

State of Nevada
Department of Administration
Public Works Division / Buildings & Grounds Section
Carson City Motor Pool
Facility Condition Analysis

CARSON CITY MOTOR POOL

750 East King Street
Carson City, Nevada 89701

Site Number: 9862
STATE OF NEVADA PUBLIC WORKS DIVISION
FACILITY CONDITION ANALYSIS



Report Printed in August 2012

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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.

Site number: 9862

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
0204	CARSON CITY MOTOR POOL 750 E. King St. Carson City	3987	1988	1/24/2012	\$75,987	\$137,731	\$0	\$213,718	\$1,196,100	18%
9862	CARSON CITY MOTOR POOL SITE 750 E. King St. Carson City		0	1/24/2012	\$2,500	\$20,092	\$0	\$22,592		0%
Report Totals.....:		<u>3,987</u>			<u>\$78,487</u>	<u>\$157,823</u>	<u>\$0</u>	<u>\$236,310</u>	<u>\$1,196,100</u>	<u>20%</u>

SPWD Facility Condition Analysis

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CARSON CITY MOTOR POOL SITE BUILDING REPORT

The Carson City Motor Pool site is situated on .82 acres and consists of one building which has a reception area, offices, vehicle repair bays, a wash bay, a fueling island and paved parking for State vehicles. It has city water and sewer, natural gas and electrical service. Backflow prevention is provided on domestic water and fire protection service lines. The site is completely fenced and is well maintained.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$2,500**
Currently Critical **Immediate to Two Years**

ADA PARKING SPACE

Project Index #: 9862ADA1
Construction Cost \$2,500

The Americans with Disabilities Act (ADA) provides for accessibility to sites and services for people with physical limitations. A concrete parking area and passenger loading area are necessary to comply with ADA requirements. This project would provide for a concrete van accessible ADA parking and loading space and walkway to the existing sidewalk. This will require regrading, installing P.C. concrete, striping, signage and any other necessary upgrades. NRS 338.180, IBC - 2006, ICC/ANSI A117.1 - 2003 and the most current version of the Americans with Disabilities Act Accessibility Guidelines (ADAAG) were used as a reference for this project.

PRIORITY CLASS 2 PROJECTS **Total Construction Cost for Priority 2 Projects: \$20,092**
Necessary - Not Yet Critical **Two to Four Years**

DRAINAGE IMPROVEMENTS

Project Index #: 9862SIT2
Construction Cost \$3,000

The site has several drainage problems around the site. On the north side the water drains towards the building and into one of the shop bays. On the perimeter of the site the runoff is directed across the public sidewalk creating a slip and fall hazard especially when it freezes. Several areas have standing water which causes premature deterioration of the paving. This project would create positive flow away from the building and to the storm drain system by regrading and installing French drains as needed. This project should be implemented concurrently with the SLURRY SEAL ASPHALT PAVING project.

SLURRY SEAL ASPHALT PAVING

Project Index #: 9862SIT1
Construction Cost \$17,092

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 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. 22,789 square feet of asphalt area was used to generate this estimate. This project should be implemented concurrently with the DRAINAGE IMPROVEMENTS project.

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$2,500
Priority Class 2:	\$20,092
Priority Class 3:	\$0
Grand Total:	\$22,592

**CARSON CITY MOTOR POOL
BUILDING REPORT**

The Carson City Motor Pool building is a concrete masonry unit and wood framed structure with an asphalt composition roofing system on a concrete foundation. The facility houses offices, two repair bays, and a wash rack bay. Outside the facility are a fueling island, pump, and one CNG compressor. The building is heated and cooled by two gas fired furnaces with exterior mounted evaporator coils. The facility is fully sprinklered with a wet pipe system. Areas subject to freezing have an antifreeze system utilizing a single check valve and loop. The facility has an ADA compliant unisex restroom as well as Men's and Women's restrooms for staff.

