State of Nevada
Department of Employment, Training & Rehabilitation

DETR LAS VEGAS OFFICE SITE

2800 East St. Louis Ave.
Las Vegas, Nevada 89104

Site Number: 9837
STATE OF NEVADA PUBLIC WORKS DIVISION
FACILITY CONDITION ANALYSIS

Report distributed in December 2022

State of Nevada
Department of Employment, Training & Rehabilitation

The Facility Condition Analysis Program was created under the authority found in NRS 341.128. The State Public Works Division develops this report using cost estimates based on contractor pricing which includes materials, labor, location factors and profit and overhead. The costs of project design, management, special testing and inspections, inflation and permitting fees are not included. Cost estimates are derived from the R.S. Means Cost Estimating Guide and from comparable construction costs of projects completed by SPWD project managers.

The deficiencies outlined in this report were noted from a visual survey. This report does not address routine maintenance needs. Recommended projects do not include telecommunications, furniture, window treatments, space change, program issues, or costs that could not be identified or determined from the survey and available building information. If there are buildings without projects listed, this indicates that only routine maintenance needs were found. This report considers probable facility needs for a 10 year planning cycle.

This report is not a guarantee of funding and should not be used for budgeting purposes. This report is a planning level document for agencies and State Public Works Division to assess the needs of the Building and/or Site and to help support future requests for ADA upgrades / renovations, Capital Improvement Projects, and maintenance. The final scope and estimate of any budget request should be developed by a qualified individual. Actual project costs will vary from those proposed in this report when the final scope and budget are developed.

Establishing a Facility Condition Needs Index (FCNI) for each building

The FCA reports identify maintenance items and establish construction cost estimates. These costs are summarized at the end of the report and noted as construction costs per square foot. A FCNI is commonly used by facility managers to make a judgment whether to recommend whole replacement of facilities, rather than expending resources on major repairs and improvements. The FCNI is a ratio between the proposed facility upgrade costs and facility replacement costs (FRC). Those buildings with indices greater than .50 or 50% are recommended to be considered for complete replacement.

Class Definitions

PRIORITY CLASS 1 - Currently Critical (Immediate to Two Years)

Projects in this category require immediate action to return a facility to normal operation, stop accelerated deterioration, correct a fire/life safety hazard, or correct an ADA requirement.

PRIORITY CLASS 2 - Necessary - Not Yet Critical (Two to Four Years)

Projects in this category include conditions requiring appropriate attention to preclude predictable deterioration or potential downtime and the associated damage or higher costs if deferred further.

PRIORITY CLASS 3 - (Four to Ten Years)

Projects in this category include items that represent a sensible improvement to existing conditions. These items are not required for the most basic function of a facility; however, Priority 3 projects will either improve overall usability and/or reduce long-term maintenance.

Site number: 9837

Facility Condition Needs Index Report

Index #	Building Name		Sq. Feet	Yr. Built	Survey Date	Cost to Repair: P1	Cost to Repair: P2	Cost to Repair: P3	Total Cost to Repair	Cost to Replace	FCNI
2565	DETR LAS VEGAS OFFICE		59874	2006	3/15/2022	$66,500	$0	$4,535,200	$4,601,700	$41,911,800	11%
	2800 E. St. Louis Ave.	Las Vegas									
9837	DETR LAS VEGAS OFFICE SITE			2006	3/15/2022	$0	$83,300	$0	$83,300		0%
	2800 E. St. Louis Ave.	Las Vegas									
	Report Totals.....:		**59,874**			**$66,500**	**$83,300**	**$4,535,200**	**$4,685,000**	**$41,911,800**	**11%**

Acronyms List

Acronym	Definition
Building Codes, Laws, Regulations and Guidelines	
AHJ	Authority Having Jurisdiction
AWWA	American Water Works Association
HVAC	Heating, Ventilating & Air Conditioning
IBC	International Building Code
ICC	International Code Council
IEBC	International Existing Building Code
IECC	International Energy Conservation Code
IFC	International Fire Code
IFGC	International Fuel Gas Code
IRC	International Residential Code
NFPA	National Fire Protection Association
NEC	National Electrical Code
OSHA	Occupational Safety and Health Administration
SAD	Standards for Accessible Design
SMACNA	Sheet Metal and Air Conditioning Contractors National Association
UMC	Uniform Mechanical Code
UPC	Uniform Plumbing Code
State of Nevada	
CIP	Capital Improvement Project
FCA	Facility Condition Analysis
FCNI	Facility Condition Needs Index
FRC	Facility Replacement Cost
NAC	Nevada Administrative Code
NDEP	Nevada Department of Environmental Protection
NRS	Nevada Revised Statutes
SFM	State Fire Marshal
SHPO	State Historic Preservation Office
SPWD	State Public Works Division
Miscellaneous	
DDC	Direct Digital Controls
FRP	Fiberglass Reinforced Plastic
GFCI	Ground Fault Circuit Interrupter
LED	Light Emitting Diode
PRV	Pressure Regulating Valve
TDD	Telecommunications Device for the Deaf
VCT	Vinyl Composite Tile

