

State of Nevada  
Department of Corrections  
Southern Nevada Correctional Center  
Facility Condition Analysis

# SOUTHERN NEVADA CORRECTIONAL CENTER SITE

#1 Prison Road  
Jean, NV 89026

Site Number: 9994  
STATE OF NEVADA PUBLIC WORKS DIVISION  
FACILITY CONDITION ANALYSIS



Report Printed in August 2016

State of Nevada  
Department of Corrections  
Southern Nevada Correctional Center  
Facility Condition Analysis

The Facility Condition Analysis Program was created under the authority found in NRS 341.128. 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 the 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: 9994

**Facility Condition Needs Index Report**

Index #	Building Name	Sq. Feet	Yr. Buil	Survey Date	Cost to Repair: P1	Cost to Repair: P2	Cost to Repair: P3	Total Cost to Repair	Cost to Replace	FCNI
0183	HOUSING UNIT 4(VACANT) #1 Prison Road	13850	1976	3/8/2016	\$3,606,750	\$0	\$0	\$3,606,750	\$4,847,500	74%
0185	HOUSING UNIT 6(VACANT) #1 Prison Road	13850	1978	3/8/2016	\$3,601,150	\$0	\$0	\$3,601,150	\$4,847,500	74%
0180	HOUSING UNIT 1(VACANT) #1 Prison Road	13850	1976	3/8/2016	\$3,597,150	\$0	\$0	\$3,597,150	\$4,847,500	74%
0181	HOUSING UNIT 2(VACANT) #1 Prison Road	13850	1976	3/8/2016	\$3,597,150	\$0	\$0	\$3,597,150	\$4,847,500	74%
0182	HOUSING UNIT 3(VACANT) #1 Prison Road	13850	1976	3/8/2016	\$3,597,150	\$0	\$0	\$3,597,150	\$4,847,500	74%
0184	HOUSING UNIT 5(VACANT) #1 Prison Road	13850	1978	3/8/2016	\$3,597,150	\$0	\$0	\$3,597,150	\$4,847,500	74%
0187	HOUSING UNIT 7(VACANT) #1 Prison Road	18090	1976	3/8/2016	\$4,474,710	\$0	\$0	\$4,474,710	\$6,331,500	71%
0190	CULINARY/ DINING/ CENTRAL PLANT(VACANT) #1 Prison Road	14000	1976	3/8/2016	\$3,591,500	\$0	\$0	\$3,591,500	\$5,250,000	68%
0188	MEDICAL UNIT 8(VACANT) #1 Prison Road	5150	1976	3/8/2016	\$1,193,350	\$0	\$0	\$1,193,350	\$1,802,500	66%
0194	GUARD TOWER 1(VACANT) #1 Prison Road	288	1982	3/8/2016	\$183,812	\$0	\$0	\$183,812	\$288,000	64%
0195	GUARD TOWER 2(VACANT) #1 Prison Road	288	1982	3/8/2016	\$183,812	\$0	\$0	\$183,812	\$288,000	64%
0193	MAINTENANCE SHOP(VACANT) #1 Prison Road	3850	1978	3/8/2016	\$586,300	\$0	\$0	\$586,300	\$962,500	61%
0192	AUTO MAINT SHOP/ WAREHOUSE(VACANT) #1 Prison Road	5030	1978	3/8/2016	\$758,660	\$0	\$0	\$758,660	\$1,257,500	60%
0191	LAUNDRY & DRY CLEANING(VACANT) #1 Prison Road	2400	1978	3/8/2016	\$540,800	\$0	\$0	\$540,800	\$900,000	60%
0179	CHAPEL/ LAW LIBRARY(VACANT) #1 Prison Road	6350	1979	3/8/2016	\$1,233,700	\$0	\$0	\$1,233,700	\$2,063,750	60%
0178	EDUCATION A(VACANT) #1 Prison Road	6350	1979	3/8/2016	\$1,105,700	\$0	\$0	\$1,105,700	\$2,063,750	54%

Site number: 9994

### Facility Condition Needs Index Report

Index #	Building Name	Sq. Feet	Yr. Buil	Survey Date	Cost to Repair: P1	Cost to Repair: P2	Cost to Repair: P3	Total Cost to Repair	Cost to Replace	FCNI
0186	RECREATION/ GYM(VACANT) #1 Prison Road Jean	12800	1976	3/8/2016	\$2,140,300	\$0	\$0	\$2,140,300	\$4,480,000	48%
0176	ADMINISTRATION/ VISITATION(VACANT) #1 Prison Road Jean	11950	1978	3/8/2016	\$1,910,850	\$0	\$0	\$1,910,850	\$4,182,500	46%
2567	SALLY PORT(VACANT) #1 Prison Road Jean	81	1976	3/8/2016	\$5,591	\$0	\$0	\$5,591	\$28,350	20%
0177	DOG KENNEL(VACANT) #1 Prison Road Jean	156	1987	3/8/2016	\$1,560	\$0	\$0	\$1,560	\$11,700	13%
9994	SOUTHERN NV CORRECT CTR SITE(VACANT) #1 Prison Road Jean		1976	3/8/2016	\$3,821,000	\$0	\$0	\$3,821,000		0%
<b>Report Totals.....:</b>		<b>169,883</b>			<b>\$43,328,145</b>	<b>\$0</b>	<b>\$0</b>	<b>\$43,328,145</b>	<b>\$58,995,050</b>	<b>73%</b>

**Table of Contents**

<b>Building Name</b>	<b>Index #</b>
SOUTHERN NV CORRECT CTR SITE(VACANT)	9994
SALLY PORT(VACANT)	2567
GUARD TOWER 2(VACANT)	0195
GUARD TOWER 1(VACANT)	0194
MAINTENANCE SHOP(VACANT)	0193
AUTO MAINT SHOP/ WAREHOUSE(VACANT)	0192
LAUNDRY & DRY CLEANING(VACANT)	0191
CULINARY/ DINING/ CENTRAL PLANT(VACANT)	0190
MEDICAL UNIT 8(VACANT)	0188
HOUSING UNIT 7(VACANT)	0187
RECREATION/ GYM(VACANT)	0186
HOUSING UNIT 6(VACANT)	0185
HOUSING UNIT 5(VACANT)	0184
HOUSING UNIT 4(VACANT)	0183
HOUSING UNIT 3(VACANT)	0182
HOUSING UNIT 2(VACANT)	0181
HOUSING UNIT 1(VACANT)	0180
CHAPEL/ LAW LIBRARY(VACANT)	0179
EDUCATION A(VACANT)	0178
DOG KENNEL(VACANT)	0177
ADMINISTRATION/ VISITATION(VACANT)	0176

**SOUTHERN NV CORRECT CTR SITE(VACANT)**

SPWD Facility Condition Analysis - 9994

Survey Date: 3/8/2016

**SOUTHERN NV CORRECT CTR SITE(VACANT)****BUILDING REPORT**

The Southern Nevada Correctional Center is located 30 miles south of Las Vegas and east of Interstate 15 in Jean, Nevada. The correctional center opened in January 1978 and closed in September 2000 when the High Desert State Prison opened. It subsequently has open and closed twice since 2000 and was currently closed during the 2016 site visit. The institution has 7 housing units, one medical unit, an administration building which includes the visiting, central control and administrative areas, two education buildings, a culinary and dining facility, a laundry building, maintenance shops, dog kennel, two guard towers and an automotive service shop. The complex totals approximately 170,182 square feet of space. There is ADA compliant parking for visitors and a route of travel to the visitation building but the signage needs to be improved.

There are also some ADA accessible routes inside of the facility which access Housing Unit No. 6 but not to all programs which may exist when full operations are implemented.

Water service is provided via a city well which is pumped to a large water storage tank. Both the domestic and fire sprinkler waterlines have backflow prevention. The site is basically all electric with diesel fuel fired boilers and emergency generator.

**PRIORITY CLASS 1 PROJECTS****Total Construction Cost for Priority 1 Projects: \$3,821,000****Currently Critical****Immediate to Two Years****Project Index #: 9994SIT2****Construction Cost \$400,000****ASPHALT CONCRETE REPLACEMENT**

The access road and the parking area around the Maintenance and Auto Shop area is in poor condition and has significant alligating and large cracks. The paving has deteriorated to the point that it is no longer viable to re-seal. This project would provide for the removal and disposal of the existing A.C. paving and installation of 80,000 square feet of A.C. paving over a compacted sub-base. This estimate includes striping for parking areas and safety zones and excludes the main public / employee parking area.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 9994SIT5****Construction Cost \$3,380,000****FACILITY START-UP / RECOMMISSIONING**

The Southern Nevada Correctional Center was vacant during the survey of 2016. During the site visit to all of the buildings, there were numerous plumbing leaks, damaged plumbing fixtures and active water leaks. The central plant was running at minimum capacity and some of the buildings' HVAC components had not been in service since the closure of the prison. This project would provide for anticipated start-up costs and recommissioning of the entire facility including complete HVAC, plumbing and waste line testing and repairs, culinary ansul fire protection and cooking equipment start-up and inspection, and fire protection system testing and inspection. The possible replacement of existing HVAC equipment in the central plant is not included in this estimate as it is unknown. Actual fixture replacement of plumbing fixtures and cooking equipment is not included in this project as it is unknown until facility is opened again. Projects for plumbing fixture replacement are addressed in the individual building project reports and mostly address replacement of porcelain fixtures with stainless steel. Kitchen equipment replacement is addressed in the individual building report. This is a budgetary allowance for anticipated costs associated with the start-up and preoccupancy of the facility. Any potential leaks or damage to the underground hot water loop, domestic water and waste lines in unknown due to facility not being in operation.

