State of Nevada Office of Military / Nevada National Guard Fallon National Guard Armory Facility Condition Analysis

# FALLON NATIONAL GUARD ARMORY

895 East Richards Street Fallon, Nevada 89406

Site Number: 9885 STATE OF NEVADA PUBLIC WORKS DIVISION FACILITY CONDITION ANALYSIS



Report Printed in April 2012

#### State of Nevada Office of Military / Nevada National Guard Fallon National Guard Armory 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.

Site num	ber: 9885	Facility Condition Nee	eds Index I	Report		Cost to	Cost to	Cost to	Total Cost	Cost to	
Index #	Building Name		Sq. Feet	Yr. Built	Survey Date	Repair: P1	Repair: P2	Repair: P3	to Repair	Replace	FCNI
0678	FALLON ARMORY		10404	1962	1/19/2012	\$5,050	\$37,400	\$104,040	\$146,490	\$2,861,100	5%
	895 E. Richards Street	Fallon									
3087	STORAGE BUILDING		960	0	1/19/2012	\$0	\$0	\$960	\$960	\$48,000	2%
	895 E. Richards Street	Fallon									
9885	FALLON ARMORY SITE	3		1962	1/19/2012	\$0	\$99,250	\$0	\$99,250		0%
	895 E. Richards Street	Fallon									
2529	HAZ MAT STORAGE BU	JILDING	62	0	1/19/2012	\$0	\$0	\$0		\$6,200	
	895 E. Richards	Fallon									
		Report Totals:	11,420	5		\$5,050	\$136,650	\$105,000	\$246,700	\$2,915,300	) 8%

#### **Table of Contents**

Building Name	Index #	
FALLON ARMORY SITE	9885	
STORAGE BUILDING	3087	
HAZ MAT STORAGE BUILDING	2529	No Current Projects
FALLON ARMORY	0678	

\$99,250

9885SEC1

9885SIT1

\$33.750

\$65,500

FALLON ARMORY SITE

**BUILDING REPORT** 

The Fallon National Guard Armory is located on a little more than 3 fully fenced acres with two structures, a metal storage building and the main armory. There is paved parking area for staff and the public including ADA accessible parking and new paving in the fenced yard in the rear of the facility. The site has electrical and natural gas service, city water and sewer service and is well maintained.

SPWD Facility Condition Analysis - 9885

1/19/2012

State of Nevada / Military

FALLON ARMORY SITE

Survey Date:

Necessary - Not Yet Critical Two to Four Years

#### CHAIN LINK FENCE UPGRADE

The existing chain link fencing around the site has reached the end of its expected life and is due for an upgrade. It currently does not have a deterrent device such as barbed wire and the swinging vehicle gates require constant maintenance. This project recommends the installation of a 6 foot high 6 gauge wire perimeter chain link fence around the entire site with barbed wire and two 14' wide sliding gates with hardware. The cost estimate also includes demolition and disposal of the existing fence.

**Total Construction Cost for Priority 2 Projects:** 

**Project Index #:** 

**Project Index #:** 

**Construction Cost** 

**Construction Cost** 

This project or a portion thereof was previously recommended in the FCA report dated 07/21/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 01/19/2012.

#### 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 access roads, parking areas and the maintenance yard. 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. 45,000 square feet of asphalt area was used to generate this estimate.

#### **PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

Priority Class 1:	\$0
Priority Class 2:	\$99,250
Priority Class 3:	\$0
Grand Total:	\$99,250

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State of Nevada / Military STORAGE BUILDING SPWD Facility Condition Analysis - 3087 Survey Date: 1/19/2012

#### **STORAGE BUILDING**

#### **BUILDING REPORT**

The Storage Building is an engineered metal structure on a concrete foundation. It has an overhead coiling door and a man door and is used primarily for storage. The building is in excellent condition.

PRIORITY CLASS 3 PROJECT	S Total Construction Cost for Priority 3 Projects:	\$960
Long-Term Needs	Four to Ten Years	

#### **EXTERIOR FINISHES**

Project Index #: 3087EXT1 Construction Cost \$960

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 the caulking and sealing of the flashing, fixtures and all other penetrations. It is recommended that the building be caulked and sealed in the next 5-7 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

#### **BUILDING INFORMATION:**

Gross Area (square feet):	960
Year Constructed:	0
Exterior Finish 1:	100 % Metal Siding
Exterior Finish 2:	0 %
Number of Levels (Floors):	1 Basement? No
IBC Occupancy Type 1:	100 % S-2
IBC Occupancy Type 2:	0 %
<b>Construction Type:</b>	Engineered Metal Building
IBC Construction Type:	III-B
Percent Fire Supressed:	0 %

#### **PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

\$1.00	Project Construction Cost per Square Foot:	\$0	Priority Class 1:
\$48,000	Total Facility Replacement Construction Cost:	\$0	Priority Class 2:
\$50	Facility Replacement Cost per Square Foot:	\$960	Priority Class 3:
2%	FCNI:	\$960	Grand Total:

State of Nevada / Military FALLON ARMORY SPWD Facility Condition Analysis - 0678 Survey Date: 1/19/2012

The Fallon Nevada National Guard Armory Building is a concrete masonry unit constructed structure with a flat singleply roofing system. The building contains support offices, training and conference rooms, ADA accessible restrooms, a kitchen and a large gymnasium area for physical activities. The building has a newer fire alarm and sprinkler system and recently underwent a renovation including the kitchen, restrooms and fixtures, new windows and a new roofing system.

