State of Nevada Department of Agriculture Agriculture Office Facility Condition Analysis

AGRICULTURE OFFICE

2300 McLeod Street Las Vegas, Nevada 89102

Site Number: 9818, Building Numbers: 0418 & 1900 STATE OF NEVADA PUBLIC WORKS BOARD FACILITY CONDITION ANALYSIS



Report Printed in March 2008

State of Nevada Department of Agriculture Agriculture Office Facility Condition Analysis

The Facility Condition Analysis Program was created under the authority found in NRS 341.201. The State Public Works Board 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 SPWB 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 Board to assess the needs of the Building and/or Site and to help support future requests for 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 .60 or 60% 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: 9818		Facility Condition Needs Index Report			Cost to	Cost to	Cost to	Total Cost	Cost to		
Index #	Building Name		Sq. Feet	Yr. Buil	Survey Date	Repair: P1	Repair: P2	Repair: P3	to Repair	Replace	FCNI
1900	AGRICULTURE GARAC	Æ	500	1974	2/5/2008	\$0	\$0	\$70,870	\$70,870	\$100,000	71%
	2300 McLeod St.	Las Vegas									
0418	AGRICULTURE OFFICE		7087	1974	2/5/2008	\$195,240	\$674,935	\$288,870	\$1,159,045	\$2,480,450	47%
	2300 McLeod St.	Las Vegas									
9818	LAS VEGAS AGRICULT	URE SITE		0	3/27/2008	\$0	\$0	\$0			0%
	2300 McLeod St.	Las Vegas									
		Report Totals:	7,58	7		\$195,240	\$674,935	\$359,740	\$1,229,915	\$2,580,450	48%

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Building Name	Index #	
LAS VEGAS AGRICULTURE SITE	9818	No Current Projects
AGRICULTURE GARAGE	1900	
AGRICULTURE OFFICE	0418	

State of Nevada / Agriculture AGRICULTURE GARAGE SPWB Facility Condition Analysis - 1900 Survey Date: 2/5/2008

AGRICULTURE GARAGE

BUILDING REPORT

The Agriculture Garage is a wood framed structure on a concrete slab-on-grade with a single-ply roofing system. It is primarily used for storage and is located to the north of the Agriculture Office. It is in fair condition.

PRIORITY CLASS 3 PROJECTS	Total Construction Cost for Priority 3 Projects	: \$70,870
Long-Term Needs	Four to Ten Years	

EXTERIOR FINISHES

Project Index #: 1900EXT2 Construction Cost \$70,870

It is important to maintain the finish, weather resistance and appearance of the building. This project recommends work 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. It is recommended that this project be implemented in the next 4 to 5 years and is recommended on a cyclical basis based on environmental conditions.

This project or a portion there of was previously recommended in the FCA report dated 03/14/2000. It has been amended accordingly to reflect conditions observed during the most recent survey date of 02/05/2008.

BUILDING INFORMATION:

Gross Area (square feet):	500
Year Constructed:	1974
Exterior Finish 1:	100 % Painted CMU
Exterior Finish 2:	%
Number of Levels (Floors):	1 Basement? No
IBC Occupancy Type 1:	100 % U
IBC Occupancy Type 2:	%
Construction Type:	Wood Framing
IBC Construction Type:	V-B

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$0	Project Construction Cost per Square Foot:	\$141.74
Priority Class 2:	\$0	Total Facility Replacement Construction Cost:	\$100,000
Priority Class 3:	\$70,870	Facility Replacement Cost per Square Foot:	\$200
Grand Total:	\$70,870	FCNI:	71%

State of Nevada / Agriculture AGRICULTURE OFFICE SPWB Facility Condition Analysis - 0418 Survey Date: 2/5/2008

AGRICULTURE OFFICE BUILDING REPORT

The Agriculture Office is a concrete masonry unit and steel framed structure with a single-ply roofing system. It is on a concrete slab-on-grade foundation. It contains offices, lab areas, a shop and restrooms. There is an ADA compliant unisex restroom. There was an addition of 1.365 square feet which was completed under CIP #99-C05. This portion of the office is in good condition. The remainder of the facility is in fair condition.

