State of Nevada Department of Administration & Department of Business & Industry Public Works Division – Building and Grounds Section Bradley Building Facility Condition Analysis

BRADLEY BUILDING

2501 East Sahara Blvd. Las Vegas, Nevada

Site Number: 9977 – Building Number 0266 STATE OF NEVADA PUBLIC WORKS DIVISION FACILITY CONDITION ANALYSIS



Report Printed in August 2013

State of Nevada

Department of Administration & Department of Business & Industry Public Works Division – Building and Grounds Section Bradley Building Facility Condition Analysis

The Facility Condition Analysis Program was created under the authority found in NRS 341.201. 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.

Building Number: 0266		Facility Condition Needs Index Report		Cost to	Cost to		
Index #	Building Name	2	City	Survey Date	Repair	Replace	FCNI
0266	BRADLEY BUILI	DING	Las Vegas	6/5/2013	\$3,464,100	\$7,775,625	45%
				Report Totals:	\$3,464,100	\$7,775,625	45%

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State of Nevada / Administration BRADLEY BUILDING SPWB Facility Condition Analysis - 0266

Survey Date: 6/5/2013

BRADLEY BUILDING BUILDING REPORT

The Bradley Building is located in Las Vegas and houses the Department of Business and Industry offices. The building is a three story concrete and steel framed structure with metal cladding for siding and glazed wall panels at the corners. It has a built up roofing system in poor shape. Surrounding the facility is some xeriscape with a few shrubs and trees. There is a parking area located adjacent to the building with designated ADA accessible parking spaces. The HVAC system is mostly original 1975 components and consists of a roof mounted chiller and cooling tower, three supplemental AC units and the original gas fired boiler inside of the roof penthouse. There are two air handlers on each of the three floors which are also original units. One of the air handlers on the second floor has been retrofitted with a heating coil and is not code compliant. Some of the controls for the system are missing and the whole system is in poor condition and should be scheduled for replacement.

The building is serviced by one water line which enters the building in the mechanical space. The domestic line is tapped from the main line inside of the mechanical space and is in need of a double check valve. Also, there is no backflow prevention on the main water service. The City of Las Vegas is scheduled to install the backflow prevention device some time in the future.

The facility is in need of several ADA accessibility upgrades including restrooms, signage, elevator components, and building entrance / parking. It also has a fire sprinkler system and an original fire alarm system which is in need of replacement.

PRIORITY CLASS 1 PROJECTS

Total Construction Cost for Priority 1 Projects: \$2,058,975

Project Index #:

Project Index #: 0266HVA1

Construction cost: \$1,200,000

Construction cost:

0266SFT6

\$12,000

Currently Critical

Immediate to Two Years

FIRE SUPPRESSION PIPE REPLACEMENT

It is estimated that after installing the double check valve on the fire riser that the water pressure in the fire suppression piping will be reduced by 10%. This reduction in pressure will not supply enough water to the 3rd floor. The city is installing a backflow prevention device on the line, the pressure will be reduced by an additional 10%. To compensate for the reduced pressure, it is recommended to replace the 3rd floor piping with larger diameter pipes. This project would provide for re-piping the fire suppression system lines on the 3rd floor to maintain an adequate supply of water for the system.

HVAC REPLACEMENT

The building is equipped with a central heating and air conditioning system controlled by a direct digital control system. Staff reported during the 2013 survey that the DDC system is no longer operating. The maintenance staff and building occupants report that the air conditioning and heating in the building does not maintain a consistent temperature and is inadequate in some areas. The addition of computers and other electronic equipment, which gives off heat, was thought to contribute to problems with the cooling system. The EvapCo cooling tower is rusting through on the upper portion and is starting to leak. It was also noted that the heat in the building is inadequate. The third floor is heated, the 1st floor does not have a heating coil to provide heat in the cold season and the 2nd floor has been retrofitted with a heating coil but it is inadequate and problematic from a maintenance perspective. This project recommends a building-wide system upgrade which includes the boiler, chiller, cooling tower, air handlers, VFD's, DDC system and duct system in the next 1-2 years. This project or a portion thereof was previously recommended in the FCA reports dated 02/10/2005 and 02/05/2008. It has been amended accordingly to reflect conditions observed during the most recent survey date of 6/5/2013.

