FACILITY CONDITION ASSESSMENT & ENERGY AUDIT

prepare for

City of Glendora
116 East Foothill Boulevard
Glendora, California 91741
Michael Sledd

Gladstone Park Restrooms
600 East Gladstone Street
Glendora, California 91741

PREPARED BY:
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1. Executive Summary

Property Overview and Assessment Details

General Information	
Property Type	Restroom Building
Main Address	600 East Gladstone Street, Glendora, California 91741
Site Developed	1965
Site Area	8.46 acres (estimated)
Parking Spaces	56 (estimated) total spaces all in open lots; two of which are accessible
Building Area	700 square feet
Number of Stories	One above grade
Outside Occupants/Leased Spaces	None
Date(s) of Visit	November 7, 2023
Management Point of Contact	City of Glendora, Michael Sledd, Assistant Public Works Director 626.914.8248 msledd@cityofglendora.org
On-site Point of Contact (POC)	Hugo Soltero 626.672.6311
Assessment and Report Prepared By	Usama Anwar
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AssetCalc Link	Full dataset for this assessment can be found at: https://www.assetcalc.net/

Significant/Systemic Findings and Deficiencies

Historical Summary

Gladstone Park Restrooms building was originally built in 1965. It is located to the south of Gladstone Park. No major renovations were reported or observed during inspection.

Architectural

The small restroom building appeared to have slab on grade foundation. No structural deficiencies were observed. The pitched roof has layers of asphalt shingles that are free of any visible damage. The exterior façade is finished with glazed masonry units that showed no cracking and spalling issues due to water infiltration. The restroom floors and interior walls are finished with ceramic tiles. All the architectural assets are budgeted for replacement at the end of the expected useful life.

Mechanical, Electrical, Plumbing and Fire (MEPF)

The building is not equipped with any HVAC system. The plumbing fixtures are plumbed well with no reported issues of plumbing failures or leakages. No domestic hot water is supplied to the building. The electrical distribution network is satisfactory to meet the required demand load, and interior lighting fixtures consist of horizontally installed wall packs and surface mounted can-lights. Wall mounted fire extinguishers are mounted by the interior wall for fire protection.

Site

Site maintenance appears to be well-maintained, and site improvements and landscaping are generally in good condition. Sidewalks are free of cracks and heaving, and asphalt pavement has been regularly maintained.

Recommended Additional Studies

No additional studies recommended at this time.

Facility Condition Index (FCI)

One of the major goals of the FCA is to calculate each building's Facility Condition Index (FCI), which provides a theoretical objective indication of a building's overall condition. By definition, the FCI is defined as the ratio of the cost of current needs divided by current replacement value (CRV) of the facility. The chart below presents the industry standard ranges and cut-off points.

FCI Ranges and Description	
0 – 5%	In new or well-maintained condition, with little or no visual evidence of wear or deficiencies.
5 – 10%	Subjected to wear but is still in a serviceable and functioning condition.
10 – 30%	Subjected to hard or long-term wear. Nearing the end of its useful or serviceable life.
30% and above	Has reached the end of its useful or serviceable life. Renewal is now necessary.

The deficiencies and lifecycle needs identified in this assessment provide the basis for a portfolio-wide capital improvement funding strategy. In addition to the current FCI, extended FCI's have been developed to provide owners the intelligence needed to plan and budget for the "keep-up costs" for their facilities. As such the 3-year, 5-year, and 10-year FCI's are calculated by dividing the anticipated needs of those respective time periods by current replacement value. As a final point, the FCI's ultimately provide more value when used to relatively compare facilities across a portfolio instead of being over-analyzed and scrutinized as stand-alone values. The table below summarizes the individual findings for this FCA:

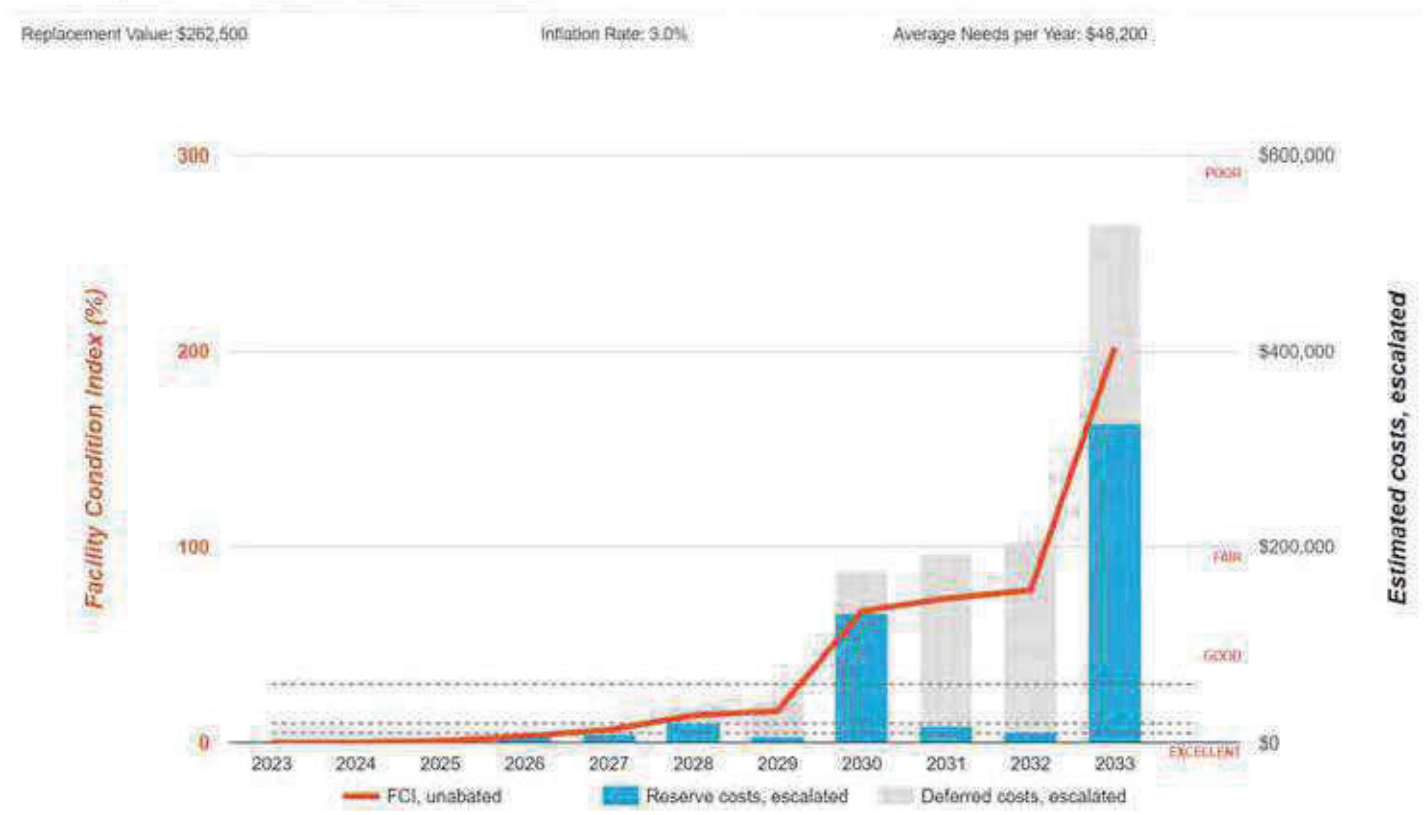
FCI Analysis | Gladstone Park Restrooms

Replacement Value	*Total SF*	*Cost/SF*
$ 262,500	*700*	*$ 375*

	Est Reserve Cost	FCI
Current	$ 0	**0.0 %**
3-Year	$ 9,100	3.4 %
5-Year	$ 37,400	14.2 %
10-Year	$ 530,200	202.0 %

The vertical bars below represent the year-by-year needs identified for the site. The orange line in the graph below forecasts what would happen to the FCI (left Y axis) over time, assuming zero capital expenditures over the next ten years. The dollar amounts allocated for each year (blue bars) are associated with the values along the right Y axis.

Needs by Year with Unaddressed FCI Over Time



Immediate Needs

BV did not identify any immediate needs with the property.

Key Findings

Supplemental Components in Poor Condition.