This project is a priority one project and will need to be done prior to occupancy.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 9994ELE3**

**Construction Cost \$5,000**

**HIGH MAST LAMP REPLACEMENT**

There are 10 high mast security light poles throughout the facility that have 8 security lamps each. A lot of these lamps were burned out at the time of the survey and should be scheduled for replacement. This project provides for the purchase and installation of 80 security lamps for the high mast light poles. The cost includes removal and disposal of the existing lamps.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 9994PLM1**

**Construction Cost \$6,000**

**PLUMBING SCOPE SERVICE**

The plumbing supply lines and sewer lines should be thoroughly inspected prior to reoccupying the facility. After being abandoned, many problems can occur with the plumbing including breaks from shifting soils, blockages or deterioration from rust. It is recommended to have the piping scoped with a camera to determine whether there are any problems with the lines.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 9994SIT4**

**Construction Cost \$15,000**

**SITE DRAINAGE IMPROVEMENTS**

The buildings across the site have visible damage to the exterior walls and foundations from improper drainage. There are many areas where the grade does not slope away from the buildings allowing water to pool up against the walls. These areas show visible water damage to the stucco and will continue to cause damage. This project would create positive flow away from the buildings by regrading and installing French drains as needed.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 9994ELE2**

**Construction Cost \$15,000**

**TRANSFORMER AND DISTRIBUTION PANELS SERVICE**

Southern Nevada Correctional Center opened in 1978. There is evidence of deterioration on the transformer cabinets and main distribution panels site wide. There are no records of inspection or servicing of these electrical items. It is highly recommended that these items be serviced on an annual basis. This project would provide for a photo infrared inspection and servicing of all the transformer and main distribution panels. Other projects may be developed from the results of the inspections.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

<b>Priority Class 1:</b>	<b>\$3,821,000</b>
<b>Priority Class 2:</b>	<b>\$0</b>
<b>Priority Class 3:</b>	<b>\$0</b>
<b>Grand Total:</b>	<b>\$3,821,000</b>

SALLY PORT(VACANT)

SPWD Facility Condition Analysis - 2567

Survey Date: 3/8/2016

**SALLY PORT(VACANT)**

**BUILDING REPORT**

The Sally Port building is a painted concrete masonry unit structure with a single-ply membrane roof on a concrete slab-on-grade foundation. The building is unoccupied and no longer is being used. It is in poor shape with damaged doors, windows and a void where the HVAC packaged unit was once located.

**PRIORITY CLASS 1 PROJECTS** **Total Construction Cost for Priority 1 Projects: \$5,591**  
**Currently Critical** **Immediate to Two Years**

**EXTERIOR DOOR REPLACEMENT** **Project Index #: 2567EXT3**  
**Construction Cost \$1,500**

The existing exterior door to the Recreation / Gym is original to the building. It is showing signs of wear and deterioration from constant use and inmate abuse. Due to security concerns and the condition of the door, replacement is recommended. This project would provide for the removal and disposal of the existing door and frame, and replacement with new exterior security door including door frame, hardware, security glazing, painting and connections to the security system as required. A total of 1 door was used to generate this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**EXTERIOR FINISHES** **Project Index #: 2567EXT2**  
**Construction Cost \$810**

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 1-2 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**FLOORING REPLACEMENT** **Project Index #: 2567INT2**  
**Construction Cost \$1,134**

The VCT (vinyl composite tile) flooring in the building is worn and damaged and reaching the end of its useful life. It is recommended that the VCT flooring be replaced. This project would provide for removal and disposal of the VCT and installation of new 12x12 VCT with a 6" base.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**INTERIOR FINISHES** **Project Index #: 2567INT1**  
**Construction Cost \$810**

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 report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 2567ENR1**  
**Construction Cost \$365**

**LIGHTING REPLACEMENT**

The existing lighting fixtures are the older fluorescent type, and are not energy efficient. This project will upgrade fixtures to higher efficiency units with a longer life cycle. F28 T-8 lamps with electronic ballasts are suggested. Any electrical wiring upgrades are not included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 2567EXT4**  
**Construction Cost \$972**

**ROOF REPLACEMENT**

The roof on this building was in poor condition at the time of the survey. The statewide roofing program has set the useful life of an average roof at 20 years. The roof warranty expires at the end of the same time frame. The temperature fluctuations throughout the year, consistent wind which blows sand and dirt on to the roof membrane, and constant exposure to the sun are contributing factors to wear and deterioration. The current roofing system was installed in 1993. It is recommended to replace the singly-ply membrane and repair the Cor-ten roofing system as needed in the next 1-2 years to be consistent with the roofing program and the end of the warranty period.

**BUILDING INFORMATION:**

**Gross Area (square feet): 81**  
**Year Constructed: 1976**  
**Exterior Finish 1: 50 % Painted CMU**  
**Exterior Finish 2: 50 % Glazing**  
**Number of Levels (Floors): 1      Basement? No**  
**IBC Occupancy Type 1: 100 % I-3**  
**IBC Occupancy Type 2: 0 %**  
**Construction Type: Concrete Masonry and Wood**  
**IBC Construction Type: V-B**  
**Percent Fire Supressed: 0 %**

**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

<b>Priority Class 1:</b>	<b>\$5,591</b>	<b>Project Construction Cost per Square Foot:</b>	<b>\$69.02</b>
<b>Priority Class 2:</b>	<b>\$0</b>	<b>Total Facility Replacement Construction Cost:</b>	<b>\$28,000</b>
<b>Priority Class 3:</b>	<b>\$0</b>	<b>Facility Replacement Cost per Square Foot:</b>	<b>\$350</b>
<b>Grand Total:</b>	<b>\$5,591</b>	<b>FCNI:</b>	<b>20%</b>

**GUARD TOWER 2(VACANT)  
BUILDING REPORT**

The Guard Tower 2 is a wood and steel framed structure with T1-11 siding, asphalt composition roof on a concrete slab-on-grade foundation. The building's interior contains a sink and a toilet for use by staff when occupied, painted gypsum board, windows and an observation deck. The tower is in poor shape and vacant.

**PRIORITY CLASS 1 PROJECTS** **Total Construction Cost for Priority 1 Projects: \$183,812**  
**Currently Critical** **Immediate to Two Years**

**2" BACKFLOW ASSEMBLY** **Project Index #: 0195PLM1**  
**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 double check valves or reduced pressure principle backflow preventers as appropriate to the hazard and in appropriate locations near the potential source of contamination. Costs include an above ground vault, and allowance for 200 feet of 1" conduit to provide power for freeze protection.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**ELECTRICAL UPGRADE** **Project Index #: 0195ELE1**  
**Construction Cost \$11,520**

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. The current wiring in the building is #14 and does not meet the current demand. #14 wiring is also against State Public Works Division's Adopted Standards, 8.5.4, for lighting and power circuits. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

**EXIT SIGN AND EGRESS LIGHTING UPGRADE** **Project Index #: 0195SFT1**  
**Construction Cost \$2,000**

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 - 2012 Chapter 10, 1011.6.2 exit sign illumination 5 foot candles (54 lux), was referenced for this project.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0195EXT3**  
**Construction Cost \$3,000**

### **EXTERIOR DOOR REPLACEMENT**

The existing exterior doors to the Guard Tower are original to the building. They are showing signs of wear and deterioration. Due to security concerns and the condition of the doors, replacement is recommended. This project would provide for the removal and disposal of the existing doors and frames and replacement with new exterior security doors including door frames, hardware, security glazing, painting and connections to the security system as required. A total of 2 doors was used to generate this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0195EXT2**  
**Construction Cost \$75,000**

### **EXTERIOR SIDING REPLACEMENT**

The Tower has a painted masonite siding that is due for replacement. The existing siding is in poor condition and will no longer hold paint. This project recommends removing the masonite siding and replacing it with T1-11 panels finished with an oil-based stain.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0195SFT2**  
**Construction Cost \$2,304**

### **FIRE ALARM INSTALLATION**

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and no longer comply with current requirements. The current system is no longer operating. 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 visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

**Project Index #: 0195INT3**  
**Construction Cost \$4,032**

### **FLOORING REPLACEMENT**

The VCT (vinyl composite tile) flooring in the Guard Tower is damaged and reaching the end of its useful life. It is recommended that the VCT flooring be replaced. This project would provide for removal and disposal of the VCT and installation of new 12x12 VCT with a 6" base.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0195HVA1**  
**Construction Cost \$10,000**

### **HVAC REPLACEMENT**

The building is conditioned by one wall-mounted heat pump. It is reaching the end of its useful and expected life. This project would provide for a new heat pump to be installed including all required connections to utilities. The estimate includes removal and disposal of the old heat pump.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0195INT2**  
**Construction Cost \$25,600**

### **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 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 report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0195ENR1**  
**Construction Cost \$2,000**

### **LIGHTING UPGRADE**

The existing lighting fixtures are the older fluorescent type, and are not energy efficient. This project will upgrade fixtures to higher efficiency units with a longer life cycle. F28 T-8 lamps with electronic ballasts are suggested. Occupancy sensors will be installed where appropriate for additional savings. Any electrical wiring upgrades are not included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0195PLM3**  
**Construction Cost \$3,000**

### **PLUMBING FIXTURES REPLACEMENT**

The existing water closet and sink are reaching the end of their expected life. They are worn and damaged from many years of use and should be scheduled for replacement. This project would provide for the installation of a new water closet and sink including all plumbing parts and connections. Removal and disposal of the old fixtures is included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0195PLM5**  
**Construction Cost \$14,400**

### **PLUMBING REPLACEMENT**

The sanitary wastewater and copper plumbing systems are showing signs of deterioration. Due to this deterioration, the systems are not working to their full potential. The copper lines have rusted and there are pin holes throughout the system. The lines are original to the site and are in poor condition. The hard water is also a contributing factor to this deterioration. Deposits within the pipes have caused restriction, and has slowed the water flow. This project would provide for the complete replacement of the sanitary sewer and copper piping system.