#### PRIORITY CLASS 1 PROJECTS

**Immediate to Two Years** 

#### ADA SIGNAGE

**Currently Critical** 

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 Accessibility Guidelines (ADAAG) were used as a reference for this project.

#### EXTERIOR OUTLET REPLACEMENT

There is an electrical outlet on the south side exterior of the building that does not meet code. This outlet should be changed to a GFCI type outlet per the 2005 NEC. This project would provide for the purchase and installation of one GFCI duplex outlet with a weatherproof cover.

#### 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 07/21/2005. It has been amended accordingly to reflect conditions observed during the most recent survey date of 01/19/2012.

#### **PRIORITY CLASS 2 PROJECTS**

Necessary - Not Yet Critical Two to Four Years

#### CULINARY FIXTURES REPLACEMENT

The existing plumbing fixtures in the culinary are worn and damaged and should be scheduled for replacement. Corrosion and mineral buildup has caused premature deterioration of the fixtures. This project recommends the replacement of the existing fixtures including the sprayers, faucets, handles, valves, filters, injectors and any other piping or equipment which has deteriorated or has signs of corrosion or mineral buildup. This project should be implemented concurrently with the WATER TREATMENT SYSTEM REPLACEMENT project.

#### Site number: 9885

#### Project Index #: 0678ADA1 Construction Cost \$750

\$5,050

0678ELE2

\$300

\$37,400

**Total Construction Cost for Priority 1 Projects:** 

**Total Construction Cost for Priority 2 Projects:** 

## Project Index #: 0678SFT1 Construction Cost \$4,000

**Project Index #:** 

**Construction Cost** 

Project Index #:0678CUL1Construction Cost\$10,000

#### 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.

### WATER HEATER REPLACEMENT

There are two large gas-fired water heaters in the building. One unit was installed in 1993 and the other in 1999. The average life span of a water heater is eight to ten years. With the passage of time and lack of water treatment, these units are showing signs of wear and should be scheduled for replacement in the next 3-4 years. Due to the inconsistent usage of the facility, it is recommended to replace these units with an on demand water heating system to reduce energy costs. Removal and disposal of the existing equipment is included in this estimate.

### WATER TREATMENT SYSTEM REPLACEMENT

The existing water softening/ treatment systems in the building are currently not operational. They have not been maintained and have reached the end of their lifecycles. Failure of the equipment causes wear and tear on the domestic water supply lines, plumbing fixtures and HVAC equipment. This project would provide for the replacement of the existing water softeners/ treatment systems with new equipment. This project would also provide for a chemical treatment program including an updated chemicals control system, service and employee training provided by a qualified water treatment vendor. The annual maintenance fee charged by the water treatment vendor would be determined after an investigation of the water system is complete. These annual costs are not included in this project cost. For budgeting purposes, a \$12,000 fee is suggested. This project should be implemented concurrently with the CULINARY FIXTURES REPLACEMENT project.

PRIORITY CLASS 3 PROJECTS	Total Construction Cost for Priority 3 Projects:	\$104,040

Long-Term Needs

Four to Ten Years

### **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 painting the concrete masonry unit walls and caulking of the windows, flashing, fixtures and all other penetrations. It is recommended that the building be painted and caulked in the next 5-7 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

### INTERIOR FINISHES

The interior finishes are in good condition. It is recommended that the interior walls and ceilings be painted at least once in the next 4-5 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 #: 0678INT3 **Construction Cost** \$1,400

0678PLM2

\$6.000

**Project Index #:** 

**Construction Cost** 

#### 0678PLM1 **Project Index #: Construction Cost** \$20.000

#### **Project Index #:** 0678EXT1 **Construction Cost** \$52,020

0678INT4

\$52.020

**Project Index #:** 

**Construction Cost** 

#### **BUILDING INFORMATION:**

Gross Area (square feet): Year Constructed:	,
Exterior Finish 1:	75 % Painted CMU
	25 % Glazing Panels
Number of Levels (Floors):	1 Basement? No
IBC Occupancy Type 1:	60 % A-3
IBC Occupancy Type 2:	40 % B
<b>Construction Type:</b>	Concrete Masonry Units & Wood
IBC Construction Type:	V-A
Percent Fire Supressed:	100 %

#### **PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

Priority Class 1:	\$5,050	Project Construction Cost per Square Foot:	\$14.08
Priority Class 2:	\$37,400	Total Facility Replacement Construction Cost:	\$2,861,000
Priority Class 3:	\$104,040	Facility Replacement Cost per Square Foot:	\$275
Grand Total:	\$146,490	FCNI:	5%

#### **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



Fallon National Guard Armory Site - Site #9885 Description: Paved parking area in need of crack filling.



Fallon National Guard Armory Site - Site #9885 Description: Area where paving or soil stabilization is needed.



Storage Building - Building #3087 Description: Exterior of the building.



Fallon Armory - Building #0678 Description: Public Entrance.



Fallon Armory - Building #0678 Description: Damaged VCT in Gym.



Fallon Armory - Building #0678 Description: Damaged overhead coiling door.