Hand Dryer, Restroom
Gladstone Park Restrooms

Uniformat Code: D3060
Recommendation: **Replace in 2025**

Priority Score: **85.7**

Plan Type:
Performance/Integrity

Cost Estimate: $2,200

**$$**$$

Not functional - AssetCALC ID: 7052027

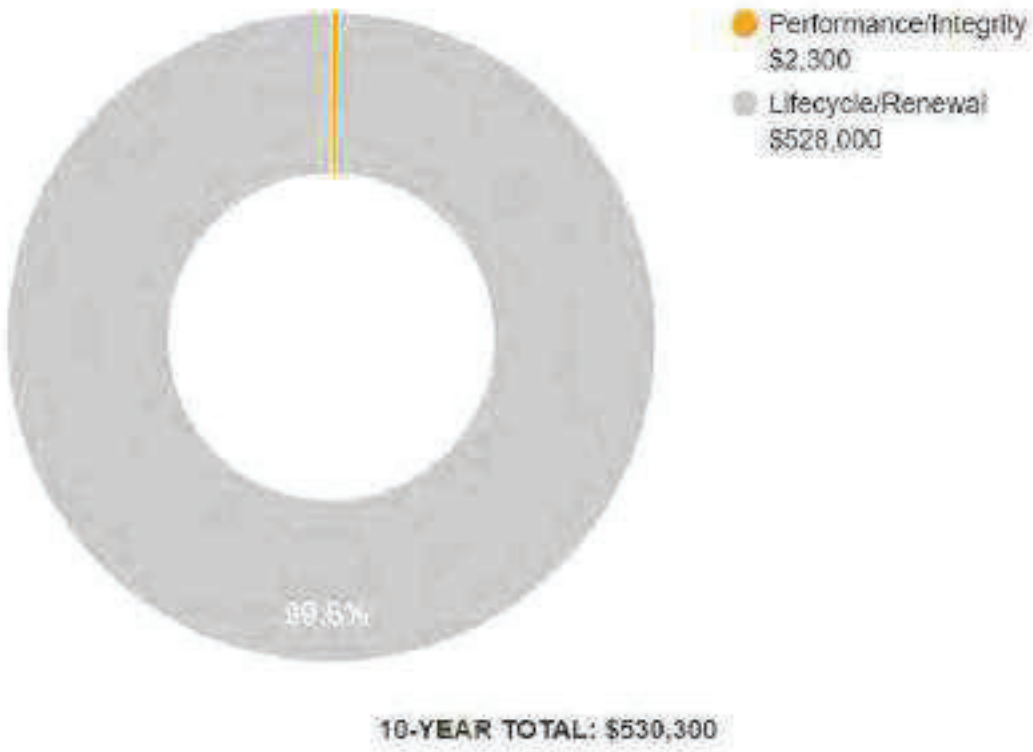
Plan Types

Each line item in the cost database is assigned a Plan Type, which is the primary reason or rationale for the recommended replacement, repair, or other corrective action. This is the "why" part of the equation. A cost or line item may commonly have more than one applicable Plan Type; however, only one Plan Type will be assigned based on the "best" fit, typically the one with the greatest significance.

Plan Type Descriptions

Safety	■	An observed or reported unsafe condition that if left unaddressed could result in injury; a system or component that presents potential liability risk.
Performance/Integrity	■	Component or system has failed, is almost failing, performs unreliably, does not perform as intended, and/or poses risk to overall system stability.
Accessibility	■	Does not meet ADA, UFAS, and/or other accessibility requirements.
Environmental	■	Improvements to air or water quality, including removal of hazardous materials from the building or site.
Retrofit/Adaptation	■	Components, systems, or spaces recommended for upgrades in in order to meet current standards, facility usage, or client/occupant needs.
Lifecycle/Renewal	■	Any component or system that is not currently deficient or problematic but for which future replacement or repair is anticipated and budgeted.

Plan Type Distribution (by Cost)



2. Building and Site Information

Systems Summary

System	Description	Condition
Structure	Masonry bearing walls with wood roof deck supported by wood joists and concrete slab foundation	Good
Façade	Primary Wall Finish: CMU Secondary Wall Finish: Wood siding	Fair
Roof	Gable construction with asphalt shingles	Fair
Interiors	Walls: Painted CMU, ceramic tile Floors: Ceramic tile Ceilings: Wood paneling	Fair
Elevators	None	--
Plumbing	Distribution: Copper supply and cast-iron waste and venting Hot Water: None Fixtures: Toilets, urinals, and sinks in restrooms	Fair
HVAC	None	--
Fire Suppression	Fire extinguishers only	Fair

Systems Summary

Electrical	Source & Distribution: Main panel with copper wiring Interior Lighting: LED Emergency Power: None	Fair
Fire Alarm	Smoke detectors with exit signs only	Fair
Equipment/Special	None	--
Site Pavement	Asphalt lots with limited areas of concrete aprons and pavement and adjacent concrete sidewalks, curbs, ramps, and stairs	Excellent
Site Development	Property entrance signage Playgrounds and basketball field with site lights Moderately furnished park benches, picnic tables, and trash receptacles	Fair
Landscaping and Topography	Moderate landscaping features including lawns, trees, bushes, and planters Irrigation present Low to moderate site slopes throughout	Fair
Utilities	Municipal water and sewer Local utility-provided electric	Fair
Site Lighting	Pole-mounted: LED Building-mounted: LED	Fair
Ancillary Structures	None	--
Accessibility	Presently it does not appear an accessibility study is needed for this property. See Appendix D.	
Key Issues and Findings	Non-operational hand dryer in the men’s restroom	

Systems Expenditure Forecast

System	Immediate	Short Term (1-2 yr)	Near Term (3-5 yr)	Med Term (6-10 yr)	Long Term (11-20 yr)	TOTAL
Facade	-	-	$8,500	-	$16,700	$25,200
Roofing	-	-	-	$5,900	-	$5,900
Interiors	-	-	$3,900	-	$45,500	$49,400
Plumbing	-	-	$2,300	$36,200	$23,900	$62,400
HVAC	-	$2,300	$2,500	-	$6,400	$11,200
Electrical	-	-	-	$4,500	$32,300	$36,800
Special Construction & Demo	-	-	-	-	$42,100	$42,100
Site Development	-	-	$14,900	$417,200	$66,000	$498,100
Site Pavement	-	-	$3,100	$3,600	$9,000	$15,700
Site Utilities	-	-	-	$25,400	-	$25,400
TOTALS (3% inflation)	**-**	**$2,300**	**$35,100**	**$492,800**	**$242,000**	**$772,200**

*Totals have been rounded to the nearest $100.

3. Property Space Use and Observed Areas

Areas Observed

The interior spaces were observed in order to gain a clear understanding of the property's overall condition. Other areas accessed included the site within the property boundaries and the exterior of the property.

Key Spaces Not Observed

All key areas of the property were accessible and observed.

4. ADA Accessibility

Generally, Title II of the Americans with Disabilities Act (ADA) prohibits discrimination by entities to access and use of “areas of public accommodations” and “public facilities” on the basis of disability. Regardless of their age, these areas and facilities must be maintained and operated to comply with the Americans with Disabilities Act Accessibility Guidelines (ADAAG).

A public entity (i.e. city governments) shall operate each service, program, or activity so that the service, program, or activity, when viewed in its entirety, is readily accessible to and usable by individuals with disabilities.

However, this does not:

1. Necessarily require a public entity to make each of its existing facilities accessible to and usable by individuals with disabilities;
2. Require a public entity to take any action that would threaten or destroy the historic significance of an historic property; or
3. Require a public entity to take any action that it can demonstrate would result in a fundamental alteration in the nature of a service, program, or activity or in undue financial and administrative burdens. In those circumstances where personnel of the public entity believe that the proposed action would fundamentally alter the service, program, or activity or would result in undue financial and administrative burdens, a public entity has the burden of proving that compliance with 35.150(a) of this part would result in such alteration or burdens. The decision that compliance would result in such alteration or burdens must be made by the head of a public entity or his or her designee after considering all resources available for use in the funding and operation of the service, program, or activity, and must be accompanied by a written statement of the reasons for reaching that conclusion. If an action would result in such an alteration or such burdens, a public entity shall take any other action that would not result in such an alteration or such burdens but would nevertheless ensure that individuals with disabilities receive the benefits or services provided by the public entity.

Removal of barriers to accessibility should be addressed from a liability standpoint in order to comply with federal law, but the barriers may or may not be building code violations. The Americans with Disabilities Act Accessibility Guidelines are part of the ADA federal civil rights law pertaining to the disabled and are not a construction code. State and local jurisdictions have adopted the ADA Guidelines or have adopted other standards for accessibility as part of their construction codes.

During the FCA, Bureau Veritas performed a limited high-level accessibility review of the facility non-specific to any local regulations or codes. The scope of the visual observation was limited to the same areas observed while performing the FCA and the categories set forth in the checklists that are included in the appendix. It is understood by the Client that the limited observations described herein do not comprise a full ADA Compliance Survey, and that such a survey is beyond the scope of this particular assessment. A full measured ADA survey would be required to identify any and all specific potential accessibility issues. Additional clarifications of this limited survey:

- This survey was visual in nature and actual measurements were not taken to verify compliance
- Only a representative sample of areas was observed
- Two overview photos were taken for each subsection regardless of perceived compliance or non-compliance
- Itemized costs for individual non-compliant items are not included in the dataset
- For any “none” boxes checked or reference to “no issues” identified, that alone does not guarantee full compliance

The facility was originally constructed in 1965.The facility has not since been substantially renovated.

During the interview process with the client representatives, no complaints or pending litigation associated with potential accessibility issues were reported.

No detailed follow-up accessibility study is currently recommended since no major or moderate issues were identified at the subject site. Reference the appendix for specific data, photos, and tables or checklists associated with this limited accessibility survey.

5. Purpose and Scope

Purpose

Bureau Veritas was retained by the client to render an opinion as to the Property's current general physical condition on the day of the site visit.

Based on the observations, interviews and document review outlined below, this report identifies significant deferred maintenance issues, existing deficiencies, and material code violations of record, which affect the Property's use. Opinions are rendered as to its structural integrity, building system condition and the Property's overall condition. The report also notes building systems or components that have realized or exceeded their typical expected useful lives.

The physical condition of building systems and related components are typically defined as being in one of five condition ratings. For the purposes of this report, the following definitions are used:

Condition Ratings	
Excellent	New or very close to new; component or system typically has been installed within the past year, sound and performing its function. Eventual repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Good	Satisfactory as-is. Component or system is sound and performing its function, typically within the first third of its lifecycle. However, it may show minor signs of normal wear and tear. Repair or replacement will be required when the component or system either reaches the end of its useful life or fails in service.
Fair	Showing signs of wear and use but still satisfactory as-is, typically near the median of its estimated useful life. Component or system is performing adequately at this time but may exhibit some signs of wear, deferred maintenance, or evidence of previous repairs. Repair or replacement will be required due to the component or system's condition and/or its estimated remaining useful life.
Poor	Component or system is significantly aged, flawed, functioning intermittently or unreliably; displays obvious signs of deferred maintenance; shows evidence of previous repair or workmanship not in compliance with commonly accepted standards; has become obsolete; or exhibits an inherent deficiency. The present condition could contribute to or cause the deterioration of contiguous elements or systems. Either full component replacement is needed, or repairs are required to restore to good condition, prevent premature failure, and/or prolong useful life.
Failed	Component or system has ceased functioning or performing as intended. Replacement, repair, or other significant corrective action is recommended or required.
Not Applicable	Assigning a condition does not apply or make logical sense, most commonly due to the item in question not being present.