PRIORITY CLASS 1 PROJECTS

Total Construction Cost for Priority 1 Projects: \$195,240 **Immediate to Two Years**

Currently Critical

Project Index #: 0418ADA3 **Construction Cost** \$35,000

ADA PARKING UPGRADE

The Americans with Disabilities Act (ADA) provides for accessibility to sites and services for people with physical limitations. The main entrance to the building has ADA parking stalls which do not entirely meet the requirements of the code. This project provides funding to bring the existing ADA parking area up to code including a compliant path of travel from the spaces to the building entrance, updated signage and any other necessary upgrades. IBC - 2006, ICC/ANSI A117.1 - 2003 and Americans with Disabilities Act Accessibility Guidelines (ADAAG) - 2003 were referenced for this project.

This project or a portion there of was previously recommended in the FCA report dated 03/14/2000. It has been amended accordingly to reflect conditions observed during the most recent survey date of 02/05/2008.

ELECTRICAL UPGRADE

This building was constructed before the high demand for electrical services were needed for computers and other electrical devices. As time has progressed, the building's electrical demand and system has changed. It is utilized to its current maximum potential. The electrical panels and receptacles are at their limit. It is recommended the entire system be upgraded to meet the evolving needs of the building including three-phase power.

This project or a portion there of was previously recommended in the FCA report dated 03/14/2000. It has been amended accordingly to reflect conditions observed during the most recent survey date of 02/05/2008.

INSTALL SEISMIC GAS SHUT-OFF VALVE

This project would provide for the installation of a seismic gas shut-off valve on the main gas service piping just prior to entering the building. 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 energy management 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 brace.

PLUMBING / WASTE LINE ASSESSMENT

The plumbing / waste lines are original to the building and major failures are beginning to surface including broken waste lines and corroded flanges. This project recommends that a licensed plumbing contractor perform a camera scope to assess the condition of the piping especially the waste lines. Future projects would be based on this report.

REMOVE PALM TREES

There are numerous palm trees along the perimeter of the paved parking along the north side of the site. They are damaging the concrete curbing and are in need of removal. This project would provide for the removal of the palm trees and repair of the damaged curbing.

0418ELE2

0418SFT4

0418PLM2

0418SIT4

\$5,000

\$3,500

\$141,740

Project Index #:

Project Index #:

Project Index #:

Project Index #:

Construction Cost

Construction Cost

Construction Cost

Construction Cost \$10,000

PRIORITY CLASS 2 PROJECTS

Necessary - Not Yet Critical Two to Four Years

4" BACKFLOW ASSEMBLY, VAULT, AND POWER

State Health Law (NAC 445A.67185) and the International Plumbing Code (IPC Section 608) 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 can be discharged or drawn into the public water system as a result of back siphonage or backpressure. There is no backflow prevention on domestic water lines and fire sprinkler or standpipe lines. This project would provide funding for installation of a 4" reduced pressure backflow prevention assembly, required fittings, a vault below grade, and allowance for 200 feet of 1" conduit to provide power for the required heat source inside the vault. This estimate includes two assemblies, one for the domestic water and one for the fire line.

CARPET REPLACEMENT

The carpet in the Supervisor/ Metrology's office is showing signs of extreme wear. It is recommended that the carpet be replaced with heavy duty commercial grade carpet in the next two to three years.

This project or a portion there of was previously recommended in the FCA report dated 03/14/2000. It has been amended accordingly to reflect conditions observed during the most recent survey date of 02/05/2008.

CARPORT STRUCTURE

There are approximately 10 state vehicles parked in the rear parking lot at any given time. Many of these vehicles carry sensitive measuring and testing equipment which can deteriorate quickly due to exposure to the elements. This project would provide a steel carport capable of protecting 10 vehicles to be built on the North side of the site.

INSTALL ENERGY MANAGEMENT SYSTEM

This project recommends the installation of an Energy Management System (EMS) for the building. This system will monitor and control the heating, ventilation, air conditioning and lighting equipment through a central computer system. Electronic sensors will be installed on each piece of equipment which will feed information into the computer system. The maintenance staff can then control and monitor the equipment remotely which will significantly lower energy costs. Along with electricity, gas and water meters, this system will provide detailed reports on energy consumption allowing the maintenance staff to analyze and customize the energy used by the facility.