**Project Index #: 0195EXT1**  
**Construction Cost \$3,456**

### **ROOF REPLACEMENT**

The asphalt composition shingle roof on this building was in poor condition at the time of the survey. Interior ceiling stains and exterior soffit stains indicate that there are active leaks. It is recommended that this building be re-roofed in the next 1-2 years with a new 50 year asphalt composition roofing shingle and new underlayments. This estimate includes removal and disposal of the old roofing.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0195PLM4**  
**Construction Cost \$2,500**

### **WATER HEATER REPLACEMENT**

There is a 10 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 1-2 years. It is recommended that a new electric water heater be installed. Removal and disposal of the existing equipment is included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**BUILDING INFORMATION:**

**Gross Area (square feet): 288**  
**Year Constructed: 1982**  
**Exterior Finish 1: 100 % Painted T1-11 Wood**  
**Exterior Finish 2: %**  
**Number of Levels (Floors): 1      Basement?    No**  
**IBC Occupancy Type 1: 100 % I-3**  
**IBC Occupancy Type 2: %**  
**Construction Type: Wood and Steel Framing**  
**IBC Construction Type: III-B**  
**Percent Fire Supressed: 0 %**

**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

<b>Priority Class 1:</b>	<b>\$183,812</b>	<b>Project Construction Cost per Square Foot:</b>	<b>\$638.24</b>
<b>Priority Class 2:</b>	<b>\$0</b>	<b>Total Facility Replacement Construction Cost:</b>	<b>\$288,000</b>
<b>Priority Class 3:</b>	<b>\$0</b>	<b>Facility Replacement Cost per Square Foot:</b>	<b>\$1,000</b>
<b>Grand Total:</b>	<b>\$183,812</b>	<b>FCNI:</b>	<b>64%</b>

**GUARD TOWER 1(VACANT)**

SPWD Facility Condition Analysis - 0194

Survey Date: 3/8/2016

**GUARD TOWER 1(VACANT)**

**BUILDING REPORT**

The Guard Tower 1 is a wood and steel framed structure with T1-11 siding, asphalt composition roof on a concrete slab-on-grade foundation. The building's interior contains a sink and a toilet for use by staff when occupied, painted gypsum board, windows and an observation deck. The tower is in poor shape and vacant.

**PRIORITY CLASS 1 PROJECTS**

**Total Construction Cost for Priority 1 Projects: \$183,812**

**Currently Critical**

**Immediate to Two Years**

**2" BACKFLOW ASSEMBLY**

**Project Index #: 0194PLM1**

**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 double check valves or reduced pressure principle backflow preventers as appropriate to the hazard and in appropriate locations near the potential source of contamination. Costs include an above ground vault, and allowance for 200 feet of 1" conduit to provide power for freeze protection.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**ELECTRICAL UPGRADE**

**Project Index #: 0194ELE1**

**Construction Cost \$11,520**

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. The current wiring in the building is #14 and does not meet the current demand. #14 wiring is also against State Public Works Division's Adopted Standards, 8.5.4, for lighting and power circuits. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

**EXIT SIGN AND EGRESS LIGHTING UPGRADE**

**Project Index #: 0194SFT1**

**Construction Cost \$2,000**

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 - 2012 Chapter 10, 1011.6.2 exit sign illumination 5 foot candles (54 lux), was referenced for this project.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0194EXT2**  
**Construction Cost \$3,000**

**EXTERIOR DOOR REPLACEMENT**

The existing exterior doors to the Guard Tower are original to the building. They are showing signs of wear and deterioration. Due to security concerns and the condition of the doors, replacement is recommended. This project would provide for the removal and disposal of the existing doors and frames and replacement with new exterior security doors including door frames, hardware, security glazing, painting and connections to the security system as required. A total of 2 doors was used to generate this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0194EXT1**  
**Construction Cost \$75,000**

**EXTERIOR SIDING REPLACEMENT**

The Tower has a painted masonite siding that is due for replacement. The existing siding is in poor condition and will no longer hold paint. This project recommends removing the masonite siding and replacing it with T1-11 panels finished with an oil-based stain.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0194SFT2**  
**Construction Cost \$2,304**

**FIRE ALARM INSTALLATION**

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and no longer comply with current requirements. The current system is no longer operating. 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 visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

**Project Index #: 0194INT3**  
**Construction Cost \$4,032**

**FLOORING REPLACEMENT**

The VCT (vinyl composite tile) flooring in the Guard Tower is damaged and has reached the end of its useful life. It is recommended that the VCT flooring be replaced. This project would provide for removal and disposal of the VCT and installation of new 12x12 VCT with a 6" base.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0194HVA1**  
**Construction Cost \$10,000**

**HVAC REPLACEMENT**

The building is conditioned by one wall-mounted heat pump. It is reaching the end of its useful and expected life. This project would provide for a new heat pump to be installed including all required connections to utilities. The estimate includes removal and disposal of the old heat pump.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0194INT2**  
**Construction Cost \$25,600**

**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 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 report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0194ENR1**  
**Construction Cost \$2,000**

**LIGHTING UPGRADE**

The existing lighting fixtures are the older fluorescent type, and are not energy efficient. This project will upgrade fixtures to higher efficiency units with a longer life cycle. F28 T-8 lamps with electronic ballasts are suggested. Occupancy sensors will be installed where appropriate for additional savings. Any electrical wiring upgrades are not included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0194PLM3**  
**Construction Cost \$3,000**

**PLUMBING FIXTURES REPLACEMENT**

The existing water closet and sink are reaching the end of their expected life. They are worn and damaged from many years of use and should be scheduled for replacement. This project would provide for the installation of a new water closet and sink including all plumbing parts and connections. Removal and disposal of the old fixtures is included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0194PLM5**  
**Construction Cost \$14,400**

**PLUMBING REPLACEMENT**

The sanitary wastewater and copper plumbing systems are showing signs of deterioration. Due to this deterioration, the systems are not working to their full potential. The copper lines have rusted and there are pin holes throughout the system. The lines are original to the site and are in poor condition. The hard water is also a contributing factor to this deterioration. Deposits within the pipes have caused restriction, and has slowed the water flow. This project would provide for the complete replacement of the sanitary sewer and copper piping system.

**Project Index #: 0194EXT3**  
**Construction Cost \$3,456**

**ROOF REPLACEMENT**

The asphalt composition shingle roof on this building was in poor condition at the time of the survey. Interior ceiling stains and exterior soffit stains indicate that there are active leaks. It is recommended that this building be re-roofed in the next 1-2 years with a new 50 year asphalt composition roofing shingle and new underlayments. This estimate includes removal and disposal of the old roofing.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0194PLM4**  
**Construction Cost \$2,500**

**WATER HEATER REPLACEMENT**

There is a 10 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 1-2 years. It is recommended that a new electric water heater be installed. Removal and disposal of the existing equipment is included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**BUILDING INFORMATION:**

**Gross Area (square feet): 288**  
**Year Constructed: 1982**  
**Exterior Finish 1: 100 % Painted T1-11 Siding**  
**Exterior Finish 2: %**  
**Number of Levels (Floors): 1      Basement?    No**  
**IBC Occupancy Type 1: 100 % I-3**  
**IBC Occupancy Type 2: %**  
**Construction Type: Wood and Steel Framing**  
**IBC Construction Type: III-B**  
**Percent Fire Supressed: 0 %**

**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

<b>Priority Class 1:</b>	<b>\$183,812</b>	<b>Project Construction Cost per Square Foot:</b>	<b>\$638.24</b>
<b>Priority Class 2:</b>	<b>\$0</b>	<b>Total Facility Replacement Construction Cost:</b>	<b>\$288,000</b>
<b>Priority Class 3:</b>	<b>\$0</b>	<b>Facility Replacement Cost per Square Foot:</b>	<b>\$1,000</b>
<b>Grand Total:</b>	<b>\$183,812</b>	<b>FCNI:</b>	<b>64%</b>

**MAINTENANCE SHOP(VACANT)  
BUILDING REPORT**

The Maintenance Building is a concrete masonry unit structure with a single-ply roof system on a concrete slab-on-grade foundation. The facility contains a shop area and support offices for facility maintenance personnel including a storage mezzanine and a non-ADA compliant restroom. It has a fire alarm system but no sprinklers and the HVAC systems consists of roof mounted evaporative coolers and electrical heating units. The building is in fair to poor shape and staff still uses this structure during closure of the prison.