State of Nevada / Administration **BRADLEY BUILDING**

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6/5/2013 **Survey Date:**

INSTALL GFCI OUTLETS

Construction cost: \$1,500 Each restroom has a standard Decora style outlet near the sink. These outlets must be changed to GFCI type outlets per

Project Index #:

Construction cost:

Construction cost:

Project Index #:

Project Index #:

Construction cost:

Construction cost:

Project Index #: 0266PLM2

Project Index #: 0266PLM3

0266ELE1

\$15,000

\$90,000

0266SFT7

\$25,000

0266SFT5

\$5,000

the NEC. This project would provide for the purchase and installation of GFCI duplex outlets. This project or a portion there of was previously recommended in the FCA reports dated 02/10/2005 and 02/05/2008. It

has been amended accordingly to reflect conditions observed during the most recent survey date of 06/05/2013.

DOUBLE CHECK VALVE INSTALLATION

State Health Law (NAC 445A.67185) and the Plumbing Code (UPC Section 603) require backflow prevention on water service connections to ensure that there are no unprotected connections between the supplies of water, systems for the pumping, storage and treatment of water, and distribution system of the public water system and any source of pollution or contamination pursuant to which any unsafe water or other degrading material can be discharged or drawn into the public water system as a result of back siphonage or backpressure. This project allows for the installation of a double check valve on the fire riser to comply with these requirements.

This project or a portion there of was previously recommended in the FCA report dated 02/10/2005 and 02/05/2008. It has been amended accordingly to reflect conditions observed during the most recent survey date of 05/05/2013.

DOMESTIC WATER LINE INSTALLATION

The domestic water currently comes into the building through the same pipe as the fire suppression system water. Once inside the building, this 6" pipe turns vertically for the fire riser, but there is a tee to a 2 1/2" pipe for the domestic water just below the riser. There should be a dedicated line for the domestic water from the main city line and there is no backflow prevention or double check valves on any portion of the water pipes. This project would provide for installing a new 2 1/2" domestic water line from the city main water line in the street to the building including a backflow prevention device between the main and the building. A hot tap, traffic control and asphalt concrete road patching is included.

Project Index #: 0266EXT3 ROOF REPLACEMENT **Construction cost:** \$200,000

The rolled asphalt roof on this building was in poor condition at the time of the survey. Efforts have been made to repair leaks many times, but the water proofing ability of the roofing is at the end of its useful life. It is recommended that this building be re-roofed in the next 1-2 years with a new single ply roofing membrane and new underlayments. This estimate includes removal and disposal of the old roofing.

This project or a portion thereof was previously recommended in the FCA reports dated 02/10/2005 and 02/05/2008. It has been amended accordingly to reflect conditions observed during the most recent survey date of 06/05/2013.

RELOCATE SPRINKLER HEADS

Numerous areas in the facility have inadequate sprinkler coverage due to partition wall construction and relocation, which has cut-off many sprinkler heads. This project would re-design the system and correct the coverage deficiencies. This project or a portion there of was previously recommended in the FCA reports dated 02/10/2005 and 02/05/2008. It has been amended accordingly to reflect conditions observed during the most recent survey date of 06/05/2013.

FIRE CAULK PENETRATIONS

Numerous locations throughout the building have piping, conduits and other penetrations through fire rated assemblies. This project would provide fire caulking and/or Intumescent and listed sealants to return the assemblies to full rating. This project or a portion thereof was previously recommended in the FCA reports dated 02/10/2005 and 02/05/2008. It has been amended accordingly to reflect conditions observed during the most recent survey date of 6/5/2013.

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ELEVATOR MACHINE ROOM VENTILATION

The elevator Machine Room has solid state elevator equipment located inside. The IBC 2012, Chapter 30, Section 3006.2 requires ventilation of the elevator Machine Room. This project will provide for a ventilation system for this room. It is recommended that this work be done at the same time as the HVAC upgrades.

This project or a portion there of was previously recommended in the FCA reports dated 02/10/2005 and 02/05/2008. It has been amended accordingly to reflect conditions observed during the most recent survey date of 06/05/2013.

DUAL LEVEL DRINKING FOUNTAIN INSTALLATION

This building contains drinking fountains on each floor. The drinking fountains on the 1st and 2nd floors have been upgraded to meet current requirements, but the 3rd floor is still without a compliant drinking fountain. The 2012 IBC Section 1109.5 states where drinking fountains are provided on an exterior site, on a floor or within a secured area, no fewer than two drinking fountains shall be provided. One shall comply with the requirements for people who use a wheelchair and one shall comply with the requirements for standing persons. This project would provide funding for the purchase and installation of two drinking fountains on the 3rd floor to meet the ADA requirements.