Scope

The standard scope of the Facility Condition Assessment includes the following:

- Visit the Property to evaluate the general condition of the building and site improvements, review available construction documents in order to familiarize ourselves with, and be able to comment on, the in-place construction systems, life safety, mechanical, electrical, and plumbing systems, and the general built environment.
- Identify those components that are exhibiting deferred maintenance issues and provide cost estimates for Immediate Costs and Replacement Reserves based on observed conditions, maintenance history and industry standard useful life estimates. This will include the review of documented capital improvements completed within the last five-year period and work currently contracted for, if applicable.
- Provide a full description of the Property with descriptions of in-place systems and commentary on observed conditions.
- Provide a high-level categorical general statement regarding the subject Property's compliance to Title III of the Americans with Disabilities Act. This will not constitute a full ADA survey but will help identify exposure to issues and the need for further review.
- Obtain background and historical information about the facility from a building engineer, property manager, maintenance staff, or other knowledgeable source. The preferred methodology is to have the client representative or building occupant complete a Pre-Survey Questionnaire (PSQ) in advance of the site visit. Common alternatives include a verbal interview just prior to or during the walk-through portion of the assessment.
- Review maintenance records and procedures with the in-place maintenance personnel.
- Observe a representative sample of the interior spaces/units, including vacant spaces/units, to gain a clear understanding of the property's overall condition. Other areas to be observed include the exterior of the property, the roofs, interior common areas, and the significant mechanical, electrical and elevator equipment rooms.
- Provide recommendations for additional studies, if required, with related budgetary information.
- Provide an Executive Summary at the beginning of this report, which highlights key findings and includes a Facility Condition Index as a basis for comparing the relative conditions of the buildings within the portfolio.

6. Opinions of Probable Costs

Cost estimates are attached throughout this report, with the Replacement Reserves in the appendix.

These estimates are based on Invoice or Bid Document/s provided either by the Owner/facility and construction costs developed by construction resources such as *S eans C itestone* and *ars all Swift* Bureau Veritas's experience with past costs for similar properties, city cost indexes, and assumptions regarding future economic conditions.

Opinions of probable costs should only be construed as preliminary, order of magnitude budgets. Actual costs most probably will vary from the consultant's opinions of probable costs depending on such matters as type and design of suggested remedy, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, whether a physical deficiency is repaired or replaced in whole, phasing or bundling of the work (if applicable), quality of contractor, quality of project management exercised, market conditions, use of subcontractors, and whether competitive pricing is solicited, etc. Certain opinions of probable costs cannot be developed within the scope of this guide without further study. Opinions of probable cost for further study should be included in the FCA.

Methodology

Based upon site observations, research, and judgment, along with referencing Expected Useful Life (EUL) tables from various industry sources, Bureau Veritas opines as to when a system or component will most probably necessitate replacement. Accurate historical replacement records, if provided, are typically the best source of information. Exposure to the elements, initial quality and installation, extent of use, the quality and amount of preventive maintenance exercised, etc., are all factors that impact the effective age of a system or component. As a result, a system or component may have an effective age that is greater or less than its actual chronological age. The Remaining Useful Life (RUL) of a component or system equals the EUL less its *effecti e age*, whether explicitly or implicitly stated. Projections of Remaining Useful Life (RUL) are based primarily on age and condition with the presumption of continued use and maintenance of the Property similar to the observed and reported past use and maintenance practices, in conjunction with the professional judgment of Bureau Veritas's assessors. Significant changes in occupants and/or usage may affect the service life of some systems or components.

Where quantities could not be or were not derived from an actual construction document take-off or facility walk-through, and/or where systemic costs are more applicable or provide more intrinsic value, budgetary square foot and gross square foot costs are used. Estimated costs are based on professional judgment and the probable or actual extent of the observed defect, inclusive of the cost to design, procure, construct, and manage the corrections.

Definitions

Immediate Needs

Immediate Needs are line items that require immediate action as a result of: (1) material existing or potential unsafe conditions, (2) failed or imminent failure of mission critical building systems or components, or (3) conditions that, if not addressed, have the potential to result in, or contribute to, critical element or system failure within one year or will most probably result in a significant escalation of its remedial cost.

For database and reporting purposes the line items with RUL=0, and commonly associated with *Safet* or *Perfor ance ntegrit* Plan Types, are considered Immediate Needs.

Replacement Reserves

Cost line items traditionally called Replacement Reserves (equivalently referred to as Lifecycle/Renewals) are for recurring probable renewals or expenditures, which are not classified as operation or maintenance expenses. The replacement reserves should be budgeted for in advance on an annual basis. Replacement Reserves are reasonably predictable both in terms of frequency and cost. However, Replacement Reserves may also include components or systems that have an indeterminable life but, nonetheless, have a potential for failure within an estimated time period.

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

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

Bureau Veritas's reserve methodology involves identification and quantification of those systems or components requiring capital reserve funds within the assessment period. The assessment period is defined as the effective age plus the reserve term. Additional information concerning system's or component's respective replacement costs (in today's dollars), typical expected useful lives, and remaining useful lives were estimated so that a funding schedule could be prepared. The Replacement Reserves Schedule presupposes that all required remedial work has been performed or that monies for remediation have been budgeted for items defined as Immediate Needs.

For the purposes of 'bucketizing' the System Expenditure Forecasts in this report, the Replacement Reserves have been subdivided and grouped as follows: Short Term (years 1-3), Near Term (years 4-5), Medium Term (years 6-10), and Long Term (years 11-20).

Key Findings

In an effort to highlight the most significant cost items and not be overwhelmed by the Replacement Reserves report in its totality, a subsection of Key Findings is included within the Executive Summary section of this report. Key Findings typically include repairs or replacements of deficient items within the first five-year window, as well as the most significant high-dollar line items that fall anywhere within the ten-year term. Note that while there is some subjectivity associated with identifying the Key Findings, the Immediate Needs are always included as a subset.

Exceedingly Aged

A fairly common scenario encountered during the assessment process, and a frequent source of debate, occurs when classifying and describing "very old" systems or components that are still functioning adequately and do not appear nor were reported to be in any way deficient. To help provide some additional intelligence on these items, such components will be tagged in the database as Exceedingly Aged. This designation will be reserved for mechanical or electrical systems or components that have aged well beyond their industry standard lifecycles, typically at least 15 years beyond and/or twice their Estimated Useful Life (EUL). In tandem with this designation, these items will be assigned a Remaining Useful Life (RUL) not less than two years but not greater than 1/3 of their standard EUL. As such the recommended replacement time for these components will reside outside the typical Short Term window but will not be pushed 'irresponsibly' (too far) into the future.

7. Energy Audit

The purpose of this Energy Audit is to provide Gladstone Park Restrooms with a baseline of energy usage, the relative energy efficiency of the facility, and specific recommendations for Energy Conservation Measures. Information obtained from these analyses may be used to support a future application to an Energy Conservation Program, Federal and Utility grants towards energy conservation, as well as support performance contracting, justify a municipal bond-funded improvement program, or as a basis for replacement of equipment or systems.

The energy audit consisted of an onsite visual assessment to determine current conditions, itemize the energy consuming equipment (i.e. Boilers, Make-Up Air Units, DWH equipment); review lighting systems both exterior and interior; and review efficiency of all such equipment. The study also included interviews and consultation with operational and maintenance personnel. The following is a summary of the tasks and reporting that make up the Energy Audit portion of the report.

The following is a summary of the tasks and reporting that make up the Energy Audit portion of the report.

Energy and Water Using Equipment

- Bureau Veritas has surveyed the common areas, offices, maintenance facilities and mechanical rooms to document utility-related equipment, including heating systems, cooling systems, air handling systems and lighting systems.

Building Envelope

- Bureau Veritas has reviewed the characteristics and conditions of the building envelope, checking insulation values and conditions. This review also includes an inspection of the condition of walls, windows, doors, roof areas, insulation, and special use areas. Where we anticipated significant losses, we utilized infrared thermographs to analyze heat loss across the envelope.

Recommendations for Energy Savings Opportunities

- Based on the information gathered during the on-site assessment, the utility rates, as well as recent consumption data and engineering analysis, Bureau Veritas has identified opportunities to save energy and provide probable construction costs, projected energy/utility savings and provide a simple payback analysis.

Analysis of Energy Consumption

- Based on the information gathered during the on-site assessment and a, Bureau Veritas has conducted an analysis of the energy usage of all equipment, and identified which equipment is using the most energy and what equipment upgrades may be necessary. As a result, equipment upgrades, or replacements are identified that may provide a reasonable return on the investment and improve maintenance reliability.

Energy Audit Process

- Interviewing staff and review plans and past upgrades
- Performing an energy audit for each use type
- Performing a preliminary evaluation of the utility system
- Analyzing findings, utilizing ECM cost-benefit worksheets
- Making preliminary recommendations for system energy improvements and measures
- Estimating initial cost and changes in operating and maintenance costs based on implementation of energy efficiency measures
- Ranking recommended cost measures, based on the criticality of the project and the largest payback

8. Energy Conservation Measures

Bureau Veritas has conducted an Energy Audit on Gladstone Park Restrooms. The study included a review of the building's construction features, historical energy and water consumption and costs, review of the building envelope, HVAC equipment, heat distribution systems, lighting, and the building's operational and maintenance practices.

