Appendix A

Facilities Assessment Markups

The Indianapolis Public Library 2024 Facility Assessment Plan • March 2024

The INDIANAPOLIS PUBLIC Library

Facilities

Facility Condition Assessment

Indianapolis Public Library

February 27, 2023

Alpha™ Facilities Solutions

in partnership with

Brightly

Alpha Facilities Solutions
Building perspective.

4085 Cibolo Canyons, Suite 200, San Antonio, TX 78261
Phone: 210-492-5742 | answers@alphafacilities.com
www.alphafacilities.com

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Introduction

Indianapolis Public Library entered into a contract with Brightly whom is partnered with ALPHA Facilities Solutions, LLC (ALPHA) to provide facility condition assessment and implementation services for Brightly's Software solution used to forecast facility needs and justify funding requirements. The project was completed by a team consisting of engineers, architects, and construction professionals. Data collected during the Facility Condition Assessment phase of the project was input into Brightly Software in order to estimate current and future funding requirements for facility sustainment. This predictive approach to asset management is known as Capital Planning and is used to anticipate funding and maintenance needs many years into the future.

The scope of work included the following:

1. Identify and document current and forecasted conditions of approximately 886,652 square feet of facilities.
2. Identify and document current site needs.
3. Identify and document remaining service life of major building systems to include envelope; architectural finishes; roofs; electrical; plumbing; and heating, ventilation, and air conditioning (HVAC).
4. Provide Rough Order of Magnitude (ROM) cost estimates for building system renewal and site repairs.
5. Forecast facility renewal requirements based on lifecycle analysis of existing systems over the span of the next 20 years for each facility.
6. Provide a Facility Condition Index (FCI) measurement to illustrate the relative condition of all facilities.

Acknowledgement

Finally, the ALPHA Team would like to take this opportunity to thank the Indianapolis Public Libraries for allowing ALPHA to help them achieve their goals. We would also like to thank Adam Parsons and library staff for investing a substantial amount of their valuable time to work with us on this project; their knowledge of the facilities was superb and their contributions were invaluable.

Facility Condition Assessment Approach

Brightly Software was used to document facility conditions, to determine current requirements, and to forecast future requirements for facilities within the Indianapolis Public Library. Parametric cost models contained within Brightly Software were assigned to most buildings while new cost models were developed in instances where an appropriate cost model did not exist. New cost models developed by the ALPHA Team are also contained within Brightly Software. System and component life cycles used within the cost models are based on average service life as shown in the Preventive Maintenance Guidebook: Best Practices to Maintain Efficient and Sustainable Buildings published by Building Owners and Managers Association (BOMA) International. When life cycle information is not provided by BOMA, we used our experience and professional judgment to suggest appropriate average service life for those components and systems. Unit costs, which are used to calculate renewal requirements, are also built into the cost models. Life cycles and unit costs have been adjusted on a location-specific basis as appropriate or as requested by library personnel.

Although there are many factors that are important to obtain a successful outcome for a facility condition assessment, three provide the foundation for establishing a reliable cost model for each building. Those three factors are related to the following basic building information:

- Gross area
- Date built
- Building/location name

The gross area of a building, also known as gross square footage (GSF), is one of the basic building blocks for determining current replacement value (CRV) and generating system renewal costs, which are major components of a parametric-based effort. The date built for each facility provides the basis for establishing life cycles for many, and in some cases, all major building systems. Finally, although not critical to the outcome of the project, agreeing upon a building/location naming convention that is meaningful to all stakeholders enhances the usefulness and readability of the facility condition assessment report. Please note that GSF for each building was provided by the Indianapolis Public Libraries and generally was not validated as part of this project. It should be noted that some building names may have changed at the direction of the Indianapolis Public Libraries from what was indicated in documentation initially provided. Locations, names, dates built, and GSF data contained in this report are as shown in your Brightly Software account.

In order to determine basic building information, the ALPHA Team met with designated Library personnel to discuss Library-specific information such as building construction/renovation programs and building naming conventions. Scaled floor and site plans were generally not available, so square footages associated with additions and site features were obtained from a combination of sources to include Library records, satellite imagery, and professional judgment.

It is worth noting that, although most concealed systems may appear to be functional, the risk of failure increases with time when they have exceeded the average service life as predicted by BOMA. Consequently, this effort assumes that replacement of concealed systems that have exceeded the average service life as predicted by BOMA is appropriate. Based on the availability of resources and the tolerance for risk or potential out-of-service conditions, the Library may elect to defer immediate replacement of concealed systems that have exceeded average service life as appropriate.

Building condition requirements and site infrastructure requirements are documented within Brightly Software and based on estimated quantities, RS Means, and client supplied data when available.

Prioritization of Needs

Finally, all needs contained within Brightly Software have been assigned a default priority based on importance to mission performance. Therefore, systems whose failure might render a building not suitable for occupancy have been ranked with a higher priority than those systems that have minimal or no impact on a facility's suitability for occupancy. For example, replacement of an HVAC system might take priority over replacement of flooring. The priority for a specific need can be changed if required and priorities can be further refined if desired by assignment of scores of one through 99. Although additional priorities are available within Brightly Software, priorities used for this project are:

- High
- Medium
- Low

Needs contained within Brightly Software have been ranked in terms of urgency in order to aid in the prioritization for allocation of funds. The priorities of applicable systems for this project are as follows:

High

- Electrical - Branch Wiring
- Electrical - Lighting
- Electrical - Other Electrical Systems
- Electrical - Service & Distribution
- Fire Protection - Other Fire Protection Systems
- Fire Protection - Sprinklers
- HVAC - Controls & Instrumentation
- HVAC - Cooling Generating Systems
- HVAC - Distribution Systems
- HVAC - Heat Generating Systems
- HVAC - Terminal & Package Units
- Roofing

Medium

- Conveying
- Exterior Enclosure - Exterior Doors
- Exterior Enclosure - Exterior Windows
- Interior Construction - Interior Doors
- Plumbing - Domestic Water Distribution
- Plumbing - Plumbing Fixtures
- Plumbing - Sanitary Waste

Low

- Exterior Enclosure - Exterior Walls
- Interior Construction - Fittings
- Interior Finishes - Ceiling Finishes
- Interior Finishes - Floor Finishes
- Interior Finishes - Wall Finishes
- Vehicular Pavements

Building Performance Metrics

As part of the FCA process, a facility condition index (FCI) was calculated for each facility. The FCI is used to quantify a facility's physical condition at a specific point in time and is calculated using the expired system replacement costs (costs associated with systems that are beyond average service life) and the current replacement value (CRV) of the building. Expired system replacement costs consist of work that is necessary to restore the facility to a condition equivalent to its original (like new) state.

The FCI can be helpful in several ways to include:

- Comparing the condition of one facility to a group of facilities
- Tracking trends (the extent of improvement or deterioration over time)
- Prioritizing capital improvement projects
- Making renovation versus replacement decisions

The FCI is calculated as shown in the example below.

Example 1: Total expired system replacement costs (Requirements) = $3,000,000

Current Replacement Value (CRV) = $10,000,000

$$FCI = \frac{\$3,000,000}{\$10,000,000} = .30$$

It is important to note there is no recognized standard for what constitutes an acceptable or unacceptable FCI. For example, the International Facility Management Association (IFMA) indicates that building condition is often defined in terms of the FCI as follows:

1. Good - 0% to 10%,
2. Fair - 11% to 20%,
3. Poor - greater than 20%

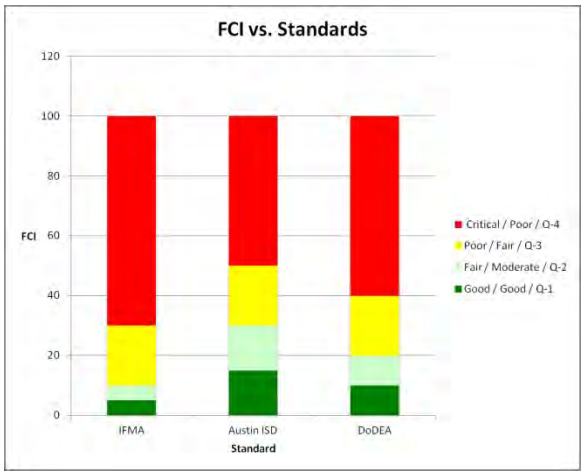


Figure 1. FCI Standards

The Renovate Versus Replacement Question

A question that often arises is at what point does it make sense to replace a facility rather than to renovate it? Again, there is no industry standard, but conventional thinking is that replacement of a facility should be seriously considered when the FCI rises above 50%. However, the FCI is not the only consideration when making renovation versus replacement decisions. One consideration that should be taken into account is whether a facility is functionally adequate for the intended use. Another consideration revolves around the magnitude of needed renovations. For example, when cost of renovation reaches or exceeds 50% of the replacement cost of the facility, requirements to meet Americans with Disabilities Act (ADA), Life Safety and possibly other codes may be triggered. When the requirement to meet current building codes or civil rights statutes, such as those mentioned above are triggered, additional costs will be incurred. Although it is not possible to predict what the additional costs will be until project requirements are identified and cost estimates are prepared, it has been our experience that additional cost can be expected to range from 5% to 20% depending upon the age of the facility.

Categorization of Costs

At this point, it is appropriate to review the different types of costs associated with facility renovation and construction and how they apply to this project. According to the American Institute of Architects (AIA), facility capital costs are normally subdivided into three major categories - site costs, hard costs, and soft costs. Site costs are normally associated with the owner's initial land acquisition and development costs for a project and are not a consideration in the context of this project. Hard costs are associated with direct construction costs while soft costs can be defined as any indirect costs incurred in addition to the direct construction costs. Soft costs include a variety of costs such as design fees, legal fees, taxes, insurance, owner's administration costs, and financing costs. Cost data produced by the parametric cost models within CFD includes hard costs including consideration of renewal costs, which accounts for the additional cost associated with replacing an existing building system versus constructing the system in a new facility. Cost information within this report does not include soft costs.

It is important to remember that cost models are intended to produce rough order of magnitude (ROM) costs for purposes of developing a baseline from which to establish an FCI for each facility and to facilitate capital planning. It is not unusual for those new to the parametric cost estimating/life cycle analysis process to have expectations that are not completely in alignment with what the process is intended to yield. For example, the parametric cost estimating/life cycle analysis process generates ROM budgeting-level costs while costs that are more detailed are derived during formal preliminary design and final design cost estimating processes.

As a point of interest, *APPA: Leadership in Educational Facilities* published a paper citing research conducted by the *Building Research Board of the National Research Council* indicating, “Underfunding of maintenance and repair is a widespread and persistent problem.” The council concluded, “That an appropriate total budget allocation for routine maintenance and capital renewal is in the range of two to four percent of the aggregate current replacement value (CRV) of those facilities (excluding major infrastructure). When a backlog of deferred maintenance has been allowed to accumulate, spending must exceed this minimum level until the backlog has been eliminated.

Facility Condition Assessment

Facility-related data contained in this report was developed at the building level, which in turn, was rolled up at the campus level. Likewise, site infrastructure requirements were rolled up at the campus level. All data was then rolled up to provide an aggregate view of District facilities. Data within this report has been grouped as follows:

- Library

This report includes the following content, which is found at campus and/or Executive Summary levels:

- Facility Description: Summary of Findings
- Current Needs (2022)
- Forecasted Needs (2027)
- Current and Forecasted Needs: Summarized by Reporting Period
- Current and Forecasted Needs: Summarized by System
- Need Priorities (High - Medium - Low)

Appendix B - Supplemental Information provides additional information the reader may find useful.

Site and Infrastructure Condition Assessment

A site infrastructure assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

- Good condition
- In need of repair
- In need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth Aerial photographs were used in lieu of site plans.

The site assessment was performed and the subsequent results grouped by location. Findings for each location were divided as follows:

- Pedestrian Pavements
- Vehicular Pavements
- Site Development

Please note that not all locations have all of the various infrastructure systems present.

We determined unit pricing for the various deficiency requirements by referencing 2023 RSMeans Building Construction Cost Data and Assembly Cost Data when available; industry sources were used as a supplemental source for unit pricing when needed.

Overview of Findings

The Facility Condition Assessment project included 24 permanent facilities, totaling 886,652 square feet. The average FCI for the facilities assessed is 3 while the average FCI in five years is estimated to be 4 assuming current facility sustainment funding levels. The assessment team made the following general observations:

1. The facilities assessed where generally in good to fair condition. The common age of the systems placed many inside their expected useful life according to BOMA. In some cases, additional testing such as Infrared electrical testing and water quality testing could add additional useful life to expired systems. If extended a reassessment is recommended in 3-5 years to properly anticipate capital replacement.
2. Some of the electrical service and distribution systems were past their useful life as defined by BOMA. It is recommended that infrared testing be performed on these systems prior to extending their life cycles.
3. Asphalt pavements were generally in fair condition except for a few locations. A more extensive seal coating program will extend useful life of pavements and reduce the necessity of reconstruction.
4. The roofing systems were generally in good condition throughout the facilities; however, there were a few roofs that were observed or reported to be leaking or had organic growth, some had some roof drains clogged. These locations should be addressed immediately before more systems are affected as a result of leaking roofs.
5. Some of the buildings assessed were constructed prior to 1985. It is recommended that any building constructed before 1985, have a water quality test performed on regular basis. Pre-1985 construction materials included lead-based solder used for pipe joint union.
6. The majority of the HVAC system components appear to be well maintained and were observed to be in good condition; however, some components are approaching or are beyond their recommended service life.

Facility Condition Assessment Findings

At the time of the assessment there were 24 permanent buildings located at Facilities. The team entered all accessible spaces in the permanent buildings to include administrative, restrooms, mezzanines, and mechanical rooms. This data was input into your capital forecast solution. Additionally, please note the following:

- The team did not enter any "permit - required confined spaces" as defined by the Occupational Safety & Health Administration.
- Building systems are assessed based on the predominant material type and condition.
- There was no invasive testing performed on concealed systems to justify extending the useful life. These concealed systems were given an assessment considering current age and additional information from Client provided escorts.
- Life safety systems are assessed based on visual inspections, client provided information, and current inspection tags. ALPHA follows the Building Owners and Manager's Association's recommended life cycles for capital renewal forecasting purposes.

The table below contains building-specific information regarding current and forecast Facility Condition Indices. A comprehensive list of expired systems and those expected to expire between now and the Year 2042 is shown in the Current and Forecasted Needs Summarized by System table.

Table 1. Facility Description: Summary of Findings: Facilities

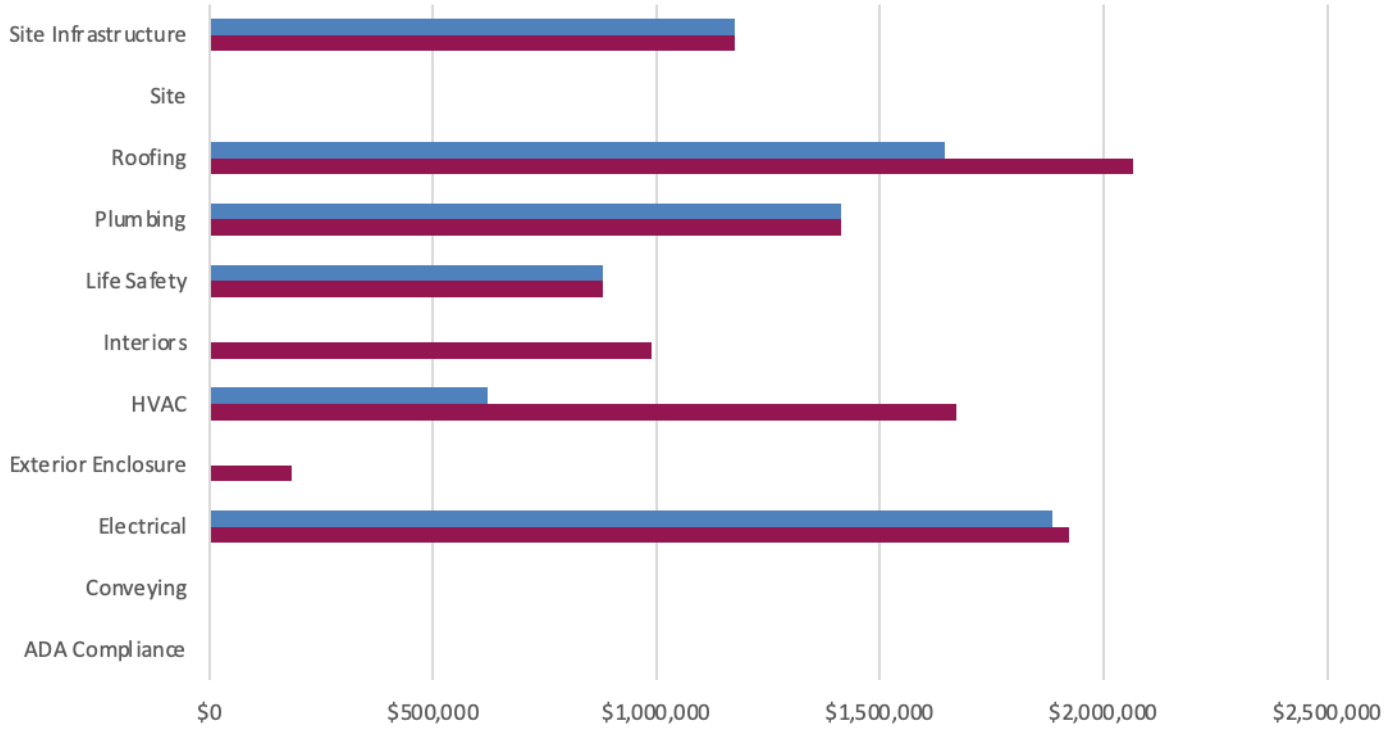
Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
Beech Grove	1967	32,999	$510,290	$8,524,094	6	$670,302	8
Central Library	2017	299,327	$191,297	$77,320,265	0	$373,667	0
Central Library Garage	2017	181,116	$0	$46,784,744	0	$4,378	0
College Avenue	2000	16,007	$216,238	$4,134,827	5	$227,239	6
Decatur	1990	11,512	$353,352	$2,973,707	12	$521,300	18
Eagle	2019	20,700	$0	$5,347,094	0	$0	0
East 38th Street	2003	16,134	$55,504	$4,167,633	1	$621,162	15
East Washington	2017	9,466	$0	$2,445,197	0	$0	0
Franklin Road	2000	17,563	$190,770	$4,536,764	4	$218,524	5
Garfield Park	1965	6,465	$49,742	$1,669,998	3	$97,739	6
Haughville	2003	11,696	$0	$3,021,237	0	$169,985	6
Irvington	2002	16,004	$185,425	$4,134,052	4	$318,927	8
Lawrence	1983	13,251	$147,541	$3,422,915	4	$147,541	4
Library Service Center	1992	81,099	$2,678,021	$20,948,983	13	$2,964,104	14
Martindate-Brightwood	2020	14,701	$0	$3,797,470	0	$0	0
Michigan Road	2018	20,050	$0	$5,179,190	0	$0	0
Nora	1971	17,922	$634,274	$4,629,498	14	$696,652	15
Pike	1986	20,194	$562,843	$5,216,387	11	$987,534	19
Southport	1974	15,581	$146,106	$4,024,786	4	$292,897	7
Spades Park	1912	7,133	$182,020	$1,842,552	10	$206,641	11
Warren	1974	15,475	$152,857	$3,997,405	4	$379,056	9
Wayne	1983	13,251	$62,647	$3,422,915	2	$62,647	2
West Indianapolis	1986	4,958	$129,363	$1,280,719	10	$163,748	13

Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
West Perry	2021	24,048	$0	$6,211,928	0	$0	0
SUBTOTAL	***-***	***886,652***	***$6,448,290***	***$229,034,360***	***3***	***$9,124,042***	***4***
Site and Infrastructure (excluded from FCI calculations)			$1,176,170			$1,176,170	
TOTALS		**886,652**	**$7,624,460**	**$229,034,360**		**$10,300,212**	

Note: The cumulative FCI for the Facilities facilities assessed is 3 while the cumulative FCI in 5 years is estimated to be 4 assuming current sustainment levels.

This page is intentionally left blank.

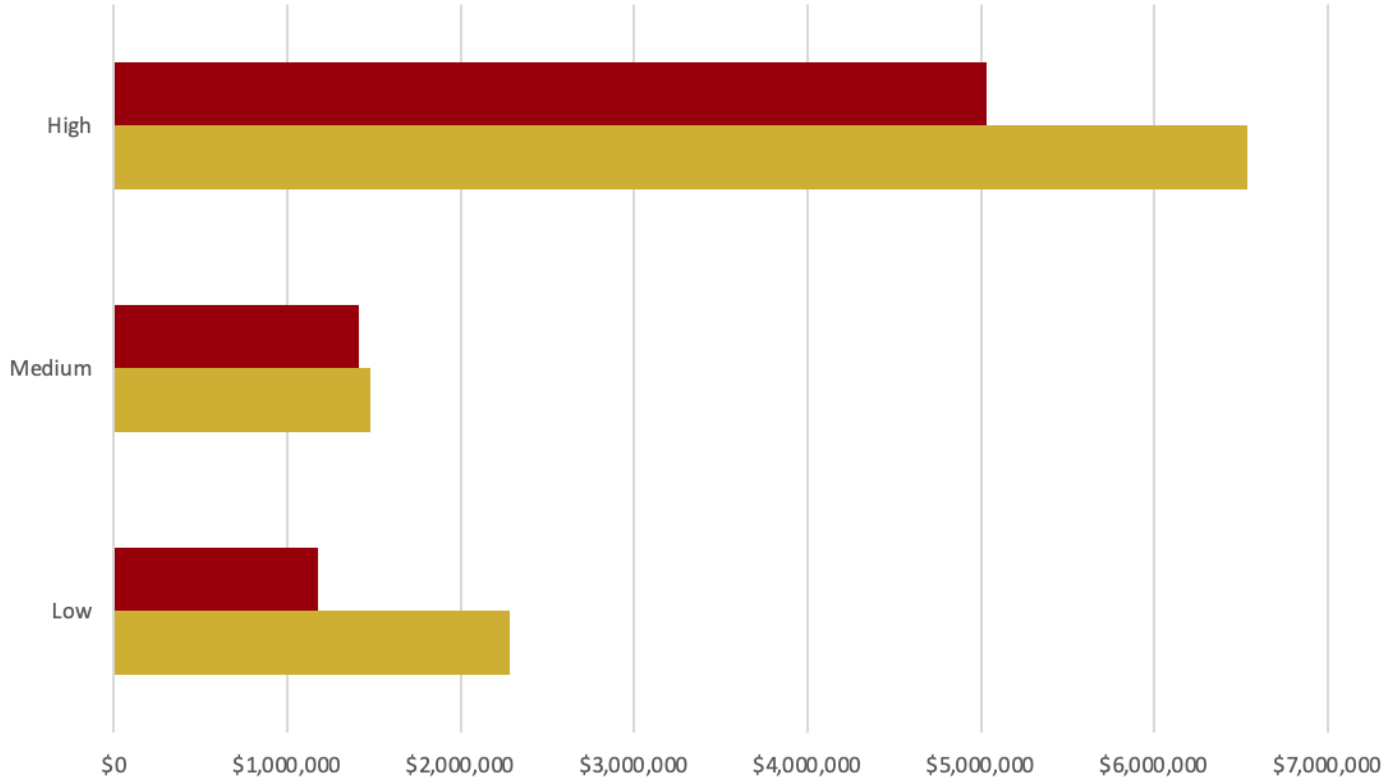
Figure 2. Comparison of 2022 Current Needs vs. 2027 Forecasted Needs by System Group: Facilities



	ADA Compliance	Conveying	Electrical	Exterior Enclosure	HVAC	Interiors	Life Safety	Plumbing	Roofing	Site	Site Infrastructure
2022	$0	$0	$1,885,401	$0	$623,965	$0	$880,471	$1,412,933	$1,645,520	$0	$1,176,170
2027	$0	$0	$1,921,232	$183,846	$1,670,291	$989,879	$880,471	$1,412,933	$2,065,389	$0	$1,176,170

Note: Forecasted Needs (2027) include Current Needs (2022)

Figure 3. Comparison of 2022 Current Needs vs. 2027 Forecasted Needs by Priority: Facilities



	Low	Medium	High
2022	$1,176,170	$1,412,933	$5,035,357
2027	$2,280,618	$1,482,210	$6,537,383

Renewal Forecast

The renewal forecast below shows the current maintenance and repair backlog and projected facility sustainment requirements over the next 20 years. Please note the renewal forecast does not include potential costs associated with seismic evaluation; seismic retrofitting; hazardous material inspection, evaluation, and mitigation, including asbestos abatement; and NFPA 101 and ADA upgrades. The renewal forecast is shown below:

Figure 4. Current and Forecasted Needs: Summarized by Reporting Period (Current +10 Years): Facilities

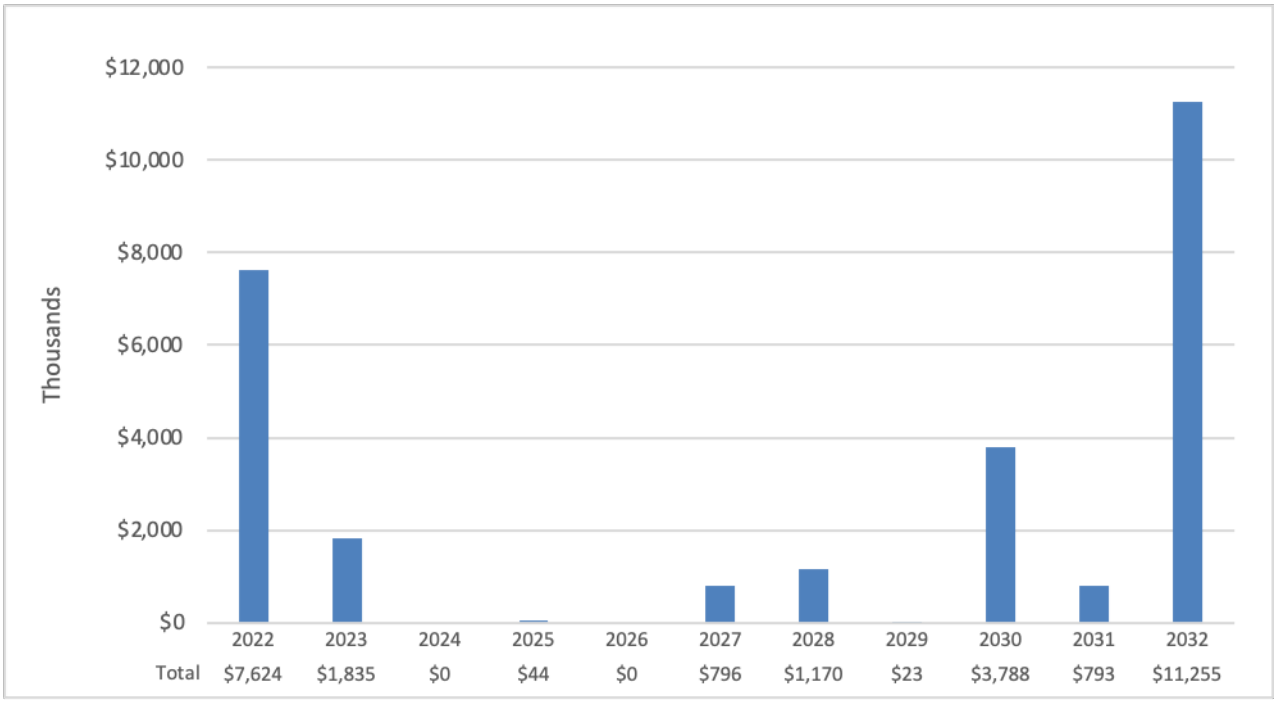


Figure 5. Current and Forecasted Needs: Summarized by Reporting Period (Years 11-20): Facilities

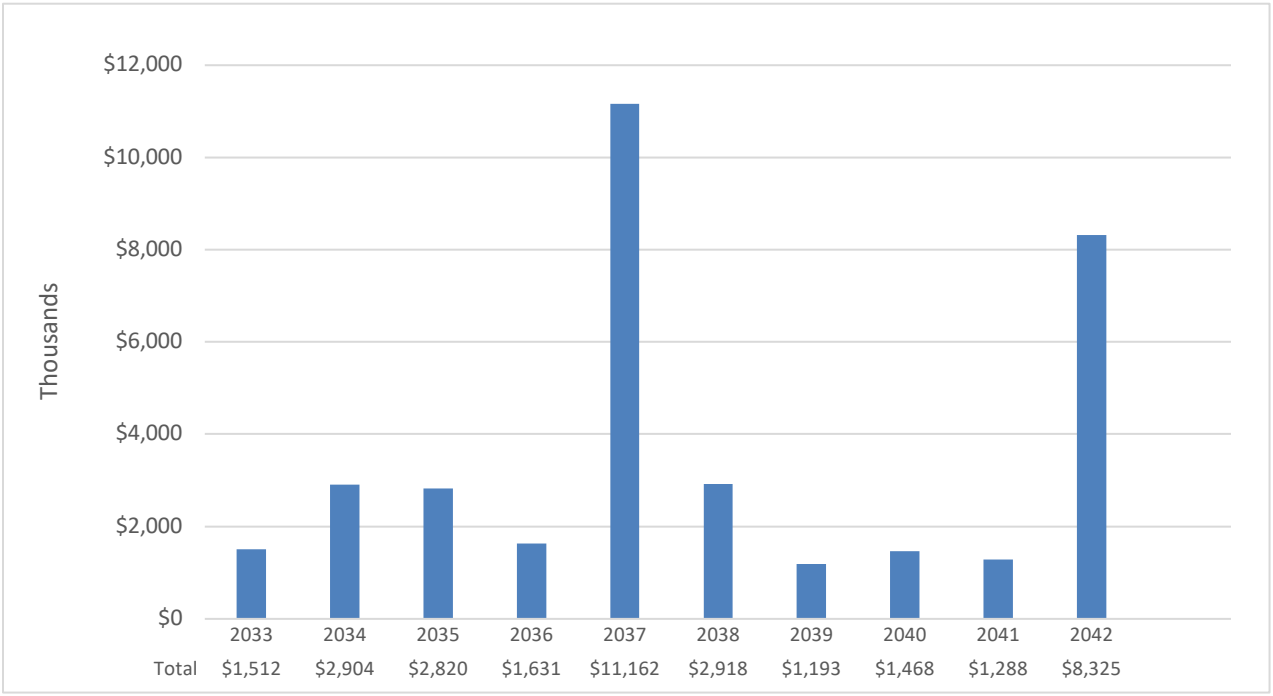


Table 2. Current and Forecasted Needs Summarized by System (Current + 5 years): Facilities

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$7,624,460***	***$9,459,934***	***$9,459,934***	***$9,504,188***	***$9,504,188***	***$10,300,212***
Needs by Year	***$7,624,460***	***$1,835,474***	***$0***	***$44,254***	***$0***	***$796,024***
Exterior Enclosure	**$0**	**$183,846**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$114,569	$0	$0	$0	$0
Exterior Windows	$0	$69,277	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0	$0
Roofing	**$1,645,520**	**$257,423**	**$0**	**$44,254**	**$0**	**$118,193**
Roof Coverings	$1,645,520	$257,423	$0	$44,254	$0	$118,193
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$312,048**	**$0**	**$0**	**$0**	**$677,831**
Ceiling Finishes	$0	$92,129	$0	$0	$0	$75,922
Floor Finishes	$0	$219,919	$0	$0	$0	$454,736
Wall Finishes	$0	$0	$0	$0	$0	$147,173
Conveying	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Conveying Systems	$0	$0	$0	$0	$0	$0
Plumbing	**$1,412,933**	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$528,397	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0	$0
Sanitary Waste	$884,535	$0	$0	$0	$0	$0
HVAC	**$623,965**	**$1,046,326**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Cooling Generation	$0	$464,221	$0	$0	$0	$0
Distribution System	$623,965	$193,434	$0	$0	$0	$0
Heat Generation	$0	$26,986	$0	$0	$0	$0
Terminal & Package Units	$0	$361,685	$0	$0	$0	$0
Fire Protection	**$880,471**	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$880,471	$0	$0	$0	$0	$0
Sprinklers & Standpipe	$0	$0	$0	$0	$0	$0
Electrical	**$1,885,401**	**$35,831**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$1,544,577	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0	$0
Service Distribution	$0	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$340,824	$35,831	$0	$0	$0	$0
Site Infrastructure	**$1,176,170**	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$1,176,170	$0	$0	$0	$0	$0

Table 3. Current and Forecasted Needs Summarized by System (Years 6 - 10): Facilities

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$11,470,333***	***$11,493,360***	***$15,281,428***	***$16,074,177***	***$27,328,728***
Needs by Year	***$1,170,122***	***$23,027***	***$3,788,068***	***$792,749***	***$11,254,551***
Exterior Enclosure	**$0**	**$0**	**$10,339**	**$77,848**	**$74,781**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$77,848	$74,781
Exterior Doors	$0	$0	$10,339	$0	$0
Roofing	**$0**	**$0**	**$0**	**$48,163**	**$0**
Roof Coverings	$0	$0	$0	$48,163	$0
Interior Construction	**$0**	**$0**	**$104,302**	**$12,386**	**$0**
Interior Doors	$0	$0	$95,995	$12,386	$0
Specialties	$0	$0	$8,307	$0	$0
Interiors	**$591,262**	**$23,027**	**$2,719,887**	**$383,022**	**$5,408,718**
Ceiling Finishes	$359,185	$0	$0	$2,675	$1,092,845
Floor Finishes	$0	$0	$1,558,279	$121,546	$1,781,745
Wall Finishes	$232,077	$23,027	$1,161,609	$258,801	$2,534,128
Conveying	**$0**	**$0**	**$84,460**	**$0**	**$0**
Conveying Systems	$0	$0	$84,460	$0	$0
Plumbing	**$0**	**$0**	**$215,070**	**$0**	**$102,531**
Domestic Water Distribution	$0	$0	$84,022	$0	$40,056
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$131,047	$0	$62,475
HVAC	**$578,860**	**$0**	**$290,950**	**$164,491**	**$1,751,932**
Controls and Instrumentation	$0	$0	$0	$0	$428,265
Cooling Generation	$0	$0	$17,304	$46,659	$70,246
Distribution System	$573,298	$0	$251,965	$117,832	$1,242,606
Heat Generation	$3,605	$0	$0	$0	$10,815
Terminal & Package Units	$1,957	$0	$21,682	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$106,839**	**$2,316,887**
Fire Alarms	$0	$0	$0	$106,839	$1,685,385
Sprinklers & Standpipe	$0	$0	$0	$0	$631,502
Electrical	**$0**	**$0**	**$363,060**	**$0**	**$1,599,703**
Branch Wiring	$0	$0	$363,060	$0	$529,967
Lighting	$0	$0	$0	$0	$1,060,551
Service Distribution	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$9,184
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 4. Current and Forecasted Needs Summarized by System (Years 11 - 15): Facilities