**PRIORITY CLASS 1 PROJECTS** **Total Construction Cost for Priority 1 Projects: \$586,300**  
**Currently Critical** **Immediate to Two Years**

**2" BACKFLOW ASSEMBLY** **Project Index #: 0193PLM1**  
**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 double check valves or reduced pressure principle backflow preventers as appropriate to the hazard and in appropriate locations near the potential source of contamination. Costs include an above ground vault, and allowance for 200 feet of 1" conduit to provide power for freeze protection.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**ADA RESTROOM REMODEL** **Project Index #: 0193ADA2**  
**Construction Cost \$30,000**

The building does not have an accessible restroom. The existing restroom does not meet the Americans with Disabilities Act (ADA) requirements. A complete retrofit is necessary. This project would provide funding for construction of a unisex accessible restroom. These items may include a new sink, toilet, hardware, mirrors, fixtures, flooring and paint. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**ELECTRICAL UPGRADE** **Project Index #: 0193ELE1**  
**Construction Cost \$154,000**

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. The current wiring in the building is #14 and does not meet the current demand. #14 wiring is also against State Public Works Division's Adopted Standards, 8.5.4, for lighting and power circuits. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

**Project Index #: 0193SFT4**  
**Construction Cost \$6,000**

#### **EMERGENCY EYE WASH STATION**

The building has outdated containers of eye wash solution. Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use, reference OSHA 1910.151(c). This project would provide funding for the purchase and installation of an emergency eye and body wash station.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0193HVA1**  
**Construction Cost \$15,000**

#### **EXHAUST FAN INSTALLATION - WELDING AREA**

The building has a welding area. Depending on what type of material is being welded, it may require a local hood and ventilation system. This project would provide funding for the engineering, exhaust fan, ducting, electrical connections, installation and repairs to the roof as required. OSHA 1910.252(3) was referenced for this project.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0193SFT2**  
**Construction Cost \$9,625**

#### **EXIT SIGN AND EGRESS LIGHTING UPGRADE**

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 - 2012 Chapter 10, 1011.6.2 exit sign illumination 5 foot candles (54 lux), was referenced for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0193EXT5**  
**Construction Cost \$3,000**

#### **EXTERIOR DOOR REPLACEMENT**

The existing exterior doors to the Auto Maintenance Shop are original to the building. They are showing signs of wear and deterioration from constant use and inmate abuse. Due to security concerns and the condition of the doors, replacement is recommended. This project would provide for the removal and disposal of the existing doors and frames and replacement with new exterior security doors including door frames, hardware, security glazing, painting and connections to the security system as required. A total of 2 doors was used to generate this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0193EXT4**  
**Construction Cost \$38,500**

#### **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 concrete masonry units and caulking of the 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.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0193SFT6**  
**Construction Cost \$30,800**

#### **FIRE ALARM SYSTEM REPLACEMENT**

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and no longer comply with current requirements. The current system is no longer operating. 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 visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

**Project Index #: 0193HVA2**  
**Construction Cost \$96,250**

#### **HVAC REPLACEMENT**

There are four electric heaters/air conditioning units installed in the Maintenance Shop. They are in poor condition and have reached the end of their useful and expected life. This project would provide for four new electric heaters/air conditioning units to be installed, and would include all required connections to the electrical. The estimate includes removal and disposal of the old heating/air conditioning units.

The water source heat pumps in this building are also being recommended for replacement. These heat pumps are not energy efficient, and have reached the end of their expected and useful life. This project would provide for installation of new water source heat pump units and the cleaning of the existing ducting and grilles. This project includes removal and disposal of the existing water source heat pump units and all required connections to utilities.

**Project Index #: 0193INT3**  
**Construction Cost \$38,500**

#### **INTERIOR FINISHES**

The interior finishes are in poor condition. It is recommended that the painted gypsum board 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 report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0193INT2**  
**Construction Cost \$5,600**

#### **JANITORS CLOSET REPAIRS**

The mop sinks in the Janitor Closets are mounted adjacent to gypsum board and are 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. Typical of two Janitor Closets.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0193ADA1**  
**Construction Cost \$2,500**

#### **LEVER ACTION HARDWARE INSTALLATION**

Section 4.13.9 of the Americans with Disabilities Act Accessible 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 in this building to meet these guidelines. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0193ENR1**  
**Construction Cost \$17,325**

### **LIGHTING UPGRADE**

The existing lighting fixtures are the older fluorescent type, and are not energy efficient. This project will upgrade 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, closets and other low occupancy areas for additional savings. Any electrical wiring upgrades are not included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0193EXT3**  
**Construction Cost \$20,000**

### **OVERHEAD COILING DOOR REPLACEMENT**

There are two 10'x12' overhead coiling doors which are damaged and do not function properly. Exposure and wind have caused the doors to bend, crack and lose their finish. 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 coiling doors and replacement with new manually operated overhead coiling doors.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0193SFT7**  
**Construction Cost \$2,000**

### **PIPE BOLLARD INSTALLATION**

The Maintenance Shop has two sectional overhead doors. These areas are in need of bollards to protect the building. This project would provide funding for 4 eight inch diameter bollards to be located on each side of the sectional overhead doors at the exterior.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0193PLM4**  
**Construction Cost \$38,500**

### **PLUMBING REPLACEMENT**

The sanitary wastewater and copper plumbing systems are showing signs of deterioration. Due to this deterioration, the systems are not working to their full potential. The copper lines have rusted and there are pin holes throughout the system. The lines are original to the site and are in poor condition. The hard water is also a contributing factor to this deterioration. Deposits within the pipes have caused restriction, and has slowed the water flow. This project would provide for the complete replacement of the sanitary sewer and copper piping system.

**Project Index #: 0193EXT1**  
**Construction Cost \$46,200**

### **ROOF REPLACEMENT**

The roof on this building was in poor condition at the time of the survey. The statewide roofing program has set the useful life of an average roof at 20 years. The roof warranty expires at the end of the same time frame. The temperature fluctuations throughout the year, consistent wind which blows sand and dirt on to the roof membrane, and constant exposure to the sun are contributing factors to wear and deterioration. The current roofing system was installed in 1993. It is recommended that this building be re-roofed in the next 1-2 years to be consistent with the roofing program and the end of the warranty period.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0193INT1**  
**Construction Cost \$5,000**

**STRUCTURAL ASSESSMENT**

A second floor area was added to this building accessed via two different wooden staircases. There is no record of a CIP project for this work or of any structural evaluations having been conducted. This project recommends that a licensed engineer perform a structural investigation to assess the load bearing capacity of the structure. Future projects would be based on this report.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0193PLM3**  
**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 1-2 years. It is recommended that a new electric water heater be installed. Removal and disposal of the existing equipment is included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**BUILDING INFORMATION:**

**Gross Area (square feet): 3,850**  
**Year Constructed: 1978**  
**Exterior Finish 1: 100 % Concrete Masonry U**  
**Exterior Finish 2: %**  
**Number of Levels (Floors): 1 Basement? No**  
**IBC Occupancy Type 1: 70 % S-2**  
**IBC Occupancy Type 2: 30 % B**  
**Construction Type: Concrete Masonry and Steel**  
**IBC Construction Type: III-B**  
**Percent Fire Supressed: 0 %**

**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

<b>Priority Class 1:</b>	<b>\$586,300</b>	<b>Project Construction Cost per Square Foot:</b>	<b>\$152.29</b>
<b>Priority Class 2:</b>	<b>\$0</b>	<b>Total Facility Replacement Construction Cost:</b>	<b>\$962,000</b>
<b>Priority Class 3:</b>	<b>\$0</b>	<b>Facility Replacement Cost per Square Foot:</b>	<b>\$250</b>
<b>Grand Total:</b>	<b>\$586,300</b>	<b>FCNI:</b>	<b>61 %</b>

**AUTO MAINT SHOP/ WAREHOUSE(VACANT)**

**SPWD Facility Condition Analysis - 0192**

**Survey Date: 3/8/2016**

**AUTO MAINT SHOP/ WAREHOUSE(VACANT)**

**BUILDING REPORT**

The Auto Maintenance Shop/ Warehouse building is a concrete masonry unit structure with a single-ply roof system on a concrete slab-on-grade foundation. The building contains a shop area for equipment maintenance and repair, and general storage. There is a mezzanine inside used as a storage area. There are non-ADA compliant restrooms and the facility does not have a fire sprinkler system. The structure is in fair to poor shape and vacant. Some minor remodeling was done to accommodate Clark County School District classes which used to be taught there according to staff.

**PRIORITY CLASS 1 PROJECTS**

**Total Construction Cost for Priority 1 Projects: \$758,660**

**Currently Critical**

**Immediate to Two Years**

**Project Index #: 0192PLM1**

**Construction Cost \$25,000**

**2" BACKFLOW ASSEMBLY**

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 double check valves or reduced pressure principle backflow preventers as appropriate to the hazard and in appropriate locations near the potential source of contamination. Costs include an above ground vault, and allowance for 200 feet of 1" conduit to provide power for freeze protection.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0192ADA3**

**Construction Cost \$30,000**

**ADA RESTROOM REMODEL**

The building does not have an accessible restroom. The existing restroom does not meet the Americans with Disabilities Act (ADA) requirements. A complete retrofit is necessary. This project would provide funding for construction of a unisex accessible restroom. These items may include a new sink, toilet, hardware, mirrors, fixtures, flooring and paint. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0192ADA1**

**Construction Cost \$3,000**

**ADA SIGNAGE**

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 - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0192ELE2**  
**Construction Cost \$201,200**

**ELECTRICAL UPGRADE**

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. The current wiring in the building is #14 and does not meet the current demand. #14 wiring is also against State Public Works Division's Adopted Standards, 8.5.4, for lighting and power circuits. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

**Project Index #: 0192SFT2**  
**Construction Cost \$12,575**

**EXIT SIGN AND EGRESS LIGHTING UPGRADE**

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 - 2012 Chapter 10, 1011.6.2 exit sign illumination 5 foot candles (54 lux), was referenced for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0192EXT5**  
**Construction Cost \$4,500**

**EXTERIOR DOOR REPLACEMENT**

The existing exterior doors to the Auto Maintenance Shop/Warehouse are original to the building. They are showing signs of wear and deterioration from constant use and inmate abuse. Due to security concerns and the condition of the doors, replacement is recommended. This project would provide for the removal and disposal of the existing doors and frames and replacement with new exterior security doors including door frames, hardware, security glazing, painting and connections to the security system as required. A total of 3 doors was used to generate this estimate.