Bureau Veritas has evaluated one Energy Conservation Measures (ECM) for this property. The savings for each measure are calculated using standard engineering methods followed in the industry, and detailed calculations for ECM are provided in Appendix H for reference. A 10% discount in energy savings was applied to account for the interactive effects amongst the ECMs. In addition to the consideration of the interactive effects, Bureau Veritas has applied a 15% contingency to the implementation costs to account for potential cost overruns during the implementation of the ECMs.

Recommended Energy Conservation Measures: Financial Impact	
Total Projected Initial ECM Investment	$72 *n Current ollars*
Estimated Annual Cost Savings Related to ECMs	$57 *n Current ollars*
Net Effective ECM Payback	1.28 years

Bureau Veritas screens ECMs using two financial methodologies. ECMs which are considered financially viable must meet both criteria.

1. Simple Payback Period –The number of years required for the cumulative value of energy or water cost savings less future non-fuel or non-water costs to equal the investment costs of the building energy or water system, without consideration of discount rates. ECMs with a payback period greater than the Expected Useful Life (EUL) of the project are not typically recommended, as the cost of the project will not be recovered during the lifespan of the equipment. These ECMs are recommended for implementation during future system replacement. At that time, replacement may be evaluated based on the premium cost of installing energy efficient equipment.

$$Simple\ Payback = \frac{Initial\ Cost}{Annual\ Savings}$$

Bureau Veritas screens and categorizes all the ECM's as per the 24 CFR 905 regulation requirements based on their payback, but only those ECM's are recommended for implementation that have a Savings to Investment Ratio ≥1.0.

Financialy methodology used to determine the Savings to Investment Ratio is as follows:

2. Savings-to-Investment Ratio (SIR) – The savings-to-investment ratio is the ratio of the present value savings to the present value costs of an energy or water conservation measure. The numerator of the ratio is the present value over the estimated useful life (EUL) of net savings in energy or water and non-fuel or non-water operation and maintenance costs attributable to the proposed energy or water conservation measure. The denominator of the ratio is the present value of the net increase in investment and replacement costs less salvage value attributable to the proposed energy or water conservation measure. It is recommended that energy efficiency recommendations should be based on a calculated SIR, with larger SIRs receiving a higher priority. A project is typically only recommended if SIR is greater than or equal to 1.0, unless other factors outweigh the financial benefit.

$$SIR = \frac{Present\ Value\ (Annual\ Savings, i\%, EUL)}{Initial\ Cost}$$

Bureau Veritas has identified one Energy Conservation Measures (ECM) for this property. The basis for an ECM recommendation is a payback of less than the remaining useful life of the system or component. Recommended energy efficiency improvements and the installed cost estimates for recommended energy efficiency measures are provided in the following table:

Energy Conservation Measures					
Priority	Brief Description	Initial Investment	Annual Savings	Payback Period *ears*	Component EUL *ears*
1	Install Low Flow Faucet Aerators	$63	$63	1.00	10

9. Utility Analysis

Establishing the energy baseline begins with an analysis of the utility cost and consumption of the facility. Utilizing the historical energy data and local weather information, we evaluate the existing utility consumption and assign it to the various end-uses throughout the buildings. The Historical Data Analysis breaks down utilities by consumption, cost, and annual profile.

This data is analyzed using standard engineering assumptions and practices. The analysis serves the following functions:

- Allows our engineers to benchmark the energy and water consumption of the facilities against consumption of efficient buildings of similar construction, use and occupancy.
- Generates the historical and current unit costs for energy and water
- Provides an indication of how well changes in energy consumption correlate to changes in weather.
- Reveals potential opportunities for energy consumption and/or cost reduction. For example, the analysis may indicate that there is excessive, simultaneous heating and cooling, which may mean that there is an opportunity to improve the control of the heating and cooling systems.

By performing this analysis and leveraging our experience, our engineers prioritize buildings and pinpoint systems for additional investigation during the site visit, thereby maximizing the benefit of their time spent on-site and minimizing time and effort by the customer's personnel.

Note: No electric utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used the utility rate from other properties within the same geographical region having similar construction layout and usage patterns. Bureau Veritas will update the report on receipt of the actual data from the client.

Estimated Utility Rates	
Electricity	Water and Sewer
$0.30/kWh	$8.36/CCF

The data analyzed provides the following information: 1) breakdown of utilities by consumption, 2) cost and annual profile, 3) baseline consumption in terms of energy/utility at the facility, 4) the Energy Use Index, or BTU/SF, and cost/SF. For multiple water meters, the utility data is combined to illustrate annual consumption for each utility type.

Electricity

Note: No utility data was received by Bureau Veritas from the client at the time of report compilation. As a result, Bureau Veritas has used the electric rate from other properties within the same geographical region having similar construction layout and usage patterns. Bureau Veritas will update the report on receipt of the actual data from the client.

Water and Sewer

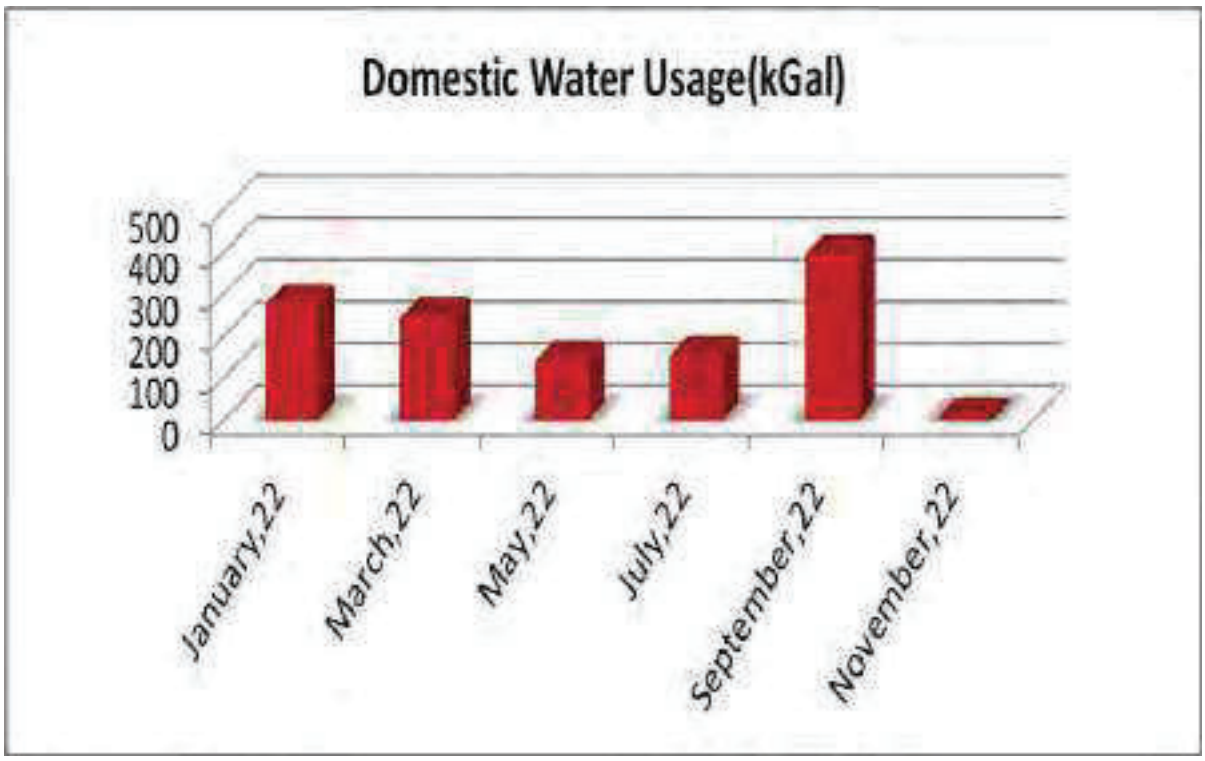
The City of Glendora satisfies the water and sewer requirements of the facility. The billing for the water is bi-monthly.