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$28,841,109***	***$31,744,995***	***$34,565,346***	***$36,196,824***	***$47,358,948***
Needs by Year	***$1,512,381***	***$2,903,886***	***$2,820,351***	***$1,631,478***	***$11,162,124***
Exterior Enclosure	**$0**	**$1,343,898**	**$669,670**	**$20,683**	**$293,088**
Exterior Walls (Finishes)	$0	$1,245,937	$592,937	$0	$0
Exterior Windows	$0	$0	$0	$0	$293,088
Exterior Doors	$0	$97,961	$76,733	$20,683	$0
Roofing	**$0**	**$0**	**$0**	**$119,944**	**$469,827**
Roof Coverings	$0	$0	$0	$119,944	$469,827
Interior Construction	**$0**	**$1,168,889**	**$1,224,143**	**$44,748**	**$0**
Interior Doors	$0	$460,981	$267,878	$0	$0
Specialties	$0	$707,908	$956,265	$44,748	$0
Interiors	**$277,775**	**$319,887**	**$540,235**	**$212,346**	**$2,923,926**
Ceiling Finishes	$7,698	$0	$0	$18,557	$1,889,854
Floor Finishes	$250,107	$319,887	$408,453	$165,763	$0
Wall Finishes	$19,970	$0	$131,782	$28,026	$1,034,071
Conveying	**$0**	**$0**	**$267,646**	**$606,619**	**$84,460**
Conveying Systems	$0	$0	$267,646	$606,619	$84,460
Plumbing	**$178,296**	**$0**	**$0**	**$0**	**$527,353**
Domestic Water Distribution	$69,656	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$527,353
Sanitary Waste	$108,640	$0	$0	$0	$0
HVAC	**$616,434**	**$0**	**$68,083**	**$208,539**	**$954,171**
Controls and Instrumentation	$37,958	$0	$0	$65,575	$700,328
Cooling Generation	$0	$0	$41,509	$71,585	$9,476
Distribution System	$508,023	$0	$0	$24,463	$86,984
Heat Generation	$3,605	$0	$12,154	$7,210	$71,997
Terminal & Package Units	$66,847	$0	$14,420	$39,707	$85,387
Fire Protection	**$68,976**	**$71,212**	**$50,574**	**$82,730**	**$40,237**
Fire Alarms	$68,976	$71,212	$50,574	$82,730	$40,237
Sprinklers & Standpipe	$0	$0	$0	$0	$0
Electrical	**$370,900**	**$0**	**$0**	**$335,871**	**$5,869,063**
Branch Wiring	$300,981	$0	$0	$0	$0
Lighting	$69,919	$0	$0	$335,871	$5,471,492
Service Distribution	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$397,571
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 5. Current and Forecasted Needs Summarized by System (Years 16-20): Facilities

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$50,277,239***	***$51,469,828***	***$52,938,142***	***$54,225,681***	***$62,550,972***
Needs by Year	***$2,918,291***	***$1,192,589***	***$1,468,313***	***$1,287,539***	***$8,325,291***
Exterior Enclosure	**$256,913**	**$0**	**$0**	**$29,591**	**$343,827**
Exterior Walls (Finishes)	$0	$0	$0	$0	$278,591
Exterior Windows	$256,913	$0	$0	$6,726	$0
Exterior Doors	$0	$0	$0	$22,866	$65,236
Roofing	**$192,943**	**$229,791**	**$408,513**	**$218,875**	**$0**
Roof Coverings	$192,943	$229,791	$408,513	$218,875	$0
Interior Construction	**$0**	**$0**	**$0**	**$274,963**	**$2,274,054**
Interior Doors	$0	$0	$0	$60,344	$334,583
Specialties	$0	$0	$0	$214,620	$1,939,471
Interiors	**$125,919**	**$123,235**	**$125,363**	**$127,441**	**$4,501,953**
Ceiling Finishes	$125,919	$123,235	$115,139	$127,441	$0
Floor Finishes	$0	$0	$10,224	$0	$4,070,510
Wall Finishes	$0	$0	$0	$0	$431,443
Conveying	**$0**	**$98,726**	**$0**	**$0**	**$0**
Conveying Systems	$0	$98,726	$0	$0	$0
Plumbing	**$748,046**	**$0**	**$0**	**$32,562**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$748,046	$0	$0	$32,562	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$474,730**	**$490,316**	**$208,497**	**$243,146**	**$6,850**
Controls and Instrumentation	$42,336	$43,708	$120,793	$50,777	$0
Cooling Generation	$102,485	$62,418	$0	$0	$0
Distribution System	$186,997	$314,768	$11,639	$126,397	$1,906
Heat Generation	$48,822	$60,667	$0	$0	$4,944
Terminal & Package Units	$94,091	$8,755	$76,066	$65,972	$0
Fire Protection	**$0**	**$0**	**$261,403**	**$0**	**$381,577**
Fire Alarms	$0	$0	$0	$0	$0
Sprinklers & Standpipe	$0	$0	$261,403	$0	$381,577
Electrical	**$1,119,741**	**$250,522**	**$464,538**	**$360,960**	**$817,032**
Branch Wiring	$0	$0	$0	$69,919	$0
Lighting	$1,093,926	$223,871	$445,610	$260,079	$627,854
Service Distribution	$0	$0	$0	$0	$189,178
Exit Signs and Emergency Lighting	$25,814	$26,651	$18,928	$30,962	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

BEECH GROVE

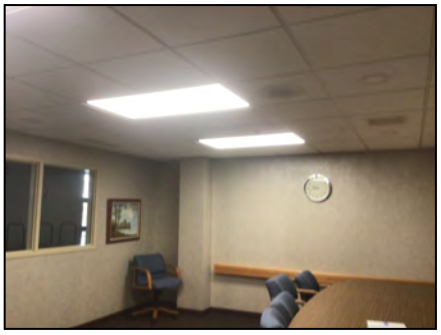
Table 6: Facility Description: Facilities - Beech Grove

Summary of Findings	
Construction Type	Three-Story Structure
Roof Type	Asphalt Shingle and Modified Bitumen
Ceiling Type	Suspended Acoustical Tile and Painted
Lighting	LED
HVAC	Air Handling Units with Hot and Chilled Water Coils
Elevator	Yes
Fire Sprinkler	Yes
Fire Alarm	Yes

Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
Beech Grove	1967	32,999	$510,290	$8,524,094	6	$670,302	8
Site Information			$23,040			$23,040	
TOTAL			$533,330			$693,342	

General Observations:

- It was reported that there was a complete renovation in 2002, excluding the plumbing systems, and the lighting was upgraded to LED in 2019.
- The fire alarm and detection system is beyond its recommended useful life.



Electrical

The LED lighting was in good condition. The electrical branch wiring is within its recommended useful life. The service and distribution system was in good condition. The emergency and exit lighting is within its recommended useful life.

Exterior Enclosure

The glazed and metal doors were in good condition. The double-pane windows were in good condition. The split-face stone veneer walls were in good condition. The asphalt shingle and modified bitumen roof covering are beyond their recommended useful lives.

Some tuckpointing and repairs are needed for the stone veneer. The bottom of exterior hollow metal doors are rusting. One window is boarded up. Sealant is deteriorated. Paint is flaking on wood windows.

Interiors

The carpet and ceramic tile floor finishes were in good condition; however, the vinyl tile floors were in poor condition due to observed damage. The painted and vinyl wall finishes were in good condition. The suspended acoustical tile and painted ceiling finishes were in good condition.

Stair treads are in fair condition due to discoloration. Vinyl wall covering is peeling. Interior door frames are scuffed and chipped. Paint on bottom of wood windows is flaking.

Plumbing

The porcelain and manual plumbing fixtures were in good condition. The domestic water distribution system is beyond its recommended useful life. The sanitary waste system is beyond its recommended useful life.

PLUMBING:
Sinks, lavatories and water closets are in fair condition. Water distribution and sanitary system appears to be in fair condition.

MECHANICAL:
2001 Chiller is in poor condition. 2001 Boilers are in Fair condition. Two Air Handlers are in poor condition, one is in fair condition. Baseboard heaters are in fair condition. VAVs are in fair condition. Split system (indoor fan coil and exterior condensing unit) in poor condition. Exhaust fans in fair condition.

Table 7. Current and Forecasted Needs Summarized by System (Current + 5 years): Beech Grove

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$533,330***	***$656,632***	***$656,632***	***$656,632***	***$656,632***	***$693,342***
Needs by Year	***$533,330***	***$123,302***	***$0***	***$0***	***$0***	***$36,709***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0	$0
Roofing	**$142,869**	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$142,869	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$32,868**	**$0**	**$0**	**$0**	**$36,709**
Ceiling Finishes	$0	$0	$0	$0	$0	$3,671
Floor Finishes	$0	$32,868	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0	$33,038
Conveying	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Conveying Systems	$0	$0	$0	$0	$0	$0
Plumbing	**$211,411**	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$82,593	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0	$0
Sanitary Waste	$128,818	$0	$0	$0	$0	$0
HVAC	**$0**	**$90,434**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Cooling Generation	$0	$70,555	$0	$0	$0	$0
Distribution System	$0	$19,879	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0	$0
Fire Protection	**$113,523**	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$113,523	$0	$0	$0	$0	$0
Sprinklers & Standpipe	$0	$0	$0	$0	$0	$0
Electrical	**$42,486**	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$42,486	$0	$0	$0	$0	$0
Site Infrastructure	**$23,040**	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$23,040	$0	$0	$0	$0	$0

Table 8. Current and Forecasted Needs Summarized by System (Years 6 - 10): Beech Grove

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$743,503***	***$743,503***	***$976,504***	***$1,094,336***	***$1,852,363***
Needs by Year	***$50,161***	***$0***	***$233,001***	***$117,832***	***$758,027***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$233,001**	**$0**	**$176,816**
Ceiling Finishes	$0	$0	$0	$0	$176,816
Floor Finishes	$0	$0	$200,133	$0	$0
Wall Finishes	$0	$0	$32,868	$0	$0
Conveying	**$0**	**$0**	**$0**	**$0**	**$0**
Conveying Systems	$0	$0	$0	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$50,161**	**$0**	**$0**	**$117,832**	**$224,327**
Controls and Instrumentation	$0	$0	$0	$0	$69,677
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$50,161	$0	$0	$117,832	$154,650
Heat Generation	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Sprinklers & Standpipe	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$356,884**
Branch Wiring	$0	$0	$0	$0	$356,884
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 9. Current and Forecasted Needs Summarized by System (Years 11 - 15): Beech Grove

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$1,875,332***	***$1,883,758***	***$2,538,080***	***$2,538,080***	***$2,538,080***
Needs by Year	***$22,969***	***$8,426***	***$654,321***	***$0***	***$0***
Exterior Enclosure	**$0**	**$8,426**	**$149,863**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$145,713	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$8,426	$4,150	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$254,239**	**$0**	**$0**
Interior Doors	$0	$0	$52,685	$0	$0
Specialties	$0	$0	$201,555	$0	$0
Interiors	**$0**	**$0**	**$74,166**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$74,166	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Conveying	**$0**	**$0**	**$176,053**	**$0**	**$0**
Conveying Systems	$0	$0	$176,053	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$22,969**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$22,969	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Sprinklers & Standpipe	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 10. Current and Forecasted Needs Summarized by System (Years 16-20): Beech Grove

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$2,759,091***	***$2,759,091***	***$2,759,091***	***$2,759,091***	***$3,372,932***
Needs by Year	***$221,011***	***$0***	***$0***	***$0***	***$613,841***
Exterior Enclosure	**$32,969**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$32,969	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Conveying	**$0**	**$0**	**$0**	**$0**	**$0**
Conveying Systems	$0	$0	$0	$0	$0
Plumbing	**$166,206**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$166,206	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$21,836**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Heat Generation	$21,836	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$256,957**
Fire Alarms	$0	$0	$0	$0	$0
Sprinklers & Standpipe	$0	$0	$0	$0	$256,957
Electrical	**$0**	**$0**	**$0**	**$0**	**$356,884**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$356,884
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 11. Expired Systems 2022: Facilities – Beech Grove

Building	System Category	System	Priority	2022 Needs
Beech Grove	Electrical	Exit Signs and Emergency Lighting	High	$42,486
Beech Grove	Fire Protection	Fire Alarms	High	$113,523
Beech Grove	Plumbing	Domestic Water Distribution	Medium	$82,593
Beech Grove	Plumbing	Sanitary Waste	Medium	$128,818
Beech Grove	Roofing	Roof Coverings	High	$50,849
Beech Grove	Roofing	Roof Coverings	High	$92,020
			TOTAL	**$510,290**

This page is intentionally left blank.

Site and Infrastructure Assessment Findings

Site General Condition

The following site conditions and/or deficiencies were observed during the assessment.

Asphalt Pavements:

- The asphalt pavements were in poor condition and in need of resealing as longitudinal and transverse cracking were observed throughout the pavement.

Site Improvements

A site infrastructure condition assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

- Good condition
- Poor condition and in need of repair
- Poor condition and in need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth aerial photographs were used in lieu of site plans. The site assessment was performed, and the subsequent results grouped by location. Findings for each location were divided as follows:

- Pedestrian Pavements
- Vehicular Pavements
- Site Development

Please note that not all locations have all the various infrastructure systems present. We determined unit pricing for the various deficiency requirements by referencing 2022 RS Means Building Construction Cost Data and Assembly Cost Data when available. Industry sources were used as a supplemental source for unit pricing when needed.

Table 12. Summary of 2022 Site and Infrastructure Deficiencies: Beech Grove

Asset Description	Corrective Action	Notes	Priority	Current Needs	Year
Vehicular Pavements	Crack Fill, Seal Coat, and Restripe Asphalt Pavements	19200 SF @ $1.2 Per SF	Low	$23,040	2022
			Total 2022 Needs	**$23,040**	

Figure 6. Site and Infrastructure Deficiencies Markup: Beech Grove

Site Infrastructure

The asphalt pavements were in poor condition and in need of resealing as longitudinal and transverse cracking were observed throughout the pavement.

This page is intentionally left blank.

CENTRAL LIBRARY

Table 13: Facility Description: Facilities - Central Library

Summary of Findings	
Construction Type	Five-Story Structure with Basement
Roof Type AND TPO OR PVC	Glazed and Modified Bitumen
Ceiling Type	Painted and Suspended Acoustical Tile
Lighting	LED, Fluorescent, and Incandescent
HVAC	Air Handling Units with Hot and Chilled Water Coils
Elevator	Yes
Fire Sprinkler	Yes
Fire Alarm	Yes

Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
Central Library	2007 2017	299,327	$191,297	$77,320,265	0	$373,667	0
Site Information			$0			$0	
TOTAL			$191,297			$373,667	

Electrical

The incandescent, LED and fluorescent lighting was in good condition. The electrical branch wiring is within its recommended useful life. The service and distribution system was in good condition. The emergency and exit lighting is within its recommended useful life.

The fire alarm system is approaching end of life. The model installed is discontinued.

Exterior Enclosure

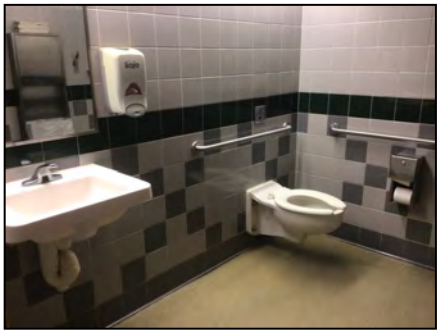
The metal, glazed and wooden doors were in good condition. The single-pane windows were in fair condition due to observed deteriorated window seals. The brick veneer and glazed walls were in good condition. The modified bitumen and glazed roof covering were within their recommended useful lives, however, a portion of the modified bitumen roof covering was beyond its recommended useful life.

Single glazed window panes are cracking. Glazed roofing reportedly leaks. Stone is in need of tuckpointing. Base of metal door frame rusting off of garden area.

Interiors

The carpet and finished concrete floor finishes were in good condition; however, the vinyl tile floors were in poor condition due to observed deterioration. The vinyl, oak veneer and tile wall finishes were in good condition. The painted and suspended acoustical tile ceiling finishes were in good condition.

Floor finishes are stained throughout with the exception of the new carpet on the 2nd floor. Vinyl wall covering is peeling in several areas. Admin area has stained ceiling tile. Ceramic tile needs repairs where new water coolers were installed. Admin area kitchen has stained floor. Decorative ceiling finish peeling



Plumbing

The porcelain and automated plumbing fixtures were in good condition. The domestic water distribution system is within its recommended useful life. The sanitary waste system is within its recommended useful life.

Water Heater is near the end of its expected service life.

MECHANICAL:

Most HVAC equipment was replaced during 2005 project. All 2005/06 equipment is near the end of its expected service life due to age, but still in good condition.

Heating Water and Chilled Water pumps are in poor condition. Two AHUs in attic mezzanine are more than 50 years old and in poor condition. Steam heat exchangers in fair conditon.

Table 14. Current and Forecasted Needs Summarized by System (Current + 5 years): Central Library

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$191,297***	***$340,370***	***$340,370***	***$340,370***	***$340,370***	***$373,667***
Needs by Year	***$191,297***	***$149,073***	***$0***	***$0***	***$0***	***$33,297***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0	$0
Roofing	**$191,297**	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$191,297	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$149,073**	**$0**	**$0**	**$0**	**$33,297**
Ceiling Finishes	$0	$0	$0	$0	$0	$33,297
Floor Finishes	$0	$149,073	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0	$0
Conveying	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Conveying Systems	$0	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0	$0

Table 15. Current and Forecasted Needs Summarized by System (Years 6 - 10): Central Library

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$373,667***	***$373,667***	***$600,583***	***$634,497***	***$6,883,467***
Needs by Year	***$0***	***$0***	***$226,916***	***$33,914***	***$6,248,970***
Exterior Enclosure	**$0**	**$0**	**$0**	**$33,914**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$33,914	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$226,916**	**$0**	**$4,235,988**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$226,916	$0	$1,701,859
Wall Finishes	$0	$0	$0	$0	$2,534,128
Conveying	**$0**	**$0**	**$0**	**$0**	**$0**
Conveying Systems	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$983,238**
Controls and Instrumentation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$983,238
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$1,029,745**
Fire Alarms	$0	$0	$0	$0	$1,029,745
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0

Table 16. Current and Forecasted Needs Summarized by System (Years 11 - 15): Central Library

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$7,173,824***	***$7,425,087***	***$7,425,087***	***$7,714,131***	***$15,040,684***
Needs by Year	***$290,357***	***$251,263***	***$0***	***$289,044***	***$7,326,553***
Exterior Enclosure	**$0**	**$98,157**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$89,832	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$8,324	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$434,020**
Roof Coverings	$0	$0	$0	$0	$434,020
Interior Construction	**$0**	**$153,106**	**$0**	**$0**	**$0**
Interior Doors	$0	$153,106	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$2,637,888**
Ceiling Finishes	$0	$0	$0	$0	$1,603,816
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$1,034,071
Conveying	**$0**	**$0**	**$0**	**$289,044**	**$0**
Conveying Systems	$0	$0	$0	$289,044	$0
HVAC	**$290,357**	**$0**	**$0**	**$0**	**$632,029**
Controls and Instrumentation	$0	$0	$0	$0	$632,029
Distribution System	$280,572	$0	$0	$0	$0
Terminal & Package Units	$9,785	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$3,622,616**
Lighting	$0	$0	$0	$0	$3,237,232
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$385,384

Table 17. Current and Forecasted Needs Summarized by System (Years 16-20): Central Library

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$15,045,061***	***$15,276,760***	***$15,276,760***	***$15,276,760***	***$17,701,938***
Needs by Year	***$4,378***	***$231,699***	***$0***	***$0***	***$2,425,178***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$55,495**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$55,495
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$2,162,029**
Interior Doors	$0	$0	$0	$0	$282,813
Specialties	$0	$0	$0	$0	$1,879,216
Interiors	**$0**	**$0**	**$0**	**$0**	**$207,654**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$207,654
Conveying	**$0**	**$0**	**$0**	**$0**	**$0**
Conveying Systems	$0	$0	$0	$0	$0
HVAC	**$4,378**	**$231,699**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Distribution System	$4,378	$231,699	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0

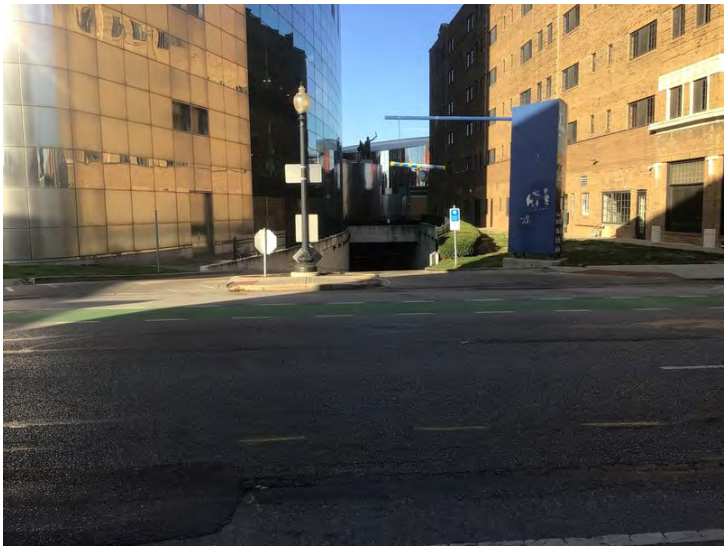
Table 18. Expired Systems 2022: Facilities – Central Library

Building	System Category	System	Priority	2022 Needs
Central Library	Roofing	Roof Coverings	High	$191,297
			TOTAL	**$191,297**

This page is intentionally left blank.

CENTRAL LIBRARY GARAGE

Table 19: Facility Description: Facilities - Central Library Garage

Summary of Findings		
Construction Type	Two-Story Structure	
Roof Type	Not Present	
Ceiling Type	Painted	
Lighting	Incandescent	
HVAC	Exhaust Fans	
Elevator	Yes	
Fire Sprinkler	Yes	
Fire Alarm	Yes	

Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
Central Library Garage	2017	181,116	$0	$46,784,744	0	$4,378	0
Site Information			$0			$0	
TOTAL			$0			$4,378	

General Observations:

- The electrical service and distribution was fed from the Central Library.

Electrical

The incandescent lighting was in good condition. The electrical branch wiring is within its recommended useful life. The service and distribution system was in good condition.

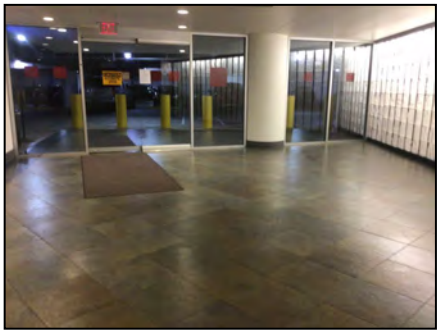
Exterior Enclosure

The metal doors were in good condition. The CMU walls were in good condition.

Signs of water infiltration on walls were noted. Insulation is falling from ceiling.

Fire Protection

The fire alarm and detection system is within its recommended useful life. The sprinkler and standpipe system is within its recommended useful life.



Interiors

The ceramic tile floor finishes were in good condition. The painted wall finishes were in good condition. The painted ceiling finishes were in good condition.

PLUMBING:
Fire Pump is leaking and in need of service or replacement.

MECHANICAL:
Garage fans are in poor condition.

Table 20. Current and Forecasted Needs Summarized by System (Current + 5 years): Central Library Garage

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$0***	***$4,378***	***$4,378***	***$4,378***	***$4,378***	***$4,378***
Needs by Year	***$0***	***$4,378***	***$0***	***$0***	***$0***	***$0***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0	$0
Conveying	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Conveying Systems	$0	$0	$0	$0	$0	$0
HVAC	**$0**	**$4,378**	**$0**	**$0**	**$0**	**$0**
Distribution System	$0	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$4,378	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0	$0

Table 21. Current and Forecasted Needs Summarized by System (Years 6 - 10): Central Library Garage

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$407,324***	***$407,324***	***$407,324***	***$407,324***	***$1,058,210***
Needs by Year	***$402,947***	***$0***	***$0***	***$0***	***$650,885***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Interiors	**$402,947**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$201,473	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$201,473	$0	$0	$0	$0
Conveying	**$0**	**$0**	**$0**	**$0**	**$0**
Conveying Systems	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$27,810**
Distribution System	$0	$0	$0	$0	$27,810
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$623,075**
Fire Alarms	$0	$0	$0	$0	$623,075
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0

Table 22. Current and Forecasted Needs Summarized by System (Years 11 - 15): Central Library Garage

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$1,058,210***	***$1,058,210***	***$1,058,210***	***$1,377,432***	***$3,336,202***
Needs by Year	***$0***	***$0***	***$0***	***$319,223***	***$1,958,770***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Conveying	**$0**	**$0**	**$0**	**$317,575**	**$0**
Conveying Systems	$0	$0	$0	$317,575	$0
HVAC	**$0**	**$0**	**$0**	**$1,648**	**$0**
Distribution System	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$1,648	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$1,958,770**
Lighting	$0	$0	$0	$0	$1,958,770

Table 23. Current and Forecasted Needs Summarized by System (Years 16-20): Central Library Garage

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$3,336,202***	***$3,434,927***	***$3,434,927***	***$3,434,927***	***$7,802,683***
Needs by Year	***$0***	***$98,726***	***$0***	***$0***	***$4,367,756***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$284,188**
Exterior Walls (Finishes)	$0	$0	$0	$0	$278,591
Exterior Doors	$0	$0	$0	$0	$5,596
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$13,058**
Interior Doors	$0	$0	$0	$0	$13,058
Interiors	**$0**	**$0**	**$0**	**$0**	**$4,070,510**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$4,070,510
Wall Finishes	$0	$0	$0	$0	$0
Conveying	**$0**	**$98,726**	**$0**	**$0**	**$0**
Conveying Systems	$0	$98,726	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**
Distribution System	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0

Table 24. Expired Systems 2022: Facilities – Central Library Garage

Building	System Category	System	Priority	2022 Needs
None				$0
			TOTAL	**$0**

This page is intentionally left blank.

COLLEGE AVENUE

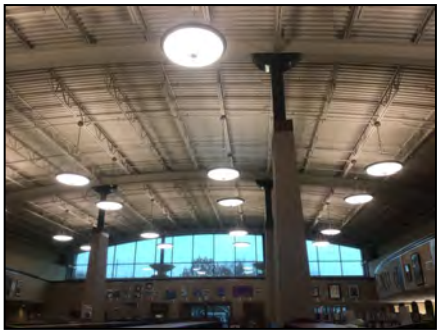
Table 25: Facility Description: Facilities - College Avenue

Summary of Findings	
Construction Type	One-Story Structure
Roof Type	Modified Bitumen
Ceiling Type	Suspended Acoustical Tile and Painted
Lighting	LED
HVAC	Packaged Units
Elevator	No
Fire Sprinkler	Yes
Fire Alarm	Yes

Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
College Avenue	2000	16,007	$216,238	$4,134,827	5	$227,239	6
Site Information			$80,500			$80,500	
TOTAL			$296,738			$307,739	

General Observations:

- The fire alarm and detection system is beyond its recommended useful life.
- It was reported that the carpet flooring underwent a renovation in 2018, and the lighting was upgraded to LED in 2017.



Electrical

The LED lighting was in good condition. The electrical branch wiring is within its recommended useful life. The service and distribution system was in good condition. The emergency and exit lighting is beyond its recommended useful life.

The emergency and exit lighting are not beyond life if updated in 2017. Requires additional input from client.

Exterior Enclosure

The glazed and metal doors were in good condition. The double-pane windows were in good condition. The brick veneer and concrete walls were in good condition. The modified bitumen roof covering was beyond its recommended useful life.

Roof is in poor condition. Splash blocks are backwards, running water toward the building. Bottom of exterior hollow metal doors and frames are rusting.

Interiors

The carpet and vinyl tile floor finishes were in good condition; however, the finished concrete floors were in fair condition due to observed stains. The vinyl and painted wall finishes were in good condition. The suspended acoustical tile and painted ceiling finishes were in good condition.

Floors in restrooms are stained. Carpet is stained.

Plumbing

The porcelain and manual plumbing fixtures were in good condition. The domestic water distribution system is within its recommended useful life. The sanitary waste system is within its recommended useful life.

Water heater is in good condition.

MECHANICAL:
4 Packaged Rooftop units are from 2018 and are in good condition. 2 of 3 roof fans are in good condition, and mini-split is in good condition.

Table 26. Current and Forecasted Needs Summarized by System (Current + 5 years): College Avenue

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$296,738***	***$299,725***	***$299,725***	***$299,725***	***$299,725***	***$307,739***
Needs by Year	***$296,738***	***$2,987***	***$0***	***$0***	***$0***	***$8,014***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0	$0
Roofing	**$140,562**	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$140,562	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**	**$8,014**
Ceiling Finishes	$0	$0	$0	$0	$0	$3,562
Floor Finishes	$0	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0	$4,452
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0	$0
HVAC	**$0**	**$2,987**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Distribution System	$0	$2,987	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0	$0
Fire Protection	**$55,067**	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$55,067	$0	$0	$0	$0	$0
Sprinklers & Standpipe	$0	$0	$0	$0	$0	$0
Electrical	**$20,609**	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$20,609	$0	$0	$0	$0	$0
Site Infrastructure	**$80,500**	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$80,500	$0	$0	$0	$0	$0

Table 27. Current and Forecasted Needs Summarized by System (Years 6 - 10): College Avenue

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$313,867***	***$313,867***	***$800,077***	***$800,077***	***$910,115***
Needs by Year	***$6,129***	***$0***	***$486,210***	***$0***	***$110,038***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$135,527**	**$0**	**$76,239**
Ceiling Finishes	$0	$0	$0	$0	$76,239
Floor Finishes	$0	$0	$15,946	$0	$0
Wall Finishes	$0	$0	$119,581	$0	$0
Plumbing	**$0**	**$0**	**$102,550**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$40,064	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$62,487	$0	$0
HVAC	**$6,129**	**$0**	**$75,017**	**$0**	**$33,799**
Controls and Instrumentation	$0	$0	$0	$0	$33,799
Distribution System	$6,129	$0	$75,017	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Sprinklers & Standpipe	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$173,116**	**$0**	**$0**
Branch Wiring	$0	$0	$173,116	$0	$0
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 28. Current and Forecasted Needs Summarized by System (Years 11 - 15): College Avenue

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$1,007,195***	***$1,007,195***	***$1,269,552***	***$1,273,929***	***$1,470,889***
Needs by Year	***$97,080***	***$0***	***$262,357***	***$4,378***	***$196,960***
Exterior Enclosure	**$0**	**$0**	**$107,342**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$92,799	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$14,543	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$155,015**	**$0**	**$0**
Interior Doors	$0	$0	$43,397	$0	$0
Specialties	$0	$0	$111,618	$0	$0
Interiors	**$97,080**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$97,080	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$4,378**	**$23,845**
Controls and Instrumentation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$4,378	$23,845
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Sprinklers & Standpipe	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$173,116**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$173,116
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 29. Current and Forecasted Needs Summarized by System (Years 16-20): College Avenue

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$1,696,605***	***$1,696,605***	***$1,831,473***	***$1,831,473***	***$1,831,473***
Needs by Year	***$225,716***	***$0***	***$134,867***	***$0***	***$0***
Exterior Enclosure	**$88,701**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$88,701	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$10,224**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$10,224	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$80,622**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$80,622	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$56,393**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Terminal & Package Units	$56,393	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$124,643**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Sprinklers & Standpipe	$0	$0	$124,643	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 30. Expired Systems 2022: Facilities – College Avenue

Building	System Category	System	Priority	2022 Needs
College Avenue	Electrical	Exit Signs and Emergency Lighting	High	$20,609
College Avenue	Fire Protection	Fire Alarms	High	$55,067
College Avenue	Roofing	Roof Coverings	High	$140,562
			TOTAL	**$216,238**

This page is intentionally left blank.

Site and Infrastructure Assessment Findings

Site General Condition

The following site conditions and/or deficiencies were observed during the assessment.

Asphalt Pavements:

- The asphalt pavements were in poor condition and in need of resurfacing as longitudinal cracking, transverse cracking, and degradation were observed throughout the pavement.

