery backup and emergency lighting. Emergency lighting is also accomplished with wall-mounted egress lighting with integral battery backup.	The lighting systems have been updated recently with new fluorescent fixtures. No deficiencies or negative impact issues observed.	Consider a program to replace all fluorescent lamps with new LED-type lamps, especially as the fluorescent lamps and/or ballasts fail and need replacement or during other renovations.	4	10	30	$45,154
794215	D7010 Access Control and Intrusion Detection	Access control and intrusion detection consist of keyed door locks and motion detectors routed through a monitored security panel to a wall-mounted controller.	No deficiencies or negative impact issues observed however, as technology advances and equipment ages, upgrades to the systems will be required.	Upgrade the system equipment, cabling, and devices throughout the building in accordance with the needs of the facility and as equipment demands, or as remodeling and upgrades are accomplished. Consider installing proximity card readers for added security.	4	6	10	$21,166
794219	D7030 Electronic Surveillance	The system consists of security surveillance cameras located on the exterior of the building that is routed to a central system.	As technology advances and equipment ages, upgrades to the surveillance systems will be required. No other deficiencies or negative impact issues observed.	Upgrade the cabling systems and end devices throughout the facility per the needs of the facility and equipment demands or as remodeling and upgrades are accomplished.	4	6	10	$29,632

1900 Administration

Item ID	Uniformat	Description	Critical Issues	Recommendation	Pri	Act Time	Life Cycle	Estimated Cost
794217	D7050 Fire Detection and Alarm	Fire detection and alarm consist of the main fire alarm panel located in Building 6000, horn/strobes, heat/smoke detectors, extender panels, and wiring.	No deficiencies or negative impact issues observed however, as technology advances and equipment ages, upgrades to the systems will be required.	Continue to perform the manufacturer's recommended testing. Upgrade and/or replace the system components as necessary to ensure early detection of a fire and to allow maximum evacuation time and limited damage.	4	8	10	$35,276
793665	E2010 Fixed Furnishings	Interior fixed furnishings consist of plastic laminate countertops, plastic laminate base cabinetry, and plastic laminate wall cabinetry.	Damaged plastic laminate finishes were observed.	Replace deteriorated cabinets and countertop system within the prescribed action timeframe.	4	7	15	$45,859

8. APPENDICES

Glossary

Report Terminology

Action Cost is the total price of a specified quantity of a component, assembly or system to be repaired or replaced multiplied by the unit cost. (See Unit Cost)

Action Timeframe is the recommended window of time in which to make a repair or replacement.

Americans with Disabilities Act (ADA) of 1990 (ADA) is a federal civil rights legislation that prohibits discrimination and ensures equal opportunity for persons with disabilities in employment, State and local government services, public accommodations, commercial facilities, and transportation.

Assembly is a group of parts or components that fit together to form a self- contained unit or system.

Asset is a building or structure, a portion of a structure, or any part of facility infrastructure that is distinguishable from its surroundings by use, date of construction, construction type, specific systems or other factors that make it an identifiable portion of the owner's property.

Beyond Useful Life is the period past which a building component, assembly, or system in a building or facility is expected to be useable for the purpose for which it was intended. Some building components, assemblies or systems may continue to function indefinitely but may be at greater risk of failure, and may be operating at a reduced efficiency.

British Thermal Unit (BTU) is the amount of energy needed to raise the temperature of one pound of water by one degree Fahrenheit. BTU is most often used as a measure of power in steam generation, heating, and air conditioning. The unit MBTU is defined as one thousand BTU's, and should not be confused with MBH which is the number of thousands of BTU's produced in one hour.

Building Gross Square Footage is the total space in square feet calculated from the exterior perimeter of the building per level. In a one story building this is also referred to as the building footprint. This is always greater than the net square footage as it includes the thickness of exterior walls.

Building Owners and Managers Association, International (BOMA) is an industry association founded in 1907, BOMA represents the owners and managers of all commercial property types.

Calculated Current Replacement Value(CRV) is the sum of all deficiency records plus the modeled aggregate. When a report includes project costs, the direct cost CRV will be escalated by the percentage selected for project costs.

Capital Improvement (or Capital Renewal) is the addition of a permanent structural improvement, addition, restoration or replacement of a component, assembly or system of a property that will either enhance the property's overall value or increases its useful life.