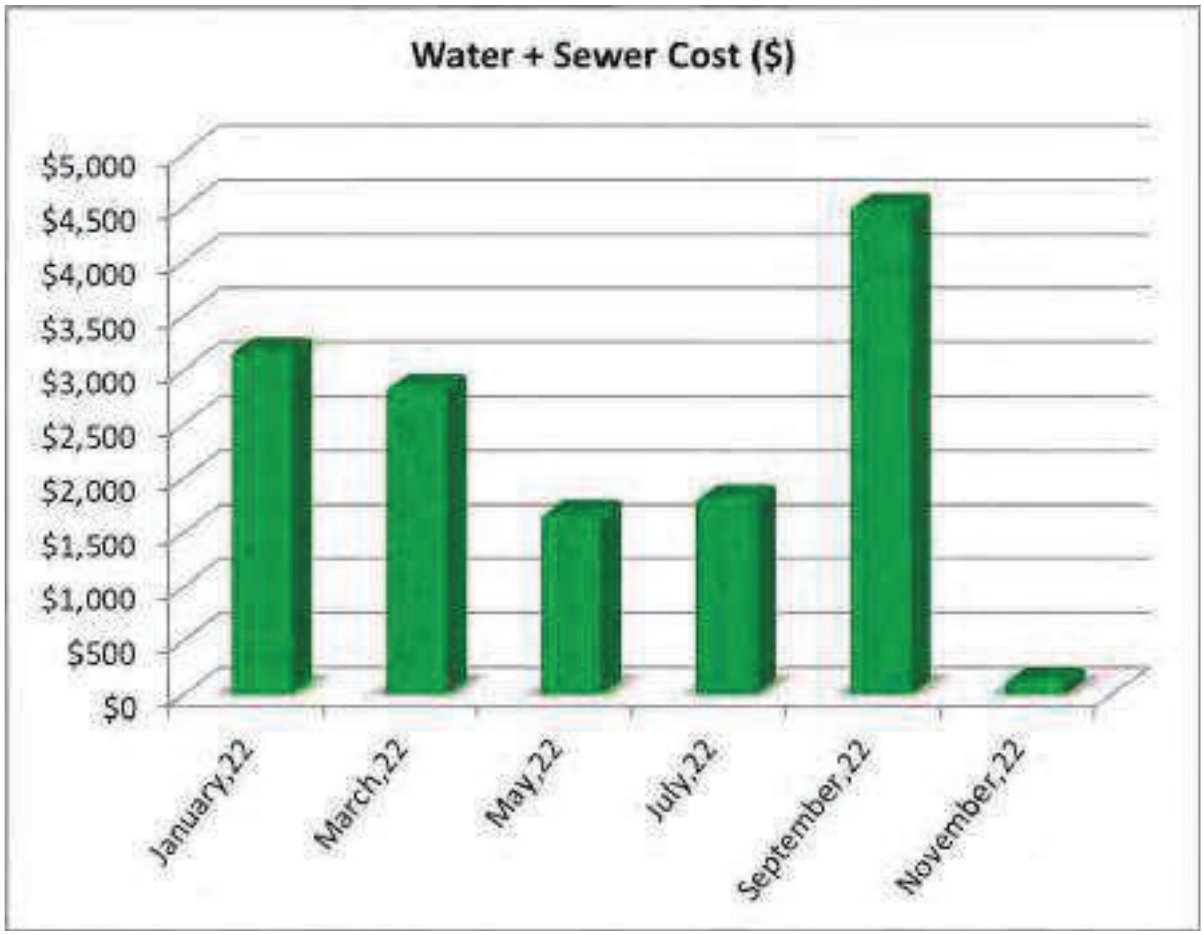
The water consumption pattern remains more or less flat over the 12-month period.

Based on the 2022 water usage and costs provided, the average blended price paid during the year was $11.18/kGal. The total annual consumption for the 12-month period analyzed is 1,266 kGal for a total cost of $14,145 kGal.

. Water and Sewer Consumption and Cost Data			
Billing Month	Consumption (kGal)	Unit Cost (per kGal)	Total Cost
January,22	284	$11.18	$3,177
March,22	254	$11.18	$2,842
May,22	150	$11.18	$1,672

. Water and Sewer Consumption and Cost Data			
July,22	162	$11.18	$1,814
September,22	403	$11.18	$4,506
November,22	12	$11.18	$134
TOTAL/AVERAGE	**1,266**	**$11.18**	**$14,145**


Domestic Water Usage(kGal)
500
400
300
200
100
0
January,22
March,22
May,22
July,22
September,22
November,22


Water + Sewer Cost ($)
$5,000
$4,500
$4,000
$3,500
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$0
January,22
March,22
May,22
July,22
September,22
November,22

10. Operations & Maintenance Plan

The quality of the maintenance and the operation of the facility's energy systems have a direct effect on its overall energy efficiency. Energy-efficiency needs to be a consideration when implementing facility modifications, equipment replacements, and general corrective actions. The following is a list of activities that should be performed as part of the routine maintenance program for the property. These actions will ensure that the energy conservation measures identified in this report will remain effective. The following general recommendations should be continued or implemented.

Building Envelope

- Ensure that the building envelope has proper caulking and weather stripping.
- Patch holes in the building envelope with foam insulation and fire rated caulk around combustion vents
- Inspect building vents semiannually for bird infestation

Lighting

- Use energy efficient replacement lamps (LEDs)
- Clean lighting fixture reflective surfaces and translucent covers.
- Ensure that timers and/or photocells are operating correctly on exterior lighting

11. Certification

City of Glendora (the Client) retained Bureau Veritas to perform this Facility Condition Assessment in connection with its continued operation of Gladstone Park Restrooms, 600 East Gladstone Street, Glendora, California 91741, the “Property”. It is our understanding that the primary interest of the Client is to locate and evaluate materials and building system defects that might significantly affect the value of the property and to determine if the present Property has conditions that will have a significant impact on its continued operations.

The conclusions and recommendations presented in this report are based on the brief review of the plans and records made available to our Project Manager during the site visit, interviews of available property management personnel and maintenance contractors familiar with the Property, appropriate inquiry of municipal authorities, our Project Manager’s walk-through observations during the site visit, and our experience with similar properties.

No testing, exploratory probing, dismantling, or operating of equipment or in-depth studies were performed unless specifically required under the *Purpose an Scope* section of this report. This assessment did not include engineering calculations to determine the adequacy of the Property’s original design or existing systems. Although walk-through observations were performed, not all areas may have been observed (see Section 1 for specific details). There may be defects in the Property, which were in areas not observed or readily accessible, may not have been visible, or were not disclosed by management personnel when questioned. The report describes property conditions at the time that the observations and research were conducted.

This report has been prepared for and is exclusively for the use and benefit of the Client identified on the cover page of this report. The purpose for which this report shall be used shall be limited to the use as stated in the contract between the client and Bureau Veritas.

This report, or any of the information contained therein, is not for the use or benefit of, nor may it be relied upon by any other person or entity, for any purpose without the advance written consent of Bureau Veritas. Any reuse or distribution without such consent shall be at the client's or recipient's sole risk, without liability to Bureau Veritas.

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Reviewed by:

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Program Manager
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12. Appendices

Appendix A: Photographic Record
Appendix B: Site Plan
Appendix C: Pre-Survey Questionnaire
Appendix D: Accessibility Review and Photos
Appendix E: Component Condition Report
Appendix F: Replacement Reserves
Appendix G: Equipment Inventory List
Appendix H: Energy Conservation Measures Calculations
Appendix I: Lighting System Schedule
Appendix J: Energy Audit Glossary of Terms

Appendix A:
Photographic Record

Photographic Overview

1 - FRONT ELEVATION

2 - LEFT ELEVATION

3 - RIGHT ELEVATION

4 - REAR ELEVATION

5 - UTILITY CLOSET

6 - RESTROOM OVERVIEW

Photographic Overview

7 - TOILETS

8 - SINKS

9 - URINALS

10 - DRINKING FOUNTAIN

11 - DISTRIBUTION PANEL

12 - IRRIGATION CONTROL PANEL

Photographic Overview

13 - BACKFLOW PREVENTER

14 - SIGNAGE

15 - PICNIC TABLE

16 - PLAY STRUCTURE

17 - BASKETBALL COURT

18 - PARKING LOT

Appendix B:
Site Plan

Site Plan

Project Number	Project Name
158691.23R000-039.379	Gladstone Park Restrooms
Source	**On-Site Date**
Google Earth	November 7, 2023

BUREAU VERITAS

N

Appendix C:
Pre-Survey Questionnaire

BV FACILITY CONDITION ASSESSMENT: PRE-SURVEY QUESTIONNAIRE

Building / Facility Name: Gladstone Park Restrooms

Name of person completing form: Hugo Soltero

Title / Association w/ property:

Length of time associated w/ property:

Date Completed: November 6, 2023

Phone Number: 626.676.6311

Method of Completion: DURING - verbally completed during assessment

Directions: Please answer all questions to the best of your knowledge and in good faith. Please provide additional details in the Comments column, or backup documentation for any ***Yes*** responses.

	Data Overview	Response		
1	Year(s) constructed	Constructed	Renovated	YOC - 1965 SF - 365
2	Building size in SF	**SF**		
3	Major Renovation/Rehabilitation		Year	Additional Detail
		Facade		
		Roof		
		Interiors		
		HVAC		
		Electrical		
		Site Pavement		
		Accessibility		
4	List other significant capital improvements (focus on recent years; provide approximate date).	Unknown		
5	List any major capital expenditures planned/requested for the next few years. Have they been budgeted?	Unknown		
6	Describe any on-going extremely problematic, historically chronic, or immediate facility needs.	Unknown		

Mark the column corresponding to the appropriate response. Please provide additional details in the Comments column, or backup documentation for any ***Yes*** responses. (**NA** indicates "*Not Applicable*", **Unk** indicates "*Unknown*")

	Question	Response				Comments
		Yes	No	Unk	NA	
7	Are there any problems with foundations or structures, like excessive settlement?		X			
8	Are there any wall, window, basement or roof leaks?		X			
9	Has any part of the facility ever contained visible suspect mold growth, or have there been any indoor air quality complaints?		X			
10	Are your elevators unreliable, with frequent service calls?		X			
11	Are there any plumbing leaks, water pressure, or clogging/backup issues?		X			
12	Have there been any leaks or pressure problems with natural gas, HVAC piping, or steam service?		X			
13	Are any areas of the facility inadequately heated, cooled or ventilated? Poorly insulated areas?		X			
14	Is the electrical service outdated, undersized, or problematic?		X			
15	Are there any problems or inadequacies with exterior lighting?		X			
16	Is site/parking drainage inadequate, with excessive ponding or other problems?		X			
17	Are there any other unresolved construction defects or significant issues/hazards at the property that have not yet been identified above?		X			
18	ADA: Has an accessibility study been previously performed? If so, when?			X		
19	ADA: Have any ADA improvements been made to the property since original construction? Describe.			X		
20	ADA: Has building management reported any accessibility-based complaints or litigation?			X		
21	Are any areas of the property leased to outside occupants?			X		

