

State of Nevada
Department of Cultural Affairs
Division of Museums and History
Nevada Historical Society
Facility Condition Analysis

NEVADA HISTORICAL SOCIETY

1650 North Virginia Street
Reno, Nevada 89503

Site Number: 9856
STATE OF NEVADA PUBLIC WORKS BOARD
FACILITY CONDITION ANALYSIS



Report Printed in March 2011

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Department of Cultural Affairs
Division of Museums and History
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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 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: 9856

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 |
|----------------------------|----------------------------------------------------------------|---------------|-----------|-------------|--------------------|--------------------|--------------------|----------------------|--------------------|------------|
| 0401 | NEVADA HISTORICAL SOCIETY 1650 N. Virginia St. Reno | 22200 | 1968 | 1/25/2011 | \$519,350 | \$323,000 | \$111,000 | \$953,350 | \$6,660,000 | 14% |
| 9856 | NEVADA HISTORICAL SOCIETY SITE 1650 N. Virginia Street Reno | | 0 | 1/25/2011 | \$150,000 | \$0 | \$0 | \$150,000 | | 0% |
| Report Totals.....: | | <u>22,200</u> | | | <u>\$669,350</u> | <u>\$323,000</u> | <u>\$111,000</u> | <u>\$1,103,350</u> | <u>\$6,660,000</u> | 17% |

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| NEVADA HISTORICAL SOCIETY | 0401 |

**NEVADA HISTORICAL SOCIETY SITE
BUILDING REPORT**

The Nevada Historical Society site is located on the campus of the University of Nevada-Reno. The building footprint and building is on a 99 year lease with UNR and all parking areas are maintained by UNR. The ADA accessible parking, route of travel from the parking and the public bus stop on North Virginia Street is not fully ADA compliant. These items are under the purview of UNR and are an integral part of the public access / route to the Historical Society building and should be addressed.

PRIORITY CLASS 1 PROJECTS

Total Construction Cost for Priority 1 Projects: \$150,000

Currently Critical

Immediate to Two Years

Project Index #: 9856ADA1

Construction Cost \$150,000

ADA ACCESS / ROUTE OF TRAVEL UPGRADES

The Americans with Disabilities Act (ADA) provides for accessibility to sites and services for people with physical and mental limitations. There are numerous areas between the sidewalk and the main entry doors that do not comply with ADA guidelines. The sidewalks, stairway and entry landing are not compliant and should be scheduled for repairs. Due to the slope at the entry landing, the adjacent ramps will require modifications to meet the new elevation of the landing. The stairway will need to be completely rebuilt. If the handrails are re-used, proper returns will need to be retrofitted onto them. Directional signage from the parking spaces to the entry should be included as well. The 2006 IBC, ICC/ANSI A117.1 - 2003 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

There are deficiencies in the accessible route from the bus stop and the parking spaces to the entry stairs and accessible ramp. These accessible elements are under the purview of UNR and should be addressed to provide the public with an ADA accessible route from the parking, bus stop and entrance into the building.

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

| | |
|--------------------------|------------------|
| Priority Class 1: | \$150,000 |
| Priority Class 2: | \$0 |
| Priority Class 3: | \$0 |
| Grand Total: | \$150,000 |

**NEVADA HISTORICAL SOCIETY
BUILDING REPORT**

The Nevada Historical Society building provides archive and display space for records and artifacts chronicling the history of Reno and the surrounding areas. The original building was constructed in 1968 and is tilt-up concrete and steel construction with a single-ply roofing system and was approximately 12,300 square feet. The addition was built in 1981 and is also tilt-up concrete and steel with a single-ply roofing system but is has a painted exterior insulation and finish system (EIFS) and is about 9,900 square feet. The HVAC system consists of 5 roof mounted packaged units ducted throughout the facility. The fire alarm system has been upgraded and the existing Halon fire suppression system, (located in the 1981 addition only) is scheduled for replacement with a new double interlock fire suppression system throughout the entire building under CIP 09-S03-4.

The building is mostly ADA compliant except for the south entrance which has some non-ADA compliant cross slope and landing issues which will be addressed in the report. The facility is in excellent shape and is well maintained.

PRIORITY CLASS 1 PROJECTS

Total Construction Cost for Priority 1 Projects: \$519,350

Currently Critical

Immediate to Two Years

ADA SIGNAGE

**Project Index #: 0401ADA2
Construction Cost \$1,200**

Americans with Disabilities Act (ADA) regulations pertaining to building access has established building signage criteria for permanent spaces in buildings. The criteria includes: sign mounting heights and locations; character heights and proportions; raised and Braille characters/pictograms; and sign contrast and finish. The signage in this facility does not comply with this criteria. It is recommended that applicable signage be installed where required. NRS 338.180, IBC - 2006, ICC/ANSI A117.1 - 2003 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

EXIT SIGN UPGRADES

**Project Index #: 0401SFT4
Construction Cost \$9,900**

The existing exit signs in the building are older types and should be replaced with new self-illuminated or LED style signs with battery-backed internal systems. The estimate is based on purchasing and installing 22 exit signs at \$450 each. IBC - 2006 Chapter 10 was referenced for this project.