PRIORITY CLASS 1 PROJECTS **Total Construction Cost for Priority 1 Projects: \$75,987**
Currently Critical **Immediate to Two Years**

ADA RESTROOM UPGRADE **Project Index #: 0204ADA1**
Construction Cost \$7,500

The designated ADA restroom does not meet the Americans with Disabilities Act (ADA) requirements. For example, the water closet and lavatory are too low, the soap dispenser and mirror are too high, the lavatory is missing under-sink protection and the toilet seat cover dispenser is too high. A complete retrofit is necessary. This project would provide funding for construction of a unisex accessible restroom. These items may include compliant hardware, mirrors, fixtures, flooring and paint. NRS 338.180, IBC - 2006, ICC/ANSI A117.1 - 2003 and the most current version of the Americans with Disabilities Act Accessibility Guidelines (ADAAG) were used as a reference for this project.

This project or a portion thereof was previously recommended in the FCA report dated 07/22/2004. It has been amended accordingly to reflect conditions observed during the most recent survey date of 01/24/2012.

BACKFLOW PREVENTION **Project Index #: 0204ENV1**
Construction Cost \$25,000

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 or reduced pressure principle backflow preventer for the fire sprinkler system which currently has only a single check valve. Costs include an above ground vault, and allowance for 50 feet of 1" conduit to provide power for freeze protection.

This project or a portion thereof was previously recommended in the FCA report dated 07/22/2004. It has been amended accordingly to reflect conditions observed during the most recent survey date of 01/24/2012.

EXIT SIGN AND EGRESS LIGHTING UPGRADE **Project Index #: 0204SFT3**
Construction Cost \$3,987

The emergency egress lighting is insufficient and the exit signs do not meet current standards. This project would provide for the purchase and installation of self-illuminated or LED style exit signs with battery-backed internal systems as well as emergency egress lighting to provide illumination along the egress route. IBC - 2006 Chapter 10 was referenced for this project.

Project Index #: 0204EXT3

Construction Cost \$25,000

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 are cleaning and sealing the brick masonry, painting the stucco and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended that the building be sealed and caulked in the next 1-2 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure. In addition, this project would repair damaged areas of the stucco and slump stone masonry.

This project or a portion thereof was previously recommended in the FCA report dated 07/22/2004. It has been amended accordingly to reflect conditions observed during the most recent survey date of 01/24/2012.

Project Index #: 0204ADA2

Construction Cost \$3,000

INSTALL LEVER HARDWARE

Section 4.13.9 of the Americans with Disabilities Act Accessibility Guidelines (ADAAG) states that handles, pulls, latches, locks and other operating devices on accessible doors shall have a shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist to operate. It is recommended that compliant hardware be installed on all doors in this building to meet these guidelines. The estimate is based on purchase and installation of hardware for 12 doors.

Project Index #: 0204ADA3

Construction Cost \$7,500

KITCHENETTE / BREAK ROOM REMODEL

The kitchenette and associated cabinets in the employee break room are original to the building. The quality of construction and installation were inadequate for the high usage at this facility, and the cabinets and counter tops are delaminating and failing. This project recommends the replacement of the existing kitchen counters, 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 - 2006, ICC/ANSI A117.1 - 2003 and the most current version of the Americans with Disabilities Act Accessibility Guidelines (ADAAG) should be incorporated into the design such as providing an accessible sink. This estimate includes removal and disposal of the existing materials.

Project Index #: 0204SFT2

Construction Cost \$4,000

SEISMIC GAS SHUT-OFF VALVE INSTALLATION

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 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.

This project or a portion thereof was previously recommended in the FCA report dated 07/22/2004. It has been amended accordingly to reflect conditions observed during the most recent survey date of 01/24/2012.

PRIORITY CLASS 2 PROJECTS

Total Construction Cost for Priority 2 Projects: \$137,731

Necessary - Not Yet Critical

Two to Four Years

Project Index #: 0204EXT4

Construction Cost \$2,000

EXTERIOR DOOR / LANDING REPLACEMENT

The exterior metal man door on the north side of the building is damaged from wear and tear due to improper grading / AC pavement placement at the landing. This project would provide for the replacement of the door assembly with a new metal door, frame and hardware and proper exterior landing. Removal and disposal of the existing door is included in this estimate.