Cubic Feet per Minute (CFM) is a unit of volumetric capacity. It is commonly used by manufacturers of blowers and compressors. CFM typically relates to air flow through, in or out of a given system or unit.

Component is a distinguishable element within a building, assembly or service system.

Current Replacement Value (CRV) is the cost of labor, material, and equipment, including demolition, at the present time, which would be required to replace a building or asset. The CRV does not include design, general conditions, a contractor's overhead and profit or land acquisition.

Deferred Maintenance is upkeep to a building or asset that has been postponed. The cost of deferred maintenance is an amount needed but not yet expended for repairs, restoration, or rehabilitation of an asset. Deferred maintenance is included in the numerator of the FCI calculation.

Deferred Maintenance Deficiencies (DMD) are components, assemblies and systems in a building or asset that are at risk of failing, have failed, or are beyond their useful life, and in need of maintenance, repair or replacement. DMD's are typically seen in greater frequency in older facilities requiring corrections to maintain infrastructure, systems and components and do not necessarily reflect the level of effort of maintenance initiatives.

Deferred Maintenance and Capital Renewal (DM+CR) / Current Replacement Value (CRV) is a measure of the percentage of a building that has reached the end of its useful life and needs to be replaced, or in a condition that must be remediated (Numerator ÷ Denominator).

Deficiency is an inadequacy in a building component, assembly or system that is in need of repair, renewal or replacement.

Discipline refers to knowledge areas in architecture and engineering that are applied to buildings and

facilities. UniFormat disciplines are categorized as: ADA Assessment (when applicable,) Architectural. Civil, Communications, Electrical, Fire Protection, Mechanical, Other Items, Plumbing, Safety and Security, and Structural.

Discipline Condition Index (DCI) is an industry-standard index that objectively measures the current condition of all building components, assemblies, or service systems within an asset. SCI utilizes the UniFormat classification system, and is derived from the equation SCI = Repair or Replacement Cost ÷ Replacement Value (of component, assembly or system)

Facility is a structure, building and/or infrastructure system that supports activities and or operations of its owner(s).

Facility Condition Index (FCI) is an industry-standard index that objectively measures the current condition of a facility, allowing comparison both within and among other facilities. To determine FCI for any given asset, the total cost of remediating deferred maintenance deficiencies (DMD) is divided by the current replacement value (CRV,) expressed mathematically as: DMD ÷ CRV = FCI. Lower FCI values represent an asset in better condition; and conversely higher FCI values represent an asset in worse condition.

Facility Optimization Solutions is a service of CannonDesign comprised of architects, engineers, building scientists, construction cost estimators and software specialists dedicated to developing highly accurate facility management tools to empower building users, managers and owners to execute data-driven and empirically based strategic facility planning.

Gallons per Minute is a measurement unit of flow, that equals a flow rate of one gallon in one minute of water or another liquid through a given system or unit.

Grandfathered is a provision in a statute or building code that exempts conditions, components and/or systems in a building from new regulations that would otherwise prevent continued use of those items. Typically, building codes allow for some individual in-kind replacements of components, but most renovation activities of assemblies and systems, including additions and new construction, trigger replacements with current code compliant components, assemblies and systems.

Horsepower is a unit of measurement of power, or the rate at which work is done. The most common use of horsepower is the power or size of a motor.

Kilowatt is equal to one thousand watts. This unit is typically used to express the output power of

engines and the power of electric motors, tools, machines, and heaters.

Impact of Failure is effect a component, assembly or system's malfunction or ceased operation has on the building or facility to which it serves.

Life Safety refers to basic standards of building safety regarding construction, egress, fire protection and occupancy of a building or facility. Life Safety requirements are regulated by State and Local building codes, and national standards.

Maintenance / Routine Maintenance / Preventative Maintenance is the effort required to keep a component, assembly or system in a building or facility in good working condition and functioning to the proper level for which it was intended to perform.

MasterFormat is sometimes referred to as the "Dewey Decimal System" of building construction, MasterFormat is a product of the Construction Specifications Institute (CSI) and Construction Specifications Canada (CSC).

Modeled Aggregate is a method used to capture the value of items that are not included in the deficiency records.