FIRE SUPPRESSION SYSTEM REPLACEMENT

**Project Index #: 0401SFT3
Construction Cost \$250,000**

There is a Halon automatic fire suppression system in a portion of the building. This system is outdated and the chemical it uses has been phased out. This project recommends replacing the existing system with a double-interlock pre-action fire suppression system and implementing a comprehensive testing and service schedule. Removal and disposal of the existing system is included in the estimate.

HIGH DENSITY STORAGE SYSTEM REPAIRS

**Project Index #: 0401SFT6
Construction Cost \$25,000**

The existing high density storage system in the archive area is not functioning properly and is a safety hazard. The electrical and mechanical elements of the system are aged, compromising the safety of the staff and volunteers. The system has a safety feature which prevents the shelves from moving when a person is in the aisle. The electronics and sensors for this safety feature are failing and pose a very dangerous situation for a person working in the aisles. There are also shelves at the ends of the system that do not open fully. It is recommended to refurbish the entire storage system. The estimate includes removal and disposal of existing electrical and mechanical parts and purchase and installation of new parts to restore the system to a safe and fully functioning system.

Project Index #: 0401ELE1
Construction Cost \$250

PROVIDE CLEARANCE AT ELECTRICAL PANELS

There are electrical panels in the building which do not have proper clear floor space around them. The 2006 IFC section 605.3 states that, "A working space of not less than 30 inches in width, 36 inches in depth and 78 inches in height shall be provided in front of electrical service equipment. Where the electrical service equipment is wider than 30 inches, the working space shall not be less than the width of the equipment. No storage of any materials shall be located within the designated working space." This project would provide funds to relocate the janitors equipment and other items currently blocking the working space.

Project Index #: 0401SFT5
Construction Cost \$3,500

ROOF HATCH REPLACEMENT

The roof hatch is original to the building and has reached the end of its useful life. The compression spring operators do not function properly, the latches and handles are worn and the seals and flashing have deteriorated. A faulty roof hatch is a safety hazard to anyone accessing the roof. This project would provide for removal and disposal of the existing roof hatch and purchase and installation of a new roof hatch.

Project Index #: 0401SEC1
Construction Cost \$222,000

SECURITY SYSTEM UPGRADE

The buildings security system is limited and outdated and the intercom system through the telephones does not meet staff requirements. There are a few security cameras and alarmed doors, but this is not sufficient to protect the people, priceless artifacts, manuscripts, photographs and library collections in the building. The only intercom system is the speakerphones on the telephones. Staff noted that the speakers are not loud enough and they are not located in the most necessary areas. This project addresses upgrading the security and communications systems in the building.

Project Index #: 0401SFT2
Construction Cost \$7,500

STAIR LANDING INSTALLATION

There are a total of five exterior stairways coming out of the building, not including the one at the south side main entrance. Four of these stairways do not have a bottom landing. This does not comply with 2006 IBC Section 1009.4 which describes the requirements for landings at stairways including that the width and length of the landing shall not be less than the width of the stairway. The fifth stairway has a bottom landing that slopes towards the stairway and the building. This landing is on the east entrance and creates a situation where water pools up and freezes creating a slipping hazard. This project addresses installing four new landings designed to current code and removing and replacing the landing at the east entrance.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$323,000

Necessary - Not Yet Critical Two to Four Years

Project Index #: 0401EXT4
Construction Cost \$3,500

DOOR AWNING INSTALLATION

The exterior door on the east elevation is the main entrance for staff and volunteers. They must use this entrance to open the building and disable the alarm. During inclement weather, snow and ice builds up on and around the door and impedes its function. This makes it difficult and dangerous to get in and out of the building. It is recommended to retrofit the door with a metal awning to protect this entrance from the elements. The awning should span the full width of the concrete landing and include a gutter that ties into the adjacent downspout. This project also includes relocating the exterior light from its current location to a position below the awning.

Project Index #: 0401SFT7
Construction Cost \$17,000

EXPLOSION-PROOF REFRIGERATOR/ FREEZER

This project would provide for the purchase and installation of two explosion-proof refrigerator/ freezer units. The existing unit has reached capacity and staff reported a need for two additional units. These units protect the chemicals or substances stored inside the unit from explosions outside the unit as well as protecting the exterior environment from explosions inside the unit. The units must be hardwired to the electrical system to prevent a short or overheating a coil which could ignite a flammable or explosive substance stored inside. Additional costs are included for an electrician to hard-wire the units to the electrical system.