Project Index #: 0204INT4
Construction Cost \$31,896

FLOORING REPLACEMENT

The carpet, sheet vinyl and painted concrete floors in the building are worn and are reaching the end of their useful life. It is recommended that the flooring be replaced and the concrete be repainted. This project would provide for painting of the concrete, removal and disposal of the existing vinyl and carpet and installation of new 12x12 VCT (vinyl composite tile) with a 6" base and heavy duty commercial grade carpet in the next 2-3 years. Additional costs may be necessary to repair the concrete floor in the shop area.

Project Index #: 0204EXT2
Construction Cost \$6,000

GUTTER REPLACEMENT

The existing gutters and downspouts around the building are due for replacement. The gutters leak and the downspouts are damaged in many areas. The leaking gutters will cause premature deterioration to the building finishes and the site hardscape. This project would replace the existing segmented gutter with seamless gutter and replace the downspouts. This project or a portion thereof was previously recommended in the FCA report dated 07/22/2004. It has been amended accordingly to reflect conditions observed during the most recent survey date of 01/24/2012.

Project Index #: 0204ENR2
Construction Cost \$60,000

HVAC SYSTEM REPLACEMENT

The HVAC system was installed in 1988 and is original to the building. It consists of two natural gas-fired furnaces and two outdoor condensers. The system is not energy efficient and has reached the end of its expected and useful life. This project would provide for installation of a new HVAC system and cleaning of the existing duct work and grilles. The new system shall be designed to significantly reduce electrical and natural gas usage in order to comply with the 2009 IECC and ASHRAE 90.1 and to reduce utility costs. This project includes removal and disposal of the existing HVAC units and all required connections to utilities.

This project or a portion thereof was previously recommended in the FCA report dated 07/22/2004. It has been amended accordingly to reflect conditions observed during the most recent survey date of 01/24/2012.

Project Index #: 0204INT3
Construction Cost \$19,935

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 2-3 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 #: 0204INT5
Construction Cost \$1,400

JANITORS CLOSET REPAIRS

The mop sink in the Janitors Closet is mounted adjacent to gypsum board and is 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 #: 0204EXT5
Construction Cost \$15,000

OVERHEAD DOOR REPLACEMENT

There are three 10'x14' overhead doors which are damaged from age and general wear and tear. They are original to the building and should be scheduled for replacement. This project would provide for the removal and disposal of the manually operated overhead doors and replacement with new manually operated insulated overhead doors.

Project Index #: 0204PLM1
Construction Cost \$1,500

WATER HEATER REPLACEMENT

There is a 30 gallon gas-fired water heater in the building that was installed in 2004. 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 3-4 years. It is recommended that a new gas-fired water heater be installed. Removal and disposal of the existing equipment is included in this estimate.

BUILDING INFORMATION:

Gross Area (square feet): 3,987
Year Constructed: 1988
Exterior Finish 1: 80 % Brick
Exterior Finish 2: 10 % Painted Stucco / EIFS
Number of Levels (Floors): 1 Basement? No
IBC Occupancy Type 1: 75 % B
IBC Occupancy Type 2: 25 % H-4
Construction Type: Concrete Masonry Units & Wood
IBC Construction Type: V-B
Percent Fire Supressed: 100 %

PROJECT CONSTRUCTION COST TOTALS SUMMARY:

Priority Class 1:	\$75,987	Project Construction Cost per Square Foot:	\$53.60
Priority Class 2:	\$137,731	Total Facility Replacement Construction Cost:	\$1,196,000
Priority Class 3:	\$0	Facility Replacement Cost per Square Foot:	\$300
Grand Total:	\$213,718	FCNI:	18%

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 Division and should be utilized as a planning level document.

REPORT DEVELOPMENT:

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



Carson City Motor Pool Site - Site #9862
Description: Area where drainage improvements are needed.



Carson City Motor Pool - Building #0204
Description: Damaged stucco fascia.



Carson City Motor Pool - Building #0204
Description: Control joint in need of caulking.



Carson City Motor Pool - Building #0204
Description: Water damaged stucco / leaking gutters.



Carson City Motor Pool - Building #0204
Description: Main entrance / lobby area.



Carson City Motor Pool - Building #0204
Description: View of the repair bay.



Carson City Motor Pool - Building #0204
Description: Unisex restroom, note fixture locations and toilet seat.



Carson City Motor Pool - Building #0204
Description: Damaged exterior door.