Site Improvements

A site infrastructure condition assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

- Good condition
- Poor condition and in need of repair
- Poor condition and in need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth aerial photographs were used in lieu of site plans. The site assessment was performed, and the subsequent results grouped by location. Findings for each location were divided as follows:

- Pedestrian Pavements
- Vehicular Pavements
- Site Development

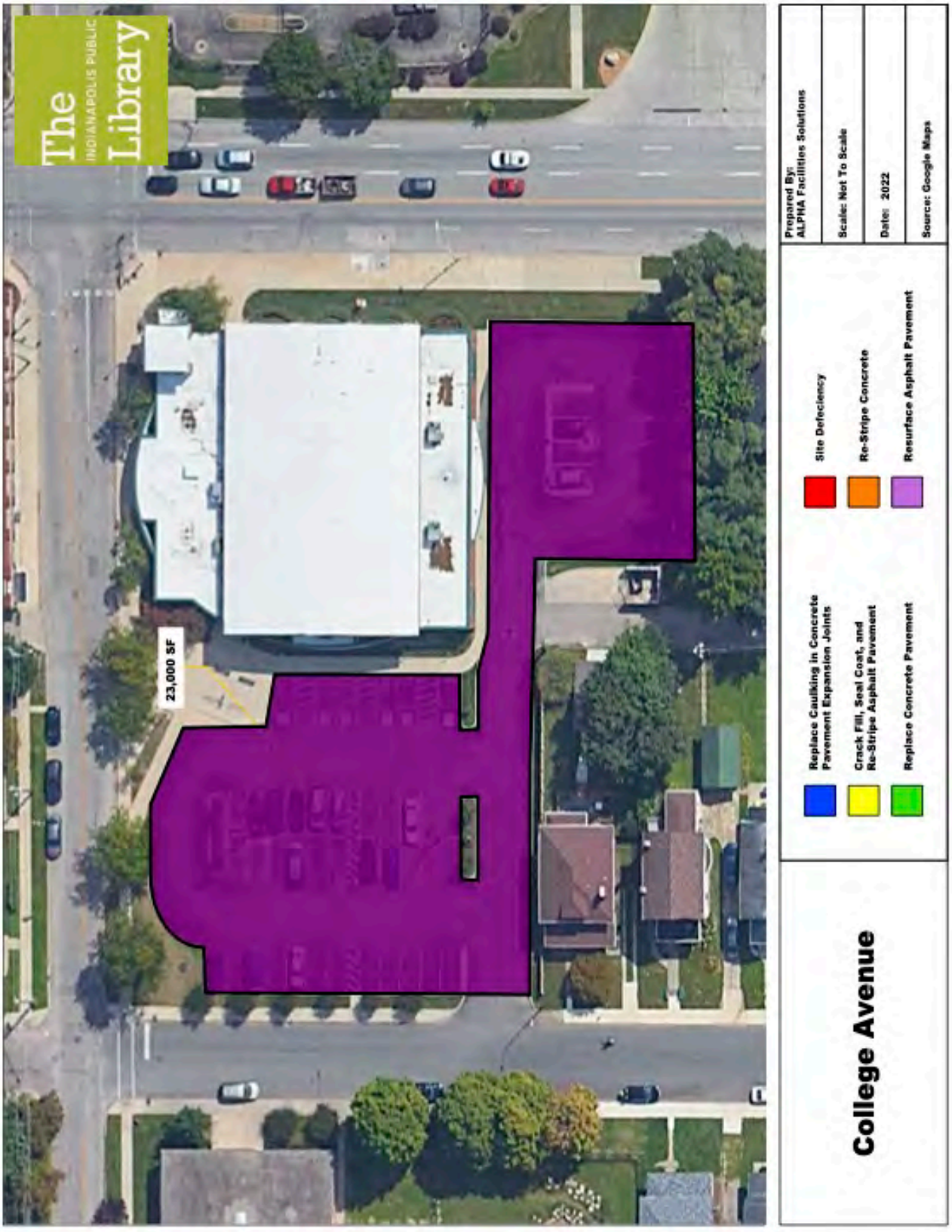
Please note that not all locations have all the various infrastructure systems present. We determined unit pricing for the various deficiency requirements by referencing 2022 RS Means Building Construction Cost Data and Assembly Cost Data when available. Industry sources were used as a supplemental source for unit pricing when needed.

o Site Utility observations were performed.

Table 31. Summary of 2022 Site and Infrastructure Deficiencies: College Avenue

Asset Description	Corrective Action	Notes	Priority	Current Needs	Year
Vehicular Pavements	Resurface Asphalt Pavements	23000 SF @ $3.5 Per SF	Low	$80,500	2022
			Total 2022 Needs	**$80,500**	

Figure 7. Site and Infrastructure Deficiencies Markup: College Avenue



Site Infrastructure

The asphalt pavements were in poor condition and in need of resurfacing as longitudinal cracking, transverse cracking, and degradation were observed throughout the pavement.

This page is intentionally left blank.

DECATUR

Table 32: Facility Description: Facilities - Decatur

Summary of Findings	
Construction Type	One-Story Structure
Roof Type	Asphalt Shingle and Standing Seam Metal Panel
Ceiling Type	Suspended Acoustical Tile and Adhered Acoustical Tile
Lighting	Fluorescent and Incandescent
HVAC	Split-DX
Elevator	No
Fire Sprinkler	No
Fire Alarm	Yes

Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
Decatur	1990	11,512	$353,352	$2,973,707	12	$521,300	18
Site Information			$133,000			$133,000	
TOTAL			$486,352			$654,300	

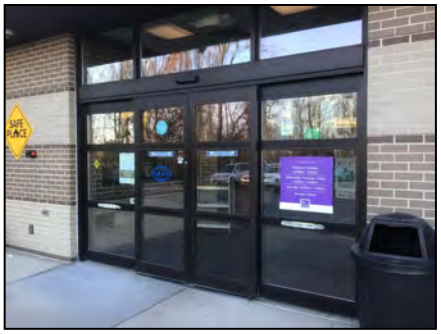
General Observations:

- The fire alarm and detection system is beyond its recommended useful life. The ductwork system is beyond its recommended useful life.

Electrical

The fluorescent and incandescent lighting was in good condition. The electrical branch wiring is beyond its recommended useful life. The service and distribution system was in good condition. The emergency and exit lighting is beyond its recommended useful life.

Branch wiring is not beyond life.
Emergency and exit lighting age need to be determined, looks to be recent.



Exterior Enclosure

The metal doors were in good condition; however, the glazed doors were in fair condition due to observed malfunctioning hardware. The double-pane windows were in good condition. The brick veneer walls were in good condition. The standing seam metal panel roof covering was within its recommended useful life; however, the asphalt shingle roof was beyond its recommended useful life.

Exterior steel door frames are rusting. Sealant is deteriorated. Brick piers at exterior enclosure are deteriorated. Water in exterior access storage room.

Interiors

The ceramic tile floor finishes were in good condition; however, the carpet and resilient floors were in fair condition due to observed rippling and deterioration. The vinyl and painted wall finishes were in good condition. The suspended acoustical tile and adhered acoustical tile ceiling finishes were in fair condition due to observed stains.

Vinyl wall coverings are peeling. Seams cracking in gypsum ceilings.

Plumbing

The porcelain and manual plumbing fixtures were in good condition. The domestic water distribution system is beyond its recommended useful life. The sanitary waste system is beyond its recommended useful life.

PLUMBING:
Water heater is in poor condition. One sink is off due to a leak.

MECHANICAL:
Fan Coil units are in poor condition. Condensing units are in poor condition.

Table 33. Current and Forecasted Needs Summarized by System (Current + 5 years): Decatur

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$486,352***	***$529,612***	***$529,612***	***$573,866***	***$573,866***	***$654,300***
Needs by Year	***$486,352***	***$43,260***	***$0***	***$44,254***	***$0***	***$80,435***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0	$0
Roofing	**$46,721**	**$0**	**$0**	**$44,254**	**$0**	**$0**
Roof Coverings	$46,721	$0	$0	$44,254	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**	**$80,435**
Ceiling Finishes	$0	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0	$79,153
Wall Finishes	$0	$0	$0	$0	$0	$1,281
Plumbing	**$73,753**	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$28,813	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0	$0
Sanitary Waste	$44,939	$0	$0	$0	$0	$0
HVAC	**$53,951**	**$43,260**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Cooling Generation	$0	$28,428	$0	$0	$0	$0
Distribution System	$53,951	$0	$0	$0	$0	$0
Heat Generation	$0	$14,832	$0	$0	$0	$0
Fire Protection	**$39,604**	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$39,604	$0	$0	$0	$0	$0
Electrical	**$139,324**	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$124,502	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$14,822	$0	$0	$0	$0	$0
Site Infrastructure	**$133,000**	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$133,000	$0	$0	$0	$0	$0

Table 34. Current and Forecasted Needs Summarized by System (Years 6 - 10): Decatur

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$715,983***	***$715,983***	***$841,368***	***$841,368***	***$971,944***
Needs by Year	***$61,683***	***$0***	***$125,385***	***$0***	***$130,576***
Exterior Enclosure	**$0**	**$0**	**$2,065**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$2,065	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$20,123**	**$0**	**$0**
Interior Doors	$0	$0	$20,123	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$61,683**	**$0**	**$103,197**	**$0**	**$6,063**
Ceiling Finishes	$61,683	$0	$0	$0	$6,063
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$103,197	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$124,513**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$124,513
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 35. Current and Forecasted Needs Summarized by System (Years 11 - 15): Decatur

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$996,252***	***$1,230,979***	***$1,230,979***	***$1,230,979***	***$1,358,090***
Needs by Year	***$24,308***	***$234,727***	***$0***	***$0***	***$127,111***
Exterior Enclosure	**$0**	**$100,440**	**$0**	**$0**	**$69,128**
Exterior Walls (Finishes)	$0	$85,927	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$69,128
Exterior Doors	$0	$14,514	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$82,527**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$82,527	$0	$0	$0
Interiors	**$0**	**$51,759**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$51,759	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$57,982**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$57,982
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$24,308**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$24,308	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 36. Current and Forecasted Needs Summarized by System (Years 16-20): Decatur

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$1,358,090***	***$1,358,090***	***$1,358,090***	***$1,358,090***	***$1,358,090***
Needs by Year	***$0***	***$0***	***$0***	***$0***	***$0***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 37. Expired Systems 2022: Facilities – Decatur

Building	System Category	System	Priority	2022 Needs
Decatur	Electrical	Branch Wiring	High	$124,502
Decatur	Electrical	Exit Signs and Emergency Lighting	High	$14,822
Decatur	Fire Protection	Fire Alarms	High	$39,604
Decatur	HVAC	Distribution System	High	$53,951
Decatur	Plumbing	Domestic Water Distribution	Medium	$28,813
Decatur	Plumbing	Sanitary Waste	Medium	$44,939
Decatur	Roofing	Roof Coverings	High	$46,721
			TOTAL	**$353,352**

This page is intentionally left blank.

Site and Infrastructure Assessment Findings

Site General Condition

The following site conditions and/or deficiencies were observed during the assessment.

Asphalt Pavements:

- The asphalt pavements were in poor condition and in need of resurfacing as longitudinal cracking, transverse cracking, and degradation were observed throughout the pavement.

Site Improvements

A site infrastructure condition assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

- Good condition
- Poor condition and in need of repair
- Poor condition and in need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth aerial photographs were used in lieu of site plans. The site assessment was performed, and the subsequent results grouped by location. Findings for each location were divided as follows:

- Pedestrian Pavements
- Vehicular Pavements
- Site Development

Please note that not all locations have all the various infrastructure systems present. We determined unit pricing for the various deficiency requirements by referencing 2022 RS Means Building Construction Cost Data and Assembly Cost Data when available. Industry sources were used as a supplemental source for unit pricing when needed.

Table 38. Summary of 2022 Site and Infrastructure Deficiencies: Decatur

Asset Description	Corrective Action	Notes	Priority	Current Needs	Year
Vehicular Pavements	Resurface Asphalt Pavements	38000 SF @ $3.5 Per SF	Low	$133,000	2022
			Total 2022 Needs	**$133,000**	

Figure 8. Site and Infrastructure Deficiencies Markup: Decatur

Site Infrastructure

The asphalt pavements were in poor condition and in need of resurfacing as longitudinal cracking, transverse cracking, and degradation were observed throughout the pavement.

This page is intentionally left blank.

EAGLE

Table 39: Facility Description: Facilities - Eagle

Summary of Findings	
Construction Type	One-Story Structure
Roof Type	Single-ply Membrane
Ceiling Type	Suspended Acoustical Tile
Lighting	LED
HVAC	VAVs with Hot and Chilled Water Coils
Elevator	No
Fire Sprinkler	Yes
Fire Alarm	Yes

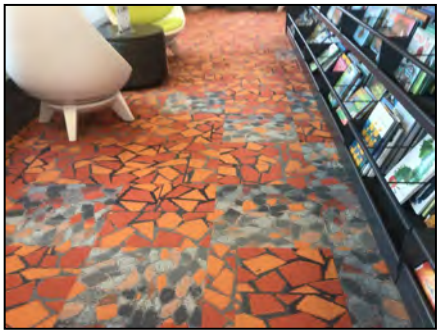
Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
Eagle	2019	20,700	$0	$5,347,094	0	$0	0
Site Information			$0			$0	
TOTAL			$0			$0	

Electrical

The LED lighting was in good condition. The electrical branch wiring is within its recommended useful life. The service and distribution system was in good condition. The emergency and exit lighting is within its recommended useful life.

Exterior Enclosure

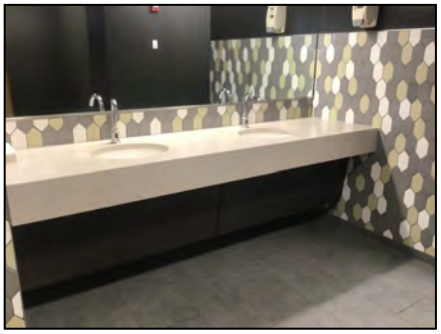
The glazed and metal doors were in good condition. The double-pane windows were in good condition. The brick veneer walls were in good condition. The single-ply membrane roof covering was within its recommended useful life.



Interiors

The ceramic tile, carpet and laminate wood floor finishes were in good condition. The painted wall finishes were in good condition. The suspended acoustical tile ceiling finishes were in good condition.

Carpeting has stains. Staining on some ceiling tiles.



Plumbing

The porcelain and automated plumbing fixtures were in good condition. The domestic water distribution system is within its recommended useful life. The sanitary waste system is within its recommended useful life.

MECHANICAL:
Air Handling Unit, Boiler, Chiller, pumps, fans, and VAV boxes all circa 2019 and in good condition.

Table 40. Current and Forecasted Needs Summarized by System (Current + 5 years): Eagle

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***
Needs by Year	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0	$0

Table 41. Current and Forecasted Needs Summarized by System (Years 6 - 10): Eagle

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$0***	***$23,027***	***$23,027***	***$23,027***	***$23,027***
Needs by Year	***$0***	***$23,027***	***$0***	***$0***	***$0***
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interiors	**$0**	**$23,027**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$23,027	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0

Table 42. Current and Forecasted Needs Summarized by System (Years 11 - 15): Eagle

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$23,027***	***$236,194***	***$236,194***	***$236,194***	***$236,194***
Needs by Year	***$0***	***$213,167***	***$0***	***$0***	***$0***
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interiors	**$0**	**$141,955**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$141,955	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$71,212**	**$0**	**$0**	**$0**
Fire Alarms	$0	$71,212	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0

Table 43. Current and Forecasted Needs Summarized by System (Years 16-20): Eagle

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$236,194***	***$1,033,315***	***$1,033,315***	***$1,033,315***	***$1,033,315***
Needs by Year	***$0***	***$797,121***	***$0***	***$0***	***$0***
Roofing	**$0**	**$229,791**	**$0**	**$0**	**$0**
Roof Coverings	$0	$229,791	$0	$0	$0
Interiors	**$0**	**$123,235**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$123,235	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
HVAC	**$0**	**$193,573**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$43,708	$0	$0	$0
Cooling Generation	$0	$62,418	$0	$0	$0
Distribution System	$0	$83,070	$0	$0	$0
Terminal & Package Units	$0	$4,378	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$250,522**	**$0**	**$0**	**$0**
Lighting	$0	$223,871	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$26,651	$0	$0	$0

Table 44. Expired Systems 2022: Facilities – Eagle

Building	System Category	System	Priority	2022 Needs
None				$0
			TOTAL	**$0**

This page is intentionally left blank.

EAST 38TH STREET

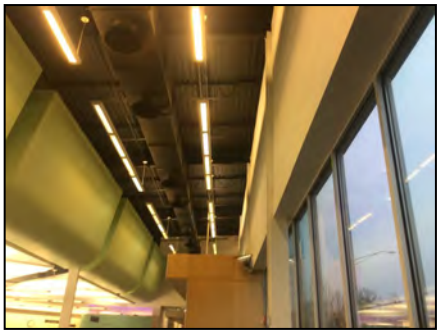
Table 45: Facility Description: Facilities - East 38th Street

Summary of Findings	
Construction Type	One-Story Structure
Roof Type	~~Modified Bitumen~~ TPO/PVC
Ceiling Type	Suspended Acoustical Tile and Painted
Lighting	Fluorescent
HVAC	Split-DX
Elevator	No
Fire Sprinkler	Yes
Fire Alarm	Yes

Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
East 38th Street	2003	16,134	$55,504	$4,167,633	1	$621,162	15
Site Information			$33,480			$33,480	
TOTAL			$88,984			$654,642	

General Observations:

- The fire alarm and detection system is beyond its recommended useful life.



Electrical

The fluorescent lighting was in good condition. The electrical branch wiring is within its recommended useful life. The service and distribution system was in good condition. The emergency and exit lighting is within its recommended useful life.

Exterior Enclosure

The glazed and metal doors were in good condition. The double-pane windows were in fair condition due to observed deteriorated window seals. The CMU walls were in good condition. ~~The modified bitumen~~ roof covering was within its recommended useful life.
TPO/PVC roof.

The bottom of the exterior hollow metal frames are rusting. Some fiber cement panels are broken. The bottom of steel columns are rusting.

Interiors

The finished concrete floor finishes were in good condition; however, the carpet floors were in fair condition due to observed stains. The vinyl and painted wall finishes were in good condition. The suspended acoustical tile and painted ceiling finishes were in good condition.
Flooring in the restroom was stained and cracked at the perimeter. Steel lavatory supports are rusting. Grout on wall tile is stained. Toilet partition has makeshift support. Vinyl wall covering is starting to peel.

Plumbing

The porcelain and automated plumbing fixtures were in good condition. The domestic water distribution system is within its recommended useful life. The sanitary waste system is within its recommended useful life.

Water heater is in good condition.

MECHANICAL:
1 Packaged rooftop Unit is in new condition, 1 packaged rooftop unit is in poor condition. One Split system consists of new furnaces and a new cooling coil, while another split system consists of a new furnace with a poor condition cooling coil/condensing unit. Fans are in fair condition.

Table 46. Current and Forecasted Needs Summarized by System (Current + 5 years): East 38th Street

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$88,984***	***$539,176***	***$539,176***	***$539,176***	***$539,176***	***$654,642***
Needs by Year	***$88,984***	***$450,192***	***$0***	***$0***	***$0***	***$115,466***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0	$0
Roofing	**$0**	**$154,718**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$154,718	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**	**$115,466**
Ceiling Finishes	$0	$0	$0	$0	$0	$3,590
Floor Finishes	$0	$0	$0	$0	$0	$110,081
Wall Finishes	$0	$0	$0	$0	$0	$1,795
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0	$0
HVAC	**$0**	**$274,701**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Cooling Generation	$0	$11,227	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$263,474	$0	$0	$0	$0
Fire Protection	**$55,504**	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$55,504	$0	$0	$0	$0	$0
Electrical	**$0**	**$20,773**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$20,773	$0	$0	$0	$0
Site Infrastructure	**$33,480**	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$33,480	$0	$0	$0	$0	$0

Table 47. Current and Forecasted Needs Summarized by System (Years 6 - 10): East 38th Street

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$654,642***	***$654,642***	***$799,273***	***$799,273***	***$1,172,177***
Needs by Year	***$0***	***$0***	***$144,631***	***$0***	***$372,904***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$74,781**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$74,781
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$144,631**	**$0**	**$76,846**
Ceiling Finishes	$0	$0	$0	$0	$76,846
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$144,631	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$46,787**
Controls and Instrumentation	$0	$0	$0	$0	$34,067
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$1,906
Heat Generation	$0	$0	$0	$0	$10,815
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$174,489**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$174,489
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 48. Current and Forecasted Needs Summarized by System (Years 11 - 15): East 38th Street

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$1,525,642***	***$1,525,642***	***$1,737,419***	***$1,737,419***	***$1,737,419***
Needs by Year	***$353,465***	***$0***	***$211,777***	***$0***	***$0***
Exterior Enclosure	**$0**	**$0**	**$71,353**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$58,889	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$12,464	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$140,424**	**$0**	**$0**
Interior Doors	$0	$0	$27,920	$0	$0
Specialties	$0	$0	$112,504	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$103,364**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$40,382	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$62,982	$0	$0	$0	$0
HVAC	**$75,612**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$75,612	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$174,489**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$174,489	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 49. Current and Forecasted Needs Summarized by System (Years 16-20): East 38th Street

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$1,823,831***	***$1,823,831***	***$1,823,831***	***$1,823,831***	***$1,823,831***
Needs by Year	***$86,412***	***$0***	***$0***	***$0***	***$0***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$81,262**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$81,262	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$5,150**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0
Terminal & Package Units	$5,150	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 50. Expired Systems 2022: Facilities – East 38th Street

Building	System Category	System	Priority	2022 Needs
East 38th Street	Fire Protection	Fire Alarms	High	$55,504
			TOTAL	**$55,504**

This page is intentionally left blank

Site and Infrastructure Assessment Findings

Site General Condition

The following site conditions and/or deficiencies were observed during the assessment.

Asphalt Pavements:

- The asphalt pavements were in poor condition and in need of resealing as longitudinal and transverse cracking were observed throughout the pavement.

Site Improvements

A site infrastructure condition assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

- Good condition
- Poor condition and in need of repair
- Poor condition and in need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth aerial photographs were used in lieu of site plans. The site assessment was performed, and the subsequent results grouped by location. Findings for each location were divided as follows:

- Pedestrian Pavements
- Vehicular Pavements
- Site Development

Please note that not all locations have all the various infrastructure systems present. We determined unit pricing for the various deficiency requirements by referencing 2022 RS Means Building Construction Cost Data and Assembly Cost Data when available. Industry sources were used as a supplemental source for unit pricing when needed.

Site Utilities

No Site Utility observations were performed.

Table 51. Summary of 2022 Site and Infrastructure Deficiencies: East 38th Street

Asset Description	Corrective Action	Notes	Priority	Current Needs	Year
Vehicular Pavements	Crack Fill, Seal Coat, and Restripe Asphalt Pavements	27900 SF @ $1.2 Per SF	Low	$33,480	2022
			Total 2022 Needs	**$33,480**	

Figure 9. Site and Infrastructure Deficiencies Markup: East 38th Street

Site Infrastructure

The asphalt pavements were in poor condition and in need of resealing as longitudinal and transverse cracking were observed throughout the pavement.

This page is intentionally left blank.

EAST WASHINGTON

Table 52: Facility Description: Facilities - East Washington

Summary of Findings	
Construction Type	One-Story Structure with Basement
Roof Type	Asphalt Shingle and Single-ply Membrane
Ceiling Type	Suspended Acoustical Tile
Lighting	LED
HVAC	Split-DX
Elevator	Yes
Fire Sprinkler	Yes
Fire Alarm	Yes

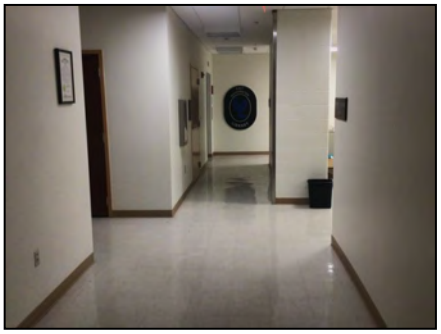
Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
East Washington	2017	9,466	$0	$2,445,197	0	$0	0
Site Information			$8,040			$8,040	
TOTAL			$8,040			$8,040	

Electrical

The LED lighting was in good condition. The electrical branch wiring is within its recommended useful life. The service and distribution system was in good condition. The emergency and exit lighting is within its recommended useful life.

Exterior Enclosure

The metal and wooden doors were in good condition. The double-pane windows were in good condition. The brick veneer walls were in good condition. The asphalt shingle and single-ply membrane roof covering are within their recommended useful lives.
Some masonry repairs are needed at the base of the original building. Bottom of exterior hollow metal doors and frames is rusting. Wood doors need refinished. A roof drain on the front of the building is clogged. Access to this drain is unsafe. Downspouts on back of building drain to the sidewalk causing slick surfaces in the winter.



Interiors

The laminate wood and vinyl tile floor finishes were in good condition. The painted wall finishes were in good condition. The suspended acoustical tile ceiling finishes were in good condition.

Plumbing

The porcelain and manual plumbing fixtures were in good condition. The domestic water distribution system is within its recommended useful life. The sanitary waste system is within its recommended useful life.

Water heater is in good condition.

MECHANICAL:
4 split system furnaces are in good condition.

Table 53. Current and Forecasted Needs Summarized by System (Current + 5 years): East Washington

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$8,040***	***$8,040***	***$8,040***	***$8,040***	***$8,040***	***$8,040***
Needs by Year	***$8,040***	***$0***	***$0***	***$0***	***$0***	***$0***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0	$0
Conveying	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Conveying Systems	$0	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0	$0
Site Infrastructure	**$8,040**	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$8,040	$0	$0	$0	$0	$0

Table 54. Current and Forecasted Needs Summarized by System (Years 6 - 10): East Washington

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$18,570***	***$18,570***	***$18,570***	***$33,196***	***$145,647***
Needs by Year	***$10,530***	***$0***	***$0***	***$14,626***	***$112,451***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$10,530**	**$0**	**$0**	**$0**	**$79,886**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$79,886
Wall Finishes	$10,530	$0	$0	$0	$0
Conveying	**$0**	**$0**	**$0**	**$0**	**$0**
Conveying Systems	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$14,626**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$14,626	$0
Heat Generation	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$32,565**
Fire Alarms	$0	$0	$0	$0	$32,565
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 55. Current and Forecasted Needs Summarized by System (Years 11 - 15): East Washington

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$145,647***	***$205,773***	***$309,520***	***$313,897***	***$540,609***
Needs by Year	***$0***	***$60,126***	***$103,747***	***$4,378***	***$226,712***
Exterior Enclosure	**$0**	**$60,126**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$55,983	$0	$0	$0
Exterior Doors	$0	$4,144	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$35,807**
Roof Coverings	$0	$0	$0	$0	$35,807
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$56,355**
Ceiling Finishes	$0	$0	$0	$0	$56,355
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Conveying	**$0**	**$0**	**$91,593**	**$0**	**$0**
Conveying Systems	$0	$0	$91,593	$0	$0
HVAC	**$0**	**$0**	**$12,154**	**$4,378**	**$19,987**
Controls and Instrumentation	$0	$0	$0	$0	$19,987
Cooling Generation	$0	$0	$0	$0	$0
Heat Generation	$0	$0	$12,154	$0	$0
Terminal & Package Units	$0	$0	$0	$4,378	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$114,562**
Lighting	$0	$0	$0	$0	$102,375
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$12,187
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 56. Current and Forecasted Needs Summarized by System (Years 16-20): East Washington

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$540,609***	***$540,609***	***$540,609***	***$540,609***	***$643,719***
Needs by Year	***$0***	***$0***	***$0***	***$0***	***$103,110***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$4,144**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$4,144
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$98,966**
Interior Doors	$0	$0	$0	$0	$38,712
Specialties	$0	$0	$0	$0	$60,255
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Conveying	**$0**	**$0**	**$0**	**$0**	**$0**
Conveying Systems	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 57. Expired Systems 2022: Facilities – East Washington

Building	System Category	System	Priority	2022 Needs
None				$0
			TOTAL	**$0**

This page is intentionally left blank

Site and Infrastructure Assessment Findings

Site General Condition

The following site conditions and/or deficiencies were observed during the assessment.

Asphalt Pavements:

- A portion of the asphalt pavements were generally in poor condition and are in need of crack filling, seal coating, and re-striping due to several instances of cracking being observed.

Site Improvements

A site infrastructure condition assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

- Good condition
- Poor condition and in need of repair
- Poor condition and in need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth aerial photographs were used in lieu of site plans. The site assessment was performed, and the subsequent results grouped by location. Findings for each location were divided as follows:

- Pedestrian Pavements
- Vehicular Pavements
- Site Development

Please note that not all locations have all the various infrastructure systems present. We determined unit pricing for the various deficiency requirements by referencing 2022 RS Means Building Construction Cost Data and Assembly Cost Data when available. Industry sources were used as a supplemental source for unit pricing when needed.

Table 58. Summary of 2022 Site and Infrastructure Deficiencies: East Washington

Asset Description	Corrective Action	Notes	Priority	Current Needs	Year
Vehicular Pavements	Crack Fill, Seal Coat, and Restripe Asphalt Pavements	6700 SF @ $1.2 Per SF	Low	$8,040	2022
			Total 2022 Needs	**$8,040**	

Figure 10. Site and Infrastructure Deficiencies Markup: East Washington

Site Infrastructure

A portion of the asphalt pavements were in poor condition and in need of resealing as longitudinal and transverse cracking were observed throughout the pavement.

This page is intentionally left blank.

FRANKLIN ROAD

Table 59: Facility Description: Facilities - Franklin Road

Summary of Findings	
Construction Type	One-Story Structure
Roof Type	Modified Bitumen and Asphalt Shingle
Ceiling Type	Suspended Acoustical Tile, Adhered Acoustical Tile, and Painted
Lighting	Fluorescent and Incandescent
HVAC	Packaged Units
Elevator	No
Fire Sprinkler	Yes
Fire Alarm	Yes

Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
Franklin Road	2000	17,563	$190,770	$4,536,764	4	$218,524	5
Site Information			$166,600			$166,600	
TOTAL			$357,370			$385,124	

General Observations:

- The fire alarm and detection system is beyond its recommended useful life.

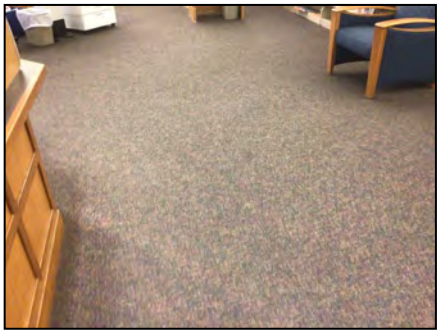
Electrical

The fluorescent and incandescent lighting was in good condition. The electrical branch wiring is within its recommended useful life. The service and distribution system was in good condition.

Exterior Enclosure

The metal and glazed doors were in good condition. The double-pane windows were in good condition. The brick veneer walls were in good condition. The modified bitumen and asphalt shingle roof covering are beyond their recommended useful lives.

Bottom of exterior hollow metal doors and frames are rusting. Some shingles have come loose. Steel framing on equipment screens is rusting.



Interiors

The laminate wood, carpet and finished concrete floor finishes were in good condition. The tile, vinyl and painted wall finishes were in good condition. The painted, suspended acoustical tile and adhered acoustical tile ceiling finishes were in good condition.

Carpet is stained. Some stains on ceilings. Restroom floors are stained. Vinyl wall covering is peeling.

Plumbing

The porcelain and manual plumbing fixtures were in good condition. The domestic water distribution system is within its recommended useful life. The sanitary waste system is within its recommended useful life.

Sanitary system is in fair to poor condition. Staff requires lines to be jetted once per year. Water heaters are in good condition.

MECHANICAL:
5 packaged rooftop units are in good condition

Table 60. Current and Forecasted Needs Summarized by System (Current + 5 years): Franklin Road

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$357,370***	***$381,215***	***$381,215***	***$381,215***	***$381,215***	***$385,124***
Needs by Year	***$357,370***	***$23,845***	***$0***	***$0***	***$0***	***$3,909***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0	$0
Roofing	**$130,350**	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$130,350	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**	**$3,909**
Ceiling Finishes	$0	$0	$0	$0	$0	$1,954
Floor Finishes	$0	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0	$1,954
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0	$0
HVAC	**$0**	**$23,845**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$23,845	$0	$0	$0	$0
Fire Protection	**$60,420**	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$60,420	$0	$0	$0	$0	$0
Sprinklers & Standpipe	$0	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0	$0
Site Infrastructure	**$166,600**	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$166,600	$0	$0	$0	$0	$0

Table 61. Current and Forecasted Needs Summarized by System (Years 6 - 10): Franklin Road

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$390,634***	***$390,634***	***$1,035,808***	***$1,035,808***	***$1,336,044***
Needs by Year	***$5,511***	***$0***	***$645,174***	***$0***	***$300,236***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$260,402**	**$0**	**$73,197**
Ceiling Finishes	$0	$0	$0	$0	$73,197
Floor Finishes	$0	$0	$120,453	$0	$0
Wall Finishes	$0	$0	$139,949	$0	$0
Plumbing	**$0**	**$0**	**$112,519**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$43,958	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$68,561	$0	$0
HVAC	**$5,511**	**$0**	**$82,309**	**$0**	**$37,084**
Controls and Instrumentation	$0	$0	$0	$0	$37,084
Distribution System	$5,511	$0	$82,309	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Sprinklers & Standpipe	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$189,944**	**$0**	**$189,955**
Branch Wiring	$0	$0	$189,944	$0	$0
Lighting	$0	$0	$0	$0	$189,955
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 62. Current and Forecasted Needs Summarized by System (Years 11 - 15): Franklin Road

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$1,388,729***	***$1,388,729***	***$1,654,824***	***$1,654,824***	***$1,654,824***
Needs by Year	***$52,685***	***$0***	***$266,096***	***$0***	***$0***
Exterior Enclosure	**$0**	**$0**	**$119,240**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$106,757	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$12,483	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$146,855**	**$0**	**$0**
Interior Doors	$0	$0	$38,678	$0	$0
Specialties	$0	$0	$108,178	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$52,685**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Terminal & Package Units	$52,685	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Sprinklers & Standpipe	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 63. Current and Forecasted Needs Summarized by System (Years 16-20): Franklin Road

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$1,792,728***	***$1,792,728***	***$1,929,487***	***$1,929,487***	***$1,929,487***
Needs by Year	***$137,904***	***$0***	***$136,760***	***$0***	***$0***
Exterior Enclosure	**$22,251**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$22,251	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$18,490**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$18,490	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$88,460**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$88,460	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$8,704**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Terminal & Package Units	$8,704	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$136,760**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Sprinklers & Standpipe	$0	$0	$136,760	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 64. Expired Systems 2022: Facilities – Franklin Road

Building	System Category	System	Priority	2022 Needs
Franklin Road	Fire Protection	Fire Alarms	High	$60,420
Franklin Road	Roofing	Roof Coverings	High	$29,046
Franklin Road	Roofing	Roof Coverings	High	$101,304
			TOTAL	**$190,770**

This page is intentionally left blank.