Priority is an assignment of a funding amount needed in a given calendar year, or group of years and is further defined by a recommended term need i.e. immediate, short-term, or long-term need.

Pounds per Square Inch is a unit of pressure or of stress based. It is the pressure resulting from a force of one pound-force applied to an area of one square inch.

Recommended Action Date or Time Frame is the action date by when a specific deficiency should be scheduled for correction.

Renovation is the general description of activities intended to extend the service life of a facility or portion of a building, system, or component. Renovation may include repair, replacement, or modernization to more current requirements, standards, codes, regulations, efficiencies or other enhancements.

Replacement is the process of removal of an existing building component, assembly or system and the installation of new component, assembly or system.

Repair refers to restoring a component, assembly or system in a facility to its original condition.

Risk of Failure is the current potential of a component, assembly or system to malfunction or cease operation as intended.

Roof Square Footage is the total space in square feet calculated from the exterior perimeter of the roof edge.

System is a group of components, assemblies and/or equipment that form an operational portion of a building or facility. An example is a mechanical system, made up of many components including diffusers, assemblies that include ductwork and dampers, and equipment including air handlers, chillers and boilers.

System Condition Index (SCI) is an industry-standard index that objectively measures the current condition of a building component, assembly, or service system within an asset. SCI utilizes the UniFormat classification system, and is derived from the equation SCI = Repair or Replacement Cost ÷ Replacement Value (of component, assembly or system)

TON is a unit of measure used in the refrigeration and air conditioning industry to measure the rate of heat absorption. A standard ton of refrigeration is 12,000 BTU per hour. Prior to the introduction of mechanical refrigeration, cooling was accomplished by delivering ice. Installing mechanical refrigeration with a one ton capacity replaced the daily delivery of one ton of ice.

UniFormat is a standard for classifying building specifications, cost estimating, and cost analysis in the U.S. and Canada. The elements are major components common to most buildings and facilities The primary categories are: (A) Substructure, (B) Shell or envelope, (C) interiors, (D) Services, (E) Equipment, (F) Special Construction & Demolition, (G) Building Site work. The system is used to provide economic evaluation of facility improvement projects. It was developed through an industry and government consensus and have been widely accepted as an American Society for Testing and Materials (ASTM) standard.

Unit Cost is the price per individual component, assembly or system in a building or facility, and measured by count (each,) linear footage (LF,) square footage (SF,) building gross square footage (BGSF,) roof square footage (RSF,) stair flight (FLIGHT,) stair riser (RISER,) or elevator floor level (STOP.)

Useful Life or Expected Useful Life is the period during which a building component, assembly, or

system in a building or facility is expected to be useable for the purpose for which it was intended. It may not necessarily correspond to the item's actual physical or economic life. Some building systems can continue to function well beyond their intended useful life, but may be less efficient, see "Beyond Useful Life."

Wall Square Footage is the surface area of an interior or exterior wall.

Watt is a unit of measure in electricity equal to the power in a circuit in which a current of one ampere flows across a potential difference of one volt. Watts are commonly used to describe the size of lights and some equipment.

ABBREVIATIONS AND UNITS OF MEASURE

ADA - Americans with Disabilities Act

ANSI - American National Standards Institute

ASTM - American Society for Testing and Materials

BGSF - Building Gross Square Footage

BOMA - Building Owners and Managers Association

BTU / MBTU / MMBTU - One British Thermal Unit / One-Thousand BTUs / One-Million BTUs

CFL - Compressed Fluorescent Lights

CFM - Cubic Feet per Minute

CRV - Current Replacement Value

CSC - Construction Specifications Canada

CSI - Construction Specifications Institute

DCI - Discipline Condition Index

FCA - Facility Conditions Assessment

FCI - Facility Condition Index

FDC - Fire Department Connection

FOS - Facility Optimization Solutions

GAL - Gallon

GPM - Gallons per Minute

HID - High Intensity Discharge

HP - Horsepower

IN - Inch

KW - Kilowatt

LED - Light Emitting Diode

MBH or MBH/H - One-Thousand BTUs/hr.

PPE - Personal Protective Equipment

PSI - Pounds per Square Inch

RFID - Radio-Frequency Identification

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