**Project Index #: 0192EXT4**  
**Construction Cost \$50,300**

**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 and sealing 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 1-2 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0192SFT8**  
**Construction Cost \$40,240**

**FIRE ALARM REPLACEMENT**

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and no longer comply with current requirements. The current system is no longer operating. 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 visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

**Project Index #: 0192SFT6**  
**Construction Cost \$5,000**

**HANDRAIL INSTALLATION**

There are two steps leading from one bay to the next that do not have handrails. This project recommends the installation of handrails on both sides of the stairs, with proper returns and supports. NRS 338.180, 2012 IBC Chapter 10, Section 1012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

**Project Index #: 0192HVA1**

**Construction Cost \$125,750**

## **HVAC REPLACEMENT**

There are two electric heaters installed in the Auto Maint Shop. They are in poor condition and have reached the end of their useful and expected life. This project would provide for two new electric heaters to be installed, and would include all required connections to the electrical. The estimate includes removal and disposal of the old electric heaters.

The water source heat pumps in this building are also being recommended for replacement. These heat pumps are not energy efficient, and have reached the end of their expected and useful life. This project would provide for installation of new water source heat pump units and the cleaning of the existing ducting and grilles. This project includes removal and disposal of the existing water source heat pump units and all required connections to utilities.

**Project Index #: 0192INT2**

**Construction Cost \$50,300**

## **INTERIOR FINISHES**

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 report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0192SFT7**

**Construction Cost \$2,000**

## **INTERIOR LANDING INSTALLATION**

There is an out-swinging interior door in the building which swings out over a step and does not have a landing. This does not comply with 2012 IBC Section 1008.1 which requires a proper landing and for the landing to be not more than 1/2" below the threshold. This project would provide for the installation of a compliant landing for the door.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0192ADA2**

**Construction Cost \$3,000**

## **LEVER ACTION HARDWARE INSTALLATION**

Section 4.13.9 of the Americans with Disabilities Act Accessible 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 in this building to meet these guidelines. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0192ELE1**

**Construction Cost \$22,635**

## **LIGHTING UPGRADE**

The existing lighting fixtures are the older fluorescent type, and are not energy efficient. This project will upgrade 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, closets and other low occupancy areas for additional savings. Any electrical wiring upgrades are not included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0192SFT5**  
**Construction Cost \$10,000**

#### **MEZZANINE REMOVAL**

The second floor mezzanine appears to be constructed without building permits or structural calculations. Since the mezzanine is now enclosed, it does not meet the building code's definition of a mezzanine. The area also does not have proper ventilation, smoke detectors or compliant stairs and railings. This project would provide funding for the removal of the second floor mezzanine and stairs.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0192EXT2**  
**Construction Cost \$10,000**

#### **OVERHEAD COILING DOOR REPLACEMENT**

There is a 10'x14' overhead coiling door which is damaged and does not function properly. Exposure and wind have caused the door to bend, crack and lose the finish. 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 new manually operated overhead coiling door.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0192PLM4**  
**Construction Cost \$50,300**

#### **PLUMBING REPLACEMENT**

The sanitary wastewater and copper plumbing systems are showing signs of deterioration. Due to this deterioration, the systems are not working to their full potential. The copper lines have rusted and there are pin holes throughout the system. The lines are original to the site and are in poor condition. The hard water is also a contributing factor to this deterioration. Deposits within the pipes have caused restriction, and has slowed the water flow. This project would provide for the complete replacement of the sanitary sewer and copper piping system.

**Project Index #: 0192EXT1**  
**Construction Cost \$60,360**

#### **ROOF REPLACEMENT**

The single-ply roof on this building was in fair condition at the time of the survey. The statewide roofing program has set the useful life of an average roof at 20 years. The roof warranty expires at the end of the same time frame. The temperature fluctuations throughout the year, consistent wind which blows sand and dirt on to the roof membrane, and constant exposure to the sun are contributing factors to wear and deterioration. The current roofing system was installed in 1993. It is recommended that this building be re-roofed in the next 1-2 years to be consistent with the roofing program and the end of the warranty period.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0192SFT4**  
**Construction Cost \$50,000**

#### **VEHICLE EXHAUST EXTRACTION SYSTEM**

The Auto Maintenance Shop has no exhaust extraction system to remove toxic exhaust fumes. In enclosed areas where motor vehicles operate, mechanical ventilation shall be provided per the 2012 IBC 406.6.3 and UMC 502.14. This project would provide for the purchase and installation of a vehicle exhaust extraction system including, hoses, automatic shut off, electrical connections and roof mounted exhaust fans and equipment as provided by manufacturer.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0192PLM3**

**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 1-2 years. It is recommended that a new electric water heater be installed. Removal and disposal of the existing equipment is included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**BUILDING INFORMATION:**

**Gross Area (square feet): 5,030**  
**Year Constructed: 1978**  
**Exterior Finish 1: 100 % Concrete Masonry U**  
**Exterior Finish 2: %**  
**Number of Levels (Floors): 2 Basement? No**  
**IBC Occupancy Type 1: 100 % S-1**  
**IBC Occupancy Type 2: 0 %**  
**Construction Type: Concrete Masonry and Steel**  
**IBC Construction Type: III-B**  
**Percent Fire Supressed: 0 %**

**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

<b>Priority Class 1:</b>	<b>\$758,660</b>	<b>Project Construction Cost per Square Foot:</b>	<b>\$150.83</b>
<b>Priority Class 2:</b>	<b>\$0</b>	<b>Total Facility Replacement Construction Cost:</b>	<b>\$1,258,000</b>
<b>Priority Class 3:</b>	<b>\$0</b>	<b>Facility Replacement Cost per Square Foot:</b>	<b>\$250</b>
<b>Grand Total:</b>	<b>\$758,660</b>	<b>FCNI:</b>	<b>60%</b>

**LAUNDRY & DRY CLEANING(VACANT)**

SPWD Facility Condition Analysis - 0191

Survey Date: 3/8/2016

**LAUNDRY & DRY CLEANING(VACANT)**

**BUILDING REPORT**

The Laundry and Dry Cleaning building is a concrete masonry unit (CMU) structure with a painted exterior insulation and finish system (EIFS), single-ply roofing system on a concrete slab-on-grade. The interior is a mix of painted CMU and gypsum board. The building was vacant and the boiler for the laundry operations has been completely removed.

**PRIORITY CLASS 1 PROJECTS**

**Total Construction Cost for Priority 1 Projects: \$540,800**

**Currently Critical**

**Immediate to Two Years**

**2" BACKFLOW ASSEMBLY**

**Project Index #: 0191PLM1**

**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 double check valves or reduced pressure principle backflow preventers as appropriate to the hazard and in appropriate locations near the potential source of contamination. Costs include an above ground vault, and allowance for 200 feet of 1" conduit to provide power for freeze protection.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**ADA RESTROOM UPGRADE**

**Project Index #: 0191ADA2**

**Construction Cost \$30,000**

The building does not have an accessible restroom. The existing restroom does not meet the Americans with Disabilities Act (ADA) requirements. A complete retrofit is necessary. This project would provide funding for construction of a unisex accessible restroom. These items may include a new sink, toilet, hardware, mirror, fixtures, flooring and paint. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**ADA SIGNAGE**

**Project Index #: 0191ADA1**

**Construction Cost \$3,000**

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 - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0191ELE1**  
**Construction Cost \$96,000**

#### **ELECTRICAL UPGRADE**

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. The current wiring in the building is #14 and does not meet the current demand. #14 wiring is also against State Public Works Division's Adopted Standards, 8.5.4, for lighting and power circuits. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

**Project Index #: 0191SFT1**  
**Construction Cost \$6,000**

#### **EXIT SIGN & EGRESS LIGHTING UPGRADE**

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 - 2012 Chapter 10, 1011.6.2 exit sign illumination 5 foot candles (54 lux), was referenced for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0191EXT3**  
**Construction Cost \$9,000**

#### **EXTERIOR DOOR REPLACEMENT**

The existing exterior doors to the Laundry & Dry Cleaning are original to the building. They are showing signs of wear and deterioration from constant use and inmate abuse. Due to security concerns and the condition of the doors, replacement is recommended. This project would provide for the removal and disposal of the existing doors and frames and replacement with new exterior security doors including door frames, hardware, security glazing, painting and connections to the security system as required. A total of 6 doors was used to generate this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0191EXT4**  
**Construction Cost \$24,000**

#### **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. There are areas where the stucco is damaged from equipment hitting the walls and leaks from the rooftop HVAC equipment. This project includes funds to repair the damaged areas prior to painting. It is recommended that the building be painted in the next 1-2 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0191SFT5**  
**Construction Cost \$19,200**

#### **FIRE ALARM REPLACEMENT**

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and no longer comply with current requirements. The current system is no longer operating. 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 visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

**Project Index #: 0191HVA2**

**Construction Cost \$60,000**

### **HVAC REPLACEMENT**

There are two evaporative coolers installed on the roof of this building. They are severely scaled and have reached the end of their useful and expected life. This project would provide for two new evaporative coolers to be installed, and would include all required connections to the utilities. The estimate includes removal and disposal of the old evaporative coolers.