Site and Infrastructure Assessment Findings

Site General Condition

The following site conditions and/or deficiencies were observed during the assessment.

Asphalt Pavements:

- The asphalt pavements were in poor condition and in need of resurfacing as longitudinal cracking, transverse cracking, and degradation were observed throughout the pavement.

Site Improvements

A site infrastructure condition assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

- Good condition
- Poor condition and in need of repair
- Poor condition and in need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth aerial photographs were used in lieu of site plans. The site assessment was performed, and the subsequent results grouped by location. Findings for each location were divided as follows:

- Pedestrian Pavements
- Vehicular Pavements
- Site Development

Please note that not all locations have all the various infrastructure systems present. We determined unit pricing for the various deficiency requirements by referencing 2022 RS Means Building Construction Cost Data and Assembly Cost Data when available. Industry sources were used as a supplemental source for unit pricing when needed.

Table 65. Summary of 2022 Site and Infrastructure Deficiencies: Franklin Road

Asset Description	Corrective Action	Notes	Priority	Current Needs	Year
Vehicular Pavements	Resurface Asphalt Pavements	47600 SF @ $3.5 Per SF	Low	$166,600	2022
			Total 2022 Needs	**$166,600**	

Figure 11. Site and Infrastructure Deficiencies Markup: Franklin Road

Site Infrastructure

The asphalt pavements were in poor condition and in need of resurfacing as longitudinal cracking, transverse cracking, and degradation were observed throughout the pavement.

This page is intentionally left blank.

GARFIELD PARK

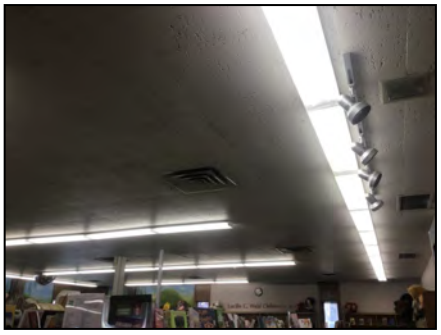
Table 66: Facility Description: Facilities - Garfield Park

Summary of Findings		
Construction Type	One-Story Structure	
Roof Type	Asphalt Shingle	
Ceiling Type	Suspended Acoustical Tile and Adhered Acoustical Tile	
Lighting	Fluorescent	
HVAC	Split-DX	
Elevator	No	
Fire Sprinkler	No	
Fire Alarm	No	

Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
Garfield Park	1965	6,465	$49,742	$1,669,998	3	$97,739	6
Site Information			$14,400			$14,400	
TOTAL			$64,142			$112,139	

General Observations:

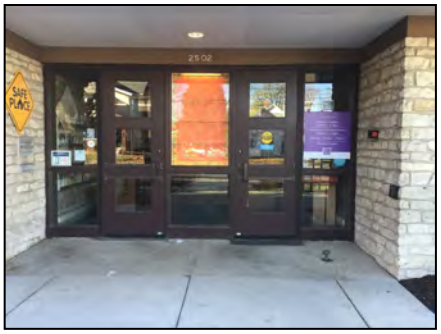
- It was reported that the facility underwent a major renovation in 2011 replacing all systems excluding the exterior walls and the plumbing systems.



Electrical

The fluorescent lighting was in good condition. The electrical branch wiring is within its recommended useful life. The service and distribution system was in good condition. The emergency and exit lighting is within its recommended useful life.

Some of the electrical distribution is original and should be replaced.
There is no fire alarm system.



Exterior Enclosure

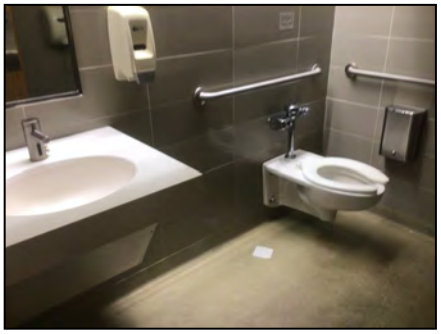
The metal and glazed doors were in good condition. The double-pane windows were in good condition. The brick veneer walls were in good condition. The asphalt shingle roof covering was within its recommended useful life.

Rust is forming at the base of exterior steel doors. Soffit trim is coming loose. Exposed steel structure is starting to rust. Sealant is deteriorated. Mechanical room exterior door has spray foam at the bottom and tape around the perimeter.

Interiors

The carpet and finished concrete floor finishes were in good condition. The vinyl and painted wall finishes were in good condition. The suspended acoustical tile and adhered acoustical tile ceiling finishes were in good condition.

Walk off mat is worn, carpet has stains. Restroom floors are stained. The vestibule is small and traps people who can't make it through both doors before the automatic door closes.



Plumbing

The porcelain and automated plumbing fixtures were in good condition. The domestic water distribution system is beyond its recommended useful life. The sanitary waste system is beyond its recommended useful life.

PLUMBING:Sanitary system drains slowly per staff onsite.
Water heater is in good condition.

MECHANICAL:Fan Coil unit is in poor condition. Condensing units are in poor condition.

Table 67. Current and Forecasted Needs Summarized by System (Current + 5 years): Garfield Park

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$64,142***	***$111,419***	***$111,419***	***$111,419***	***$111,419***	***$112,139***
Needs by Year	***$64,142***	***$47,277***	***$0***	***$0***	***$0***	***$720***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**	**$720**
Ceiling Finishes	$0	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0	$720
Plumbing	**$41,419**	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$16,181	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0	$0
Sanitary Waste	$25,237	$0	$0	$0	$0	$0
HVAC	**$0**	**$47,277**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Cooling Generation	$0	$18,849	$0	$0	$0	$0
Distribution System	$0	$28,428	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0	$0
Electrical	**$8,324**	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$8,324	$0	$0	$0	$0	$0
Site Infrastructure	**$14,400**	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$14,400	$0	$0	$0	$0	$0

Table 68. Current and Forecasted Needs Summarized by System (Years 6 - 10): Garfield Park

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$114,096***	***$114,096***	***$216,167***	***$276,715***	***$276,715***
Needs by Year	***$1,957***	***$0***	***$102,071***	***$60,548***	***$0***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$48,163**	**$0**
Roof Coverings	$0	$0	$0	$48,163	$0
Interior Construction	**$0**	**$0**	**$0**	**$12,386**	**$0**
Interior Doors	$0	$0	$0	$12,386	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$102,071**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$44,113	$0	$0
Wall Finishes	$0	$0	$57,958	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$1,957**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Terminal & Package Units	$1,957	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 69. Current and Forecasted Needs Summarized by System (Years 11 - 15): Garfield Park

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$367,983***	***$433,079***	***$433,079***	***$498,509***	***$498,509***
Needs by Year	***$91,268***	***$65,096***	***$0***	***$65,431***	***$0***
Exterior Enclosure	**$0**	**$65,096**	**$0**	**$20,683**	**$0**
Exterior Walls (Finishes)	$0	$65,096	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$20,683	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$44,748**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$44,748	$0
Interiors	**$7,698**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$7,698	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$13,651**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$13,651	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Electrical	**$69,919**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$69,919	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 70. Current and Forecasted Needs Summarized by System (Years 16-20): Garfield Park

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$498,509***	***$498,509***	***$498,509***	***$665,236***	***$665,236***
Needs by Year	***$0***	***$0***	***$0***	***$166,727***	***$0***
Exterior Enclosure	**$0**	**$0**	**$0**	**$6,726**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$6,726	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$27,222**	**$0**
Ceiling Finishes	$0	$0	$0	$27,222	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$32,562**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$32,562	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$30,298**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$30,298	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$69,919**	**$0**
Branch Wiring	$0	$0	$0	$69,919	$0
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 71. Expired Systems 2022: Facilities – Garfield Park

Building	System Category	System	Priority	2022 Needs
Garfield Park	Electrical	Exit Signs and Emergency Lighting	High	$8,324
Garfield Park	Plumbing	Domestic Water Distribution	Medium	$16,181
Garfield Park	Plumbing	Sanitary Waste	Medium	$25,237
			TOTAL	**$49,742**

This page is intentionally left blank.

Site and Infrastructure Assessment Findings

Site General Condition

The following site conditions and/or deficiencies were observed during the assessment.

Asphalt Pavements:

- The asphalt pavements were in poor condition and in need of resealing as longitudinal and transverse cracking were observed throughout the pavement.

Site Improvements

A site infrastructure condition assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

- Good condition
- Poor condition and in need of repair
- Poor condition and in need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth aerial photographs were used in lieu of site plans. The site assessment was performed, and the subsequent results grouped by location. Findings for each location were divided as follows:

- Pedestrian Pavements
- Vehicular Pavements
- Site Development

Please note that not all locations have all the various infrastructure systems present. We determined unit pricing for the various deficiency requirements by referencing 2022 RS Means Building Construction Cost Data and Assembly Cost Data when available. Industry sources were used as a supplemental source for unit pricing when needed.

Table 72. Summary of 2022 Site and Infrastructure Deficiencies: Garfield Park

Asset Description	Corrective Action	Notes	Priority	Current Needs	Year
Vehicular Pavements	Crack Fill, Seal Coat, and Restripe Asphalt Pavements	12000 SF @ $1.2 Per SF	Low	$14,400	2022
			Total 2022 Needs	**$14,400**	

Figure 12. Site and Infrastructure Deficiencies Markup: Garfield Park

Site Infrastructure

The asphalt pavements were in poor condition and in need of resealing as longitudinal and transverse cracking were observed throughout the pavement.

This page is intentionally left blank.

HAUGHVILLE

Table 73: Facility Description: Facilities - Haughville

Summary of Findings	
Construction Type	One-Story Structure
Roof Type	Modified Bitumen EPDM
Ceiling Type	Painted and Suspended Acoustical Tile
Lighting	Fluorescent
HVAC	Packaged Units
Elevator	No
Fire Sprinkler	Yes
Fire Alarm	Yes

Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
Haughville	2003	11,696	$0	$3,021,237	0	$169,985	6
Site Information			$89,600			$89,600	
TOTAL			$89,600			$259,585	

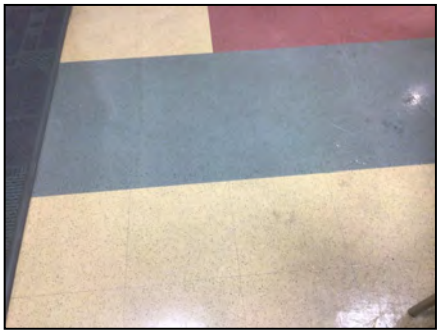
Electrical

The fluorescent lighting was in good condition. The electrical branch wiring is within its recommended useful life. The service and distribution system was in good condition. The emergency and exit lighting is within its recommended useful life.

Exterior Enclosure

The metal and glazed doors were in good condition. The double-pane windows were in good condition. The brick veneer walls were in good condition. The modified bitumen roof covering was within its recommended useful life.

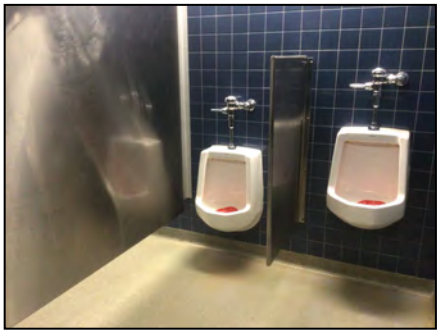
Brick veneer is cracking in several locations beneath the lintel. Roof is EPDM. Rust is starting to form at the base of steel doors and steel canopy structure.



Interiors

The finished concrete, carpet and vinyl tile floor finishes were in good condition. The painted wall finishes were in good condition. The painted and suspended acoustical tile ceiling finishes were in good condition.

Carpet and tile has staining. Vinyl wall covering is beginning to peel. Stains noted on ceilings. Some cracking in drywall walls and ceilings.



Plumbing

The porcelain and manual plumbing fixtures were in good condition. The domestic water distribution system is within its recommended useful life. The sanitary waste system is within its recommended useful life.

MECHANICAL:
One Packaged RTU was in good condition. Other two RTUs were in poor condition.

Table 74. Current and Forecasted Needs Summarized by System (Current + 5 years): Haughville

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$89,600***	***$234,865***	***$234,865***	***$234,865***	***$234,865***	***$259,585***
Needs by Year	***$89,600***	***$145,265***	***$0***	***$0***	***$0***	***$24,721***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0	$0
Roofing	**$0**	**$102,705**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$102,705	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**	**$24,721**
Ceiling Finishes	$0	$0	$0	$0	$0	$11,710
Floor Finishes	$0	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0	$13,011
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0	$0
HVAC	**$0**	**$27,501**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$27,501	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0	$0
Electrical	**$0**	**$15,059**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$15,059	$0	$0	$0	$0
Site Infrastructure	**$89,600**	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$89,600	$0	$0	$0	$0	$0

Table 75. Current and Forecasted Needs Summarized by System (Years 6 - 10): Haughville

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$259,585***	***$259,585***	***$342,172***	***$342,172***	***$500,326***
Needs by Year	***$0***	***$0***	***$82,587***	***$0***	***$158,154***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$82,587**	**$0**	**$6,965**
Ceiling Finishes	$0	$0	$0	$0	$6,965
Floor Finishes	$0	$0	$82,587	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$24,696**
Controls and Instrumentation	$0	$0	$0	$0	$24,696
Distribution System	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$126,492**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$126,492
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 76. Current and Forecasted Needs Summarized by System (Years 11 - 15): Haughville

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$756,563***	***$756,563***	***$982,625***	***$982,625***	***$1,022,861***
Needs by Year	***$256,237***	***$0***	***$226,061***	***$0***	***$40,237***
Exterior Enclosure	**$0**	**$0**	**$95,541**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$87,229	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$8,312	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$130,520**	**$0**	**$0**
Interior Doors	$0	$0	$49,445	$0	$0
Specialties	$0	$0	$81,076	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$74,932**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$29,274	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$45,658	$0	$0	$0	$0
HVAC	**$54,813**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Distribution System	$54,813	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$40,237**
Fire Alarms	$0	$0	$0	$0	$40,237
Electrical	**$126,492**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$126,492	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 77. Current and Forecasted Needs Summarized by System (Years 16-20): Haughville

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$1,168,388***	***$1,168,388***	***$1,168,388***	***$1,205,777***	***$1,205,777***
Needs by Year	***$145,526***	***$0***	***$0***	***$37,389***	***$0***
Exterior Enclosure	**$86,617**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$86,617	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$58,909**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$58,909	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$37,389**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$37,389	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 78. Expired Systems 2022: Facilities – Haughville

Building	System Category	System	Priority	2022 Needs
None				$0
			TOTAL	**$0**

This page is intentionally left blank.

Site and Infrastructure Assessment Findings

Site General Condition

The following site conditions and/or deficiencies were observed during the assessment.

Asphalt Pavements:

- The asphalt pavements were in poor condition and in need of resurfacing as longitudinal cracking, transverse cracking, and degradation were observed throughout the pavement.

Site Improvements

A site infrastructure condition assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

- Good condition
- Poor condition and in need of repair
- Poor condition and in need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth aerial photographs were used in lieu of site plans. The site assessment was performed, and the subsequent results grouped by location. Findings for each location were divided as follows:

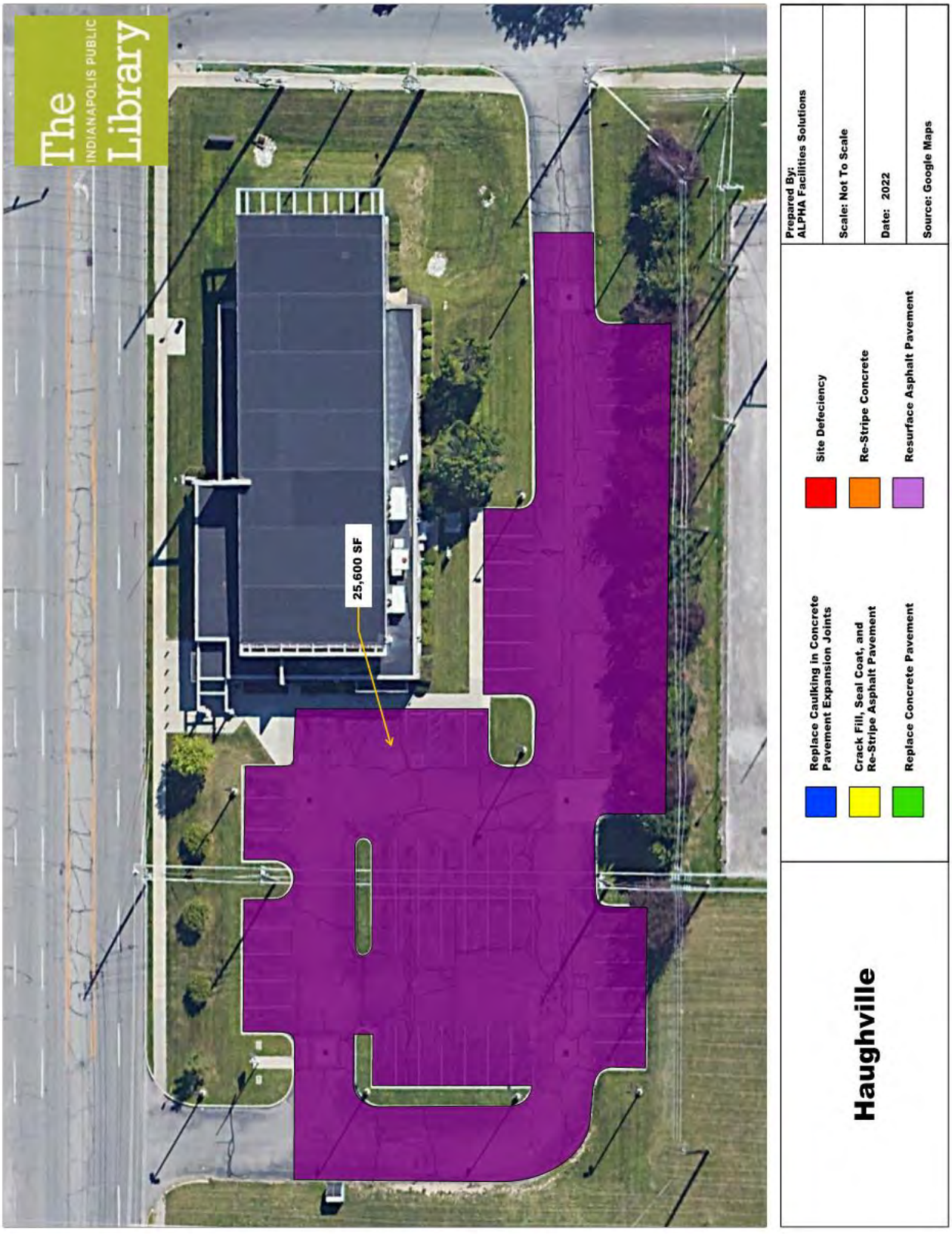
- Pedestrian Pavements
- Vehicular Pavements
- Site Development

Please note that not all locations have all the various infrastructure systems present. We determined unit pricing for the various deficiency requirements by referencing 2022 RS Means Building Construction Cost Data and Assembly Cost Data when available. Industry sources were used as a supplemental source for unit pricing when needed.

Table 79. Summary of 2022 Site and Infrastructure Deficiencies: Haughville

Asset Description	Corrective Action	Notes	Priority	Current Needs	Year
Vehicular Pavements	Resurface Asphalt Pavements	25600 SF @ $3.5 Per SF	Low	$89,600	2022
			Total 2022 Needs	**$89,600**	

Figure 13. Site and Infrastructure Deficiencies Markup: Haughville



Site Infrastructure

The asphalt pavements were in poor condition and in need of resurfacing as longitudinal cracking, transverse cracking, and degradation were observed throughout the pavement.

This page is intentionally left blank.

IRVINGTON

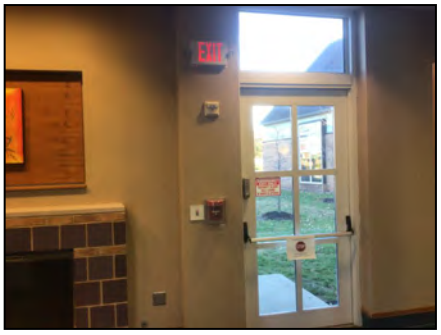
Table 80: Facility Description: Facilities - Irvington

Summary of Findings	
Construction Type	One-Story Structure
Roof Type	Modified Bitumen and Asphalt Shingle
Ceiling Type	Suspended Acoustical Tile and Painted
Lighting	Fluorescent
HVAC	Packaged Units and Split-DX
Elevator	No
Fire Sprinkler	Yes
Fire Alarm	Yes

Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
Irvington	2002	16,004	$185,425	$4,134,052	4	$318,927	8
Site Information			$0			$0	
TOTAL			$185,425			$318,927	

General Observations:

- The fire alarm and detection system is beyond its recommended useful life.



Electrical

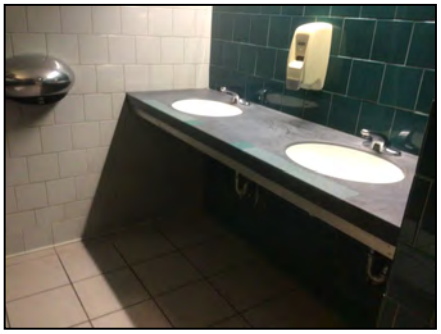
The fluorescent lighting was in good condition. The electrical branch wiring is within its recommended useful life. The service and distribution system was in good condition. The emergency and exit lighting is beyond its recommended useful life.

Exterior Enclosure

The metal and glazed doors were in good condition. The double-pane windows were in good condition. The brick veneer walls were in good condition. The modified bitumen and asphalt shingle roof covering were beyond their recommended useful lives.
Sealant is deteriorated. Brick on piers is spalling. Broken shingles were noted. The bottom of the EIFS was wet at the transition to brick.

Interiors

The ceramic tile floor finishes were in good condition; however, the carpet floors were in fair condition due to observed deterioration. The tile, painted and vinyl wall finishes were in good condition. The suspended acoustical tile and painted ceiling finishes were in good condition.
Vinyl wall covering is peeling. Carpet is stained. Restroom counters are stained. Some water damage noted around windows and on ceilings. Drywall corners are cracked on vaulted ceilings.



Plumbing

The porcelain and manual plumbing fixtures were in good condition. The domestic water distribution system is within its recommended useful life. The sanitary waste system is within its recommended useful life.

Water heaters are in good condition.

MECHANICAL:
2 Furnaces are in good condition, 2 furnaces are in poor condition. All 4 condensing units are in poor condition.
Packaged rooftop units are in good condition

Table 81. Current and Forecasted Needs Summarized by System (Current + 5 years): Irvington

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$185,425***	***$197,270***	***$197,270***	***$197,270***	***$197,270***	***$318,927***
Needs by Year	***$185,425***	***$11,845***	***$0***	***$0***	***$0***	***$121,657***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0	$0
Roofing	**$109,762**	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$109,762	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**	**$121,657**
Ceiling Finishes	$0	$0	$0	$0	$0	$7,122
Floor Finishes	$0	$0	$0	$0	$0	$109,194
Wall Finishes	$0	$0	$0	$0	$0	$5,342
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0	$0
HVAC	**$0**	**$11,845**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Cooling Generation	$0	$6,901	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0	$0
Heat Generation	$0	$4,944	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0	$0
Fire Protection	**$55,057**	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$55,057	$0	$0	$0	$0	$0
Sprinklers & Standpipe	$0	$0	$0	$0	$0	$0
Electrical	**$20,605**	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$20,605	$0	$0	$0	$0	$0

Table 82. Current and Forecasted Needs Summarized by System (Years 6 - 10): Irvington

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$320,420***	***$320,420***	***$416,067***	***$416,067***	***$996,938***
Needs by Year	***$1,494***	***$0***	***$95,647***	***$0***	***$580,871***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$95,647**	**$0**	**$57,171**
Ceiling Finishes	$0	$0	$0	$0	$57,171
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$95,647	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$102,531**
Domestic Water Distribution	$0	$0	$0	$0	$40,056
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$62,475
HVAC	**$1,494**	**$0**	**$0**	**$0**	**$75,003**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$1,494	$0	$0	$0	$75,003
Heat Generation	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Sprinklers & Standpipe	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$346,167**
Branch Wiring	$0	$0	$0	$0	$173,083
Lighting	$0	$0	$0	$0	$173,083
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0

Table 83. Current and Forecasted Needs Summarized by System (Years 11 - 15): Irvington

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$996,938***	***$996,938***	***$1,284,361***	***$1,284,361***	***$1,293,837***
Needs by Year	***$0***	***$0***	***$287,423***	***$0***	***$9,476***
Exterior Enclosure	**$0**	**$0**	**$113,913**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$101,550	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$12,363	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$137,528**	**$0**	**$0**
Interior Doors	$0	$0	$29,392	$0	$0
Specialties	$0	$0	$108,136	$0	$0
Interiors	**$0**	**$0**	**$35,982**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$35,982	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$9,476**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$9,476
Distribution System	$0	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Sprinklers & Standpipe	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0

Table 84. Current and Forecasted Needs Summarized by System (Years 16-20): Irvington

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$1,424,664***	***$1,424,664***	***$1,482,300***	***$1,482,300***	***$1,613,770***
Needs by Year	***$130,826***	***$0***	***$57,637***	***$0***	***$131,469***
Exterior Enclosure	**$26,375**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$26,375	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$80,607**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$80,607	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$23,845**	**$0**	**$57,637**	**$0**	**$6,850**
Controls and Instrumentation	$0	$0	$33,792	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$1,906
Heat Generation	$0	$0	$0	$0	$4,944
Terminal & Package Units	$23,845	$0	$23,845	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$124,620**
Fire Alarms	$0	$0	$0	$0	$0
Sprinklers & Standpipe	$0	$0	$0	$0	$124,620
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0

Table 85. Expired Systems 2022: Facilities – Irvington

Building	System Category	System	Priority	2022 Needs
Irvington	Electrical	Exit Signs and Emergency Lighting	High	$20,605
Irvington	Fire Protection	Fire Alarms	High	$55,057
Irvington	Roofing	Roof Coverings	High	$46,350
Irvington	Roofing	Roof Coverings	High	$63,412
			TOTAL	**$185,425**

This page is intentionally left blank.

LAWRENCE

Table 86: Facility Description: Facilities - Lawrence

Summary of Findings	
Construction Type	One-Story Structure
Roof Type	Asphalt Shingle
Ceiling Type	Suspended Acoustical Tile and Wood
Lighting	LED
HVAC	Split-DX
Elevator	No
Fire Sprinkler	No
Fire Alarm	Yes

Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
Lawrence	1983	13,251	$147,541	$3,422,915	4	$147,541	4
Site Information			$31,200			$31,200	
TOTAL			$178,741			$178,741	

General Observations:

- The fire alarm and detection system is beyond its recommended useful life.
- It was reported that there was a major renovation in 2020 excluding the service and distribution system, the emergency lighting, the plumbing fixtures, and all the HVAC systems.

Electrical

The LED lighting was in good condition. The electrical branch wiring is within its recommended useful life. The service and distribution system was in good condition. The emergency and exit lighting is beyond its recommended useful life.

Original distribution and wiring installed in 1983 are at end of life.

Exterior Enclosure

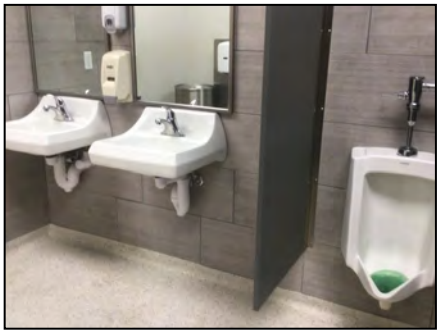
The metal and glazed doors were in good condition. The double-pane windows were in good condition. The brick veneer walls were in good condition. The asphalt shingle roof covering was within its recommended useful life.

Sealant is failing. Bottom of exterior hollow metal doors are rusting.

Interiors

The carpet and finished concrete floor finishes were in good condition. The painted wall finishes were in good condition. The suspended acoustical tile and wood ceiling finishes were in good condition.

Floors and partitions in restrooms are stained. Carpet is stained. Acoustical ceilings are stained.



Plumbing

The porcelain and manual plumbing fixtures were in good condition. The domestic water distribution system is beyond its recommended useful life. The sanitary waste system is beyond its recommended useful life.

PLUMBING:
Sinks, lavatories and water closets are in good condition. Water heater is in good condition. Domestic distribution system and sanitary system appear to be in fair condition.

MECHANICAL:
2 Air Handling Units and 5 split systems are in good condition.

Table 87. Current and Forecasted Needs Summarized by System (Current + 5 years): Lawrence

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$178,741***	***$178,741***	***$178,741***	***$178,741***	***$178,741***	***$178,741***
Needs by Year	***$178,741***	***$0***	***$0***	***$0***	***$0***	***$0***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0	$0
Plumbing	**$84,894**	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$33,166	$0	$0	$0	$0	$0
Sanitary Waste	$51,728	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0	$0
Fire Protection	**$45,586**	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$45,586	$0	$0	$0	$0	$0
Electrical	**$17,061**	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$17,061	$0	$0	$0	$0	$0
Site Infrastructure	**$31,200**	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$31,200	$0	$0	$0	$0	$0

Table 88. Current and Forecasted Needs Summarized by System (Years 6 - 10): Lawrence

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$178,741***	***$178,741***	***$193,481***	***$206,047***	***$227,574***
Needs by Year	***$0***	***$0***	***$14,740***	***$12,566***	***$21,527***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$14,740**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$14,740	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$12,566**	**$21,527**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$12,566	$21,527
Distribution System	$0	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 89. Current and Forecasted Needs Summarized by System (Years 11 - 15): Lawrence

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$227,574***	***$340,676***	***$433,659***	***$440,869***	***$630,971***
Needs by Year	***$0***	***$113,102***	***$92,984***	***$7,210***	***$190,102***
Exterior Enclosure	**$0**	**$113,102**	**$0**	**$0**	**$36,142**
Exterior Walls (Finishes)	$0	$92,436	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$36,142
Exterior Doors	$0	$20,665	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$90,409**	**$0**	**$106,992**
Ceiling Finishes	$0	$0	$0	$0	$106,992
Floor Finishes	$0	$0	$90,409	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$2,575**	**$7,210**	**$46,968**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$2,575	$0	$0
Distribution System	$0	$0	$0	$0	$39,758
Heat Generation	$0	$0	$0	$7,210	$7,210
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 90. Current and Forecasted Needs Summarized by System (Years 16-20): Lawrence

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$630,971***	***$634,576***	***$999,571***	***$999,571***	***$999,571***
Needs by Year	***$0***	***$3,605***	***$364,995***	***$0***	***$0***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$185,812**	**$0**	**$0**
Roof Coverings	$0	$0	$185,812	$0	$0
Interiors	**$0**	**$0**	**$7,894**	**$0**	**$0**
Ceiling Finishes	$0	$0	$7,894	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$0**	**$3,605**	**$27,979**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$27,979	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Heat Generation	$0	$3,605	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$143,310**	**$0**	**$0**
Lighting	$0	$0	$143,310	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 91. Expired Systems 2022: Facilities – Lawrence

Building	System Category	System	Priority	2022 Needs
Lawrence	Electrical	Exit Signs and Emergency Lighting	High	$17,061
Lawrence	Fire Protection	Fire Alarms	High	$45,586
Lawrence	Plumbing	Domestic Water Distribution	Medium	$33,166
Lawrence	Plumbing	Sanitary Waste	Medium	$51,728
			TOTAL	**$147,541**

This page is intentionally left blank.

Site and Infrastructure Assessment Findings

Site General Condition

The following site conditions and/or deficiencies were observed during the assessment.

Asphalt Pavements:

- A portion of the asphalt pavements were generally in poor condition and are in need of crack filling, seal coating, and re-striping due to several instances of cracking being observed.

Site Improvements

A site infrastructure condition assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

- Good condition
- Poor condition and in need of repair
- Poor condition and in need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth aerial photographs were used in lieu of site plans. The site assessment was performed, and the subsequent results grouped by location. Findings for each location were divided as follows:

- Pedestrian Pavements
- Vehicular Pavements
- Site Development

Please note that not all locations have all the various infrastructure systems present. We determined unit pricing for the various deficiency requirements by referencing 2022 RS Means Building Construction Cost Data and Assembly Cost Data when available. Industry sources were used as a supplemental source for unit pricing when needed.

Table 92. Summary of 2022 Site and Infrastructure Deficiencies: Lawrence

Asset Description	Corrective Action	Notes	Priority	Current Needs	Year
Vehicular Pavements	Crack Fill, Seal Coat, and Restripe Asphalt Pavements	26000 SF @ $1.2 Per SF	Low	$31,200	2022
			Total 2022 Needs	**$31,200**	

Figure 14. Site and Infrastructure Deficiencies Markup: Lawrence

Site Infrastructure

A portion of the asphalt pavements were in poor condition and in need of resealing as longitudinal and transverse cracking were observed throughout the pavement.

This page is intentionally left blank.

LIBRARY SERVICE CENTER

Table 93: Facility Description: Facilities - Library Service Center

Summary of Findings	
Construction Type	Two-Story Structure
Roof Type	Built-Up Membrane Ballasted EPDM
Ceiling Type	Suspended Acoustical Tile and Painted
Lighting	LED
HVAC	AHU with Hot and Chilled Water Coils
Elevator	Yes
Fire Sprinkler	Yes
Fire Alarm	Yes

Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
Library Service Center	1992	81,099	$2,678,021	$20,948,983	13	$2,964,104	14
Site Information			$118,990			$118,990	
TOTAL			$2,797,011			$3,083,094	

General Observations:

- The fire alarm and detection system is beyond its recommended useful life. The piping and ductwork system is beyond its recommended useful life.
- It was reported that the entire 2nd floor underwent a complete renovation in 2008, a portion of the carpet on the 1st floor was replaced in 2015, and the lighting was upgraded to LED in 2018.