Project Index #: 0401EXT5

Construction Cost \$5,000

EXTERIOR DOOR REPLACEMENT

The exterior metal door assembly on the south side public entrance is damaged from age and general wear and tear and has reached the end of its expected life. This project would provide for the replacement of the south double door entry assembly with new metal doors, frames and hardware. Removal and disposal of the existing doors is included in this estimate.

Project Index #: 0401INT2

Construction Cost \$49,500

FLOORING REPAIRS

The painted and sealed concrete floor in the addition portion of the building is damaged and reaching the end of its useful life. It is recommended to refurbish the floor by stripping the existing finish, repairing any cracks, painting and sealing in order to extend its useful life. This project would provide for refurbishing the floor in the next 2-3 years.

Project Index #: 0401INT4

Construction Cost \$125,000

HIGH DENSITY STORAGE SYSTEM INSTALLATION

The static shelving in the archive area has reached capacity and will no longer be able to meet storage demands. Leased space and other offsite storage space has already been utilized to handle the overflow. In order to maintain control and security of the artifacts it is recommended to replace the existing shelving with a new high density storage system as opposed to utilizing the offsite storage facilities. The new system will store two to three times as much material in the same amount of space. The estimate includes removal and disposal of existing static shelving and purchase and installation of a high density storage system.

Project Index #: 0401INT1

Construction Cost \$111,000

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 3-4 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.

Project Index #: 0401INT3

Construction Cost \$1,000

JANITORS CLOSET REPAIRS

The mop sink in the Janitors Closet is mounted adjacent to gypsum board and showing signs of water damage. This project would provide fiberglass reinforced panels (FRP) to be installed on the walls adjacent to the mop sink. The FRP shall extend two feet beyond the edge of the sink and a minimum of 54" above the floor finish.

Project Index #: 0401ENR2

Construction Cost \$8,500

LIGHTING UPGRADE

There are still some older fluorescent type lighting fixtures in the building including T-12's and older T-8's that are not energy efficient. This project will upgrade these fixtures to higher efficiency units with a longer life cycle. F28 T-8 lamps with electronic ballasts are suggested. Occupancy sensors will be installed in restrooms, conference rooms and other low occupancy areas for additional savings. Any electrical wiring upgrades are not included in this estimate.

Project Index #: 0401PLM1

Construction Cost \$2,500

WATER HEATER REPLACEMENT

There is a 30 gallon electric water heater in the building. The average life span of a water heater is eight to ten years. With the passage of time and constant use, this unit is showing signs of wear and should be scheduled for replacement in the next 2-3 years. It is recommended that a new on-demand electric water heater be installed. Removal and disposal of the existing equipment is included in this estimate.

PRIORITY CLASS 3 PROJECTS

Total Construction Cost for Priority 3 Projects: \$111,000

Long-Term Needs

Four to Ten Years

Project Index #: 0401EXT3

Construction Cost \$111,000

EXTERIOR FINISHES

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 power washing, priming and painting and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended that the building be painted in the next 8-10 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

BUILDING INFORMATION:

Gross Area (square feet): 22,200
Year Constructed: 1968
Exterior Finish 1: 50 % Tilt-Up Concrete
Exterior Finish 2: 50 % Painted Stucco / EIFS
Number of Levels (Floors): 1 Basement? No
IBC Occupancy Type 1: 50 % B
IBC Occupancy Type 2: 50 % A-3
Construction Type: Tilt-up Concrete
IBC Construction Type: I-B
Percent Fire Supressed: 40 %

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

| | | | |
|--------------------------|------------------|------------------------------------------------------|--------------------|
| Priority Class 1: | \$519,350 | Project Construction Cost per Square Foot: | \$42.94 |
| Priority Class 2: | \$323,000 | Total Facility Replacement Construction Cost: | \$6,660,000 |
| Priority Class 3: | \$111,000 | Facility Replacement Cost per Square Foot: | \$300 |
| Grand Total: | \$953,350 | FCNI: | 14% |

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 |



Nevada Historical Society - Building #0401
Description: Public entrance / exterior landing.



Nevada Historical Society - Building #0401
Description: Exit stairs in need of a landing.



Nevada Historical Society - Building #0401
Description: ADA accessible route non compliant.



Nevada Historical Society - Building #0401
Description: Typical artifact display area.



Nevada Historical Society - Building #0401
Description: Storage racks.



Nevada Historical Society - Building #0401
Description: Non compliant stairs and handrails.