INSULATE LABORATORY

The Metrology laboratory on the North side of the building was built in an existing garage that does not have proper insulation. The heating and cooling is not efficient in the room, the sensitive measuring and testing equipment is affected by the inconsistent temperatures and the staff working in the lab do not have a comfortable work environment. This project would provide for the furring of the interior side of the CMU, board insulation, 5/8" Type X gypsum board, paint and ceiling insulation to bring the room up to the appropriate "R" value to match the rest of the building.

INTERIOR FINISHES

The interior finishes are in fair condition. It is recommended that the interior walls and ceilings be painted at least once in the next two to three years and every 5 to 7 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.

This project or a portion there of was previously recommended in the FCA report dated 03/14/2000. It has been amended accordingly to reflect conditions observed during the most recent survey date of 02/05/2008.

Project Index #: 0418ENR1

0418SIT3

\$200,000

0418ENR2

0418INT3

\$35,435

\$65,000

Project Index #:

Project Index #:

Project Index #:

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Construction Cost

Construction Cost

Construction Cost

Construction Cost \$60,000

Project Index #: 0418PLM3 Construction Cost \$50,000

Project Index #: 0418INT4 Construction Cost \$3,000

Total Construction Cost for Priority 2 Projects: \$674,935

LANDSCAPE SPRINKLER REPLACEMENT

The landscape sprinkler system is old and consists of at least three different types of piping. The existing copper, PVC and galvanized iron piping has been spliced together over the years and is a constant maintenance problem. This project would provide for the replacement of the entire sprinkler system including piping, sprinkler heads, check valves and a new backflow preventer. The estimate includes disposal of the existing materials. An allowance for 300 feet of 2" schedule 40 PVC pipe, excavation and backfill is included with this estimate.

LIGHTING UPGRADE

The existing lighting fixtures in the original building are the older fluorescent type, and are not energy efficient. This project will upgrade fixtures to T-8 lamps with electronic ballasts, resulting in increased efficiency and reduced costs associated with illumination. Any electrical wiring upgrades are not included in this estimate. The estimate is based on quotes recently acquired by the staff for this project.

This project or a portion there of was previously recommended in the FCA report dated 03/14/2000. It has been amended accordingly to reflect conditions observed during the most recent survey date of 02/05/2008.

OVERHEAD DOOR REPLACEMENT

There is a 16'x14' overhead coiling door which is damaged and does not function properly. It is original to the building and should be scheduled for replacement. This project would provide for the removal and disposal of the manually operated overhead coiling door and replacement with a motorized door.

REPLACE ROOFTOP HVAC UNITS

The heating and cooling to this building is provided by several rooftop packaged units of which 3 appear to be original equipment. They are in poor condition and have reached the end of their expected life. This project would provide for the installation of 3 new rooftop packaged HVAC units including connections to existing utilities. Removal and disposal of the old units is included in this estimate. This project is recommended to be undertaken at the same time as the energy management system installation.

REPLACE STOREFRONT ENTRANCE SYSTEMS

There are two separate storefront glazing systems that are showing signs of failure due to broken seals and general wear and tear. The storefront systems are an exterior application and are exposed to weather extremes. This project would provide removal and disposal of the (2) 15' wide storefronts and purchase and installation of two new systems including hardware.

RESTROOM REMODEL

There are several restrooms in this building. This project would provide for a complete remodel and rehabilitation of one Men and one Women restroom in the original building including fixtures, casework, floor and wall finishes and hardware. This project is recommended to be completed after the PLUMBING / WASTE LINE ASSESSMENT project has determined the state of the plumbing system. This estimate does not include any funds for under slab plumbing and / or waste line replacement.

RESURFACE CONCRETE FLOOR

The painted concrete floor in the East wing laboratory is worn and cracked and should be resurfaced. This project provides for cleaning and repairing the existing floor, applying a bonding agent, pouring a new polymer surface and applying an appropriate finish product.