Signature of Assessor

Signature of POC

Appendix D:
Accessibility Review and Photos

No Documents Associated
With This Appendix

Appendix E:
Component Condition Report

Component Condition Report | Gladstone Park Restrooms

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Facade						
B2010	Building exterior	Fair	Exterior Walls, any painted surface, Prep & Paint	1,800 SF	5	7177641
B2050	Building Exterior	Fair	Exterior Door, Steel, Standard	4	17	7052006
Roofing						
B3010	Roof- Restroom Building	Fair	Roofing, Asphalt Shingle, 20-Year Standard	933 SF	7	7051991
Interiors						
C1090	Restrooms building	Fair	Toilet Partitions, Metal	6	11	7051994
C2010	Throughout	Fair	Wall Finishes, any surface, Prep & Paint	500 SF	5	7177638
C2010	Restrooms building	Good	Wall Finishes, Ceramic Tile	1,200 SF	28	7052019
C2030	Restrooms building	Fair	Flooring, Ceramic Tile	700 SF	20	7052011
C2050	Restrooms building	Fair	Ceiling Finishes, exposed irregular elements, Prep & Paint	700 SF	5	7177639
Plumbing						
D2010	Site- Playarea	Fair	Backflow Preventer, Domestic Water	1	10	7052036
D2010	Restrooms- W	Fair	Toilet, Commercial Water Closet	4	7	7052035
D2010	Building exterior	Fair	Backflow Preventer, Domestic Water	1	9	7051997
D2010	Restrooms building	Fair	Drinking Fountain, Wall-Mounted, Bi-Level	1	4	7052002
D2010	Restrooms- M	Fair	Sink/Lavatory, Wall-Hung, Enameled Steel	2	15	7051998
D2010	Restrooms building	Fair	Plumbing System, Supply & Sanitary, Low Density (excludes fixtures)	700 SF	17	7177637
D2010	Utility closet	Fair	Sink/Lavatory, Service Sink, Floor	1	18	7052038
D2010	Restrooms- M	Fair	Urinal, Standard	2	10	7051988
D2010	Restrooms- W	Fair	Sink/Lavatory, Wall-Hung, Enameled Steel	2	15	7052001
HVAC						
D3060	Restrooms- M	Poor	Supplemental Components, Hand Dryer, Restroom	1	2	7052027
D3060	Restrooms- W	Fair	Supplemental Components, Hand Dryer, Restroom	1	5	7052003

Component Condition Report | Gladstone Park Restrooms

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
Electrical						
D5020	Utility closet	Fair	Supplemental Components, Load Center, Single Phase Residential 120/240 V, 100 AMP	1	15	7177640
D5020	Restrooms building	Fair	Electrical System, Full System Renovation/Upgrade, Low Density/Complexity	700 SF	17	7051999
D5040	Restrooms building	Fair	Interior Lighting System, Full Upgrade, Low Density & Standard Fixtures	700 SF	10	7177636
D5040	Building exterior	Fair	Standard Fixture w/ Lamp, any type, w/ LED Replacement, 250 W	4	10	7177692
Pedestrian Plazas & Walkways						
G2020	Parking lot	Excellent	Parking Lots, Pavement, Asphalt, Mill & Overlay	16,490 SF	25	7052017
G2020	Site	Excellent	Parking Lots, Pavement, Asphalt, Seal & Stripe	4,400 SF	5	7052034
G2030	Site	Good	Sidewalk, Concrete, Small Areas/Sections	2,800 SF	37	7051995
Athletic, Recreational & Playfield Areas						
G2050	Site- Playarea 2	Fair	Play Structure, Multipurpose, Large	1	7	7052024
G2050	Site	Fair	Campground Accessories, Grill, Pedestal-Style	1	3	7052016
G2050	Site- Basketball court	Fair	Sports Apparatus, Basketball, Backboard/Rim/Pole	1	12	7052009
G2050	Site	Fair	Play Structure, Swing Set, 4 Seats	2	8	7052008
G2050	Site- Playarea	Fair	Playfield Surfaces, Chips Rubber, 3" Depth	450 SF	3	7052030
G2050	Site- Playarea 2	Fair	Campground Accessories, Grill, Pedestal-Style	1	3	7052040
G2050	Site- Playarea	Fair	Play Structure, Multipurpose, Large	1	7	7052020
G2050	Site- Basketball court	Fair	Athletic Surfaces & Courts, Basketball/General, Asphalt Pavement	780 SF	12	7052015
Sitework						
G2060	Site- Playarea 2	Fair	Park Bench, Wood/Composite/Fiberglass	1	3	7052031
G2060	Site	Fair	Picnic Table, Precast Concrete	1	12	7052042
G2060	Site- Playarea 2	Fair	Park Bench, Wood/Composite/Fiberglass	1	3	7052023
G2060	Site- Playarea	Fair	Park Bench, Precast Concrete	1	10	7052004
G2060	Site	Fair	Picnic Table, Precast Concrete	1	12	7052018
G2060	Site- Basketball court	Fair	Park Bench, Metal Powder-Coated	1	7	7052013

Component Condition Report | Gladstone Park Restrooms

UF L3 Code	Location	Condition	Asset/Component/Repair	Quantity	RUL	ID
G2060	Site- Playarea	Fair	Park Bench, Precast Concrete	1	10	7051990
G2060	Site	Fair	Picnic Table, Precast Concrete	1	12	7052029
G2060	Site- Trees Covered Seating	Good	Picnic Table, Precast Concrete	1	17	7052010
G2060	Site- Trees Covered Seating	Good	Picnic Table, Precast Concrete	1	17	7051987
G2060	Site- Playarea	Good	Picnic Table, Precast Concrete	1	19	7052032
G2060	Site- Playarea 2	Fair	Picnic Table, Metal Powder-Coated	1	5	7052007
G2060	Site- Basketball court	Fair	Park Bench, Metal Powder-Coated	1	7	7052005
G2060	Site- Trees Covered Seating	Good	Picnic Table, Precast Concrete	1	17	7052041
G2060	Site	Fair	Picnic Table, Precast Concrete	1	12	7052039
G2060	Site- Playarea	Good	Picnic Table, Precast Concrete	1	19	7052037
G2060	Site- Trees Covered Seating	Fair	Signage, Property, Monument, Replace/Install	1	4	7052000
G2060	Site- Playarea 2	Fair	Picnic Table, Wood/Composite/Fiberglass	1	5	7051996
G2060	Site	Fair	Signage, Property, Monument, Replace/Install	1	6	7052022
G2060	Site- Trees Covered Seating	Fair	Picnic Table, Precast Concrete	1	14	7052012
G2060	Site- Playarea 2	Fair	Park Bench, Wood/Composite/Fiberglass	1	6	7052026
G2060	Site	Fair	Trash Receptacle, Portable/Light-Duty	1	4	7052014
G2060	Site- Trees Covered Seating	Good	Picnic Table, Precast Concrete	1	17	7051992
G2060	Site- Playarea 2	Fair	Picnic Table, Wood/Composite/Fiberglass	1	4	7051988
G2060	Site- Playarea 2	Fair	Park Bench, Wood/Composite/Fiberglass	1	3	7052021
G2060	Site- Trees Covered Seating	Fair	Picnic Table, Precast Concrete	1	16	7052033
G2080	Site	Fair	Irrigation System, Pop-Up Spray Heads, Commercial	150,000 SF	10	7177691
G2080	Restrooms building	Fair	Irrigation System, Control Panel	1	8	7052025
G4050	Site- Playarea	Fair	Pole Light Fixture w/ Lamps, any type 30' High, w/ LED Replacement, Replace/Install	2	10	7051993

Appendix F:
Replacement Reserves

Replacement Reserves Report

Gladstone Park Restrooms

12/28/2023

Location	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	Total Escalated Estimate
Gladstone Park Restrooms	$0	$0	$2,292	$6,749	$8,357	$20,001	$5,803	$133,068	$17,101	$11,626	$325,211	$9,530	$40,363	$0	$2,450	$50,436	$2,600	$44,181	$8,216	$10,179	$35,550	**$733,712**
Grand Total	**$0**	**$0**	**$2,292**	**$6,749**	**$8,357**	**$20,001**	**$5,803**	**$133,068**	**$17,101**	**$11,626**	**$325,211**	**$9,530**	**$40,363**	**$0**	**$2,450**	**$50,436**	**$2,600**	**$44,181**	**$8,216**	**$10,179**	**$35,550**	**$733,712**