This is a generic acronym list of commonly used terms throughout the Facility Condition Analysis report.

SPWD Facility Condition Analysis

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DETR LAS VEGAS OFFICE SITE

BUILDING REPORT

The DETR Las Vegas Office site is located on East St. Louis Ave in Las Vegas. It was developed in 2006 from an unimproved parcel of land. It has a large paved parking area for the public including ADA accessible parking, loading, and route of travel into the building's main entrance. There is also a large employee parking area on the west side of the site with gated access which provides a separate entrance into the facility for employees. There is city water and sewer service as well as natural gas and electrical service serving the building. There are backflow prevention devices on the domestic and fire sprinkler supply lines. The remainder of the site is mainly xeriscape with a few shrubs scattered about. The south side of the site has a drainage swale with rip rap.

PRIORITY CLASS 2 PROJECTS **Total Construction Cost for Priority 2 Projects: $83,300**

Necessary - Not Yet Critical **Two to Four Years**

Project Index #: 9837SIT2

CRACK FILL / SEAL ASPHALT PAVING **Construction Cost $83,300**

The existing asphalt concrete paving on site is in fair condition. It was re-sealed in 2011. This project would provide for crack filling as needed and sealing and striping the pavement in the next 3 - 4 years. This project should be completed on a cyclical basis based on environmental conditions and use.

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	**$0**
Priority Class 2:	**$83,300**
Priority Class 3:	**$0**
Grand Total:	**$83,300**

DETR LAS VEGAS OFFICE

BUILDING REPORT

The DETR Office, built in 2006, is a concrete and steel framed structure with a single-ply membrane roofing system on a concrete foundation. This building is the main office for the Department of Employment, Training and Rehabilitation (DETR) activities in the Las Vegas area. There are offices, conference rooms, storage areas, an employee lounge, mechanical room and ADA compliant restrooms on two levels. There is a separate employee entrance to the facility. It is fully sprinklered and has a fire alarm system. The HVAC system is comprised of two boilers, two chillers, two cooling towers which supply air handlers and fan coils located throughout the facility. The office spaces is set on raised floors. The building and site is well maintained and in good condition.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: $66,500**

Currently Critical **Immediate to Two Years**

Project Index #: 2565ELE1

ARC FLASH and ELECTRICAL COORDINATION STUDY **Construction Cost $60,000**

Arc flash and electrical breaker coordination studies have not been performed or it has been more than 5 years since the last coordination study. Safety requirements for maintenance personnel and the latest electrical code require coordination studies to be verified and performed every 5 years, along with arc flash labeling on all electrical panels. This project will perform the required coordination study, evaluation, adjustments and labeling for the building's electrical distribution system.

Project Index #: 2565SFT1

SEISMIC GAS SHUT-OFF VALVE INSTALLATION **Construction Cost $6,500**

This project would provide for the installation of a seismic gas shut-off valve on the main gas service piping prior to entering the building. Alternately, for propane services or a site gas services with a single site metering station, consider installation at the tank or main meter service if it feeds multiple buildings. This estimate is based on the manufacturer Pacific Seismic Products or approved equal, equipped with the optional Model MS remote monitoring switch (to be interfaced with the direct digital control system and/or with an audible alarm). The gas piping immediately adjacent to the seismic gas valve shall be secured to the building utilizing unistrut channel bracing.

PRIORITY CLASS 3 PROJECTS **Total Construction Cost for Priority 3 Projects: $4,535,200**

Long-Term Needs **Four to Ten Years**

Project Index #: 2565EXT1

EXTERIOR FINISHES **Construction Cost $299,400**

The exterior finishes were in good condition. It is important to maintain the finish, weather resistance, and appearance of the building. This project would provide funding to protect the exterior building envelope, other than the roof, including painting, staining, or other applied finishes, and caulking around windows, flashing, fixtures, and other penetrations to maintain the building in good, weather tight condition. This project will protect the building envelope and is recommended in the next 8 - 10 years and on a cyclical basis based on environmental conditions.