Electrical

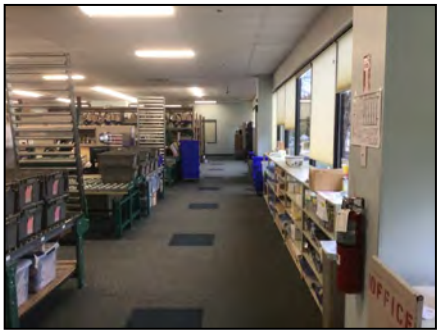
The LED lighting was in good condition. The electrical branch wiring is beyond its recommended useful life. The service and distribution system was in good condition. The emergency and exit lighting is beyond its recommended useful life.

Branch circuit wiring is not beyond useful life.
Fire alarm system age needs to be verified. If 20+ years, replacement should be considered.
Emergency and exit lighting age needs be determined, appears to be 5-10 years old.

Exterior Enclosure

The glazed and metal doors were in good condition. The double-pane windows were in good condition. The brick veneer walls were in good condition. The built-up membrane roof covering was beyond its recommended useful life.

Ballasted EPDM roof needs replaced. The glazed arch has a leak. The exterior steel door at the garage is rusted.



Interiors

The finished concrete, carpet and ceramic tile floor finishes were in good condition. The painted and vinyl wall finishes were in good condition. The suspended acoustical tile and painted ceiling finishes were in good condition.

The carpet has stains. The wall coverings are peeling and buckled on the first floor and in the lobby. Interior doors have wear on the finish. Sorting room walls are damaged from carts. Ceiling tile in the book sale area has stains.

Plumbing

The porcelain and manual plumbing fixtures were in good condition. The domestic water distribution system is beyond its recommended useful life. The sanitary waste system is beyond its recommended useful life.

Fixtures are in good condition, water closets currently being replaced.

MECHANICAL:
Air Handling units are in poor condition, manufactured in 1991. Pumps are in fair condition. Boilers are in good condition. Chiller is in fair to poor condition. Roof fans are also in fair to poor condition.

Table 94. Current and Forecasted Needs Summarized by System (Current + 5 years): Library Service Center

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$2,797,011***	***$3,006,410***	***$3,006,410***	***$3,006,410***	***$3,006,410***	***$3,083,094***
Needs by Year	***$2,797,011***	***$209,399***	***$0***	***$0***	***$0***	***$76,683***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0	$0
Roofing	**$517,885**	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$517,885	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**	**$76,683**
Ceiling Finishes	$0	$0	$0	$0	$0	$9,022
Floor Finishes	$0	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0	$67,662
Conveying	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Conveying Systems	$0	$0	$0	$0	$0	$0
Plumbing	**$519,569**	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$202,983	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0	$0
Sanitary Waste	$316,586	$0	$0	$0	$0	$0
HVAC	**$380,070**	**$209,399**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Cooling Generation	$0	$209,399	$0	$0	$0	$0
Distribution System	$380,070	$0	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0	$0
Fire Protection	**$278,997**	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$278,997	$0	$0	$0	$0	$0
Sprinklers & Standpipe	$0	$0	$0	$0	$0	$0
Electrical	**$981,501**	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$877,086	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$104,415	$0	$0	$0	$0	$0
Site Infrastructure	**$118,990**	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$118,990	$0	$0	$0	$0	$0

Table 95. Current and Forecasted Needs Summarized by System (Years 6 - 10): Library Service Center

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$3,483,197***	***$3,483,197***	***$4,340,225***	***$4,340,225***	***$5,577,506***
Needs by Year	***$400,104***	***$0***	***$857,028***	***$0***	***$1,237,281***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$755,264**	**$0**	**$434,539**
Ceiling Finishes	$0	$0	$0	$0	$434,539
Floor Finishes	$0	$0	$553,323	$0	$0
Wall Finishes	$0	$0	$201,941	$0	$0
Conveying	**$0**	**$0**	**$84,460**	**$0**	**$0**
Conveying Systems	$0	$0	$84,460	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$400,104**	**$0**	**$17,304**	**$0**	**$171,241**
Controls and Instrumentation	$0	$0	$0	$0	$171,241
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$400,104	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$17,304	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$631,502**
Fire Alarms	$0	$0	$0	$0	$0
Sprinklers & Standpipe	$0	$0	$0	$0	$631,502
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 96. Current and Forecasted Needs Summarized by System (Years 11 - 15): Library Service Center

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$5,651,563***	***$6,879,990***	***$6,879,990***	***$6,879,990***	***$7,421,049***
Needs by Year	***$74,057***	***$1,228,427***	***$0***	***$0***	***$541,059***
Exterior Enclosure	**$0**	**$342,716**	**$0**	**$0**	**$89,379**
Exterior Walls (Finishes)	$0	$321,574	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$89,379
Exterior Doors	$0	$21,142	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$794,576**	**$0**	**$0**	**$0**
Interior Doors	$0	$280,019	$0	$0	$0
Specialties	$0	$514,557	$0	$0	$0
Interiors	**$0**	**$91,135**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$91,135	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Conveying	**$0**	**$0**	**$0**	**$0**	**$0**
Conveying Systems	$0	$0	$0	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$408,471**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$408,471
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$74,057**	**$0**	**$0**	**$0**	**$43,209**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$74,057	$0	$0	$0	$4,378
Heat Generation	$0	$0	$0	$0	$38,831
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Sprinklers & Standpipe	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 97. Current and Forecasted Needs Summarized by System (Years 16-20): Library Service Center

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$8,298,135***	***$8,355,197***	***$8,355,197***	***$8,369,617***	***$8,369,617***
Needs by Year	***$877,086***	***$57,062***	***$0***	***$14,420***	***$0***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Conveying	**$0**	**$0**	**$0**	**$0**	**$0**
Conveying Systems	$0	$0	$0	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$0**	**$57,062**	**$0**	**$14,420**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Heat Generation	$0	$57,062	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$14,420	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Sprinklers & Standpipe	$0	$0	$0	$0	$0
Electrical	**$877,086**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$877,086	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 98. Expired Systems 2022: Facilities – Library Service Center

Building	System Category	System	Priority	2022 Needs
Library Service Center	Electrical	Branch Wiring	High	$877,086
Library Service Center	Electrical	Exit Signs and Emergency Lighting	High	$104,415
Library Service Center	Fire Protection	Fire Alarms	High	$278,997
Library Service Center	HVAC	Distribution System	High	$380,070
Library Service Center	Plumbing	Domestic Water Distribution	Medium	$202,983
Library Service Center	Plumbing	Sanitary Waste	Medium	$316,586
Library Service Center	Roofing	Roof Coverings	High	$517,885
			TOTAL	**$2,678,021**

This page is intentionally left blank.

Site and Infrastructure Assessment Findings

Site General Condition

The following site conditions and/or deficiencies were observed during the assessment.

Asphalt Pavements:

- A portion of the asphalt pavements were in poor condition and in need of resurfacing as longitudinal cracking, transverse cracking, and degradation were observed throughout the pavement.
- A portion of the asphalt pavements were generally in poor condition and are in need of crack filling, seal coating, and re-striping due to several instances of cracking being observed.

Site Improvements

A site infrastructure condition assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

- Good condition
- Poor condition and in need of repair
- Poor condition and in need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth aerial photographs were used in lieu of site plans. The site assessment was performed, and the subsequent results grouped by location. Findings for each location were divided as follows:

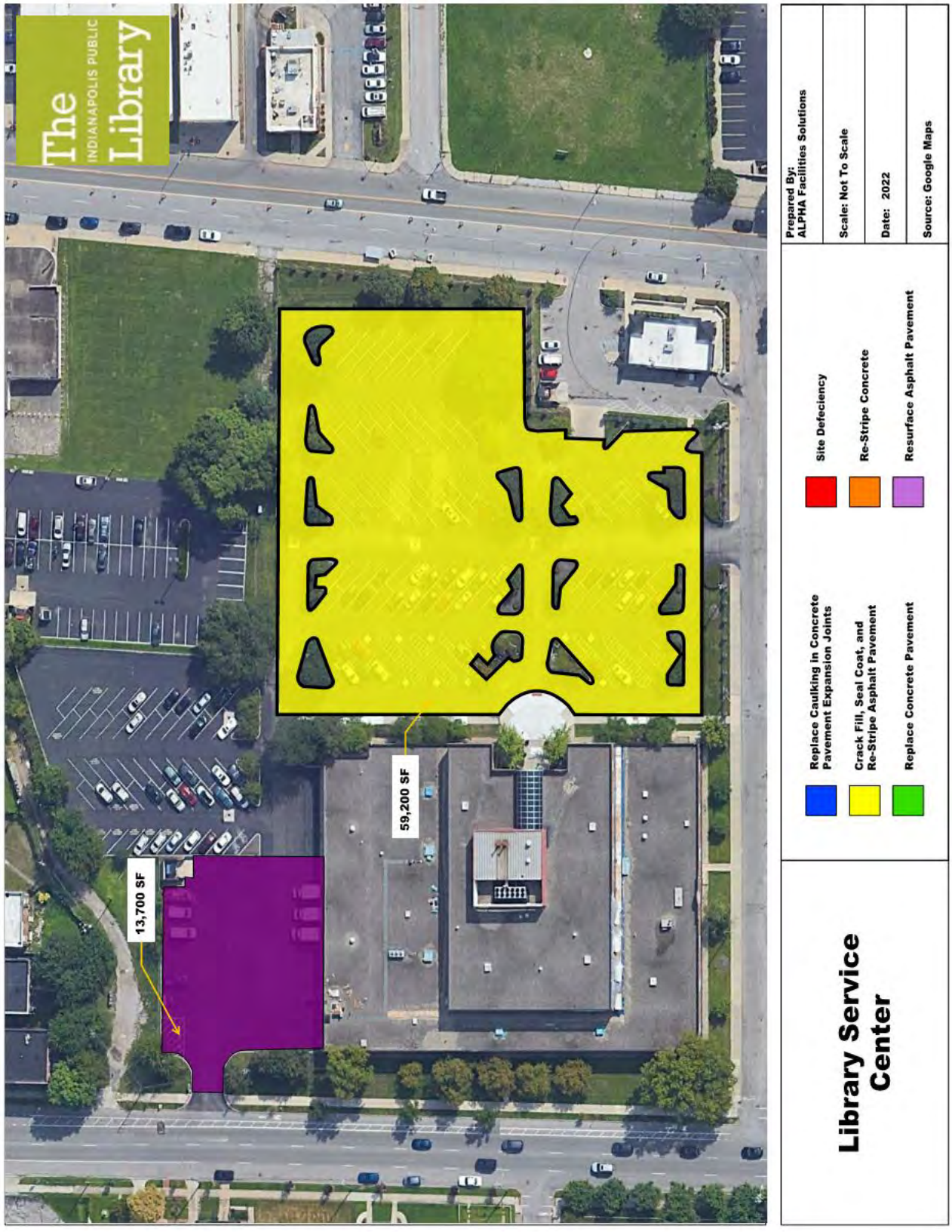
- Pedestrian Pavements
- Vehicular Pavements
- Site Development

Please note that not all locations have all the various infrastructure systems present. We determined unit pricing for the various deficiency requirements by referencing 2022 RS Means Building Construction Cost Data and Assembly Cost Data when available. Industry sources were used as a supplemental source for unit pricing when needed.

Table 99. Summary of 2022 Site and Infrastructure Deficiencies: Library Service Center

Asset Description	Corrective Action	Notes	Priority	Current Needs	Year
Vehicular Pavements	Crack Fill, Seal Coat, and Restripe Asphalt Pavements	59200 SF @ $1.2 Per SF	Low	$71,040	2022
Vehicular Pavements	Resurface Asphalt Pavements	13700 SF @ $3.5 Per SF	Low	$47,950	2022
			Total 2022 Needs	**$118,990**	

Figure 15. Site and Infrastructure Deficiencies Markup: Library Service Center



Site Infrastructure

A portion of the asphalt pavements were in poor condition and in need of resealing as longitudinal and transverse cracking were observed throughout the pavement.

Site Infrastructure

A portion of the asphalt pavements were in poor condition and in need of resurfacing as longitudinal cracking, transverse cracking, and degradation were observed throughout the pavement.

This page is intentionally left blank.

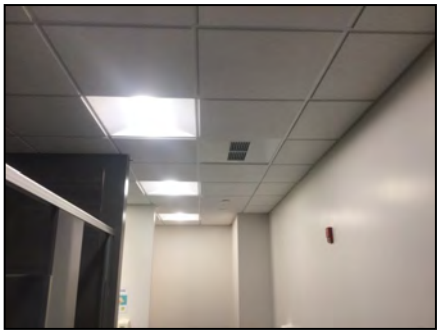
MARTINDALE

MARTINDATE-BRIGHTWOOD

Table 100: Facility Description: Facilities - Martindate-Brightwood

Summary of Findings		
Construction Type	One-Story Structure	
Roof Type	Single-ply Membrane	
Ceiling Type	Suspended Acoustical Tile	
Lighting	LED	
HVAC	Split-DX	
Elevator	No	
Fire Sprinkler	Yes	
Fire Alarm	Yes	

Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
Martindate-Brightwood	2020	14,701	$0	$3,797,470	0	$0	0
Site Information			$0			$0	
TOTAL			$0			$0	



Electrical

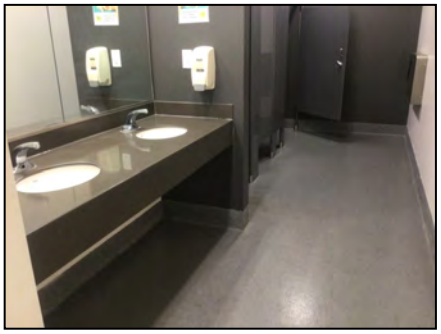
The LED lighting was in good condition. The electrical branch wiring is within its recommended useful life. The service and distribution system was in good condition. The emergency and exit lighting is within its recommended useful life.

Exterior Enclosure

The glazed doors were in good condition. The double-pane windows were in good condition. The brick veneer walls were in good condition. The single-ply membrane roof covering was within its recommended useful life.

Interiors

The finished concrete, carpet and vinyl tile floor finishes were in good condition. The painted and vinyl wall finishes were in good condition. The suspended acoustical tile ceiling finishes were in good condition.



Plumbing

The porcelain and automated plumbing fixtures were in good condition. The domestic water distribution system is within its recommended useful life. The sanitary waste system is within its recommended useful life.

Water heater is in good condition.

MECHANICAL:
VRF system and DOAS is in good condition. Baseboard heaters are in good condition.

Table 101. Current and Forecasted Needs Summarized by System (Current + 5 years): Martindate-Brightwood

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***
Needs by Year	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0	$0

Table 102. Current and Forecasted Needs Summarized by System (Years 6 - 10): Martindate-Brightwood

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$0***	***$0***	***$1,636***	***$1,636***	***$1,636***
Needs by Year	***$0***	***$0***	***$1,636***	***$0***	***$0***
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$1,636**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$1,636	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0

Table 103. Current and Forecasted Needs Summarized by System (Years 11 - 15): Martindate-Brightwood

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$1,636***	***$1,636***	***$326,736***	***$326,736***	***$326,736***
Needs by Year	***$0***	***$0***	***$325,100***	***$0***	***$0***
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$235,591**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$103,809	$0	$0
Wall Finishes	$0	$0	$131,782	$0	$0
HVAC	**$0**	**$0**	**$38,934**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$38,934	$0	$0
Distribution System	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$50,574**	**$0**	**$0**
Fire Alarms	$0	$0	$50,574	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0

Table 104. Current and Forecasted Needs Summarized by System (Years 16-20): Martindate-Brightwood

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$326,736***	***$326,736***	***$843,343***	***$843,343***	***$843,343***
Needs by Year	***$0***	***$0***	***$516,607***	***$0***	***$0***
Roofing	**$0**	**$0**	**$156,266**	**$0**	**$0**
Roof Coverings	$0	$0	$156,266	$0	$0
Interiors	**$0**	**$0**	**$87,521**	**$0**	**$0**
Ceiling Finishes	$0	$0	$87,521	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$94,901**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$31,041	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$11,639	$0	$0
Terminal & Package Units	$0	$0	$52,221	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$177,919**	**$0**	**$0**
Lighting	$0	$0	$158,991	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$18,928	$0	$0

Table 105. Expired Systems 2022: Facilities – Martindate-Brightwood

Building	System Category	System	Priority	2022 Needs
None				$0
			TOTAL	**$0**

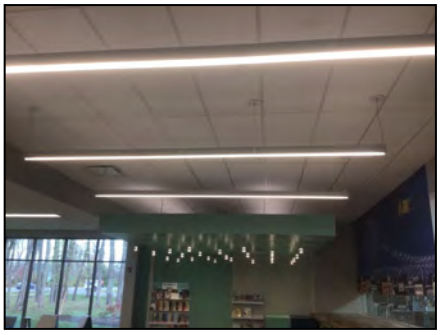
This page is intentionally left blank.

MICHIGAN ROAD

Table 106: Facility Description: Facilities - Michigan Road

Summary of Findings	
Construction Type	One-Story Structure
Roof Type	Modified Bitumen Single Ply TPO or PVC
Ceiling Type	Suspended Acoustical Tile and Wood
Lighting	LED
HVAC	Air Handling Units with Hot and Chilled Water Coils
Elevator	No
Fire Sprinkler	Yes
Fire Alarm	Yes

Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
Michigan Road	2018	20,050	$0	$5,179,190	0	$0	0
Site Information			$0			$0	
TOTAL			$0			$0	



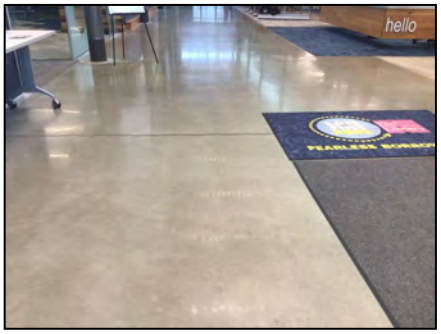
Electrical

The LED lighting was in good condition. The electrical branch wiring is within its recommended useful life. The service and distribution system was in good condition. The emergency and exit lighting is within its recommended useful life.

Exterior Enclosure

The glazed and metal doors were in good condition. The double-pane windows were in good condition. The brick veneer and metal siding walls were in good condition. The modified bitumen roof covering was within its recommended useful life.

The roof access ladder is beginning to rust. There was spray foam at the base of the exterior mechanical room door. The main entry columns are beginning to rust around the base. The wood is deteriorating at the entry canopy. The interior pane of a window in the community room is broken.



Interiors

The finished concrete, carpet and resilient floor finishes were in good condition. The painted and vinyl wall finishes were in good condition. The suspended acoustical tile and wood ceiling finishes were in good condition.

Wall covering is peeling from columns. The drywall is cracked in the men's restroom. Grout is stained under the hand dryers. Sealant is cracked at lavatories. Walls are damaged from furniture. Carpet in Admin area is stained.

Plumbing

The porcelain and automated plumbing fixtures were in good condition. The domestic water distribution system is within its recommended useful life. The sanitary waste system is within its recommended useful life.

MECHANICAL:
Air Handling units are in good condition, manufactured in 2018. Pumps are in good condition. Boiler is in good condition. Chiller is in good condition.

Table 107. Current and Forecasted Needs Summarized by System (Current + 5 years): Michigan Road

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***
Needs by Year	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0	$0

Table 108. Current and Forecasted Needs Summarized by System (Years 6 - 10): Michigan Road

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$20,073***	***$20,073***	***$20,073***	***$20,073***	***$20,073***
Needs by Year	***$20,073***	***$0***	***$0***	***$0***	***$0***
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interiors	**$20,073**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$20,073	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0

Table 109. Current and Forecasted Needs Summarized by System (Years 11 - 15): Michigan Road

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$262,047***	***$262,047***	***$262,047***	***$262,047***	***$262,047***
Needs by Year	***$241,974***	***$0***	***$0***	***$0***	***$0***
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interiors	**$172,998**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$153,028	$0	$0	$0	$0
Wall Finishes	$19,970	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Fire Protection	**$68,976**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$68,976	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0

Table 110. Current and Forecasted Needs Summarized by System (Years 16-20): Michigan Road

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$1,132,513***	***$1,132,513***	***$1,132,513***	***$1,132,513***	***$1,132,513***
Needs by Year	***$870,467***	***$0***	***$0***	***$0***	***$0***
Roofing	**$192,943**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$192,943	$0	$0	$0	$0
Interiors	**$107,429**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$107,429	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
HVAC	**$327,440**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$42,336	$0	$0	$0	$0
Cooling Generation	$102,485	$0	$0	$0	$0
Distribution System	$182,619	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$242,655**	**$0**	**$0**	**$0**	**$0**
Lighting	$216,841	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$25,814	$0	$0	$0	$0

Table 111. Expired Systems 2022: Facilities – Michigan Road

Building	System Category	System	Priority	2022 Needs
None				$0
			TOTAL	**$0**

This page is intentionally left blank.

NORA

Table 112: Facility Description: Facilities - Nora

Summary of Findings	
Construction Type	One-Story Structure
Roof Type	~~Modified Bitumen~~ EPDM
Ceiling Type	Suspended Acoustical Tile and Painted
Lighting	LED
HVAC	Packaged Units
Elevator	No
Fire Sprinkler	No
Fire Alarm	Yes

Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
Nora	1971	17,922	$634,274	$4,629,498	14	$696,652	15
Site Information			$53,400			$53,400	
TOTAL			$687,674			$750,052	

General Observations:

- The fire alarm and detection system is beyond its recommended useful life. The ductwork system is beyond its recommended useful life.
- It was reported that the carpet was replaced in 2015 and the lighting was upgraded to LED in 2022.

The fire alarm system does not appear to be beyond useful life. It appears to be installed in 2010.

Electrical

The LED lighting was in good condition. The electrical branch wiring is beyond its recommended useful life. The service and distribution system was in good condition. The emergency and exit lighting is beyond its recommended useful life.

The electrical equipment is beyond life, installed in 1971.
Emergency and exit lighting are not beyond life if part of LED upgrades.

Exterior Enclosure

The metal and glazed doors were in good condition. The double-pane windows were in fair condition due to observed deteriorated window seals. The brick veneer walls were in good condition. The ~~modified bitumen~~ EPDM roof covering was beyond its recommended useful life.

Interiors

The carpet and finished concrete floor finishes were in good condition; however, the vinyl tile floors were in poor condition due to observed damage. The tile and painted wall finishes were in good condition. The painted ceiling finishes were in good condition; however, the suspended acoustical tile ceilings were in fair condition due to observed stains.

Stains on carpet and resinous flooring.

Plumbing

The porcelain and manual plumbing fixtures were in good condition. The domestic water distribution system is beyond its recommended useful life. The sanitary waste system is beyond its recommended useful life.

Water heater is in good condition.

MECHANICAL:
4 of 8 packaged rooftop units are in good or fair condition.
4 of 8 rooftop units are in poor condition.

Table 113. Current and Forecasted Needs Summarized by System (Current + 5 years): Nora

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$687,674***	***$746,063***	***$746,063***	***$746,063***	***$746,063***	***$750,052***
Needs by Year	***$687,674***	***$58,389***	***$0***	***$0***	***$0***	***$3,989***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0	$0
Roofing	**$156,907**	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$156,907	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$17,858**	**$0**	**$0**	**$0**	**$3,989**
Ceiling Finishes	$0	$0	$0	$0	$0	$1,995
Floor Finishes	$0	$17,858	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0	$1,995
Plumbing	**$114,819**	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$44,857	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0	$0
Sanitary Waste	$69,962	$0	$0	$0	$0	$0
HVAC	**$83,991**	**$40,531**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Distribution System	$83,991	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$40,531	$0	$0	$0	$0
Fire Protection	**$61,655**	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$61,655	$0	$0	$0	$0	$0
Electrical	**$216,901**	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$193,826	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0	$0
Service Distribution	$0	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$23,075	$0	$0	$0	$0	$0
Site Infrastructure	**$53,400**	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$53,400	$0	$0	$0	$0	$0

Table 114. Current and Forecasted Needs Summarized by System (Years 6 - 10): Nora

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$848,398***	***$848,398***	***$965,398***	***$1,009,332***	***$1,009,332***
Needs by Year	***$98,346***	***$0***	***$117,000***	***$43,934***	***$0***
Exterior Enclosure	**$0**	**$0**	**$0**	**$43,934**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$43,934	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$8,307**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$8,307	$0	$0
Interiors	**$96,028**	**$0**	**$108,694**	**$0**	**$0**
Ceiling Finishes	$96,028	$0	$0	$0	$0
Floor Finishes	$0	$0	$108,694	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$2,318**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Distribution System	$2,318	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0
Service Distribution	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 115. Current and Forecasted Needs Summarized by System (Years 11 - 15): Nora

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$1,009,332***	***$1,116,090***	***$1,278,521***	***$1,278,521***	***$1,372,756***
Needs by Year	***$0***	***$106,757***	***$162,432***	***$0***	***$94,235***
Exterior Enclosure	**$0**	**$106,757**	**$10,338**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$106,757	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$10,338	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$137,674**	**$0**	**$0**
Interior Doors	$0	$0	$26,362	$0	$0
Specialties	$0	$0	$111,312	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$14,420**	**$0**	**$94,235**
Controls and Instrumentation	$0	$0	$0	$0	$37,842
Distribution System	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$14,420	$0	$56,393
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0
Service Distribution	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 116. Current and Forecasted Needs Summarized by System (Years 16-20): Nora

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$1,463,024***	***$1,463,024***	***$1,463,024***	***$1,463,024***	***$1,949,863***
Needs by Year	***$90,268***	***$0***	***$0***	***$0***	***$486,839***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$223,789**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$223,789
Plumbing	**$90,268**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$90,268	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$263,050**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$193,826
Service Distribution	$0	$0	$0	$0	$69,224
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 117. Expired Systems 2022: Facilities – Nora

Building	System Category	System	Priority	2022 Needs
Nora	Electrical	Branch Wiring	High	$193,826
Nora	Electrical	Exit Signs and Emergency Lighting	High	$23,075
Nora	Fire Protection	Fire Alarms	High	$61,655
Nora	HVAC	Distribution System	High	$83,991
Nora	Plumbing	Domestic Water Distribution	Medium	$44,857
Nora	Plumbing	Sanitary Waste	Medium	$69,962
Nora	Roofing	Roof Coverings	High	$156,907
			TOTAL	**$634,274**

This page is intentionally left blank.

Site and Infrastructure Assessment Findings

Site General Condition

The following site conditions and/or deficiencies were observed during the assessment.

Asphalt Pavements:

- The asphalt pavements were in poor condition and in need of resealing as longitudinal and transverse cracking were observed throughout the pavement.

Site Improvements

A site infrastructure condition assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

- Good condition
- Poor condition and in need of repair
- Poor condition and in need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth aerial photographs were used in lieu of site plans. The site assessment was performed, and the subsequent results grouped by location. Findings for each location were divided as follows:

- Pedestrian Pavements
- Vehicular Pavements
- Site Development

Please note that not all locations have all the various infrastructure systems present. We determined unit pricing for the various deficiency requirements by referencing 2022 RS Means Building Construction Cost Data and Assembly Cost Data when available. Industry sources were used as a supplemental source for unit pricing when needed.

Table 118. Summary of 2022 Site and Infrastructure Deficiencies: Nora

Asset Description	Corrective Action	Notes	Priority	Current Needs	Year
Vehicular Pavements	Crack Fill, Seal Coat, and Restripe Asphalt Pavements	44500 SF @ $1.2 Per SF	Low	$53,400	2022
			Total 2022 Needs	**$53,400**	

Figure 16. Site and Infrastructure Deficiencies Markup: Nora

Site Infrastructure

The asphalt pavements were in poor condition and in need of resealing as longitudinal and transverse cracking were observed throughout the pavement.

This page is intentionally left blank.

PIKE

Table 119: Facility Description: Facilities - Pike

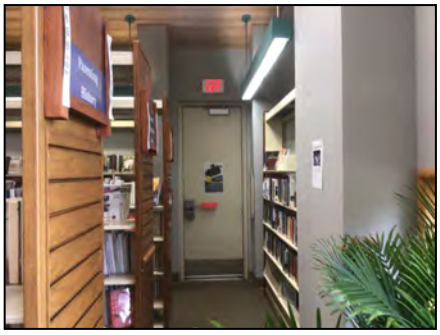
Summary of Findings	
Construction Type	One-Story Structure
Roof Type	Asphalt Shingle
Ceiling Type	Wood and Suspended Acoustical Tile
Lighting	Fluorescent
HVAC	Split-DX
Elevator	No
Fire Sprinkler	No
Fire Alarm	Yes

Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
Pike	1986	20,194	$562,843	$5,216,387	11	$987,534	19
Site Information			$88,680			$88,680	
TOTAL			$651,523			$1,076,214	

General Observations:

- The fire alarm and detection system is beyond its recommended useful life.
- It was reported that the HVAC systems underwent a renovation in 2000.

Fire alarm system appears to be installed in 2017. If this is the case, it is not beyond it's recommended life.



Electrical

The fluorescent lighting was in good condition. The electrical branch wiring is beyond its recommended useful life. The service and distribution system was in good condition. The emergency and exit lighting is beyond its recommended useful life.

There are LED retrofits lamps installed.
Branch circuit wiring is approaching end of life.

Exterior Enclosure

The metal and glazed doors were in good condition. The double-pane windows were in poor condition due to observed deteriorated window seals. The brick veneer walls were in poor condition due to observed damaged finishes. The asphalt shingle roof covering was beyond its recommended useful life.

Rust is forming at the base of exterior steel doors and frames. Splash blocks were installed backwards.

Interiors

The carpet and ceramic tile floor finishes were in fair condition due to observed stains, and the vinyl tile floors were in poor condition due to observed damage. The vinyl and painted wall finishes were in good condition; however, the tile walls were in fair condition due to observed stains. The wood and suspended acoustical tile ceiling finishes were in good condition.

Plumbing

The porcelain and manual plumbing fixtures were in good condition. The domestic water distribution system is beyond its recommended useful life. The sanitary waste system is beyond its recommended useful life.

PLUMBING:
Fixture porcelain is in fiar condition, trim is in poor condition. Reports from staff members that the sanitary backs up occasionally. Water heater is in good condition.

MECHANICAL:
Air Handling units are in poor condition. Condensing units are in poor condition. Boiler is in poor condition.

Table 120. Current and Forecasted Needs Summarized by System (Current + 5 years): Pike

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$651,523***	***$951,492***	***$951,492***	***$951,492***	***$951,492***	***$1,076,214***
Needs by Year	***$651,523***	***$299,969***	***$0***	***$0***	***$0***	***$124,722***
Exterior Enclosure	**$0**	**$153,881**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$114,569	$0	$0	$0	$0
Exterior Windows	$0	$39,312	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0	$0
Roofing	**$119,598**	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$119,598	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$20,119**	**$0**	**$0**	**$0**	**$124,722**
Ceiling Finishes	$0	$0	$0	$0	$0	$0
Floor Finishes	$0	$20,119	$0	$0	$0	$122,475
Wall Finishes	$0	$0	$0	$0	$0	$2,247
Plumbing	**$129,375**	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$50,544	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0	$0
Sanitary Waste	$78,831	$0	$0	$0	$0	$0
HVAC	**$0**	**$125,969**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Cooling Generation	$0	$38,728	$0	$0	$0	$0
Distribution System	$0	$85,284	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$1,957	$0	$0	$0	$0
Fire Protection	**$69,471**	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$69,471	$0	$0	$0	$0	$0
Electrical	**$244,398**	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$218,398	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$26,000	$0	$0	$0	$0	$0
Site Infrastructure	**$88,680**	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$88,680	$0	$0	$0	$0	$0

Table 121. Current and Forecasted Needs Summarized by System (Years 6 - 10): Pike

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$1,104,642***	***$1,104,642***	***$1,483,185***	***$1,483,185***	***$1,792,314***
Needs by Year	***$28,428***	***$0***	***$378,543***	***$0***	***$309,129***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$65,023**	**$0**	**$0**
Interior Doors	$0	$0	$65,023	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$206,314**	**$0**	**$48,092**
Ceiling Finishes	$0	$0	$0	$0	$48,092
Floor Finishes	$0	$0	$45,399	$0	$0
Wall Finishes	$0	$0	$160,915	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$28,428**	**$0**	**$107,205**	**$0**	**$42,640**
Controls and Instrumentation	$0	$0	$0	$0	$42,640
Cooling Generation	$0	$0	$12,566	$0	$0
Distribution System	$28,428	$0	$94,639	$0	$0
Heat Generation	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$218,398**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$218,398
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 122. Current and Forecasted Needs Summarized by System (Years 11 - 15): Pike

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$1,792,314***	***$1,822,890***	***$1,946,857***	***$1,974,883***	***$2,083,588***
Needs by Year	***$0***	***$30,576***	***$123,967***	***$28,026***	***$108,705***
Exterior Enclosure	**$0**	**$8,320**	**$2,080**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$8,320	$2,080	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$22,256**	**$121,887**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$22,256	$121,887	$0	$0
Interiors	**$0**	**$0**	**$0**	**$28,026**	**$108,705**
Ceiling Finishes	$0	$0	$0	$0	$108,705
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$28,026	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 123. Current and Forecasted Needs Summarized by System (Years 16-20): Pike

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$2,212,285***	***$2,212,285***	***$2,212,285***	***$2,212,285***	***$2,212,285***
Needs by Year	***$128,697***	***$0***	***$0***	***$0***	***$0***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$101,711**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$101,711	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$26,986**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Heat Generation	$26,986	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 124. Expired Systems 2022: Facilities – Pike

Building	System Category	System	Priority	2022 Needs
Pike	Electrical	Branch Wiring	High	$218,398
Pike	Electrical	Exit Signs and Emergency Lighting	High	$26,000
Pike	Fire Protection	Fire Alarms	High	$69,471
Pike	Plumbing	Domestic Water Distribution	Medium	$50,544
Pike	Plumbing	Sanitary Waste	Medium	$78,831
Pike	Roofing	Roof Coverings	High	$119,598
			TOTAL	**$562,843**

This page is intentionally left blank.