Uniformat Code	Location Description	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost	w/ Markup *	Subtotal	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	Deficiency Repair Estimate
B2010	Building exterior	7177641	Exterior Walls, any painted surface, Prep & Paint	10	5	5	1800	SF	$3.00	$4.05	$7,290						$7,290										$7,290						**$14,580**
B2050	Building Exterior	7052006	Exterior Door, Steel, Standard, Replace	40	23	17	4	EA	$600.00	$810.00	$3,240																		$3,240				**$3,240**
B3010	Roof- Restroom Building	7051991	Roofing, Asphalt Shingle, 20-Year Standard, Replace	20	13	7	933	SF	$3.80	$5.13	$4,786								$4,786														**$4,786**
C1090	Restrooms building	7051994	Toilet Partitions, Metal, Replace	20	9	11	6	EA	$850.00	$1,147.50	$6,885												$6,885										**$6,885**
C2010	Throughout	7177638	Wall Finishes, any surface, Prep & Paint	10	5	5	500	SF	$1.50	$2.03	$1,013						$1,013										$1,013						**$2,025**
C2030	Restrooms building	7052011	Flooring, Ceramic Tile, Replace	40	20	20	700	SF	$18.00	$24.30	$17,010																					$17,010	**$17,010**
C2050	Restrooms building	7177639	Ceiling Finishes, exposed irregular elements, Prep & Paint	10	5	5	700	SF	$2.50	$3.38	$2,363						$2,363										$2,363						**$4,725**
D2010	Building exterior	7051997	Backflow Preventer, Domestic Water, Replace	30	21	9	1	EA	$6,600.00	$8,910.00	$8,910										$8,910												**$8,910**
D2010	Site- Playarea	7052036	Backflow Preventer, Domestic Water, Replace	30	20	10	1	EA	$6,600.00	$8,910.00	$8,910											$8,910											**$8,910**
D2010	Restrooms building	7177637	Plumbing System, Supply & Sanitary, Low Density (excludes fixtures), Replace	40	23	17	700	SF	$5.00	$6.75	$4,725																			$4,725			**$4,725**
D2010	Restrooms building	7052002	Drinking Fountain, Wall-Mounted, Bi-Level, Replace	15	11	4	1	EA	$1,500.00	$2,025.00	$2,025					$2,025																$2,025		**$4,050**
D2010	Restrooms- W	7052035	Toilet, Commercial Water Closet, Replace	30	23	7	4	EA	$1,300.00	$1,755.00	$7,020								$7,020														**$7,020**
D2010	Restrooms- M	7051988	Urinal, Standard, Replace	30	20	10	2	EA	$1,100.00	$1,485.00	$2,970											$2,970											**$2,970**
D2010	Restrooms- W	7052001	Sink/Lavatory, Wall-Hung, Enameled Steel, Replace	30	15	15	2	EA	$1,700.00	$2,295.00	$4,590																$4,590						**$4,590**
D2010	Restrooms- M	7051998	Sink/Lavatory, Wall-Hung, Enameled Steel, Replace	30	15	15	2	EA	$1,700.00	$2,295.00	$4,590																$4,590						**$4,590**
D2010	Utility closet	7052038	Sink/Lavatory, Service Sink, Floor, Replace	35	17	18	1	EA	$800.00	$1,080.00	$1,080																				$1,080		**$1,080**
D3060	Restrooms- M	7052027	Supplemental Components, Hand Dryer, Restroom, Replace	10	8	2	1	EA	$1,600.00	$2,160.00	$2,160			$2,160										$2,160									**$4,320**
D3060	Restrooms- W	7052003	Supplemental Components, Hand Dryer, Restroom, Replace	10	5	5	1	EA	$1,600.00	$2,160.00	$2,160						$2,160										$2,160						**$4,320**
D5020	Utility closet	7177640	Supplemental Components, Load Center, Single Phase Residential 120/240 V, 100 AMP, Replace	30	15	15	1	EA	$5,700.00	$7,695.00	$7,695																$7,695						**$7,695**
D5020	Restrooms building	7051999	Electrical System, Full System Renovation/Upgrade, Low Density/Complexity, Replace	40	23	17	700	SF	$13.00	$17.55	$12,285																			$12,285			**$12,285**
D5040	Building exterior	7177692	Standard Fixture w/ Lamp, any type, w/ LED Replacement, 250 W, Replace	20	10	10	4	EA	$250.00	$337.50	$1,350											$1,350											**$1,350**
D5040	Restrooms building	7177636	Interior Lighting System, Full Upgrade, Low Density & Standard Fixtures, Replace	20	10	10	700	SF	$2.10	$2.84	$1,985											$1,985											**$1,985**
G2020	Site	7052034	Parking Lots, Pavement, Asphalt, Seal & Stripe	5	0	5	4400	SF	$0.45	$0.61	$2,673						$2,673					$2,673					$2,673					$2,673	**$10,692**
G2050	Site- Basketball court	7052009	Sports Apparatus, Basketball, Backboard/Rim/Pole, Replace	25	13	12	1	EA	$9,500.00	$12,825.00	$12,825												$12,825										**$12,825**
G2050	Site- Basketball court	7052015	Athletic Surfaces & Courts, Basketball/General, Asphalt Pavement, Replace	25	13	12	780	SF	$6.50	$8.78	$6,845												$6,845										**$6,845**
G2050	Site	7052016	Campground Accessories, Grill, Pedestal-Style, Replace	15	12	3	1	EA	$600.00	$810.00	$810				$810																$810		**$1,620**
G2050	Site- Playarea 2	7052040	Campground Accessories, Grill, Pedestal-Style, Replace	15	12	3	1	EA	$600.00	$810.00	$810				$810																$810		**$1,620**
G2050	Site- Playarea	7052030	Playfield Surfaces, Chips Rubber, 3" Depth, Replace	15	12	3	450	SF	$3.50	$4.73	$2,126				$2,126																$2,126		**$4,253**
G2050	Site- Playarea 2	7052024	Play Structure, Multipurpose, Large, Replace	20	13	7	1	EA	$35,000.00	$47,250.00	$47,250								$47,250														**$47,250**
G2050	Site- Playarea	7052020	Play Structure, Multipurpose, Large, Replace	20	13	7	1	EA	$35,000.00	$47,250.00	$47,250								$47,250														**$47,250**
G2050	Site	7052008	Play Structure, Swing Set, 4 Seats, Replace	20	12	8	2	EA	$2,500.00	$3,375.00	$6,750									$6,750													**$6,750**
G2060	Site- Playarea 2	7052031	Park Bench, Wood/Composite/Fiberglass, Replace	20	17	3	1	EA	$600.00	$810.00	$810				$810																$810		**$810**
G2060	Site- Playarea 2	7052023	Park Bench, Wood/Composite/Fiberglass, Replace	20	17	3	1	EA	$600.00	$810.00	$810				$810																$810		**$810**
G2060	Site- Playarea 2	7052021	Park Bench, Wood/Composite/Fiberglass, Replace	20	17	3	1	EA	$600.00	$810.00	$810				$810																$810		**$810**
G2060	Site	7052014	Trash Receptacle, Portable/Light-Duty, Replace	15	11	4	1	EA	$400.00	$540.00	$540					$540																$540	**$1,080**
G2060	Site- Playarea 2	7051986	Picnic Table, Wood/Composite/Fiberglass, Replace	20	16	4	1	EA	$600.00	$810.00	$810					$810																	**$810**
G2060	Site- Playarea 2	7051996	Picnic Table, Wood/Composite/Fiberglass, Replace	20	15	5	1	EA	$600.00	$810.00	$810						$810																**$810**
G2060	Site- Playarea 2	7052007	Picnic Table, Metal Powder-Coated, Replace	20	15	5	1	EA	$700.00	$945.00	$945						$945																**$945**
G2060	Site- Playarea 2	7052026	Park Bench, Wood/Composite/Fiberglass, Replace	20	14	6	1	EA	$600.00	$810.00	$810							$810															**$810**
G2060	Site- Basketball court	7052013	Park Bench, Metal Powder-Coated, Replace	20	13	7	1	EA	$700.00	$945.00	$945								$945														**$945**
G2060	Site- Basketball court	7052005	Park Bench, Metal Powder-Coated, Replace	20	13	7	1	EA	$700.00	$945.00	$945								$945														**$945**
G2060	Site- Playarea	7052004	Park Bench, Precast Concrete, Replace	25	15	10	1	EA	$1,000.00	$1,350.00	$1,350											$1,350											**$1,350**
G2060	Site- Playarea	7051990	Park Bench, Precast Concrete, Replace	25	15	10	1	EA	$1,000.00	$1,350.00	$1,350											$1,350											**$1,350**
G2060	Site	7052042	Picnic Table, Precast Concrete, Replace	25	13	12	1	EA	$1,200.00	$1,620.00	$1,620													$1,620									**$1,620**
G2060	Site	7052018	Picnic Table, Precast Concrete, Replace	25	13	12	1	EA	$1,200.00	$1,620.00	$1,620													$1,620									**$1,620**
G2060	Site	7052029	Picnic Table, Precast Concrete, Replace	25	13	12	1	EA	$1,200.00	$1,620.00	$1,620													$1,620									**$1,620**
G2060	Site	7052039	Picnic Table, Precast Concrete, Replace	25	13	12	1	EA	$1,200.00	$1,620.00	$1,620													$1,620									**$1,620**
G2060	Site- Trees Covered Seating	7052012	Picnic Table, Precast Concrete, Replace	25	11	14	1	EA	$1,200.00	$1,620.00	$1,620															$1,620							**$1,620**
G2060	Site- Trees Covered Seating	7052033	Picnic Table, Precast Concrete, Replace	25	9	16	1	EA	$1,200.00	$1,620.00	$1,620																	$1,620					**$1,620**
G2060	Site- Trees Covered Seating	7051992	Picnic Table, Precast Concrete, Replace	25	8	17	1	EA	$1,200.00	$1,620.00	$1,620																		$1,620				**$1,620**
G2060	Site- Trees Covered Seating	7052041	Picnic Table, Precast Concrete, Replace	25	8	17	1	EA	$1,200.00	$1,620.00	$1,620																		$1,620				**$1,620**
G2060	Site- Trees Covered Seating	7052010	Picnic Table, Precast Concrete, Replace	25	8	17	1	EA	$1,200.00	$1,620.00	$1,620																		$1,620				**$1,620**