Project Index #: 2565HVA1

HVAC EQUIPMENT REPLACEMENT PLANNING **Construction Cost $2,515,000**

The existing HVAC central plant is original equipment built in 2006. According to the American Society of Heating Refrigeration and Air conditioning Engineers (ASHRAE), typical large HVAC equipment life expectancy is 20 - 25 years. Planning should take place for a complete replacement of the central plant and the datacenter cooling systems. The cooling towers are failing and reaching the end of their useful life, the datacenter cooling system operates on R-22 and the chillers are operating with a transition R-22 refrigerant called R-407c. The R-22 refrigerant in the datacenter cooling system is no longer EPA compliant and its production was phased out completely January 1, 2020. This project recommends a complete replacement of the central plant equipment including the chillers, cooling towers, boilers, pumps and the datacenter cooling system in the next 4 - 6 years. The urgency for replacement is driven by the condition of the cooling towers. It would provide for replacing the existing equipment with new, high efficiency equipment and cleaning the existing duct work and grilles. This project includes removal and disposal of the existing HVAC equipment and all required connections to utilities.

Project Index #: 2565INT1

INTERIOR FINISHES **Construction Cost $299,400**

The interior finishes are in good to fair condition. It is recommended that the interior walls and ceilings be painted at least once in the next 6 - 8 years and every 8 - 10 years thereafter to maintain the integrity of the interior of the building. Prior to painting, all surfaces should be repaired and prepped. An epoxy-based paint should be utilized in wet areas for durability.

Project Index #: 2565EXT2

ROOF REPLACEMENT **Construction Cost $1,421,400**

The roof on this building was in fair condition at the time of the survey. The statewide roofing program has set the useful life of an average roof at 20 - 25 years. The roof warranty expires during that time frame. Temperature fluctuations throughout the year, consistent wind which blows sand and dirt on to the roof membrane, and constant exposure to the sun are contributing factors to wear and deterioration. The current roofing system was installed in 2006 with a 15 year warranty. Based on the expected roofing lifespan, it is recommended that this building be re-roofed in the next 8 - 10 years to be consistent with the roofing program.

BUILDING INFORMATION:

Gross Area (square feet):	**59,874**	**IBC Occupancy Type 1:**	**100 % B**
Year Constructed:	**2006**	**IBC Occupancy Type 2:**	**0 %**
Exterior Finish 1:	**75 % Painted Stucco / EIFS**	**Construction Type:**	**Concrete & Steel**
Exterior Finish 2:	**25 % Glazing Panels**	**IBC Construction Type:**	**II-B**
Number of Levels (Floors):	**2 Basement? No**	**Percent Fire Suppressed:**	**100 %**

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	**$66,500**	**Project Construction Cost per Square Foot:**	**$76.86**
Priority Class 2:	**$0**	**Total Facility Replacement Construction Cost:**	**$41,912,000**
Priority Class 3:	**$4,535,200**	**Facility Replacement Cost per Square Foot:**	**$700**
Grand Total:	**$4,601,700**	**FCNI:**	**11%**

NOTES:

The deficiencies outlined in this report were noted from a visual survey. The costs do not represent the cost of a complete facility renovation or maintenance needs. Recommended projects do not include telecommunications, furniture, window treatment, space change, program issues, relocation, swing space, or costs that could not be identified or determined from the survey and available building information.

Individual projects and costs noted herein may be impacted by new construction materials or methods, agency projects, and pending or proposed Capital Improvement Projects (CIP).

This report was created under the authority found in NRS 341.128 by the State Public Works Division and should be utilized as a planning level document.

REPORT DEVELOPMENT:

State Public Works Division
Facilities Condition Analysis
515 E. Musser Street, Suite 102
Carson City, Nevada 89701-4263
(775) 684-4141 voice
(775) 684-4142 facsimile

DETR Las Vegas Office Site – FCA Site #9837
Description: Building Exterior from E. St. Louis Ave.

DETR Las Vegas Office Site – FCA Site #9837
Description: Public Parking Re-sealing Needed.

DETR Las Vegas Office - FCA Building #2565
Description: View of Public Lobby.

DETR Las Vegas Office - FCA Building #2565
Description: View of Employee Break Area.

DETR Las Vegas Office - FCA Building #2565
Description: Seismic Gas Isolation Valve Needed.

DETR Las Vegas Office - FCA Building #2565
Description: Planning for HVAC Central Plant Replacement Recommended.