Site and Infrastructure Assessment Findings

Site General Condition

The following site conditions and/or deficiencies were observed during the assessment.

Asphalt Pavements:

- A portion of the asphalt pavements were in poor condition and in need of resurfacing as longitudinal cracking, transverse cracking, and degradation were observed throughout the pavement.
- A portion of the asphalt pavements were generally in poor condition and are in need of crack filling, seal coating, and re-striping due to several instances of cracking being observed.

Site Improvements

A site infrastructure condition assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

- Good condition
- Poor condition and in need of repair
- Poor condition and in need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth aerial photographs were used in lieu of site plans. The site assessment was performed, and the subsequent results grouped by location. Findings for each location were divided as follows:

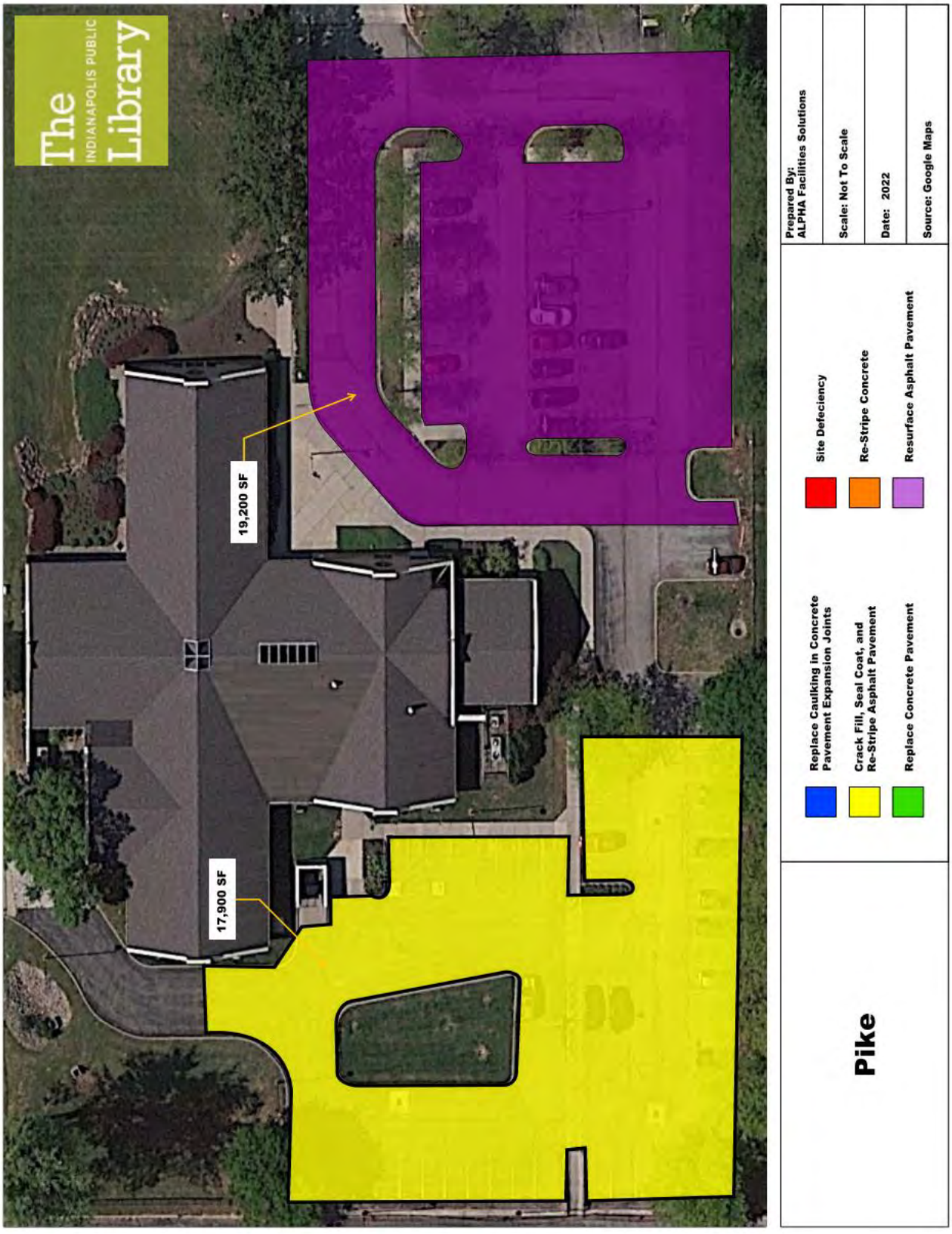
- Pedestrian Pavements
- Vehicular Pavements
- Site Development

Please note that not all locations have all the various infrastructure systems present. We determined unit pricing for the various deficiency requirements by referencing 2022 RS Means Building Construction Cost Data and Assembly Cost Data when available. Industry sources were used as a supplemental source for unit pricing when needed.

Table 125. Summary of 2022 Site and Infrastructure Deficiencies: Pike

Asset Description	Corrective Action	Notes	Priority	Current Needs	Year
Vehicular Pavements	Crack Fill, Seal Coat, and Restripe Asphalt Pavements	17900 SF @ $1.2 Per SF	Low	$21,480	2022
Vehicular Pavements	Resurface Asphalt Pavements	19200 SF @ $3.5 Per SF	Low	$67,200	2022
			Total 2022 Needs	**$88,680**	

Figure 17. Site and Infrastructure Deficiencies Markup: Pike



Site Infrastructure

A portion of the asphalt pavements were in poor condition and in need of resurfacing as longitudinal cracking, transverse cracking, and degradation were observed throughout the pavement.

Site Infrastructure

A portion of the asphalt pavements were in poor condition and in need of resealing as longitudinal and transverse cracking were observed throughout the pavement.

This page is intentionally left blank.

SOUTHPORT

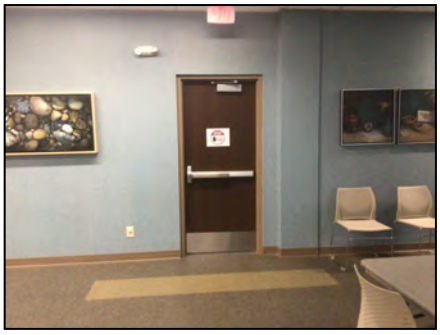
Table 126: Facility Description: Facilities - Southport

Summary of Findings	
Construction Type	One-Story Structure
Roof Type	Modified Bitumen and Slate Shingle
Ceiling Type	Suspended Acoustical Tile and Wood
Lighting	LED
HVAC	Split-DX
Elevator	No
Fire Sprinkler	No
Fire Alarm	Yes

Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
Southport	1974	15,581	$146,106	$4,024,786	4	$292,897	7
Site Information			$100,100			$100,100	
TOTAL			$246,206			$392,997	

General Observations:

- It was reported that there was a major renovation in 2016 replacing the HCAV systems, the interior construction systems, the exterior doors, the branch wiring, fire protection, the plumbing fixtures including upgrading the lighting to LED.



Electrical

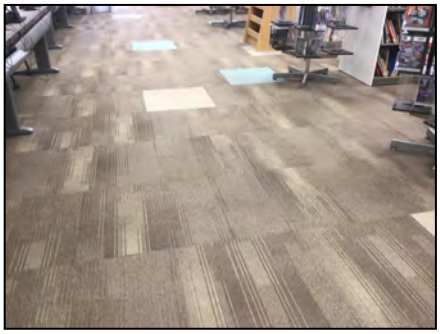
The LED lighting was in good condition. The electrical branch wiring is within its recommended useful life. The service and distribution system was in good condition. The emergency and exit lighting is beyond its recommended useful life.

Original electrical distribution is beyond end of life. Emergency and exit lighting appear to be recent. Fire alarm system is beyond end of life.

Exterior Enclosure

The metal and glazed doors were in good condition. The double-pane windows were in good condition. The brick veneer walls were in good condition. The modified bitumen roof covering was within its recommended useful life; however, the slate shingle roof was beyond its recommended useful life.

Damage to the screen wall at the main entrance. Loose roof tiles. Sealant is deteriorated. Rust at base of exterior steel doors and frames.



Interiors

The carpet and ceramic tile floor finishes were in good condition. The vinyl and painted wall finishes were in good condition. The suspended acoustical tile and wood ceiling finishes were in good condition.

Stains on carpet and grout. Stains on toilet partition. No sealant on backsplash in restroom.

Plumbing

The porcelain and manual plumbing fixtures were in good condition. The domestic water distribution system is beyond its recommended useful life. The sanitary waste system is beyond its recommended useful life.

PLUMBING:
One toilet fixture is in poor condition. Sanitary system drains slowly per staff onsite. Water heaters are in fair condition.

MECHANICAL:
Fan Coil units are in poor condition. Condensing units are in poor condition.

Table 127. Current and Forecasted Needs Summarized by System (Current + 5 years): Southport

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$246,206***	***$271,338***	***$271,338***	***$271,338***	***$271,338***	***$392,997***
Needs by Year	***$246,206***	***$25,132***	***$0***	***$0***	***$0***	***$121,660***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0	$0
Roofing	**$26,224**	**$0**	**$0**	**$0**	**$0**	**$118,193**
Roof Coverings	$26,224	$0	$0	$0	$0	$118,193
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**	**$3,467**
Ceiling Finishes	$0	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0	$3,467
Plumbing	**$99,821**	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$38,998	$0	$0	$0	$0	$0
Sanitary Waste	$60,824	$0	$0	$0	$0	$0
HVAC	**$0**	**$25,132**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Cooling Generation	$0	$25,132	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0	$0
Electrical	**$20,061**	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0	$0
Service Distribution	$0	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$20,061	$0	$0	$0	$0	$0
Site Infrastructure	**$100,100**	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$100,100	$0	$0	$0	$0	$0

Table 128. Current and Forecasted Needs Summarized by System (Years 6 - 10): Southport

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$465,355***	***$465,355***	***$571,660***	***$768,882***	***$833,816***
Needs by Year	***$72,358***	***$0***	***$106,306***	***$197,221***	***$64,934***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$106,306**	**$124,153**	**$64,934**
Ceiling Finishes	$0	$0	$0	$0	$64,934
Floor Finishes	$0	$0	$106,306	$0	$0
Wall Finishes	$0	$0	$0	$124,153	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$72,358**	**$0**	**$0**	**$19,467**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$19,467	$0
Distribution System	$72,358	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$53,602**	**$0**
Fire Alarms	$0	$0	$0	$53,602	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0
Service Distribution	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 129. Current and Forecasted Needs Summarized by System (Years 11 - 15): Southport

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$838,193***	***$973,479***	***$973,479***	***$1,217,906***	***$1,246,336***
Needs by Year	***$4,378***	***$135,286***	***$0***	***$244,427***	***$28,430***
Exterior Enclosure	**$0**	**$100,248**	**$0**	**$0**	**$14,444**
Exterior Walls (Finishes)	$0	$100,248	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$14,444
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$35,038**	**$0**	**$18,557**	**$13,986**
Ceiling Finishes	$0	$0	$0	$18,557	$13,986
Floor Finishes	$0	$35,038	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$4,378**	**$0**	**$0**	**$57,362**	**$0**
Controls and Instrumentation	$0	$0	$0	$32,899	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$24,463	$0
Terminal & Package Units	$4,378	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$168,509**	**$0**
Lighting	$0	$0	$0	$168,509	$0
Service Distribution	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 130. Current and Forecasted Needs Summarized by System (Years 16-20): Southport

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$1,246,336***	***$1,246,336***	***$1,246,336***	***$1,391,321***	***$1,451,503***
Needs by Year	***$0***	***$0***	***$0***	***$144,985***	***$60,182***
Exterior Enclosure	**$0**	**$0**	**$0**	**$10,432**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$10,432	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$134,553**	**$0**
Interior Doors	$0	$0	$0	$29,436	$0
Specialties	$0	$0	$0	$105,117	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$60,182**
Lighting	$0	$0	$0	$0	$0
Service Distribution	$0	$0	$0	$0	$60,182
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 131. Expired Systems 2022: Facilities – Southport

Building	System Category	System	Priority	2022 Needs
Southport	Electrical	Exit Signs and Emergency Lighting	High	$20,061
Southport	Plumbing	Domestic Water Distribution	Medium	$38,998
Southport	Plumbing	Sanitary Waste	Medium	$60,824
Southport	Roofing	Roof Coverings	High	$26,224
			TOTAL	**$146,106**

This page is intentionally left blank

Site and Infrastructure Assessment Findings

Site General Condition

The following site conditions and/or deficiencies were observed during the assessment.

Asphalt Pavements:

- The asphalt pavements were in poor condition and in need of resurfacing as longitudinal cracking, transverse cracking, and degradation were observed throughout the pavement.

Site Improvements

A site infrastructure condition assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

- Good condition
- Poor condition and in need of repair
- Poor condition and in need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth aerial photographs were used in lieu of site plans. The site assessment was performed, and the subsequent results grouped by location. Findings for each location were divided as follows:

- Pedestrian Pavements
- Vehicular Pavements
- Site Development

Please note that not all locations have all the various infrastructure systems present. We determined unit pricing for the various deficiency requirements by referencing 2022 RS Means Building Construction Cost Data and Assembly Cost Data when available. Industry sources were used as a supplemental source for unit pricing when needed.

Table 132. Summary of 2022 Site and Infrastructure Deficiencies: Southport

Asset Description	Corrective Action	Notes	Priority	Current Needs	Year
Vehicular Pavements	Resurface Asphalt Pavements	28600 SF @ $3.5 Per SF	Low	$100,100	2022
			Total 2022 Needs	**$100,100**	

Figure 18. Site and Infrastructure Deficiencies Markup: Southport

Site Infrastructure

The asphalt pavements were in poor condition and in need of resurfacing as longitudinal cracking, transverse cracking, and degradation were observed throughout the pavement.

This page is intentionally left blank.

SPADES PARK

Table 133: Facility Description: Facilities - Spades Park

Summary of Findings	
Construction Type	Two-Story Structure with Basement
Roof Type	Asphalt Shingle
Ceiling Type	Suspended Acoustical Tile
Lighting	LED
HVAC	Split-DX
Elevator	Yes
Fire Sprinkler	No
Fire Alarm	No

Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
Spades Park	1912	7,133	$182,020	$1,842,552	10	$206,641	11
Site Information			$6,360			$6,360	
TOTAL			$188,380			$213,001	

General Observations:

- The ductwork system is beyond its recommended useful life.
- It was reported that there was a renovation in 2012 replacing all the carpet. It was reported that the lighting being upgraded to LED in 2022.

Electrical

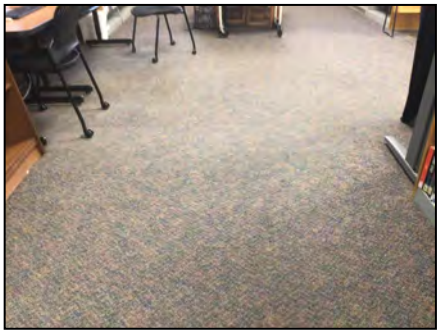
The LED lighting was in good condition. The electrical branch wiring is beyond its recommended useful life. The service and distribution system was in good condition. The emergency and exit lighting is within its recommended useful life.

The distribution equipment is approaching end of life, installed in 1986.

Exterior Enclosure

The wooden doors were in good condition. The double-pane windows were in good condition. The brick veneer walls were in good condition. The asphalt shingle roof covering was beyond its recommended useful life.

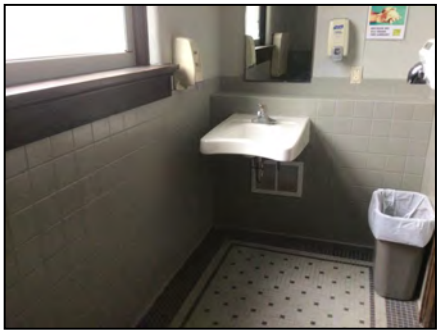
Some tuckpointing is needed on the lower portion of the brick and at the joints in the stone at the main entry. The staff entry door is delaminating. There is some damage to the staff entry steps. Paint is peeling on the base of the wood elevator entry.



Interiors

The carpet and finished concrete floor finishes were in good condition. The painted wall finishes were in good condition. The suspended acoustical tile ceiling finishes were in good condition.

The paint is worn on the metal stairs and the walls are scraped in the stairwell. Some cracking on ceiling in the upper level. Staining on carpet. Some cracking in plaster on exterior walls and some bubbles in wall covering.



Plumbing

The porcelain and manual plumbing fixtures were in good condition. The domestic water distribution system is beyond its recommended useful life. The sanitary waste system is beyond its recommended useful life.

Water heater is in good condition.

MECHANICAL:
3 furnaces are in poor condition. 1 condensing unit is in fair condition, while the other 2 are in poor condition.

Table 134. Current and Forecasted Needs Summarized by System (Current + 5 years): Spades Park

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$188,380***	***$205,066***	***$205,066***	***$205,066***	***$205,066***	***$213,001***
Needs by Year	***$188,380***	***$16,686***	***$0***	***$0***	***$0***	***$7,935***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0	$0
Roofing	**$25,750**	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$25,750	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**	**$7,935**
Ceiling Finishes	$0	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0	$7,935
Conveying	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Conveying Systems	$0	$0	$0	$0	$0	$0
Plumbing	**$45,698**	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$17,853	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0	$0
Sanitary Waste	$27,845	$0	$0	$0	$0	$0
HVAC	**$33,429**	**$16,686**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Cooling Generation	$0	$9,476	$0	$0	$0	$0
Distribution System	$33,429	$0	$0	$0	$0	$0
Heat Generation	$0	$7,210	$0	$0	$0	$0
Electrical	**$77,143**	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$77,143	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0	$0
Site Infrastructure	**$6,360**	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$6,360	$0	$0	$0	$0	$0

Table 135. Current and Forecasted Needs Summarized by System (Years 6 - 10): Spades Park

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$216,606***	***$216,606***	***$264,608***	***$264,608***	***$331,319***
Needs by Year	***$3,605***	***$0***	***$48,002***	***$0***	***$66,711***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$43,264**	**$0**	**$42,466**
Ceiling Finishes	$0	$0	$0	$0	$42,466
Floor Finishes	$0	$0	$43,264	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Conveying	**$0**	**$0**	**$0**	**$0**	**$0**
Conveying Systems	$0	$0	$0	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$3,605**	**$0**	**$4,738**	**$0**	**$15,061**
Controls and Instrumentation	$0	$0	$0	$0	$15,061
Cooling Generation	$0	$0	$4,738	$0	$0
Distribution System	$0	$0	$0	$0	$0
Heat Generation	$3,605	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$9,184**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$9,184
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 136. Current and Forecasted Needs Summarized by System (Years 11 - 15): Spades Park

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$331,319***	***$490,765***	***$490,765***	***$490,765***	***$662,654***
Needs by Year	***$0***	***$159,446***	***$0***	***$0***	***$171,889***
Exterior Enclosure	**$0**	**$86,417**	**$0**	**$0**	**$51,502**
Exterior Walls (Finishes)	$0	$78,115	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$51,502
Exterior Doors	$0	$8,302	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$73,029**	**$0**	**$0**	**$0**
Interior Doors	$0	$24,759	$0	$0	$0
Specialties	$0	$48,270	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Conveying	**$0**	**$0**	**$0**	**$0**	**$84,460**
Conveying Systems	$0	$0	$0	$0	$84,460
Plumbing	**$0**	**$0**	**$0**	**$0**	**$35,927**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$35,927
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 137. Current and Forecasted Needs Summarized by System (Years 16-20): Spades Park

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$662,654***	***$662,654***	***$662,654***	***$662,654***	***$739,797***
Needs by Year	***$0***	***$0***	***$0***	***$0***	***$77,143***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Conveying	**$0**	**$0**	**$0**	**$0**	**$0**
Conveying Systems	$0	$0	$0	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$77,143**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$77,143
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 138. Expired Systems 2022: Facilities – Spades Park

Building	System Category	System	Priority	2022 Needs
Spades Park	Electrical	Branch Wiring	High	$77,143
Spades Park	HVAC	Distribution System	High	$33,429
Spades Park	Plumbing	Domestic Water Distribution	Medium	$17,853
Spades Park	Plumbing	Sanitary Waste	Medium	$27,845
Spades Park	Roofing	Roof Coverings	High	$25,750
			TOTAL	**$182,020**

This page is intentionally left blank.

Site and Infrastructure Assessment Findings

Site General Condition

The following site conditions and/or deficiencies were observed during the assessment.

Asphalt Pavements:

- The asphalt pavements were in poor condition and in need of resealing as longitudinal and transverse cracking were observed throughout the pavement.

Site Improvements

A site infrastructure condition assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

- Good condition
- Poor condition and in need of repair
- Poor condition and in need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth aerial photographs were used in lieu of site plans. The site assessment was performed, and the subsequent results grouped by location. Findings for each location were divided as follows:

- Pedestrian Pavements
- Vehicular Pavements
- Site Development

Please note that not all locations have all the various infrastructure systems present. We determined unit pricing for the various deficiency requirements by referencing 2022 RS Means Building Construction Cost Data and Assembly Cost Data when available. Industry sources were used as a supplemental source for unit pricing when needed.

Site Utility observations were performed.

Table 139. Summary of 2022 Site and Infrastructure Deficiencies: Spades Park

Asset Description	Corrective Action	Notes	Priority	Current Needs	Year
Vehicular Pavements	Crack Fill, Seal Coat, and Restripe Asphalt Pavements	5300 SF @ $1.2 Per SF	Low	$6,360	2022
			Total 2022 Needs	**$6,360**	

Figure 19. Site and Infrastructure Deficiencies Markup: Spades Park

Site Infrastructure

The asphalt pavements were in poor condition and in need of resealing as longitudinal and transverse cracking were observed throughout the pavement.

This page is intentionally left blank.

WARREN

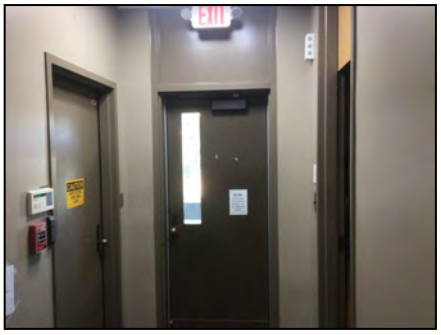
Table 140: Facility Description: Facilities - Warren

Summary of Findings	
Construction Type	One-Story Structure
Roof Type	~~Modified Bitumen~~ EPDM
Ceiling Type	Suspended Acoustical Tile
Lighting	LED
HVAC	Split-DX
Elevator	No
Fire Sprinkler	No
Fire Alarm	Yes

Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
Warren	1974	15,475	$152,857	$3,997,405	4	$379,056	9
Site Information			$53,160			$53,160	
TOTAL			$206,017			$432,216	

General Observations:

- The ductwork system is beyond its recommended useful life.
- It was reported that there was a major renovation in 2016 replacing portions all systems excluding the sanitary waste system, the HVAC distribution, the emergency and exit lighting, the exterior walls and windows, and the service and distribution.



Electrical

The LED lighting was in good condition. The electrical branch wiring is within its recommended useful life. The service and distribution system was in good condition. The emergency and exit lighting is beyond its recommended useful life.
The original distribution, 1974, as at end of useful life.

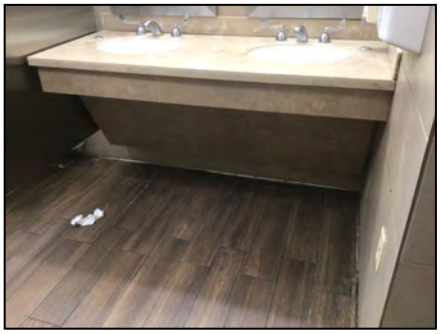
Exterior Enclosure

The metal and glazed doors were in good condition. The double-pane windows were in poor condition due to observed deteriorated window seals. The brick veneer walls were in good condition. The ~~modified bitumen~~ roof covering was within its recommended useful life. EPDM

Bottom of fascia is rusted. Sealant is deteriorating. Structural steel is starting to rust at entry. Bottom of exterior hollow metal doors and frames are rusting.

Interiors

The vinyl tile, carpet and laminate wood floor finishes were in good condition. The vinyl and painted wall finishes were in good condition. The suspended acoustical tile ceiling finishes were in poor condition due to observed stains.
Carpet and grout are stained



Plumbing

The porcelain and manual plumbing fixtures were in good condition. The domestic water distribution system is within its recommended useful life. The sanitary waste system is beyond its recommended useful life.

Water heater is in good condition.

MECHANICAL:
Rooftop unit is in good condition. 2 condensing units and 2 air handling units are in poor condition. One no longer has cooling.

Table 141. Current and Forecasted Needs Summarized by System (Current + 5 years): Warren

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$206,017***	***$430,494***	***$430,494***	***$430,494***	***$430,494***	***$432,216***
Needs by Year	***$206,017***	***$224,477***	***$0***	***$0***	***$0***	***$1,722***
Exterior Enclosure	**$0**	**$29,966**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0	$0
Exterior Windows	$0	$29,966	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$92,129**	**$0**	**$0**	**$0**	**$1,722**
Ceiling Finishes	$0	$92,129	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0	$1,722
Plumbing	**$60,410**	**$0**	**$0**	**$0**	**$0**	**$0**
Sanitary Waste	$60,410	$0	$0	$0	$0	$0
HVAC	**$72,524**	**$102,382**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Cooling Generation	$0	$45,526	$0	$0	$0	$0
Distribution System	$72,524	$56,856	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0	$0
Electrical	**$19,924**	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0	$0
Service Distribution	$0	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$19,924	$0	$0	$0	$0	$0
Site Infrastructure	**$53,160**	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$53,160	$0	$0	$0	$0	$0

Table 142. Current and Forecasted Needs Summarized by System (Years 6 - 10): Warren

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$439,014***	***$439,014***	***$474,218***	***$756,899***	***$756,899***
Needs by Year	***$6,798***	***$0***	***$35,204***	***$282,681***	***$0***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$30,827**	**$229,443**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$121,546	$0
Wall Finishes	$0	$0	$30,827	$107,898	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$6,798**	**$0**	**$4,378**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$6,798	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$4,378	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$53,237**	**$0**
Fire Alarms	$0	$0	$0	$53,237	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0
Service Distribution	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 143. Current and Forecasted Needs Summarized by System (Years 11 - 15): Warren

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$756,899***	***$857,147***	***$857,147***	***$1,206,431***	***$1,206,431***
Needs by Year	***$0***	***$100,248***	***$0***	***$349,285***	***$0***
Exterior Enclosure	**$0**	**$100,248**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$100,248	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$119,944**	**$0**
Roof Coverings	$0	$0	$0	$119,944	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$61,979**	**$0**
Controls and Instrumentation	$0	$0	$0	$32,675	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$29,304	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$167,362**	**$0**
Lighting	$0	$0	$0	$167,362	$0
Service Distribution	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 144. Current and Forecasted Needs Summarized by System (Years 16-20): Warren

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$1,206,431***	***$1,206,431***	***$1,206,431***	***$1,359,275***	***$1,419,047***
Needs by Year	***$0***	***$0***	***$0***	***$152,844***	***$59,772***
Exterior Enclosure	**$0**	**$0**	**$0**	**$12,433**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$12,433	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$140,410**	**$0**
Interior Doors	$0	$0	$0	$30,908	$0
Specialties	$0	$0	$0	$109,503	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$59,772**
Lighting	$0	$0	$0	$0	$0
Service Distribution	$0	$0	$0	$0	$59,772
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 145. Expired Systems 2022: Facilities – Warren

Building	System Category	System	Priority	2022 Needs
Warren	Electrical	Exit Signs and Emergency Lighting	High	$19,924
Warren	HVAC	Distribution System	High	$72,524
Warren	Plumbing	Sanitary Waste	Medium	$60,410
			TOTAL	**$152,857**

This page is intentionally left blank.

Site and Infrastructure Assessment Findings

Site General Condition

The following site conditions and/or deficiencies were observed during the assessment.

Asphalt Pavements:

- The asphalt pavements were in poor condition and in need of resealing as longitudinal and transverse cracking were observed throughout the pavement.

Site Improvements

A site infrastructure condition assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

- Good condition
- Poor condition and in need of repair
- Poor condition and in need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth aerial photographs were used in lieu of site plans. The site assessment was performed, and the subsequent results grouped by location. Findings for each location were divided as follows:

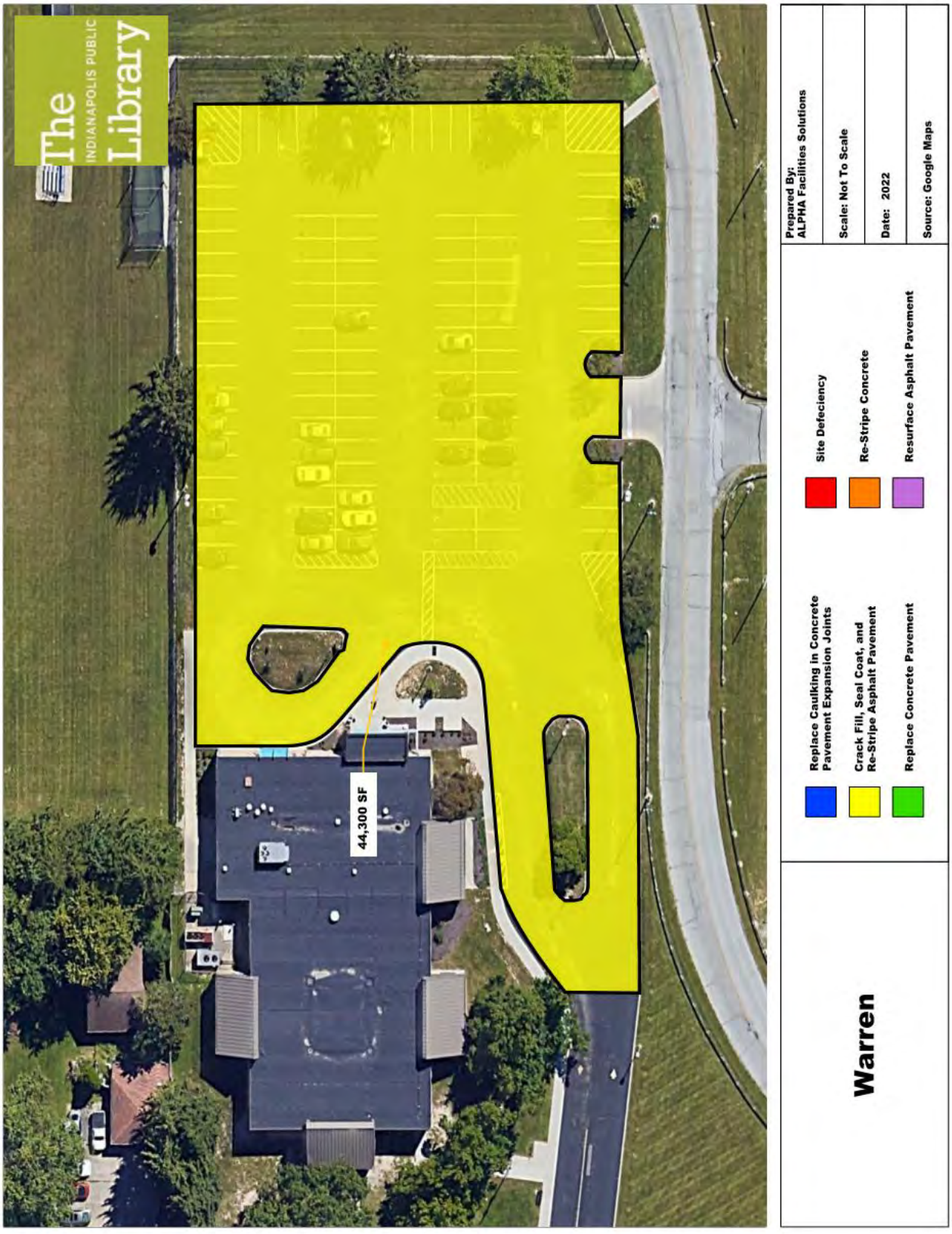
- Pedestrian Pavements
- Vehicular Pavements
- Site Development

Please note that not all locations have all the various infrastructure systems present. We determined unit pricing for the various deficiency requirements by referencing 2022 RS Means Building Construction Cost Data and Assembly Cost Data when available. Industry sources were used as a supplemental source for unit pricing when needed.

Table 146. Summary of 2022 Site and Infrastructure Deficiencies: Warren

Asset Description	Corrective Action	Notes	Priority	Current Needs	Year
Vehicular Pavements	Crack Fill, Seal Coat, and Restripe Asphalt Pavements	44300 SF @ $1.2 Per SF	Low	$53,160	2022
			Total 2022 Needs	**$53,160**	

Figure 20. Site and Infrastructure Deficiencies Markup: Warren



Site Infrastructure

The asphalt pavements were in poor condition and in need of resealing as longitudinal and transverse cracking were observed throughout the pavement.

This page is intentionally left blank.

WAYNE

Table 147: Facility Description: Facilities - Wayne

Summary of Findings	
Construction Type	One-Story Structure
Roof Type	Asphalt Shingle
Ceiling Type	Wood and Suspended Acoustical Tile
Lighting	LED
HVAC	Split-DX
Elevator	No
Fire Sprinkler	No
Fire Alarm	Yes

Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
Wayne	1983	13,251	$62,647	$3,422,915	2	$62,647	2
Site Information			$153,300			$153,300	
TOTAL			$215,947			$215,947	

General Observations:

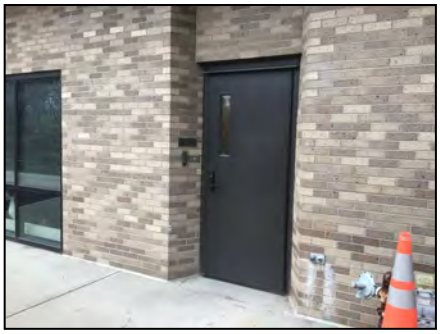
- The fire alarm and detection system is beyond its recommended useful life.
- It was reported that there was a major renovation in 2020 replacing all systems excluding the fire alarm systems, the exterior walls and windows, the emergency and exit lighting, and the electrical service and distribution.