Replacement Reserves Report

Gladstone Park Restrooms

12/28/2023

Uniformat Code	Location Description	ID	Cost Description	Lifespan (EUL)	EAge	RUL	Quantity	Unit	Unit Cost	w/ Markup	*Subtotal	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	Deficiency Repair Estimate
G2060	Site- Trees Covered Seating	7051987	Picnic Table, Precast Concrete, Replace	25	8	17	1	EA	$1,200.00	$1,620.00	$1,620																		$1,620				**$1,620**
G2060	Site- Playarea	7052032	Picnic Table, Precast Concrete, Replace	25	6	19	1	EA	$1,200.00	$1,620.00	$1,620																				$1,620			**$1,620**
G2060	Site- Playarea	7052037	Picnic Table, Precast Concrete, Replace	25	6	19	1	EA	$1,200.00	$1,620.00	$1,620																				$1,620			**$1,620**
G2060	Site- Trees Covered Seating	7052000	Signage, Property, Monument, Replace/Install	20	16	4	1	EA	$3,000.00	$4,050.00	$4,050					$4,050																		**$4,050**
G2060	Site	7052022	Signage, Property, Monument, Replace/Install	20	14	6	1	EA	$3,000.00	$4,050.00	$4,050							$4,050																**$4,050**
G2080	Restrooms building	7052025	Irrigation System, Control Panel, Replace	15	7	8	1	EA	$5,000.00	$6,750.00	$6,750									$6,750														**$6,750**
G2080	Site	7177691	Irrigation System, Pop-Up Spray Heads, Commercial, Replace	20	10	10	150000	SF	$1.00	$1.35	$202,500											$202,500												**$202,500**
G4050	Site- Playarea	7051993	Pole Light Fixture w/ Lamps, any type 30' High, w/ LED Replacement, Replace/Install	20	10	10	2	EA	$7,000.00	$9,450.00	$18,900											$18,900												**$18,900**
Totals, Unescalated												**$0**	**$0**	**$2,160**	**$6,176**	**$7,425**	**$17,253**	**$4,860**	**$108,196**	**$13,500**	**$8,910**	**$241,988**	**$6,885**	**$28,310**	**$0**	**$1,620**	**$32,373**	**$1,620**	**$26,730**	**$4,826**	**$5,805**	**$19,683**	**$538,320**
Totals, Escalated (3.0% inflation, compounded annually)												**$0**	**$0**	**$2,292**	**$6,749**	**$8,357**	**$20,001**	**$5,803**	**$133,068**	**$17,101**	**$11,626**	**$325,211**	**$9,530**	**$40,363**	**$0**	**$2,450**	**$50,436**	**$2,600**	**$44,181**	**$8,216**	**$10,179**	**$35,550**	**$733,712**

Appendix G:
Equipment Inventory List

Mechanical Inventory - Gladstone Park Restrooms							
Equipment Location	Equipment	Capacity	Quantity	Year	Make	Model	Serial
Site- Playarea	Backflow Preventer	4 IN	1	Unknown	Inaccessible	Inaccessible	Inaccessible
Building exterior	Backflow Preventer	4 IN	1	Unknown	Inaccessible	Inaccessible	Inaccessible

D20 Plumbing

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7052036	D2010	**Backflow Preventer**	Domestic Water	4 IN	Gladstone Park Restrooms	Site- Playarea	Inaccessible	Inaccessible	Inaccessible		000268	
2	7051997	D2010	**Backflow Preventer**	Domestic Water	4 IN	Gladstone Park Restrooms	Building exterior					000423	

D50 Electrical

Index	ID	UFCode	Component Description	Attributes	Capacity	Building	Location Detail	Manufacturer	Model	Serial	Dataplate Yr	Barcode	Qty
1	7177640	D5020	**Supplemental Components**	Load Center, Single Phase Residential 120/240 V, 100 AMP		Gladstone Park Restrooms	Utility closet	No dataplate	No dataplate	No dataplate			
2	7177692	D5040	**Standard Fixture w/ Lamp**	any type, w/ LED Replacement, 250 W		Gladstone Park Restrooms	Building exterior						4

Appendix H:
Energy Conservation Measures Calculations

IC	Install Low low aucet Aerators
EAP2-b	Location: Restrooms
Attributes:	Replace 4x 1GPM rated bathroom aerators with 0.5GPM WaterSense certified aerators

Property Type:	Commercial	Estimated No. of Operational Weeks	52
		Number of Occupied Days/Week (Max 7)	7

KITCHEN AUCETS			BATHROOM AUCETS		
Number of Occupants Affected By Retrofit			Number of Occupants Affected by Retrofit	20	
Do You Want To Replace Kitchen Faucets Aerators	No	(Select)	Do You Want To Replace Bathroom Faucets Aerators	Yes	(Select)
Total Number of Faucet Aerators To Be Replaced			Total Number of Faucet Aerators To Be Replaced	4	
Total Number of Faucets To Be Replaced:			Total Number of Faucets To Be Replaced:	0	
GPM of Existing Faucet Aerators	-	GPM	GPM of Existing Faucet Aerators	1	GPM
GPM of Proposed Faucet Aerator	-	GPM	GPM of Proposed Faucet Aerator	0.5	GPM
Estimated Number of Uses Per Day	4		Estimated Number of Uses Per Day	5	

Annual Water Savings From Installing Low Flow Aerators: 1.75 kGal

WATER ENERG SA ING CALCULATION			COST SA ING CALCULATION		
Select Type of Water Heater uel:	Electric	(Select)	Property Location in United States	Southern Localities	
Energy Factor of Domestic Hot Water Heater:	1.00	EF	Heating Fuel Tariff	$0.30	$/kWh
Hot Water Discharge Temperature at Faucet	110.00	°F	Water Tariff ($/1000 Gal)	$11.18	$/kGal
Equivalent Heating Fuel Savings:	145	kWh	Annual Cost Savings In Form of Water	$20	$
Savings Discounted by 15% to Account For Cold Water Use					
Annual Water Savings		kGal	Annual Energy Savings From Water Heater	$43	$

COST BENE IT ANAL SIS				
Estimated Material Cost	$32	Estiamted Labor Cost	$31	
Estimated Total Annual Cost Savings	$63	$$	Estimated Total Installation Cost	$63	$$
Simple Payback Period	1.00	Years	Type of Recommendation	No/Low Cost ECM Recommendation	

ECM EXPLANATION:

B reducing the flo of ater co ing fro the restroo faucets aerators can generate energ sa ings at lo cost and ith eas installation The sa ings generated ould be in the for of reduced ater and se er costs and at the sa e ti e aerators ould sa e energ b reducing the de and for hot ater The a erage faucet has a flo rate of about 2 to PM dding a scre -in faucet aerator reduces the flo to to PM in the bathroo and 2 2 PM in the kitchen In addition to sa ing energ and ater the foa ier ater that co es fro faucet aerators ets ob ects better than ater fro a faucet ith no aerator hich tends to bounce off the ob ect rather than thoroughl etting it

B reco ends replacing the proposed faucet aerators ith ne lo flo aerators as entioned abo e The proposed ECM shall also result in an annual energ sa ing in for of reduction in ater heating bills

Summary:

Initial In est ent 6 Esti ated nnual Cost Sa ings 6 Si ple Pa back Period rs

Appendix I:
Lighting System Schedule

No Documents Associated
With This Appendix

Appendix J:
Energy Audit Glossary of Terms

Glossary of Terms and Acronyms

ECM – Energy Conservation Measures are projects recommended to reduce energy consumption. These can be No/Low cost items implemented as part of routine maintenance or Capital Cost items to be implemented as a capital improvement project.

Initial Investment – The estimated cost of implementing an ECM project. Estimates typically are based on R.S. Means Construction cost data and Industry Standards.

Annual Energy Savings – The reduction in energy consumption attributable to the implementation of a particular ECM. These savings values do not include the interactive effects of other ECMs.

Cost Savings – The expected reduction in utility or energy costs achieved through the corresponding reduction in energy consumption by implementation of an ECM.

Simple Payback Period –The number of years required for the cumulative value of energy or water cost savings less future non-fuel or non-water costs to equal the investment costs of the building energy or water system, without consideration of discount rates.

EUL – Expected Useful Life is the estimated lifespan of a typical piece of equipment based on industry accepted standards.

RUL – Remaining Useful Life is the EUL minus the effective age of the equipment and reflects the estimated number of operating years remaining for the item.

SIR - The savings-to-investment ratio is the ratio of the present value savings to the present value costs of an energy or water conservation measure. The numerator of the ratio is the present value of net savings in energy or water and non-fuel or non-water operation and maintenance costs attributable to the proposed energy or water conservation measure. The denominator of the ratio is the present value of the net increase in investment and replacement costs less salvage value attributable to the proposed energy or water conservation measure. It is recommended that energy-efficiency recommendations be based on a calculated SIR, with larger SIRs receiving a higher priority. A project typically is recommended only if the SIR is greater than or equal to 1.0, unless other factors outweigh the financial benefit.

Life Cycle Cost - The sum of the present values of (a) **I**nvestment costs, less salvage values at the end of the study period; (b) Non-fuel operation and maintenance costs: (c) Replacement costs less salvage costs of replaced building systems; and (d) Energy and/or water costs.

Life Cycle Savings – The sum of the estimated annual cost savings over the EUL of the recommended ECM, expressed in present value dollars.

Building Site Energy Use Intensity - The sum of the total site energy use in thousands of Btu per unit of gross building area. Site energy accounts for all energy consumed at the building location only not the energy consumed during generation and transmission of the energy to the site.

Building Source Energy Use Intensity – The sum of the total source energy use in thousands of Btu per unit of gross building area. Source energy is the energy consumed during generation and transmission in supplying the energy to your site.

Building Cost Intensity - This metric is the sum of all energy use costs in dollars per unit of gross building area.

Greenhouse Gas Emissions - Although there are numerous gases that are classified as contributors to the total for Greenhouse Emissions, the scope of this energy audit focuses on carbon dioxide (CO_2). Carbon dioxide enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and also as a result of other chemical reactions (e.g., manufacture of cement).