This project or a portion thereof was previously recommended in the FCA reports dated 02/10/2005 and 02/05/2008. It has been amended accordingly to reflect conditions observed during the most recent survey date of 6/5/2013.

EMPLOYEE BREAK ROOM CONVERSION

There is a portion of the existing garage located along the north side of the building which has been converted to an employee break room. The ceiling in this space is less than the required 7'-6" minimum ceiling height for habitable spaces. In addition, the corridor serving the space appears to not meet the requirements for egress. The only way into or out of the space is through a narrow corridor. This project recommends abandoning the use of this space as an employee break room and converting it into a storage room. Signage indicating the use of the space for storage is suggested. This project or a portion thereof was previously recommended in the FCA report dated 02/05/2008. It has been amended accordingly to reflect conditions observed during the most recent survey date of 6/5/2013.

FLOORING REPLACEMENT

The VCT (vinyl composite tile) and carpet in the building are damaged and reaching the end of their useful life. It is recommended that the flooring be replaced. This project would provide for removal and disposal of the existing flooring and installation of new 12x12 VCT with a 6" base and heavy duty commercial grade carpet in the next 2-3 years.

BREAK ROOM REMODEL

The kitchenettes and associated cabinets in the employee break rooms are original to the building. The quality of construction and installation were inadequate for the high usage at this facility, and the cabinets and countertops are delaminating and failing. This project recommends the replacement of the existing kitchen countertops, cabinets, and associated equipment with heavy duty, quality components. The cabinets should be finished inside and outside with a melamine or similar finish which encapsulates the door, frame, and shelving. The countertops should be constructed of a highly durable product, such as stainless steel, over a moisture resistant underlayment to minimize swelling and damage from water exposure. ADA compliance according to NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the ADA Standards For Accessible Design should be incorporated into the design such as providing an accessible sink. The estimate is for remodeling 3 break rooms, one on each floor.

Project Index #: 0266HVA2

Project Index #: 0266ADA3

\$25,000

\$2,000

0266SFT3

\$1,000

0266INT3

\$168,000

0266ADA4

\$30,000

Construction cost:

Construction cost:

Project Index #:

Project Index #:

Project Index #:

Construction cost:

Construction cost:

Construction cost:

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BUILDING / SITE ADA IMPROVEMENTS

The existing ADA accessible parking curb cuts are not completely ADA compliant. The restrooms are not 100% ADA compliant and the building is lacking ADA compliant signage. This project would provide for removing and replacing the non-compliant ADA curb cuts, minor restroom modifications including new and / or relocated fixtures, and a sign package for the entire facility. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the ADA Standards For Accessible Design were used as a reference for this project.

FIRE ALARM INSTALLATION

This building is equipped with an automatic fire detection and alarm system that is the original system and should be scheduled for replacement. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. When completed, the new system will provide smoke detection, horns and strobes throughout the facility in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

Project Index #: 0266INT2 INTERIOR FINISHES **Construction cost:** \$141,375

The interior finishes are in poor condition. It is recommended that the interior walls and ceilings be painted at least once in the next 1-2 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure. Prior to painting, all surfaces should be repaired and prepped. An epoxy-based paint should be utilized in wet areas for durability.

This project or a portion there of was previously recommended in the FCA reports dated 02/10/2005 and 02/05/2008. It has been amended accordingly to reflect conditions observed during the most recent survey date of 06/05/2013.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects:

Project Index #: 0266ADA6

\$30,000

0266SFT8

\$113,100

0266ADA5

\$25,000

0266INT4

\$2,250

0266EXT2

\$6,000

Construction cost:

Project Index #:

Project Index #:

Project Index #:

Project Index #:

Construction cost:

Construction cost:

Construction cost:

Construction cost:

Necessary - Not Yet Critical Two to Four Years

ELEVATOR EQUIPMENT UPGRADE

The elevators were built and installed in 1975 and require periodic repairs. However, they are currently due for a complete refurbishment of all mechanical parts to maintain the elevator in a safe working order including the hydraulic motors. They are also not ADA compliant and will require new signage, call buttons, two-way communication and any other necessary equipment to comply with the ADA. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the

most current version of the ADA Standards For Accessible Design were used as a reference for this project.

JANITOR CLOSET FRP

There are three Janitor's closets that are in need of wall protection. This project would provide for the installation of a

fiberglass reinforced panel (FRP) to be installed on the walls adjacent to the mop sink.