The water source heat pumps in this building are also being recommended for replacement. These heat pumps are not energy efficient, and have reached the end of their expected and useful life. This project would provide for installation of new water source heat pump units and the cleaning of the existing ducting and grilles. This project includes removal and disposal of the existing water source heat pump units and all required connections to utilities.

**Project Index #: 0191INT3**

**Construction Cost \$24,000**

### **INTERIOR FINISHES**

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 report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0191INT2**

**Construction Cost \$10,800**

### **LIGHTING UPGRADE**

The existing lighting fixtures are the older fluorescent type, and are not energy efficient. This project will upgrade 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, closets and other low occupancy areas for additional savings. Any electrical wiring upgrades are not included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0191PLM3**

**Construction Cost \$120,000**

### **PLUMBING REPLACEMENT**

The sanitary wastewater and copper plumbing systems are showing signs of deterioration. Due to this deterioration, the systems are not working to their full potential. The copper lines have rusted and there are pin holes throughout the system. The lines are original to the site and are in poor condition. The hard water is also a contributing factor to this deterioration. Deposits within the pipes have caused restriction, and has slowed the water flow. This project would provide for the complete replacement of the sanitary sewer and copper piping system.

**Project Index #: 0191EXT2**

**Construction Cost \$28,800**

### **ROOF REPLACEMENT**

The roof on this building was in poor condition at the time of the survey. The statewide roofing program has set the useful life of an average roof at 20 years. The roof warranty expires at the end of the same time frame. The temperature fluctuations throughout the year, consistent wind which blows sand and dirt on to the roof membrane, and constant exposure to the sun are contributing factors to wear and deterioration. The current roofing system was installed in 1993. It is recommended that this building be re-roofed in the next 1-2 years to be consistent with the roofing program and the end of the warranty period.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0191HVA1**

**Construction Cost \$85,000**

**STEAM BOILER REPLACEMENT**

The steam boiler that powers the laundry equipment has been removed for use at an occupied facility. This project would provide for the installation of a new electric steam boiler including all required connections to utilities and equipment. The estimate is based on a 518 KW electric steam boiler. The existing chemical water treatment system will need to be tested and adjusted once equipment is operational. \$2,000 is included in this estimate for testing of chemical water treatment system.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**BUILDING INFORMATION:**

**Gross Area (square feet): 2,400**  
**Year Constructed: 1978**  
**Exterior Finish 1: 100 % Painted Stucco / EIFS**  
**Exterior Finish 2: %**  
**Number of Levels (Floors): 1 Basement? No**  
**IBC Occupancy Type 1: 100 % F-2**  
**IBC Occupancy Type 2: %**  
**Construction Type: Concrete Masonry & Wood**  
**IBC Construction Type: III-B**  
**Percent Fire Supressed: 0 %**

**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

<b>Priority Class 1:</b>	<b>\$540,800</b>	<b>Project Construction Cost per Square Foot:</b>	<b>\$225.33</b>
<b>Priority Class 2:</b>	<b>\$0</b>	<b>Total Facility Replacement Construction Cost:</b>	<b>\$900,000</b>
<b>Priority Class 3:</b>	<b>\$0</b>	<b>Facility Replacement Cost per Square Foot:</b>	<b>\$375</b>
<b>Grand Total:</b>	<b>\$540,800</b>	<b>FCNI:</b>	<b>60%</b>

**CULINARY/ DINING/ CENTRAL PLANT(VACANT)**

SPWD Facility Condition Analysis - 0190

Survey Date: 3/8/2016

**CULINARY/ DINING/ CENTRAL PLANT(VACANT)**

**BUILDING REPORT**

The Culinary/ Dining/ Central Plant building is a concrete masonry unit (CMU) structure with a painted exterior insulation and finish system (EIFS), single-ply roofing system on a concrete slab-on-grade. The facility contains food service and preparation areas, food storage, dining and the central plant which serves the majority of the buildings' HVAC systems on the site. During the survey of 2016, the majority of the kitchen equipment had been removed and the building was vacant. Only minimal operations of the central plant boilers was occurring. It also is not ADA compliant and the fire sprinkler system is old and only covers certain areas of the building.

**PRIORITY CLASS 1 PROJECTS**

**Total Construction Cost for Priority 1 Projects: \$3,591,500**

**Currently Critical**

**Immediate to Two Years**

**2" BACKFLOW ASSEMBLY, VAULT, AND POWER**

**Project Index #: 0190PLM1**

**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 double check valves or reduced pressure principle backflow preventers as appropriate to the hazard and in appropriate locations near the potential source of contamination. Costs include an above ground vault, and allowance for 200 feet of 1" conduit to provide power for freeze protection.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**ADA SIGNAGE**

**Project Index #: 0190ADA1**

**Construction Cost \$3,000**

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 - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0190ADA3**  
**Construction Cost \$25,000**

### **ADA UPGRADES - DINING**

The building is lacking an accessible path of travel through the interior, the ramp in the Dining area is not compliant and there are no accessible dining tables installed. The building is used for serving inmates meals and is required to have accessible facilities per the Americans with Disabilities Act (ADA) regulations. This project would provide for an accessible path of travel, ramp from the dining area to the service line and an accessible dining table in the building. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0190PLM3**  
**Construction Cost \$500,000**

### **BOILER SYSTEM REPLACEMENT**

There are two hot water boilers servicing the prison. The life expectancy of these units is 20 to 25 years with proper water treatment programs and maintenance. Replacement parts for performing routine and/or emergency maintenance are difficult to locate due to the equipment's age. This project would provide for the removal and disposal of the existing boilers, controls and mixing valves and replacement with new equipment, including all required connections to utilities and equipment. The existing chemical water treatment system will need to be tested and adjusted once the equipment is operational. \$2,000 is included in this estimate for testing of the chemical water treatment system.

**Project Index #: 0190ADA2**  
**Construction Cost \$4,000**

### **DUAL LEVEL DRINKING FOUNTAIN INSTALLATION**

This building contains a water fountain. The 2012 IBC Section 1109.5 states where a water fountain is provided, at least half should be accessible. This project would provide funding for the purchase and installation of a new accessible fixed high/ low ADA drinking fountain.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0190ELE2**  
**Construction Cost \$560,000**

### **ELECTRICAL UPGRADE**

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. The current wiring in the building is #14 and does not meet the current demand. #14 wiring is also against State Public Works Division's Adopted Standards, 8.5.4, for lighting and power circuits. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0190SFT1**  
**Construction Cost \$35,000**

### **EXIT SIGN AND EGRESS LIGHTING UPGRADE**

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 - 2012 Chapter 10, 1011.6.2 exit sign illumination 5 foot candles (54 Lux), was referenced for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0190EXT4**  
**Construction Cost \$22,500**

#### **EXTERIOR DOOR REPLACEMENT**

The existing exterior doors to the Culinary/Dining/Central Plant are original to the building. They are showing signs of wear and deterioration from constant use and inmate abuse. Due to security concerns and the condition of the doors, replacement is recommended. This project would provide for the removal and disposal of the existing doors and frames and replacement with new exterior security doors including door frames, hardware, security glazing, painting and connections to the security system as required. A total of 15 doors was used to generate this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0190EXT5**  
**Construction Cost \$140,000**

#### **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. There are areas where the stucco is damaged from equipment hitting the walls and leaks from the rooftop HVAC equipment. This project includes funds to repair the damaged areas prior to painting. It is recommended that the building be painted in the next 1-2 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0190SFT5**  
**Construction Cost \$112,000**

#### **FIRE ALARM SYSTEM REPLACEMENT**

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and no longer comply with current requirements. The current system is no longer operating. 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 visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

**Project Index #: 0190SFT3**  
**Construction Cost \$196,000**

#### **FIRE SUPPRESSION SYSTEM INSTALLATION/ UPGRADE**

The building has a floor area greater than 12,000 square feet. Pursuant to the Nevada State Fire Marshal Regulation, NAC 477.915 (c) states, that every building owned or occupied by the state which is designated as a B occupancy, or has a floor area greater than 12,000 square feet on any floor or 24,000 square feet on all floors or is an R-1 occupancy, must have sprinklers installed when the building is remodeled or an addition is proposed. This project would provide funding for the installation of a fire sprinkler system and backflow prevention for the areas not currently sprinklered in the event the building is remodeled or an addition is undertaken.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0190HVA1**  
**Construction Cost \$350,000**

#### **HVAC REPLACEMENT**

Four evaporative coolers are installed on the roof of this building. They are severely scaled and have reached the end of their useful and expected life. This project would provide for four new evaporative coolers to be installed including all required connections to utilities. The estimate includes removal and disposal of the old coolers.

The water source heat pumps in this building are also being recommended for replacement. These heat pumps are not energy efficient, and have reached the end of their expected and useful life. This project would provide for installation of new water source heat pump units and the cleaning of the existing ducting and grilles. This project includes removal and disposal of the existing water source heat pump units and all required connections to utilities.

**Project Index #: 0190INT1**  
**Construction Cost \$140,000**

**INTERIOR FINISHES**

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 report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0190CUL1**  
**Construction Cost \$300,000**

**KITCHEN EQUIPMENT REPLACEMENT**

Most of the kitchen cooking equipment has been removed from the building to supply occupied facilities. The equipment that is still installed is original to the building and has reached the end of its lifetime. It is recommended that the equipment be scheduled for replacement in the next one to two years, including ovens and hoods, grills, sinks and dishwashers. This project provides for the removal and disposal of the existing equipment and replacement with new equipment. The propane tanks have been removed from the site. If any propane fired equipment is installed, additional costs must be included for the purchase and installation of the propane system.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0190INT2**  
**Construction Cost \$63,000**

**LIGHTING UPGRADE**

The existing lighting fixtures are the older fluorescent type, and are not energy efficient. This project will upgrade 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.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0190PLM4**  
**Construction Cost \$700,000**

**PLUMBING REPLACEMENT**

The sanitary wastewater and copper plumbing systems are showing signs of deterioration. Due to this deterioration, the systems are not working to their full potential. The copper lines have rusted and there are pin holes throughout the system. The lines are original to the site and are in poor condition. The hard water is also a contributing factor to this deterioration. Deposits within the pipes have caused restriction, and has slowed the water flow. This project would provide for the complete replacement of the sanitary sewer and copper piping system.