The fire alarm system age needs to be determined. If 20+ years of age, it should be replaced.

Electrical

The LED lighting was in good condition. The electrical branch wiring is within its recommended useful life. The service and distribution system was in good condition. The emergency and exit lighting is beyond its recommended useful life.

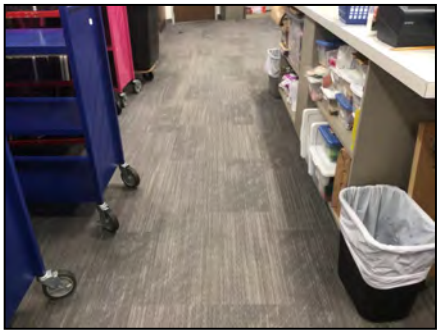
Emergency and exit lighting appear to be recent. The distribution system is approaching end of life.



Exterior Enclosure

The metal and glazed doors were in good condition. The double-pane windows were in good condition. The brick veneer walls were in good condition. The asphalt shingle roof covering was within its recommended useful life.

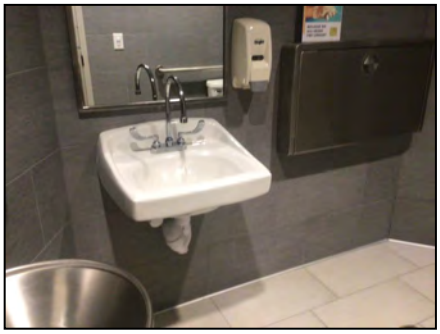
Paint is thin on fascia.



Interiors

The laminate wood, carpet and vinyl tile floor finishes were in good condition. The painted and tile wall finishes were in good condition. The wood and suspended acoustical tile ceiling finishes were in good condition.

Damage to wall by mop sink. Staining on carpet.



Plumbing

The porcelain and manual plumbing fixtures were in good condition. The domestic water distribution system is within its recommended useful life. The sanitary waste system is within its recommended useful life.

PLUMBING:
Water heaters are in good condition.

MECHANICAL:
Fan Coil units are in good condition. Condensing units are in good condition. Air Handlers are in good condition.

Table 148. Current and Forecasted Needs Summarized by System (Current + 5 years): Wayne

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$215,947***	***$215,947***	***$215,947***	***$215,947***	***$215,947***	***$215,947***
Needs by Year	***$215,947***	***$0***	***$0***	***$0***	***$0***	***$0***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Specialties	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0	$0
Fire Protection	**$45,586**	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$45,586	$0	$0	$0	$0	$0
Electrical	**$17,061**	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$17,061	$0	$0	$0	$0	$0
Site Infrastructure	**$153,300**	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$153,300	$0	$0	$0	$0	$0

Table 149. Current and Forecasted Needs Summarized by System (Years 6 - 10): Wayne

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$215,947***	***$215,947***	***$229,213***	***$229,213***	***$263,306***
Needs by Year	***$0***	***$0***	***$13,266***	***$0***	***$34,093***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$13,266**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$13,266	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$34,093**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$34,093
Distribution System	$0	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 150. Current and Forecasted Needs Summarized by System (Years 11 - 15): Wayne

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$263,306***	***$366,115***	***$470,203***	***$470,203***	***$548,626***
Needs by Year	***$0***	***$102,809***	***$104,088***	***$0***	***$78,423***
Exterior Enclosure	**$0**	**$92,436**	**$0**	**$0**	**$21,155**
Exterior Walls (Finishes)	$0	$92,436	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$21,155
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$10,373**	**$0**	**$0**	**$0**
Specialties	$0	$10,373	$0	$0	$0
Interiors	**$0**	**$0**	**$104,088**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$104,088	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$57,268**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$42,848
Heat Generation	$0	$0	$0	$0	$14,420
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 151. Current and Forecasted Needs Summarized by System (Years 16-20): Wayne

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$548,626***	***$553,004***	***$810,451***	***$810,451***	***$810,451***
Needs by Year	***$0***	***$4,378***	***$257,448***	***$0***	***$0***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$66,435**	**$0**	**$0**
Roof Coverings	$0	$0	$66,435	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$19,724**	**$0**	**$0**
Ceiling Finishes	$0	$0	$19,724	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
HVAC	**$0**	**$4,378**	**$27,979**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$27,979	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$4,378	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$143,310**	**$0**	**$0**
Lighting	$0	$0	$143,310	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 152. Expired Systems 2022: Facilities – Wayne

Building	System Category	System	Priority	2022 Needs
Wayne	Electrical	Exit Signs and Emergency Lighting	High	$17,061
Wayne	Fire Protection	Fire Alarms	High	$45,586
			TOTAL	**$62,647**

This page is intentionally left blank.

Site and Infrastructure Assessment Findings

Site General Condition

The following site conditions and/or deficiencies were observed during the assessment.

Asphalt Pavements:

- The asphalt pavements were in poor condition and in need of resurfacing as longitudinal cracking, transverse cracking, and degradation were observed throughout the pavement.

Site Improvements

A site infrastructure condition assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

- Good condition
- Poor condition and in need of repair
- Poor condition and in need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth aerial photographs were used in lieu of site plans. The site assessment was performed, and the subsequent results grouped by location. Findings for each location were divided as follows:

- Pedestrian Pavements
- Vehicular Pavements
- Site Development

Please note that not all locations have all the various infrastructure systems present. We determined unit pricing for the various deficiency requirements by referencing 2022 RS Means Building Construction Cost Data and Assembly Cost Data when available. Industry sources were used as a supplemental source for unit pricing when needed.

Table 153. Summary of 2022 Site and Infrastructure Deficiencies: Wayne

Asset Description	Corrective Action	Notes	Priority	Current Needs	Year
Vehicular Pavements	Resurface Asphalt Pavements	43800 SF @ $3.5 Per SF	Low	$153,300	2022
			Total 2022 Needs	**$153,300**	

Figure 21. Site and Infrastructure Deficiencies Markup: Wayne

Site Infrastructure

The asphalt pavements were in poor condition and in need of resurfacing as longitudinal cracking, transverse cracking, and degradation were observed throughout the pavement.

This page is intentionally left blank.

WEST INDIANAPOLIS

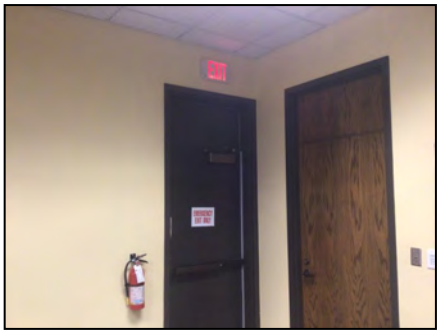
Table 154: Facility Description: Facilities - West Indianapolis

Summary of Findings		
Construction Type	One-Story Structure	
Roof Type	Asphalt Shingle	
Ceiling Type	Suspended Acoustical Tile	
Lighting	Fluorescent	
HVAC	Split-DX	
Elevator	No	
Fire Sprinkler	No	
Fire Alarm	No	

Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
West Indianapolis	1986	4,958	$129,363	$1,280,719	10	$163,748	13
Site Information			$22,320			$22,320	
TOTAL			$151,683			$186,068	

General Observations:

- The interior metal doors were in fair condition due to observed rusted panels.
- It was reported that the carpet was replaced in 2000 along with upgrading the lighting to fluorescent.



Electrical

The fluorescent lighting was in good condition. The electrical branch wiring is beyond its recommended useful life. The service and distribution system was in good condition. The emergency and exit lighting is beyond its recommended useful life.

There is some retrofit LED lighting in the building.
Age of emergency and exit need to be determined.
There is no fire alarm system in the building.

Exterior Enclosure

The glazed doors were in good condition; however, the metal doors were in fair condition due to observed rusted panels. The double-pane windows were in good condition. The brick veneer walls were in good condition. The asphalt shingle roof covering was beyond its recommended useful life.

Tuckpointing needed on screen wall. Much is pile up onto window frame.

Interiors

The carpet and ceramic tile floor finishes were in fair condition due to observed stains. The vinyl and painted wall finishes were in good condition. The suspended acoustical tile ceiling finishes were in good condition.

Plumbing

The porcelain and manual plumbing fixtures were in good condition. The domestic water distribution system is beyond its recommended useful life. The sanitary waste system is beyond its recommended useful life.

PLUMBING:
Staff reports that sanitary lines drain slowly. Water heater is beyond service life but in fair condition.

MECHANICAL:
Fan Coil units are in good condition. Condensing units are in good condition. Fresh air intake in in poor condition.

Table 155. Current and Forecasted Needs Summarized by System (Current + 5 years): West Indianapolis

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$151,683***	***$151,683***	***$151,683***	***$151,683***	***$151,683***	***$186,068***
Needs by Year	***$151,683***	***$0***	***$0***	***$0***	***$0***	***$34,385***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0	$0
Roofing	**$37,595**	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$37,595	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**	**$34,385**
Ceiling Finishes	$0	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0	$33,833
Wall Finishes	$0	$0	$0	$0	$0	$552
Plumbing	**$31,764**	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$12,409	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0	$0
Sanitary Waste	$19,355	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0	$0
Electrical	**$60,004**	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$53,621	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$6,383	$0	$0	$0	$0	$0
Site Infrastructure	**$22,320**	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$22,320	$0	$0	$0	$0	$0

Table 156. Current and Forecasted Needs Summarized by System (Years 6 - 10): West Indianapolis

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$186,068***	***$186,068***	***$260,790***	***$260,790***	***$358,554***
Needs by Year	***$0***	***$0***	***$74,722***	***$0***	***$97,764***
Exterior Enclosure	**$0**	**$0**	**$8,274**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$8,274	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$10,849**	**$0**	**$0**
Interior Doors	$0	$0	$10,849	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$55,599**	**$0**	**$29,517**
Ceiling Finishes	$0	$0	$0	$0	$29,517
Floor Finishes	$0	$0	$11,147	$0	$0
Wall Finishes	$0	$0	$44,452	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$14,626**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$14,626
Heat Generation	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$53,621**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$53,621
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 157. Current and Forecasted Needs Summarized by System (Years 11 - 15): West Indianapolis

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$362,159***	***$456,588***	***$456,588***	***$456,588***	***$520,052***
Needs by Year	***$3,605***	***$94,429***	***$0***	***$0***	***$63,464***
Exterior Enclosure	**$0**	**$61,407**	**$0**	**$0**	**$11,337**
Exterior Walls (Finishes)	$0	$57,284	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$11,337
Exterior Doors	$0	$4,123	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$33,021**	**$0**	**$0**	**$0**
Interior Doors	$0	$3,096	$0	$0	$0
Specialties	$0	$29,926	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$24,972**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$24,972
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$3,605**	**$0**	**$0**	**$0**	**$27,155**
Controls and Instrumentation	$0	$0	$0	$0	$10,469
Cooling Generation	$0	$0	$0	$0	$0
Heat Generation	$3,605	$0	$0	$0	$11,536
Terminal & Package Units	$0	$0	$0	$0	$5,150
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 158. Current and Forecasted Needs Summarized by System (Years 16-20): West Indianapolis

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$520,052***	***$520,052***	***$520,052***	***$520,052***	***$520,052***
Needs by Year	***$0***	***$0***	***$0***	***$0***	***$0***
Exterior Enclosure	**$0**	**$0**	**$0**	**$0**	**$0**
Exterior Walls (Finishes)	$0	$0	$0	$0	$0
Exterior Windows	$0	$0	$0	$0	$0
Exterior Doors	$0	$0	$0	$0	$0
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interior Construction	**$0**	**$0**	**$0**	**$0**	**$0**
Interior Doors	$0	$0	$0	$0	$0
Specialties	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
Plumbing	**$0**	**$0**	**$0**	**$0**	**$0**
Domestic Water Distribution	$0	$0	$0	$0	$0
Plumbing Fixtures	$0	$0	$0	$0	$0
Sanitary Waste	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Heat Generation	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Branch Wiring	$0	$0	$0	$0	$0
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0
Site Infrastructure	**$0**	**$0**	**$0**	**$0**	**$0**
Vehicular Pavements	$0	$0	$0	$0	$0

Table 159. Expired Systems 2022: Facilities – West Indianapolis

Building	System Category	System	Priority	2022 Needs
West Indianapolis	Electrical	Branch Wiring	High	$53,621
West Indianapolis	Electrical	Exit Signs and Emergency Lighting	High	$6,383
West Indianapolis	Plumbing	Domestic Water Distribution	Medium	$12,409
West Indianapolis	Plumbing	Sanitary Waste	Medium	$19,355
West Indianapolis	Roofing	Roof Coverings	High	$37,595
			TOTAL	**$129,363**

Table 160. Component Level Deficiencies: Facilities – West Indianapolis

Description	Renewal Year	Estimate
None		$0
	TOTAL	**$0**

Site and Infrastructure Assessment Findings

Site General Condition

The following site conditions and/or deficiencies were observed during the assessment.

Asphalt Pavements:

• The asphalt pavements were in poor condition and in need of resealing as longitudinal and transverse cracking were observed throughout the pavement.

Site Improvements

A site infrastructure condition assessment was included in the scope of work for this project. The site infrastructure assessment is a visual evaluation of the site systems. The teams walked each site to determine the general condition of the systems and categorized them as follows:

• Good condition

• Poor condition and in need of repair

• Poor condition and in need of replacement

Estimated quantities were calculated by digitizing marked-up Google Earth aerial photographs. Google Earth aerial photographs were used in lieu of site plans. The site assessment was performed, and the subsequent results grouped by location. Findings for each location were divided as follows:

• Pedestrian Pavements

• Vehicular Pavements

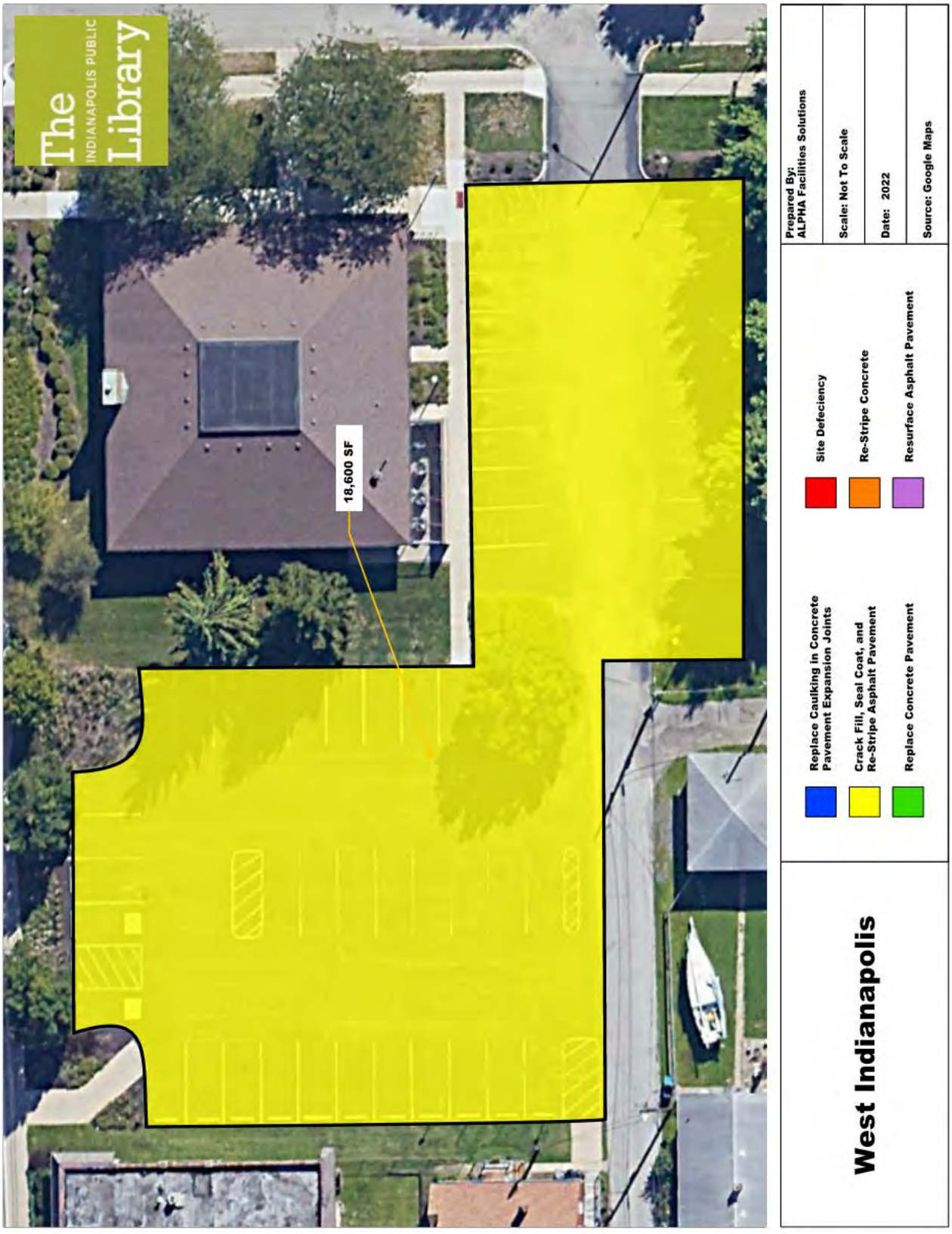
• Site Development

Please note that not all locations have all the various infrastructure systems present. We determined unit pricing for the various deficiency requirements by referencing 2022 RS Means Building Construction Cost Data and Assembly Cost Data when available. Industry sources were used as a supplemental source for unit pricing when needed.

Table 161. Summary of 2022 Site and Infrastructure Deficiencies: West Indianapolis

Asset Description	Corrective Action	Notes	Priority	Current Needs	Year
Vehicular Pavements	Crack Fill, Seal Coat, and Restripe Asphalt Pavements	18600 SF @ $1.2 Per SF	Low	$22,320	2022
			Total 2022 Needs	**$22,320**	

Figure 22. Site and Infrastructure Deficiencies Markup: West Indianapolis



Site Infrastructure

The asphalt pavements were in poor condition and in need of resealing as longitudinal and transverse cracking were observed throughout the pavement.

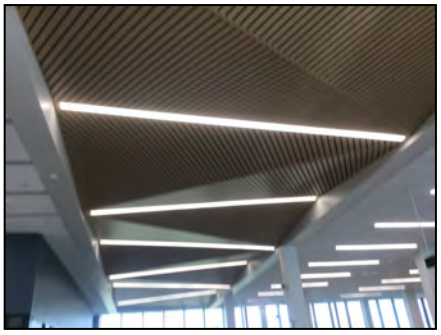
This page is intentionally left blank.

WEST PERRY

Table 162: Facility Description: Facilities - West Perry

Summary of Findings	
Construction Type	One-Story Structure
Roof Type	Modified Bitumen TPO
Ceiling Type	Suspended Acoustical Tile, Painted, and Metal Strips
Lighting	LED
HVAC	Split-DX
Elevator	No
Fire Sprinkler	Yes
Fire Alarm	Yes

Name	Year Built	Area (SF)	Total Needs 2022	Current Replacement Value	2022 FCI %	Total Needs 2027	2027 FCI %
West Perry	2021	24,048	$0	$6,211,928	0	$0	0
Site Information			$0			$0	
TOTAL			$0			$0	



Electrical

The LED lighting was in good condition. The electrical branch wiring is within its recommended useful life. The service and distribution system was in good condition. The emergency and exit lighting is within its recommended useful life.

Exterior Enclosure

The glazed and metal doors were in good condition. The double-pane windows were in good condition. The brick veneer walls were in good condition. The modified bitumen roof covering was within its recommended useful life.

Roofing is TPO. Slip sheets have shifted from under solar panel ballasts.

Interiors

The ceramic tile, carpet and laminate wood floor finishes were in good condition. The painted wall finishes were in good condition. The metal strips, suspended acoustical tile and painted ceiling finishes were in good condition.

LVT and carpet tile are curling at the edges. Some stains on carpet and toilet partitions.

Plumbing

The porcelain and automated plumbing fixtures were in good condition. The domestic water distribution system is within its recommended useful life. The sanitary waste system is within its recommended useful life.

MECHANICAL:
Mechanical System is in new condition.

Table 163. Current and Forecasted Needs Summarized by System (Current + 5 years): West Perry

System	2022	2023	2024	2025	2026	2027
Cumulative Needs by Year	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***
Needs by Year	***$0***	***$0***	***$0***	***$0***	***$0***	***$0***
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0	$0

Table 164. Current and Forecasted Needs Summarized by System (Years 6 - 10): West Perry

System	2028	2029	2030	2031	2032
Cumulative Needs by Year	***$0***	***$0***	***$0***	***$29,426***	***$29,426***
Needs by Year	***$0***	***$0***	***$0***	***$29,426***	***$0***
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$29,426**	**$0**
Ceiling Finishes	$0	$0	$0	$2,675	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$26,751	$0
HVAC	**$0**	**$0**	**$0**	**$0**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0

Table 165. Current and Forecasted Needs Summarized by System (Years 11 - 15): West Perry

System	2033	2034	2035	2036	2037
Cumulative Needs by Year	***$29,426***	***$29,426***	***$29,426***	***$349,505***	***$349,505***
Needs by Year	***$0***	***$0***	***$0***	***$320,078***	***$0***
Roofing	**$0**	**$0**	**$0**	**$0**	**$0**
Roof Coverings	$0	$0	$0	$0	$0
Interiors	**$0**	**$0**	**$0**	**$165,763**	**$0**
Ceiling Finishes	$0	$0	$0	$0	$0
Floor Finishes	$0	$0	$0	$165,763	$0
Wall Finishes	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$71,585**	**$0**
Controls and Instrumentation	$0	$0	$0	$0	$0
Cooling Generation	$0	$0	$0	$71,585	$0
Distribution System	$0	$0	$0	$0	$0
Terminal & Package Units	$0	$0	$0	$0	$0
Fire Protection	**$0**	**$0**	**$0**	**$82,730**	**$0**
Fire Alarms	$0	$0	$0	$82,730	$0
Electrical	**$0**	**$0**	**$0**	**$0**	**$0**
Lighting	$0	$0	$0	$0	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$0	$0

Table 166. Current and Forecasted Needs Summarized by System (Years 16-20): West Perry

System	2038	2039	2040	2041	2042
Cumulative Needs by Year	***$349,505***	***$349,505***	***$349,505***	***$1,120,679***	***$1,120,679***
Needs by Year	***$0***	***$0***	***$0***	***$771,174***	***$0***
Roofing	**$0**	**$0**	**$0**	**$218,875**	**$0**
Roof Coverings	$0	$0	$0	$218,875	$0
Interiors	**$0**	**$0**	**$0**	**$100,220**	**$0**
Ceiling Finishes	$0	$0	$0	$100,220	$0
Floor Finishes	$0	$0	$0	$0	$0
Wall Finishes	$0	$0	$0	$0	$0
HVAC	**$0**	**$0**	**$0**	**$161,039**	**$0**
Controls and Instrumentation	$0	$0	$0	$50,777	$0
Cooling Generation	$0	$0	$0	$0	$0
Distribution System	$0	$0	$0	$96,099	$0
Terminal & Package Units	$0	$0	$0	$14,163	$0
Fire Protection	**$0**	**$0**	**$0**	**$0**	**$0**
Fire Alarms	$0	$0	$0	$0	$0
Electrical	**$0**	**$0**	**$0**	**$291,041**	**$0**
Lighting	$0	$0	$0	$260,079	$0
Exit Signs and Emergency Lighting	$0	$0	$0	$30,962	$0

Table 167. Expired Systems 2022: Facilities – West Perry

Building	System Category	System	Priority	2022 Needs
None				$0
			TOTAL	**$0**

This page is intentionally left blank.

Equipment Inventory

Table 168. Equipment Inventory: Facilities

Building	Equipment Type	Replacement Year	Replacement Cost
Beech Grove	Air Handling Unit	2023	19300.00
Beech Grove	Air Handling Unit	2028	32800.00
Beech Grove	Air Handling Unit	2033	22300.00
Beech Grove	BackFlow Preventer	2028	1300.00
Beech Grove	Boiler, Gas-Fired	2038	10600.00
Beech Grove	Boiler, Gas-Fired	2038	10600.00
Beech Grove	Chiller, Air Cooled	2023	60600.00
Beech Grove	Condensing Unit	2023	7900.00
Beech Grove	Elevator, Hydraulic	2035	82000.00
Beech Grove	Elevator, Hydraulic	2035	88925.00
Beech Grove	Fan, Exhaust	2028	1850.00
Beech Grove	Fan, Exhaust	2028	1650.00
Beech Grove	Fire Sprinkler System, Wet Pipe	2022	8500.00
Beech Grove	Fire Sprinkler System, Wet Pipe	2022	8500.00
Beech Grove	Panel, Distribution	2044	14250.00
Beech Grove	Panel, Main Fire Alarm	2022	5700.00
Beech Grove	Pump, Chilled Water Circulation	2028	4600.00
Beech Grove	Pump, Hot Water Circulation	2028	3900.00
Beech Grove	Pump, Hot Water Circulation	2028	3900.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00

Building	Equipment Type	Replacement Year	Replacement Cost
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	VAV Box	2031	2600.00
Beech Grove	Water Heater, Electric	2036	8350.00
Central Library	Air Handling Unit	2032	22800.00
Central Library	Air Handling Unit	2032	152200.00
Central Library	Air Handling Unit	2032	137000.00
Central Library	Air Handling Unit	2032	18700.00
Central Library	Air Handling Unit	2032	137000.00
Central Library	Air Handling Unit	2032	22800.00
Central Library	Air Handling Unit	2032	32900.00
Central Library	Air Handling Unit	2032	18700.00
Central Library	Air Handling Unit	2032	137000.00
Central Library	Air Handling Unit	2032	137000.00
Central Library	Air Handling Unit	2032	18700.00
Central Library	Air Handling Unit	2032	119800.00
Central Library	Air Handling Unit	2033	56300.00
Central Library	Air Handling Unit	2033	117700.00
Central Library	Air Handling Unit	2033	98400.00
Central Library	Elevator, Hydraulic	2036	95850.00
Central Library	Elevator, Hydraulic	2036	88925.00
Central Library	Elevator, Hydraulic	2036	95850.00

Building	Equipment Type	Replacement Year	Replacement Cost
Central Library	Fan Coil Unit - DX	2033	1900.00
Central Library	Fan Coil Unit - DX	2033	1900.00
Central Library	Fan Coil Unit - DX	2033	1900.00
Central Library	Fan Coil Unit - DX	2033	1900.00
Central Library	Fan Coil Unit - DX	2033	1900.00
Central Library	Food Service - Dishwasher	2027	14000.00
Central Library	Food Service - Exhaust Hood	2033	10000.00
Central Library	Food Service - Exhaust Hood	2033	10000.00
Central Library	Food Service - Food Disposer	2036	4000.00
Central Library	Food Service - Mixer	2027	8000.00
Central Library	Food Service - Oven	2033	6500.00
Central Library	Food Service - Oven	2033	6500.00
Central Library	Food Service - Refrigerator	2027	4950.00
Central Library	Food Service - Walk-In Cooler	2027	28000.00
Central Library	Food Service - Warmer, Food	2030	3000.00
Central Library	Panel, Main Fire Alarm	2022	5700.00
Central Library	Pump, Chilled Water Circulation	2039	62000.00
Central Library	Pump, Chilled Water Circulation	2039	62000.00
Central Library	Pump, Hot Water Circulation	2039	44100.00
Central Library	Pump, Hot Water Circulation	2039	44100.00
Central Library	Unit Heater, Hydronic	2038	4250.00
Central Library	Unit Heater, Hydronic	2039	4250.00
Central Library	Unit Heater, Hydronic	2039	4250.00
Central Library	Unit Heater, Hydronic	2039	4250.00
Central Library	Water Heater, Electric	2027	37250.00
Central Library Garage	Air Handling Unit	2032	27000.00
Central Library Garage	BackFlow Preventer	2028	3900.00
Central Library Garage	BackFlow Preventer	2028	3900.00
Central Library Garage	Elevator, Hydraulic	2036	102775.00
Central Library Garage	Elevator, Hydraulic	2036	102775.00
Central Library Garage	Elevator, Hydraulic	2036	102775.00
Central Library Garage	Elevator, Hydraulic	2039	95850.00
Central Library Garage	Emergency Generator	2033	243750.00
Central Library Garage	Fire Sprinkler System, Dry Pipe	2047	8500.00
Central Library Garage	Fire Sprinkler System, Dry Pipe	2047	8500.00
Central Library Garage	Fire Sprinkler System, Dry Pipe	2047	8500.00
Central Library Garage	Fire Sprinkler System, Dry Pipe	2047	8500.00
Central Library Garage	Fire Sprinkler System, Dry Pipe	2047	8500.00
Central Library Garage	Fire Sprinkler System, Dry Pipe	2047	8500.00
Central Library Garage	Mini Split System	2023	4250.00
Central Library Garage	Pump, Fire (Electric)	2033	33700.00
Central Library Garage	Pump, Sump	2033	900.00
Central Library Garage	Pump, Sump	2033	900.00

Building	Equipment Type	Replacement Year	Replacement Cost
Central Library Garage	Switchgear	2057	68000.00
Central Library Garage	Switchgear	2057	79200.00
Central Library Garage	Transfer Switch, Automatic	2039	35200.00
Central Library Garage	Transformer	2057	7900.00
Central Library Garage	Unit Heater, Electric	2036	1600.00
College Avenue	BackFlow Preventer	2028	1550.00
College Avenue	Fan, Exhaust	2023	1450.00
College Avenue	Fan, Exhaust	2028	1450.00
College Avenue	Fan, Exhaust	2028	2250.00
College Avenue	Fire Sprinkler System, Wet Pipe	2044	8500.00
College Avenue	Mini Split System	2036	4250.00
College Avenue	Packaged Unit	2037	23150.00
College Avenue	Packaged Unit	2038	8450.00
College Avenue	Packaged Unit	2038	23150.00
College Avenue	Packaged Unit	2038	23150.00
College Avenue	Panel, Main Fire Alarm	2022	5700.00
College Avenue	Switchgear	2050	27600.00
Decatur	BackFlow Preventer	2028	1550.00
Decatur	Condensing Unit	2023	4600.00
Decatur	Condensing Unit	2023	4600.00
Decatur	Condensing Unit	2023	4600.00
Decatur	Condensing Unit	2023	4600.00
Decatur	Condensing Unit	2023	4600.00
Decatur	Condensing Unit	2023	4600.00
Decatur	Furnace with Evaporator	2023	2400.00
Decatur	Furnace with Evaporator	2023	2400.00
Decatur	Furnace with Evaporator	2023	2400.00
Decatur	Furnace with Evaporator	2023	2400.00
Decatur	Furnace with Evaporator	2023	2400.00
Decatur	Furnace with Evaporator	2023	2400.00
Decatur	Panel, Distribution	2043	11700.00
Decatur	Panel, Main Fire Alarm	2022	5700.00
Decatur	Water Heater, Gas	2027	9150.00
Eagle	Air Handling Unit	2039	68000.00
Eagle	BackFlow Preventer	2039	1300.00
Eagle	Boiler, Gas-Fired	2049	18500.00
Eagle	Chiller, Air Cooled	2039	60600.00
Eagle	Fan, Exhaust	2039	1650.00
Eagle	Fire Sprinkler System, Wet Pipe	2059	3500.00
Eagle	Mini Split System	2039	4250.00
Eagle	Panel, Main Fire Alarm	2034	5700.00
Eagle	Pump, Hot Water Circulation	2039	11000.00
Eagle	Switchgear	2069	35900.00

Building	Equipment Type	Replacement Year	Replacement Cost
Eagle	VAV Box	2049	2600.00
Eagle	VAV Box	2049	2600.00
Eagle	VAV Box	2049	2600.00
Eagle	VAV Box	2049	2600.00
Eagle	VAV Box	2049	2600.00
Eagle	VAV Box	2049	2600.00
Eagle	VAV Box	2049	2600.00
Eagle	VAV Box	2049	2600.00
Eagle	VAV Box	2049	2600.00
Eagle	VAV Box	2049	2600.00
Eagle	VAV Box	2049	2600.00
Eagle	VAV Box	2049	2600.00
Eagle	VAV Box	2049	2600.00
Eagle	VAV Box	2049	2600.00
Eagle	VAV Box	2049	2600.00
Eagle	VAV Box	2049	2600.00
Eagle	VAV Box	2049	2600.00
Eagle	VAV Box	2049	2600.00
Eagle	VAV Box	2049	2600.00
Eagle	VAV Box	2049	2600.00
Eagle	VAV Box	2049	2600.00
Eagle	VAV Box	2049	2600.00
East 38th Street	BackFlow Preventer	2032	1300.00
East 38th Street	Condensing Unit	2023	6300.00
East 38th Street	Condensing Unit	2023	4600.00
East 38th Street	Fan, Exhaust	2032	1850.00
East 38th Street	Fire Sprinkler System, Wet Pipe	2043	8500.00
East 38th Street	Furnace with Evaporator	2032	3500.00
East 38th Street	Furnace with Evaporator	2032	3500.00
East 38th Street	Furnace with Evaporator	2032	3500.00
East 38th Street	Packaged Unit	2023	127900.00
East 38th Street	Packaged Unit	2023	127900.00
East 38th Street	Panel, Main Fire Alarm	2022	5700.00
East 38th Street	Switchgear	2053	27600.00
East 38th Street	Unit Heater, Gas	2038	5000.00
East Washington	BackFlow Preventer	2033	1550.00
East Washington	Condensing Unit	2031	2500.00
East Washington	Condensing Unit	2031	4600.00
East Washington	Condensing Unit	2031	2500.00
East Washington	Condensing Unit	2031	4600.00
East Washington	Elevator, Hydraulic	2035	88925.00
East Washington	Fire Sprinkler System, Dry Pipe	2050	8500.00
East Washington	Fire Sprinkler System, Dry Pipe	2050	8500.00