Project Index #:0418SIT6Construction Cost\$20,000

Project Index #:0418ELE1Construction Cost\$25,000

Project Index #: 0418HVA1 Construction Cost \$54,000

0418EXT5

0418EXT4

0418INT7

\$25,000

\$30.000

\$6,000

Project Index #:

Project Index #:

Construction Cost

Construction Cost

Project Index #: 0418INT6 Construction Cost \$60,000

Project Index #:

Construction Cost

WATER HEATER REPLACEMENT

The average life span of a water heater is eight to ten years. The existing 40 gallon gas water heater in the building has reached the end of its expected life and is not energy efficient. This project would provide for the removal and disposal of the old water heater and installation of a new 40 gallon gas water heater.

WINDOW REPLACEMENT

The windows in the original building are original, single pane construction in a metal frame. These older windows are drafty and not energy efficient. Several of the windows also have a metal wall panel below them that should be removed and replaced with a framed and insulated wall to match the adjacent walls. This project recommends replacing the windows with dual pane, higher efficiency units. This estimate is for the replacement of 20 units and does not include the windows in the storefront entrance systems which are addressed in a separate project.

PRIORITY CLASS 3 PROJECTS	Total Construction Cost for Priority 3 Projects:	\$288,870
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Four to Ten Years

Long-Term Needs

EXTERIOR FINISHES

It is important to maintain the finish, weather resistance and appearance of the building. This project recommends work 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. It is recommended that this project be implemented in the next 4 to 5 years and is recommended on a cyclical basis based on environmental conditions.

This project or a portion there of was previously recommended in the FCA report dated 03/14/2000. It has been amended accordingly to reflect conditions observed during the most recent survey date of 02/05/2008.

SECURITY SYSTEM

The facility currently does not have a security system installed. Access on or off of the property is uncontrolled and there have been security problems including the homeless inhabiting areas of the property. This project recommends card-access control, security fencing, security cameras and additional site lighting be installed to remedy this problem.

SLURRY SEAL ASPHALT PAVING

It is important to maintain the asphalt concrete paving on the site. This project would provide for minor crack filling and slurry sealing of the paving site wide including loading zones, access roads and parking areas. Striping is included in this estimate. This project should be scheduled on a 5 year cyclical basis to maintain the integrity of the paving and prevent premature failure. 20,000 square feet of asphalt area was used to generate this estimate.

Project Index #:0418EXT3Construction Cost\$40,000

0418PLM1

0418EXT2

0418SEC1

\$200,000

\$70.870

\$1,500

Project Index #:

Construction Cost

Project Index #:

Project Index #:

Construction Cost

Construction Cost

Project Index #: 0418SIT5 Construction Cost \$18,000

BUILDING INFORMATION:

Gross Area (square feet):	7,087			
Year Constructed:	1974			
Exterior Finish 1:	90 % Painted CMU			
Exterior Finish 2:	10 % Painted Stucco / EIFS			
Number of Levels (Floors):	1 Basement? No			
IBC Occupancy Type 1:	80 % B			
IBC Occupancy Type 2:	20 % S-1			
Construction Type:	Concrete Masonry Units and Steel			
IBC Construction Type:	V-A			

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$195,240	Project Construction Cost per Square Foot:	\$163.55
Priority Class 2:	\$674,935	Total Facility Replacement Construction Cost:	\$2,480,000
Priority Class 3:	\$288,870	Facility Replacement Cost per Square Foot:	\$350
Grand Total:	\$1,159,045	FCNI:	47%

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

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



Agriculture - Site #9818 Description: Public parking area.



Agriculture - Site #9818 Description: Damaged perimeter fencing.



Agriculture Office - Building #0418 Description: Exterior of the building.



Agriculture Office - Building #0418 Description: Restroom drain repair.



Agriculture Office - Building #0418 Description: Interior of the office area.



Agriculture Office - Building #0418 Description: Single pane window system.



Agriculture Office - Building #0418 Description: Roof top equipment.



Agriculture Office - Building #0418 Description: Lab area.



Agriculture Site - Site #9818 Description: Curb damage from palm tree.



Agriculture Garage - Building #1900 Description: Exterior of the building.