**Project Index #: 0190ADA4**  
**Construction Cost \$150,000**

**RESTROOM REMODEL**

The water closets and the lavatories in the five restrooms throughout the building are worn from many years of use and being idle due to multiple closures. It is recommended that all fixtures be replaced with new units. At least two of the new units and restroom layouts are also required to comply with ADA requirements. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0190EXT3**  
**Construction Cost \$168,000**

**ROOF REPLACEMENT**

The roof on this building was in poor condition at the time of the survey. The statewide roofing program has set the useful life of an average roof at 20 years. The roof warranty expires at the end of the same time frame. The temperature fluctuations throughout the year, consistent wind which blows sand and dirt on to the roof membrane, and constant exposure to the sun are contributing factors to wear and deterioration. The current roofing system was installed in 1993. It is recommended to replace the singly-ply membrane and repair the Cor-ten roofing system as needed in the next 1-2 years to be consistent with the roofing program and the end of the warranty period.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0190SEC1**  
**Construction Cost \$98,000**

**SECURITY SURVEILLANCE SYSTEM INSTALLATION**

There is no security cameras or recording system in the Culinary/Dining/Central Plant building. This is a safety issue for the staff and inmates as all areas cannot be seen by the security staff or recorded in case of an incident. This project would provide for the installation of surveillance cameras and a security system for the entire building and all required connections to existing utility systems.

**BUILDING INFORMATION:**

**Gross Area (square feet): 14,000**  
**Year Constructed: 1976**  
**Exterior Finish 1: 100 % Painted Stucco / EIFS**  
**Exterior Finish 2: %**  
**Number of Levels (Floors): 1 Basement? No**  
**IBC Occupancy Type 1: 70 % I-3**  
**IBC Occupancy Type 2: 30 % H-4**  
**Construction Type: Concrete Masonry and Wood**  
**IBC Construction Type: III-B**  
**Percent Fire Supressed: 50 %**

**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

<b>Priority Class 1:</b>	<b>\$3,591,500</b>	<b>Project Construction Cost per Square Foot:</b>	<b>\$256.54</b>
<b>Priority Class 2:</b>	<b>\$0</b>	<b>Total Facility Replacement Construction Cost:</b>	<b>\$5,250,000</b>
<b>Priority Class 3:</b>	<b>\$0</b>	<b>Facility Replacement Cost per Square Foot:</b>	<b>\$375</b>
<b>Grand Total:</b>	<b>\$3,591,500</b>	<b>FCNI:</b>	<b>68%</b>

**MEDICAL UNIT 8(VACANT)  
BUILDING REPORT**

The Medical Unit 8 building is a concrete masonry unit (CMU) structure with a painted exterior insulation and finish system (EIFS), single-ply roofing system on a concrete slab-on-grade foundation. The facility is a housing unit for inmates with medical issues and includes exam rooms, dental services and doctor offices. The building has an accessible shower and restroom and is fully sprinklered. The building was vacant at the time of the survey and in poor condition.

**PRIORITY CLASS 1 PROJECTS** **Total Construction Cost for Priority 1 Projects: \$1,193,350**  
**Currently Critical** **Immediate to Two Years**

**2" BACKFLOW ASSEMBLY**

**Project Index #: 0188PLM1**  
**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 double check valves or reduced pressure principle backflow preventers as appropriate to the hazard and in appropriate locations near the potential source of contamination. Costs include an above ground vault, and allowance for 200 feet of 1" conduit to provide power for freeze protection.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**ADA ACCESSIBLE COUNTER**

**Project Index #: 0188ADA6**  
**Construction Cost \$2,000**

The Americans with Disabilities Act (ADA) provides for accessibility to sites and services for people with physical limitations. The admitting station has a service counter for the inmates and staff to approach which does not meet current codes. Section 7.2 of the Americans with Disabilities Act Accessible Guidelines (ADAAG) states that the counter must have a portion which is at least 36" in length with a maximum height of 36" above the finish floor. This project will provide an accessible counter space in accordance with this requirement. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**ADA RESTROOM REMODELS**

**Project Index #: 0188ADA7**  
**Construction Cost \$30,000**

The accessible restrooms in the building are not completely compliant and do not have stainless steel, institutional-grade equipment. A complete retrofit is necessary. This project would provide funding for remodeling the four Men's and Women's restrooms into ADA compliant restrooms. These items may include a new sink, toilet, hardware, mirrors, fixtures, flooring and paint including that the fixtures are institutional-grade, stainless steel fixtures. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0188ADA3**  
**Construction Cost \$2,000**

#### **ADA SIGNAGE**

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 - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0188SEC1**  
**Construction Cost \$150,000**

#### **CONTROL PANEL, DOORS AND LOCKS REPLACEMENT**

Problems exist with the door control panel and door locks for the controlled doors. The panel and locks are original equipment and should be scheduled for replacement. Buttons on the panel do not work or get stuck frequently and the door locks are not consistently responsive to the panel. Repairs to the control panel and locks are difficult because replacement parts are no longer being manufactured for the units. Improper operation will cause security risks to the staff and inmates. It is recommended that the door control panel and 10 door locks be replaced.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0188ADA2**  
**Construction Cost \$4,000**

#### **DUAL LEVEL DRINKING FOUNTAIN INSTALLATION**

This building contains a water fountain. The 2012 IBC Section 1109.5 states where a water fountain is provided, at least half should be accessible. This project would provide funding for the purchase and installation of a new accessible fixed high/ low ADA drinking fountain. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0188ELE3**  
**Construction Cost \$206,000**

#### **ELECTRICAL UPGRADE**

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. The current wiring in the building is #14 and does not meet the current demand. #14 wiring is also against State Public Works Division's Adopted Standards, 8.5.4, for lighting and power circuits. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

**Project Index #: 0188SFT2**  
**Construction Cost \$12,875**

#### **EXIT SIGN & EGRESS LIGHTING UPGRADE**

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 - 2012 Chapter 10, 1011.6.2 exit sign illumination 5 foot candles (54 Lux), was referenced for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0188EXT4**  
**Construction Cost \$15,000**

**EXTERIOR DOOR REPLACEMENT**

The existing exterior doors to the Housing Unit 8 are original to the building. They are showing signs of wear and deterioration from constant use and inmate abuse. Due to security concerns and the condition of the doors, replacement is recommended. This project would provide for the removal and disposal of the existing doors and frames and replacement with new exterior security doors including door frames, hardware, security glazing, painting and connections to the security system as required. A total of 10 doors was used to generate this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0188EXT3**  
**Construction Cost \$51,500**

**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 1-2 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0188SFT3**  
**Construction Cost \$41,200**

**FIRE ALARM SYSTEM REPLACEMENT**

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and no longer comply with current requirements. The current system is no longer operating. 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 visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

**Project Index #: 0188HVA1**  
**Construction Cost \$128,750**

**HVAC REPLACEMENT**

The Water Source Heat Pumps in the building should be scheduled for replacement. They are not energy efficient and have reached the end of their expected and useful life. This project would provide for installation of new Water Source Heat Pump units and the cleaning of the existing ducting and grilles. This project includes removal and disposal of the existing Water Source Heat Pump units and all required connections to utilities.

**Project Index #: 0188INT3**  
**Construction Cost \$51,500**

**INTERIOR FINISHES**

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 report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0188ADA1**  
**Construction Cost \$15,000**

**LEVER ACTION HARDWARE INSTALLATION**

Section 4.13.9 of the Americans with Disabilities Act Accessible 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 in this building to meet these guidelines. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0188ENR1**  
**Construction Cost \$23,175**

**LIGHTING UPGRADE**

The existing lighting fixtures are the older fluorescent type, and are not energy efficient. This project will upgrade 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.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0188PLM5**  
**Construction Cost \$75,000**

**PLUMBING FIXTURE REPLACEMENT**

Approximately half of the plumbing fixtures in the cells are separate porcelain wall hung lavatories and water closets. These units are in poor condition and should be replaced with stainless steel fixtures designed for correctional facilities. This project would provide for the removal and replacement of the old porcelain plumbing fixtures with new stainless steel fixtures. The estimate is based on installing 10 separate water closets and sinks in the same place as the existing porcelain fixtures. If combination style units are feasible to install, there may be a cost savings on the materials, but additional work to install.

**Project Index #: 0188PLM4**  
**Construction Cost \$257,500**

**PLUMBING REPLACEMENT**

The sanitary wastewater and copper plumbing systems are showing signs of deterioration. Due to this deterioration, the systems are not working to their full potential. The copper lines have rusted and there are pin holes throughout the system. The lines are original to the site and are in poor condition. The hard water is also a contributing factor to this deterioration. Deposits within the pipes have caused restriction, and has slowed the water flow. This project would provide for the complete replacement of the sanitary sewer and copper piping system.