Building	Equipment Type	Replacement Year	Replacement Cost
East Washington	Furnace with Evaporator	2035	3500.00
East Washington	Furnace with Evaporator	2035	3500.00
East Washington	Furnace with Evaporator	2035	2400.00
East Washington	Furnace with Evaporator	2035	2400.00
East Washington	Mini Split System	2036	4250.00
East Washington	Panel, Distribution	2056	8850.00
East Washington	Panel, Main Fire Alarm	2030	5700.00
Franklin Road	BackFlow Preventer	2028	2725.00
Franklin Road	Fan, Exhaust	2028	1850.00
Franklin Road	Fan, Exhaust	2028	1650.00
Franklin Road	Fan, Exhaust	2028	1850.00
Franklin Road	Fire Sprinkler System, Wet Pipe	2044	8500.00
Franklin Road	Packaged Unit	2023	23150.00
Franklin Road	Packaged Unit	2033	14000.00
Franklin Road	Packaged Unit	2033	14000.00
Franklin Road	Packaged Unit	2033	23150.00
Franklin Road	Packaged Unit	2038	8450.00
Franklin Road	Panel, Distribution	2050	14250.00
Franklin Road	Panel, Main Fire Alarm	2022	5700.00
Garfield Park	Air Handling Unit	2023	27600.00
Garfield Park	Boiler, Gas-Fired	2049	10600.00
Garfield Park	Condensing Unit	2023	2500.00
Garfield Park	Condensing Unit	2023	15800.00
Garfield Park	Fan Coil Unit - DX	2028	1900.00
Garfield Park	Switchgear	2038	23700.00
Garfield Park	Water Heater, Electric	2033	6000.00
Haughville	Fire Sprinkler System, Wet Pipe	2043	8500.00
Haughville	Mini Split System	2023	4250.00
Haughville	Packaged Unit	2023	14000.00
Haughville	Packaged Unit	2023	8450.00
Haughville	Packaged Unit	2041	36300.00
Haughville	Panel, Main Fire Alarm	2037	5700.00
Haughville	Switchgear	2053	23700.00
Irvington	Condensing Unit	2023	6700.00
Irvington	Condensing Unit	2037	4600.00
Irvington	Condensing Unit	2037	4600.00
Irvington	Fan, Exhaust	2028	1450.00
Irvington	Fan, Exhaust	2042	1850.00
Irvington	Fire Sprinkler System, Dry Pipe	2044	8500.00
Irvington	Furnace with Evaporator	2023	2400.00
Irvington	Furnace with Evaporator	2023	2400.00
Irvington	Furnace with Evaporator	2042	2400.00
Irvington	Furnace with Evaporator	2042	2400.00

Building	Equipment Type	Replacement Year	Replacement Cost
Irvington	Packaged Unit	2038	23150.00
Irvington	Packaged Unit	2040	23150.00
Irvington	Panel, Main Fire Alarm	2022	5700.00
Irvington	Switchgear	2052	27600.00
Irvington	Transformer	2052	4850.00
Lawrence	Air Handling Unit	2037	19300.00
Lawrence	Air Handling Unit	2037	19300.00
Lawrence	Condensing Unit	2031	12200.00
Lawrence	Condensing Unit	2032	6300.00
Lawrence	Condensing Unit	2032	7900.00
Lawrence	Condensing Unit	2032	6700.00
Lawrence	Condensing Unit	2035	2500.00
Lawrence	Furnace with Evaporator	2036	3500.00
Lawrence	Furnace with Evaporator	2036	3500.00
Lawrence	Furnace with Evaporator	2037	3500.00
Lawrence	Furnace with Evaporator	2037	3500.00
Lawrence	Furnace with Evaporator	2039	3500.00
Lawrence	Panel, Main Fire Alarm	2022	5700.00
Lawrence	Switchgear	2022	24550.00
Library Service Center	Air Handling Unit	2028	47100.00
Library Service Center	Air Handling Unit	2028	47100.00
Library Service Center	Air Handling Unit	2028	32800.00
Library Service Center	Air Handling Unit	2028	27600.00
Library Service Center	Air Handling Unit	2028	47100.00
Library Service Center	Air Handling Unit	2028	32800.00
Library Service Center	Air Handling Unit	2028	81900.00
Library Service Center	Air Handling Unit	2028	32800.00
Library Service Center	Boiler, Gas-Fired	2037	37700.00
Library Service Center	Boiler, Gas-Fired	2039	55400.00
Library Service Center	Chiller, Air Cooled	2023	203300.00
Library Service Center	Elevator, Hydraulic	2030	82000.00
Library Service Center	Fan, Exhaust	2028	2650.00
Library Service Center	Fan, Exhaust	2028	2650.00
Library Service Center	Fan, Exhaust	2028	2650.00
Library Service Center	Fan, Exhaust	2028	2650.00
Library Service Center	Fan, Exhaust	2028	1650.00
Library Service Center	Fan, Exhaust	2028	2650.00
Library Service Center	Fan, Exhaust	2028	1650.00
Library Service Center	Fire Sprinkler System, Dry Pipe	2043	8500.00
Library Service Center	Fire Sprinkler System, Wet Pipe	2043	8500.00
Library Service Center	Overhead Door Motor	2030	1500.00
Library Service Center	Overhead Door Motor	2030	1500.00
Library Service Center	Overhead Door Motor	2030	1500.00

Building	Equipment Type	Replacement Year	Replacement Cost
Library Service Center	Overhead Door Motor	2030	1500.00
Library Service Center	Overhead Door Motor	2030	1500.00
Library Service Center	Overhead Door Motor	2030	1500.00
Library Service Center	Overhead Door Motor	2030	1500.00
Library Service Center	Overhead Door Motor	2030	1500.00
Library Service Center	Overhead Door Motor	2030	1500.00
Library Service Center	Overhead Door Motor	2030	1500.00
Library Service Center	Overhead Door, Automatic	2030	5900.00
Library Service Center	Overhead Door, Automatic	2030	5900.00
Library Service Center	Overhead Door, Automatic	2030	5900.00
Library Service Center	Overhead Door, Automatic	2030	5900.00
Library Service Center	Overhead Door, Automatic	2030	5900.00
Library Service Center	Overhead Door, Automatic	2030	5900.00
Library Service Center	Overhead Door, Automatic	2030	5900.00
Library Service Center	Overhead Door, Automatic	2030	5900.00
Library Service Center	Overhead Door, Automatic	2030	5900.00
Library Service Center	Overhead Door, Automatic	2030	5900.00
Library Service Center	Overhead Door, Automatic	2030	5900.00
Library Service Center	Packaged Unit	2041	14000.00
Library Service Center	Panel, Main Fire Alarm	2036	5700.00
Library Service Center	Pump, Chilled Water Circulation	2033	24600.00
Library Service Center	Pump, Chilled Water Circulation	2033	24600.00
Library Service Center	Pump, Hot Water Circulation	2028	22700.00
Library Service Center	Pump, Hot Water Circulation	2033	22700.00
Library Service Center	Switchgear	2049	72250.00
Library Service Center	Unit Heater, Gas	2030	2800.00
Library Service Center	Unit Heater, Gas	2030	2800.00
Library Service Center	Unit Heater, Gas	2030	2800.00
Library Service Center	Unit Heater, Gas	2030	2800.00
Library Service Center	Unit Heater, Gas	2030	2800.00
Library Service Center	Unit Heater, Gas	2030	2800.00
Library Service Center	Unit Heater, Hydronic	2037	4250.00
Martindate-Brightwood	Condensing Unit	2035	6700.00
Martindate-Brightwood	Condensing Unit	2035	12200.00
Martindate-Brightwood	Condensing Unit	2035	6700.00
Martindate-Brightwood	Condensing Unit	2035	12200.00
Martindate-Brightwood	Energy Recovery Unit	2040	11300.00
Martindate-Brightwood	Fan Coil Unit - DX	2040	1900.00
Martindate-Brightwood	Fan Coil Unit - DX	2040	1900.00
Martindate-Brightwood	Fan Coil Unit - DX	2040	3400.00
Martindate-Brightwood	Fan Coil Unit - DX	2040	3400.00
Martindate-Brightwood	Fan Coil Unit - DX	2040	3400.00
Martindate-Brightwood	Fan Coil Unit - DX	2040	1900.00

Building	Equipment Type	Replacement Year	Replacement Cost
Martindate-Brightwood	Fan Coil Unit - DX	2040	1900.00
Martindate-Brightwood	Fan Coil Unit - DX	2040	1900.00
Martindate-Brightwood	Fan Coil Unit - DX	2040	1900.00
Martindate-Brightwood	Fan Coil Unit - DX	2040	3400.00
Martindate-Brightwood	Fan Coil Unit - DX	2040	3400.00
Martindate-Brightwood	Fan Coil Unit - DX	2040	3400.00
Martindate-Brightwood	Fan Coil Unit - DX	2040	3400.00
Martindate-Brightwood	Fan Coil Unit - DX	2040	3400.00
Martindate-Brightwood	Fan Coil Unit - DX	2040	3400.00
Martindate-Brightwood	Fan Coil Unit - DX	2040	3400.00
Martindate-Brightwood	Fan Coil Unit - DX	2040	1900.00
Martindate-Brightwood	Fan Coil Unit - DX	2040	3400.00
Martindate-Brightwood	Fire Sprinkler System, Wet Pipe	2060	8500.00
Martindate-Brightwood	Panel, Distribution	2060	14250.00
Martindate-Brightwood	Panel, Main Fire Alarm	2035	5700.00
Michigan Road	Air Handling Unit	2038	56600.00
Michigan Road	Air Handling Unit	2038	22300.00
Michigan Road	Air Handling Unit	2038	32800.00
Michigan Road	Air Handling Unit	2038	27600.00
Michigan Road	Boiler, Gas-Fired	2048	21900.00
Michigan Road	Chiller, Air Cooled	2038	99500.00
Michigan Road	Fire Sprinkler System, Wet Pipe	2058	8500.00
Michigan Road	Fire Sprinkler System, Wet Pipe	2058	8500.00
Michigan Road	Panel, Distribution	2058	11700.00
Michigan Road	Panel, Main Fire Alarm	2033	5700.00
Michigan Road	Pump, Chilled Water Circulation	2038	19000.00
Michigan Road	Pump, Hot Water Circulation	2038	19000.00
Michigan Road	VAV Box	2048	2600.00
Michigan Road	VAV Box	2048	2600.00
Michigan Road	VAV Box	2048	2600.00
Michigan Road	VAV Box	2048	2600.00
Michigan Road	VAV Box	2048	2600.00
Michigan Road	VAV Box	2048	2600.00
Michigan Road	VAV Box	2048	2600.00
Michigan Road	VAV Box	2048	2600.00
Michigan Road	VAV Box	2048	2600.00
Michigan Road	VAV Box	2048	2600.00
Michigan Road	VAV Box	2048	2600.00
Michigan Road	VAV Box	2048	2600.00
Michigan Road	VAV Box	2048	2600.00
Michigan Road	VAV Box	2048	2600.00
Michigan Road	VAV Box	2048	2600.00
Michigan Road	VAV Box	2048	2600.00

Building	Equipment Type	Replacement Year	Replacement Cost
Michigan Road	VAV Box	2048	2600.00
Michigan Road	VAV Box	2048	2600.00
Michigan Road	VAV Box	2048	2600.00
Michigan Road	VAV Box	2048	2600.00
Nora	Fan, Exhaust	2028	2250.00
Nora	Packaged Unit	2023	8450.00
Nora	Packaged Unit	2023	14000.00
Nora	Packaged Unit	2023	8450.00
Nora	Packaged Unit	2023	8450.00
Nora	Packaged Unit	2035	14000.00
Nora	Packaged Unit	2037	23150.00
Nora	Packaged Unit	2037	23150.00
Nora	Packaged Unit	2037	8450.00
Nora	Panel, Distribution	2042	14250.00
Nora	Panel, Main Fire Alarm	2022	5700.00
Pike	Air Handling Unit	2023	27600.00
Pike	Air Handling Unit	2023	27600.00
Pike	Air Handling Unit	2023	27600.00
Pike	Air Handling Unit	2028	27600.00
Pike	Boiler, Gas-Fired	2038	26200.00
Pike	Condensing Unit	2023	22100.00
Pike	Condensing Unit	2023	2500.00
Pike	Condensing Unit	2023	6300.00
Pike	Condensing Unit	2023	6700.00
Pike	Condensing Unit	2030	12200.00
Pike	Fan Coil Unit - DX	2023	1900.00
Pike	Panel, Distribution	2044	19350.00
Pike	Panel, Main Fire Alarm	2032	5700.00
Southport	Air Handling Unit	2028	13400.00
Southport	Air Handling Unit	2028	27600.00
Southport	Air Handling Unit	2028	27600.00
Southport	Air Handling Unit	2036	22300.00
Southport	Condensing Unit	2023	12200.00
Southport	Condensing Unit	2023	12200.00
Southport	Condensing Unit	2031	12200.00
Southport	Condensing Unit	2031	6700.00
Southport	Fan, Exhaust	2028	1650.00
Southport	Fan, Exhaust	2036	1450.00
Southport	Mini Split System	2033	4250.00
Southport	Panel, Distribution	2035	11700.00
Southport	Panel, Main Fire Alarm	2022	5700.00
Spades Park	Condensing Unit	2023	4600.00
Spades Park	Condensing Unit	2023	4600.00

Building	Equipment Type	Replacement Year	Replacement Cost
Spades Park	Condensing Unit	2030	4600.00
Spades Park	Elevator, Hydraulic	2037	82000.00
Spades Park	Furnace with Evaporator	2023	3500.00
Spades Park	Furnace with Evaporator	2023	3500.00
Spades Park	Furnace with Evaporator	2028	3500.00
Spades Park	Panel, Distribution	2052	7350.00
Warren	Air Handling Unit	2023	27600.00
Warren	Air Handling Unit	2023	27600.00
Warren	Condensing Unit	2023	22100.00
Warren	Condensing Unit	2023	22100.00
Warren	Fan, Exhaust	2028	1650.00
Warren	Fan, Exhaust	2028	1650.00
Warren	Fan, Exhaust	2028	1650.00
Warren	Fan, Exhaust	2028	1650.00
Warren	Mini Split System	2030	4250.00
Warren	Packaged Unit	2036	28450.00
Warren	Panel, Distribution	2035	11700.00
Warren	Panel, Main Fire Alarm	2022	5700.00
Wayne	Air Handling Unit	2037	19300.00
Wayne	Air Handling Unit	2037	22300.00
Wayne	BackFlow Preventer	2028	1300.00
Wayne	Condensing Unit	2032	6700.00
Wayne	Condensing Unit	2032	12200.00
Wayne	Condensing Unit	2032	6300.00
Wayne	Condensing Unit	2032	7900.00
Wayne	Furnace with Evaporator	2037	3500.00
Wayne	Furnace with Evaporator	2037	3500.00
Wayne	Furnace with Evaporator	2037	3500.00
Wayne	Furnace with Evaporator	2037	3500.00
Wayne	Mini Split System	2039	4250.00
Wayne	Panel, Main Fire Alarm	2022	5700.00
Wayne	Switchgear	2022	24550.00
West Indianapolis	Condensing Unit	2032	2500.00
West Indianapolis	Condensing Unit	2032	2500.00
West Indianapolis	Condensing Unit	2032	4600.00
West Indianapolis	Condensing Unit	2032	4600.00
West Indianapolis	Furnace with Evaporator	2033	3500.00
West Indianapolis	Furnace with Evaporator	2037	3500.00
West Indianapolis	Furnace with Evaporator	2037	3850.00
West Indianapolis	Furnace with Evaporator	2037	3850.00
West Indianapolis	Panel, Distribution	2043	7350.00
West Indianapolis	Unit Heater, Gas	2037	5000.00
West Indianapolis	Water Heater, Gas	2027	9150.00

Building	Equipment Type	Replacement Year	Replacement Cost
West Perry	Air Handling Unit	2041	81900.00
West Perry	BackFlow Preventer	2041	1300.00
West Perry	Boiler, Gas-Fired	2051	21900.00
West Perry	Boiler, Gas-Fired	2051	21900.00
West Perry	Condensing Unit	2036	15800.00
West Perry	Condensing Unit	2036	15800.00
West Perry	Condensing Unit	2036	6300.00
West Perry	Condensing Unit	2036	15800.00
West Perry	Condensing Unit	2036	15800.00
West Perry	Fan Coil Unit - DX	2041	1900.00
West Perry	Fan Coil Unit - DX	2041	1900.00
West Perry	Fan Coil Unit - DX	2041	1900.00
West Perry	Fan Coil Unit - DX	2041	1900.00
West Perry	Fan Coil Unit - DX	2041	1900.00
West Perry	Fire Sprinkler System, Wet Pipe	2061	8500.00
West Perry	Mini Split System	2041	4250.00
West Perry	Panel, Distribution	2061	19350.00
West Perry	Panel, Main Fire Alarm	2036	5700.00
West Perry	Pump, Hot Water Circulation	2041	5700.00
West Perry	Pump, Hot Water Circulation	2041	5700.00
West Perry	Unit Heater, Electric	2046	1600.00

APPENDICES

APPENDICES

Appendix A -Typical System Lifecycles

System and component life cycles used in the cost models for this project were based on average service life as shown in the *Preventive Maintenance Guidebook: Best Practices to Maintain Efficient and Sustainable Buildings* published by Building Owners and Managers Association (BOMA) International. When life cycle information is not provided by BOMA, life cycles have been assigned using ALPHA's professional judgment.

Table 169. Typical Life Cycles

Roofing	
Built-up	25
Composition Shingle	20
Metal Panels	25
Modified Bitumen	20
Standing Seam Metal	35
Building Exterior	
Exterior Doors	25
Exterior Walls (Finishes)	10-30
Exterior Windows	30
Interior Finishes	
Interior Doors	25
Ceiling (Acoustical Tile and Grids)	20
Ceiling (Painted)	10
Walls	10
Floors	15
Built-in Equip/Specialties	
Built-in Equip/Specialties	20
Conveying Systems	
Elevators	35
Chair Lifts	15
Plumbing	

Plumbing Fixtures	30
Domestic Water Distribution	30
Sanitary Waste	30
Fire Protection	
Fire Sprinklers and Standpipe (Piping and Risers)	40
Fire Detection (Activation Devices)	10 20
Fire Detection (Notification Devices and	15 20
Fire Detection (Wiring)	30
HVAC	
Cooling Generating	25
Controls	20
Distribution	30
Heat Generating	30
Terminal and Package Units	15
Electrical	
Branch Wiring	30 40
Lighting	20
Service and Distribution	40
Generators	20
Equipment	
Institutional Equipment	25
Other Equipment	15-25

Capital Planning v. Budgeting

While traditional budgets may be perceived as reacting to short-term needs based on the historical performance of facilities and systems, a capital plan anticipates both short- and long-term degradation by employing a facility condition assessment and predictive cost modeling.

- **Budgeting:** Traditional, cost-based, budgeting practices describe a system by which a prior period's budget is adjusted to provide for the fluctuating cost of maintaining facilities. Traditional budgeting issues may include: 1) anticipated needs; 2) organizational growth; 3) the acquisition of new assets; 4) operations and maintenance; 5) deferred maintenance; and, 6) insurance.
- **Capital Planning:** Capital planning differs from budgeting in that it considers a broader range of financial considerations over an extended timeline so as to more effectively predict and manage the fiscal needs of a real estate portfolio. Financial considerations may include the cost of capital, depreciation, organizational risk and return on investment (ROI). Similar in concept to the accounting principle of anticipating the capital depreciation of plant value, a capital renewal plan anticipates and attempts to counteract the ongoing deterioration of facility systems and components in order to extend a facility's life and value.

Facility Condition Index

A Facility Condition Index is considered to be a key building performance metric. As part of the FCA process, a facility condition index (FCI) is calculated for each facility. The FCI is used to quantify a facility's physical condition at a specific point in time and is calculated using the expired system replacement costs (costs associated with systems that are beyond average service life) and the current replacement value (CRV) of the building. Expired system replacement costs consist of work that is necessary to restore the facility to a condition equivalent to its original (like new) state.

Example: Total expired system replacement costs (Requirements) = $3,000,000

Current Replacement Value (CRV) = $10,000,000

$$FCI = \frac{\$3{,}000{,}000}{\$10{,}000{,}000} = .30$$

Present Value and Nominal Value

In the calculation of FCI sums, monetary values can be discounted to incorporate the time value of money, or be expressed in constant terms, ignoring the effects of inflation and interest. Because the cost of capital can vary significantly according to time, portfolio types, and project programs, all monetary terms in this report are expressed as nominal values.

- **Nominal Value:** Expresses monetary values, without adjusting for inflation or interest (also known as face value or par value).
- **Present Value:** The current worth of a future sum of money or stream of cash flows given a specified rate of return. Future cash flows can be discounted at a client specified discount rate to reflect the owner's internal cost of capital.

Hard and Soft Costs

Unless otherwise stated, the costs indicated in this report represent hard costs only. Because soft costs vary regionally and periodically, provisions for soft cost expenses should be considered in addition to the hard costs indicated. For the purpose of this report, Hard and Soft costs are defined as follows:

- **Hard costs:** Direct costs incurred in relation to a specific construction project. Hard cost may include labor, materials, equipment, etc.
- **Soft cost:** Indirect costs incurred in addition to the direct construction cost. Soft costs may include professional services, financing, taxes, etc.

Building Systems

A building system describes a mechanism, or group of mechanisms that perform a given role to maintain the functionality of a facility. Examples of building systems may include roofing, plumbing or heating, ventilation and air conditioning (HVAC) systems.

Per the Uniformat classification standard, building systems have been grouped as follows:

- Foundations
- Superstructure
- Exterior Enclosure
- Roofing
- Interior Construction
- Interior Finishes
- Conveying Systems
- Plumbing
- HVAC
- Fire Protection
- Electrical

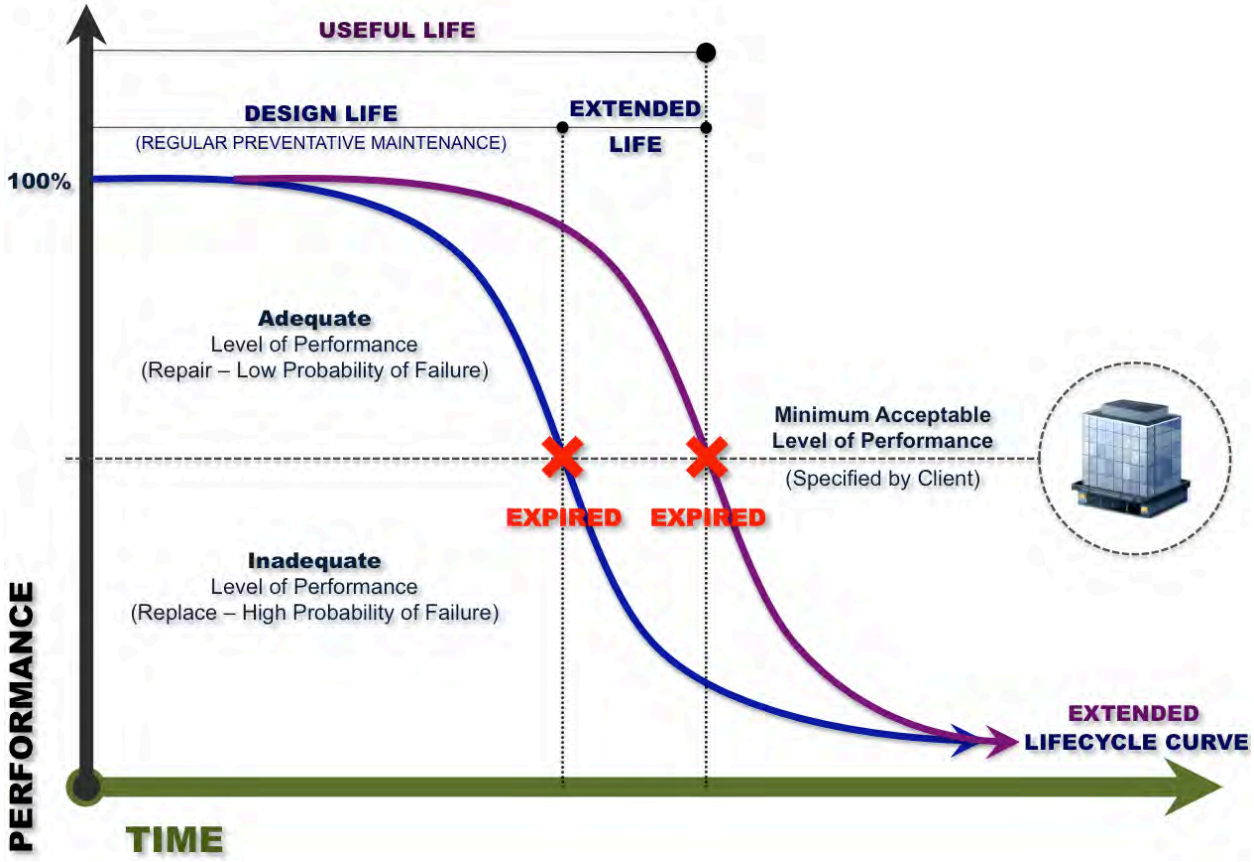
System States

The design life of a building system or component describes the duration for which a system is expected to perform within normal operational parameters. The design life may be shortened for a variety of reasons including, neglect or inadequate maintenance or extended as a result of robust preventative / predictive maintenance. This extended or shortened design life is defined as a system's useful life, and quantifies the duration for which a system, or component, operates within a minimally accepted level of performance.

As illustrated in the figure below, a facility condition analysis will make an appraisal of systems and components and recommend one of a series of actions necessary to ensure the continued functionality of a facility:

- **Missing:** A system or component may be deemed missing if the element absent, but is required for the operation of a facility (Example: ADA requirements for accessible ramps).
- **Extended:** The life cycle of a system or component may be extended beyond its anticipated design life, if the element is deemed to be performing adequately.
- **Expired:** A system or component may be recommended for replacement (at any time) if the element is deemed to be performing inadequately.

Figure 23. System or Component Life Cycle Curve



System Actions

A deficiency describes a condition in which there exists the need to repair an item that is damaged, missing, inadequate or insufficient for an intended purpose. Deficiencies are typically associated with underperforming systems or components, and describe activities that are required to extend their useful life.

- **Repair:** Describes a condition in which it is recommended that the building system or component be serviced to provide additional useful life. Repairs are curative in nature, while maintenance by contrast is preventative.
- **Replace:** Describes a condition in which it is recommended that the building system or component be removed and replaced with a new system or component. Replacement needs may vary according to building type, region, use, and maintenance management.

Multiple building systems are considered “non-renewable” because the replacement of those systems would typically be so costly as to require the replacement of the entire facility (Example: Foundations). Accordingly, there are no deficiencies or costs associated to non-renewable system.

Additionally, per client preferences, many aspects of the built environment may not be part of the scope of a facility condition analysis.

Cost Models

Cost estimation models are parametric equations used to predict the costs or the life cycle of a building system or component. The projections of the cost models are factored into capital plans, budgeting tools and other financial planning mechanisms. The rough order of magnitude cost estimates contained in this report are based on the cost models available within the client's database platform.

It is important to note that there are a variety of cost model equations employed in the building industry and it is not uncommon for prices derived from the client's database platform to vary from external references. If required, adjustments can typically be made to the facility condition data in order to facilitate comparison with external cost models, better reflect local conditions or perform sensitivity analyses.

This page is intentionally left blank.

Appendix C - Glossary

ACBM: Asbestos-containing Building Material

ADA: Americans with Disabilities Act

AHERA: Asbestos Hazard Emergency Response Act

ALPHA: ALPHA Facilities Solutions, LLC

Alterations: Work performed to change the interior arrangements or other physical characteristics of an existing facility or fixed equipment so that it can be used more effectively for its current designated purpose or adapted to a new use.

ASHRAE: American Society of Heating, Refrigerating and Air Conditioning Engineers

ASTM: American Society for Testing and Materials

BOMA: Building Owners and Managers Association

Budgeting: A system by which a prior period's estimate of income and expenditure is adjusted to account for operational realities in order to provide for the cost of maintaining facilities. Traditional budgeting issues may include anticipated needs, organizational growth, the acquisition of new assets, operations and maintenance, deferred maintenance and insurance.

Building: An enclosed and roofed structure that can be traversed without exiting to the exterior.

Building Addition: An area, space or component of a building added to the existing structure, after the original building's year built date.

Capital Renewal: The planned replacement of building subsystems such as roofs, electrical systems, HVAC systems, and plumbing systems that have reached the end of their useful lives. Without significant reinvestment in building subsystems, older facilities will fall into a state of deteriorating condition and functionality, and the repair and maintenance costs will increase (International Facilities Management Association).

Calculated Next Renewal: The year a system or element would be expected to expire, based solely on the date it was installed and the expected service life of the system.

Condition: Condition refers to the state of physical fitness or readiness of a facility, system or systemic element for its intended use.

Cost Model: Parametric equations used to quantify the condition of building systems and estimate the cost necessary to sustain a facility over a given set of reporting periods. These estimated costs can be presented over a timeline to represent a capital renewal schedule.

Current Replacement Value (CRV): CRV is a standard industry cost estimate of materials, supplies and labor required to replace facility at existing size and functional capability. Please note that the terms Plant Replacement Value and Current Replacement Value have the same meaning in the context of determining Facility Condition Index.

Deficiency: A deficiency describes a condition in which there exists the need to repair a building system or component that is damaged, missing, inadequate or insufficient for an intended purpose.

Element: Elements are the major components that comprise building systems.

Facility: A facility refers to site(s), building(s), or building addition(s) or combinations thereof that provide a particular service or support of an educational purpose.

Facility Condition Assessment (FCA): The process of performing a physical evaluation of the condition of a facility and its systems. The findings of this analysis may be used in conjunction with cost models to estimate the current and future funding streams necessary to maintain a real estate portfolio.

Facility Condition Index (FCI): FCI is an industry-standard measurement of a facility's condition that is the ratio of the cost to correct a facility's deficiencies to the Current Replacement Value of the facilities – the higher the FCI, the poorer the condition of the facility. After an FCI is established for all buildings within a portfolio, a building's condition can be ranked relative to other buildings. The FCI may also represent the condition of a portfolio based on the cumulative FCIs of the portfolio's facilities.

Gross Square Feet (GSF): The size of the enclosed floor space of a building in square feet, measured to the outside face of the enclosing walls.

Hard Costs: Direct costs incurred in relation to a specific construction project. Hard costs may include labor, materials, equipment, etc.

Heating, Ventilation and Air Conditioning (HVAC): A term used to describe building systems responsible for maintaining the temperature, humidity and air quality control.

IFMA: International Facilities Management Association.

Indoor Air Quality (IAQ): A metric used to quantify the air quality within and around buildings and structures, especially as it relates to the health and comfort of building occupants.

Install Year: The year a building or system was built or the most recent major renovation date (where a minimum of 70% of the system's Current Replacement Value (CRV) was replaced).

Inflation: The trend of increasing prices from one year to the next, representing the rate at which the real value of an investment is eroded and the loss in spending power over time.

Interest: The charge for the privilege of borrowing money, typically expressed as an annual percentage rate and commonly calculated using simple or compound interest calculation.

Life Cycle: The period of time that a building, system or element can be expected to adequately serve its intended function.

Maintenance: Work necessary to realize the originally anticipated life of a fixed asset, including buildings, fixed equipment and infrastructure. Maintenance is preventative, whereas repairs are curative.

Mechanical, Electrical and Plumbing (MEP): A term used to describe building systems related to the provision of HVAC, electric and plumbing services to a facility.

Needs: In the context of this report, needs are the backlog of capital renewal requirements.

Next Renewal: The assessor adjusted expected useful life of a system or element as a result of on-site inspection.

Nominal Value: A value expressed in monetary terms for a specific year or years, without adjusting for inflation – also known as face value or par value.

Operations: Activities related to normal performance of the functions for which a building is used (e.g., utilities, janitorial services, waste treatment).

O&M: Operations and Maintenance

Parametric Cost Modeling: Parametric statistics is a branch of statistics that assumes that the data has come from a type of probability distribution and makes inferences about the parameters of the distribution.

Plant Replacement Value (PRV): PRV represents the cost to design and construct a notional facility to current standards to replace an existing facility at the same location. Please note that the terms Plant Replacement Value (PRV) and Current Replacement Value (CRV) have the same meaning in the context of determining Facility Condition Index (FCI).

Present Value (PV): The current worth of a future sum of money or stream of cash flows given a specified rate of return. Future cash flows are discounted at a client specified discount rate.

Real Interest Rate: A net interest rate adjusted to remove the effects of inflation. It is the amount by which the nominal interest rate is higher than the inflation rate.

Repairs: Work to restore damaged or worn-out facilities to normal operating condition. Repairs are curative, whereas maintenance is preventative.

Replacements: An exchange of one fixed asset for another that has the same capacity to perform the same function. In contrast to repair, replacement generally involves a complete identifiable item of reinvestment (e.g., a major building component or subsystem).

Return on Investment (ROI): ROI is a financial indicator used to evaluate the performance of an investment and as a means to compare benefit.

Rough Order of Magnitude (ROM): ROM cost estimates are the most basic of cost estimate classifications.

RSMeans: An independent third-party provider of building industry construction cost data.

Site: A facility's grounds and its utilities, roadways, landscaping, fencing and other typical land improvements needed to support the facility.

Soft Costs: Indirect costs incurred in addition to the direct construction cost. Soft costs may include professional services, financing, taxes, etc.

System: System refers to building and related site work elements as described by ASTM Uniformat II, Classification for Building Elements (E1557-97), a format for classifying major facility elements common to most buildings. Elements usually perform a given function, regardless of the design specification, construction method or materials used. See also, "Uniformat II".

Uniformat II: Uniformat II (commonly referred to simply as Uniformat), is ASTM Uniformat II, Classification for Building Elements (E1557-97) – A methodology for classifying major facility components common to most buildings.

Year Built: The year that a building or addition was originally built, based on substantial completion or occupancy.

This page is intentionally left blank.

4085 Cibolo Canyons, Suite 200
San Antonio, TX 78261
210.49.ALPHA www.alphafacilities.com
answers@alphafacilities.com