EXTERIOR INSULATION & FINISH SYSTEM REPAIRS

The EIFS (Exterior Insulation and Finish System) near the South building exit and at the column areas is showing signs of damage, cracking and appears to be failing. This project will provide for repair and painting of the damaged areas. This project or a portion there of was previously recommended in the FCA reports dated 02/10/2005 and 02/05/2008. It has been amended accordingly to reflect conditions observed during the most recent survey date of 06/05/2013.

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Project Index #: 0266EXT4
EXTERIOR FINISHES Construction cost: \$141,375

It is important to maintain the finish, weather resistance and appearance of the building. This project would provide funding to protect the exterior of the building excluding the roof. Included in the cost is painting the metal paneling and stucco and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended that the building be painted in the next 2-3 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure. This project or a portion thereof was previously recommended in the FCA report dated 02/05/2008. It has been amended accordingly to reflect conditions observed during the most recent survey date of 6/5/2013.

ROOF DRAIN DOWNSPOUT MODIFICATIONS

The roof drain downspouts currently terminate within inches of the building with no continuous drainage away from the foundation. This is causing the water to pool next to the foundation and damage the foundation and the sloped concrete and stone walls at the base of the building. Water also flows across the concrete sidewalks causing damage to the concrete and creating a potential slipping hazard. This project would provide for the extension of the roof drains from the downspouts to approximately 5'-0" away from the perimeter of the building to prevent pooling and damage to the building.

This project or a portion thereof was previously recommended in the FCA report dated 02/05/2008. It has been amended accordingly to reflect conditions observed during the most recent survey date of 6/5/2013.

Project Index #: 0266ELE3
ELECTRICAL UPGRADE Construction cost: \$565,500

This building was constructed before the high demand for electrical services were needed for computers and other electrical devices. As time has progressed, the buildings electrical demand and system has changed. It is utilized to its current maximum potential. The electrical panels are at their limit and the breakers trip often. The receptacles are in the floor. There are not enough receptacles and the floor mounted system is old and problematic. It is recommended the entire system be upgraded to meet the evolving needs of the building including switchgear, interior transformers, panel boxes, breakers, wiring and receptacles.

This project or a portion thereof was previously recommended in the FCA report dated 02/05/2008. It has been amended accordingly to reflect conditions observed during the most recent survey date of 06/05/2013.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$660,000

Long-Term Needs Four to Ten Years

Project Index #: 0266EXT1
EXTERIOR METAL WALL PANEL REPLACEMENT Construction cost: \$660,000

The exterior is a dark anodized enamel aluminum wall panel system and is faded due to weather. The dark color increases summertime heat gain, which puts a strain on the HVAC system. There is also discoloration on the south side of the building below the state seal. This project recommends replacing it with a lighter metal wall panel system for increased energy efficiency. Includes removal and disposal of the old system.

This project or a portion there of was previously recommended in the FCA reports dated 02/10/2005 and 02/05/2008. It has been amended accordingly to reflect conditions observed during the most recent survey date of 06/05/2013.

0266SIT3

\$5,000

Project Index #:

Construction cost:

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BRADLEY BUILDING

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PROJECT CONSTRUCTION COST TOTALS SUMMARY

Priority Class 1: \$2,059,000
Priority Class 2: \$745,000
Priority Class 3: \$660,000

Grand Total: \$3,464,000

Project Construction Cost per Square Foot: \$123

Total Facility Replacement Construction Cost: \$7,776,000

Facility Replacement Construction Cost per Square Foot: \$275

BUILDING INFORMATION:

Gross Area (square feet): 28,275

Year Constructed: 1975

Exterior Finish 1: 90 % Metal Siding

Exterior Finish 2: 10 % Glazing

Number of Levels (Floors): 3 Basement? NO

IBC Occupancy Type 1: 100 % B
IBC Occupancy Type 2: %

Construction Type: Concrete & Steel

IBC Construction Type: IV

% Suppressed: 100 %

FCNI: 45%

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 341.201 by the State Public Works Board and should be utilized as a planning level document.

REPORT DEVELOPMENT:

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



Bradley Building – East Sahara Site – FCA Building #0266 Description: Roof mounted cooling tower.



Bradley Building – East Sahara Site – FCA Building #0266 Description: Non ADA compliant curb cut.



Bradley Building – East Sahara Site – FCA Building #0266 Description: Clad metal wall panels in need of painting or replacement.



Bradley Building – East Sahara Site – FCA Building #0266 Description: Water main.



Bradley Building – East Sahara Site – FCA Building #0266 Description: Typical mechanical space.



Bradley Building – East Sahara Site – FCA Building #0266 Description: Missing HVAC controls.