**Project Index #: 0188EXT2**  
**Construction Cost \$61,800**

**ROOF REPLACEMENT**

The roof on this building was in poor condition at the time of the survey. The statewide roofing program has set the useful life of an average roof at 20 years. The roof warranty expires at the end of the same time frame. The temperature fluctuations throughout the year, consistent wind which blows sand and dirt on to the roof membrane, and constant exposure to the sun are contributing factors to wear and deterioration. The current roofing system was installed in 1993. It is recommended to replace the singly-ply membrane and repair the Cor-ten roofing system as needed in the next 1-2 years to be consistent with the roofing program and the end of the warranty period.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0188ELE2**

**Construction Cost \$2,500**

**ROOFTOP SECURITY LIGHT REMOVAL**

The building has roof-mounted security lights that have been superseded by the installation of a high-mast security lighting system. This project will provide funding for the removal of the fixtures, conduit and associated wiring removed back to the panel. This will free up capacity for other electrical needs in the buildings.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0188SEC2**

**Construction Cost \$36,050**

**SECURITY SURVEILLANCE SYSTEM INSTALLATION**

There is no security camera or recording system in the Medical Unit 8 Building. This is a safety issue for the staff and inmates as all areas cannot be seen by the security staff or recorded in case of an incident. This project would provide for the installation of surveillance cameras and a security system for the entire building and all required connections to existing utility systems.

**Project Index #: 0188PLM3**

**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 1-2 years. It is recommended that a new electric water heater be installed. Removal and disposal of the existing equipment is included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**BUILDING INFORMATION:**

**Gross Area (square feet): 5,150**  
**Year Constructed: 1976**  
**Exterior Finish 1: 100 % Painted Stucco / EIFS**  
**Exterior Finish 2: %**  
**Number of Levels (Floors): 1 Basement? No**  
**IBC Occupancy Type 1: 100 % I-3**  
**IBC Occupancy Type 2: %**  
**Construction Type: Concrete Masonry and Wood**  
**IBC Construction Type: III-A**  
**Percent Fire Supressed: 100 %**

**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

<b>Priority Class 1:</b>	<b>\$1,193,350</b>	<b>Project Construction Cost per Square Foot:</b>	<b>\$231.72</b>
<b>Priority Class 2:</b>	<b>\$0</b>	<b>Total Facility Replacement Construction Cost:</b>	<b>\$1,802,000</b>
<b>Priority Class 3:</b>	<b>\$0</b>	<b>Facility Replacement Cost per Square Foot:</b>	<b>\$350</b>
<b>Grand Total:</b>	<b>\$1,193,350</b>	<b>FCNI:</b>	<b>66%</b>

**HOUSING UNIT 7(VACANT)**

SPWD Facility Condition Analysis - 0187

Survey Date: 3/8/2016

**HOUSING UNIT 7(VACANT)**

**BUILDING REPORT**

The Housing Unit 7 building is a concrete masonry unit (CMU) and reinforced concrete structure with a painted exterior insulation and finish system (EIFS), single-ply roofing system on a concrete slab-on-grade. This housing unit contains an A and B wing each with restroom facilities, utility room and a central control room. This unit has a mix stainless steel fixtures in the cells. The building was vacant at the time of the 2016 survey and numerous water leaks were observed coming from the cell area plumbing fixtures. This is the only housing unit with an elevator which is not operational.

**PRIORITY CLASS 1 PROJECTS**

**Total Construction Cost for Priority 1 Projects: \$4,474,710**

**Currently Critical**

**Immediate to Two Years**

**2" BACKFLOW ASSEMBLY**

**Project Index #: 0187PLM4**

**Construction Cost \$30,000**

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 double check valves or reduced pressure principle backflow preventers as appropriate to the hazard and in appropriate locations near the potential source of contamination. Costs include an above ground vault, and allowance for 200 feet of 1" conduit to provide power for freeze protection.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**ADA SIGNAGE**

**Project Index #: 0187ADA5**

**Construction Cost \$3,000**

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 - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0187ADA6**  
**Construction Cost \$70,000**

**ADA UPGRADES**

3% of the cells in each housing unit are required to comply with ADA accessibility guidelines. This unit does not have any accessible cells, showers, drinking fountains or path of travel through the unit. This project would provide for 2 accessible cells, 1 accessible shower, 2 accessible drinking fountains, a compliant path of travel from the entrance of the building to these areas and any other necessary upgrades. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0187SFT4**  
**Construction Cost \$840,000**

**CONTROL PANEL, DOORS AND LOCKS REPLACEMENT**

Problems exist with the door control panel and door locks for the cells. The panel and locks are original equipment and should be scheduled for replacement. Buttons on the panel do not work or get stuck frequently and the door locks are not consistently responsive to the panel. Repairs to the control panel and locks are difficult because replacement parts are no longer being manufactured for the units. Improper operation will cause security risks to the staff and inmates. It is recommended that the door control panel and 56 door locks be replaced.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0187ELE3**  
**Construction Cost \$723,600**

**ELECTRICAL REPLACEMENT**

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. The current wiring in the building is #14 and does not meet the current demand. #14 wiring is also against State Public Works Division's Adopted Standards, 8.5.4, for lighting and power circuits. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0187SFT5**  
**Construction Cost \$45,225**

**EXIT SIGN AND EGRESS LIGHTING UPGRADE**

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 - 2012 Chapter 10, 1011.6.2 exit sign illumination 5 foot candles (54 Lux), was referenced for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0187EXT5**  
**Construction Cost \$1,500**

### **EXTERIOR DOOR REPLACEMENT**

The existing exterior door to the Housing Unit 7 is original to the building. It is showing signs of wear and deterioration from constant use and inmate abuse. Due to security concerns and the condition of the door, replacement is recommended. This project would provide for the removal and disposal of the existing door and frame, and replacement with new exterior security door including door frame, hardware, security glazing, painting and connections to the security system as required. A total of 1 door was used to generate this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0187EXT4**  
**Construction Cost \$180,900**

### **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 1-2 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0187SFT6**  
**Construction Cost \$144,720**

### **FIRE ALARM SYSTEM REPLACEMENT**

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and no longer comply with current requirements. The current system is no longer operating. 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 visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

**Project Index #: 0187HVA2**  
**Construction Cost \$452,250**

### **HVAC REPLACEMENT**

The Water Source Heat Pumps in the building should be scheduled for replacement. They are not energy efficient and have reached the end of their expected and useful life. This project would provide for installation of new Water Source Heat Pump units and the cleaning of the existing ducting and grilles. This project includes removal and disposal of the existing Water Source Heat Pump units and all required connections to utilities.

**Project Index #: 0187INT3**  
**Construction Cost \$180,900**

### **INTERIOR FINISHES**

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 report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0187ADA1**

**Construction Cost \$3,000**

### **LEVER ACTION HARDWARE INSTALLATION**

Section 4.13.9 of the Americans with Disabilities Act Accessible 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 in this building to meet these guidelines.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0187INT4**

**Construction Cost \$81,405**

### **LIGHTING UPGRADE**

The existing lighting fixtures are the older fluorescent type, and are not energy efficient. This project will upgrade 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.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0187PLM6**

**Construction Cost \$375,000**

### **PLUMBING FIXTURE REPLACEMENT**

Approximately half of the plumbing fixtures in the cells are separate porcelain wall hung lavatories and water closets. These units are in poor condition and should be replaced with stainless steel fixtures designed for correctional facilities. This project would provide for the removal and replacement of the old porcelain plumbing fixtures with new stainless steel fixtures. The estimate is based on installing a 50 separate water closets and sinks in the same place as the existing porcelain fixtures. If combination style units are feasible to install, there may be a cost savings on the materials, but additional work to install.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0187PLM7**

**Construction Cost \$904,500**

### **PLUMBING REPLACEMENT**

The sanitary wastewater and copper plumbing systems are showing signs of deterioration. Due to this deterioration, the systems are not working to their full potential. The copper lines have rusted and there are pin holes throughout the system. The lines are original to the site and are in poor condition. The hard water is also a contributing factor to this deterioration. Deposits within the pipes have caused restriction, and has slowed the water flow. This project would provide for the complete replacement of the sanitary sewer and copper piping system.

**Project Index #: 0187INT1**

**Construction Cost \$80,000**

### **REPAIR ELEVATOR**

This building has an elevator, but it has been out of service for some time, and it does not comply with ADA standards. This project would provide funding to repair the elevator to improve maintenance, facilitate control of this building and comply with the ICC/ANSI A117.2009 Section 407. These repairs are to include but not limited to updating the control panel, door reversing light beams, call button, hall station upgrades, and a hands-free telephone.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0187EXT3**

**Construction Cost \$217,080**

**ROOF REPLACEMENT**

The roof on this building was in poor condition at the time of the survey. The statewide roofing program has set the useful life of an average roof at 20 years. The roof warranty expires at the end of the same time frame. The temperature fluctuations throughout the year, consistent wind which blows sand and dirt on to the roof membrane, and constant exposure to the sun are contributing factors to wear and deterioration. The current roofing system was installed in 1993. It is recommended to replace the singly-ply membrane and repair the Cor-ten roofing system as needed in the next 1-2 years to be consistent with the roofing program and the end of the warranty period.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0187SEC1**

**Construction Cost \$126,630**

**SECURITY SURVEILLANCE SYSTEM INSTALLATION**

There is no security camera or recording system in the Housing Unit 7 Building. This is a safety issue for the staff and inmates as all areas cannot be seen by the security staff or recorded in case of an incident. This project would provide for the installation of surveillance cameras and a security system for the entire building and all required connections to existing utility systems.

**Project Index #: 0187PLM5**

**Construction Cost \$15,000**

**WATER HEATER REPLACEMENT**

There are two 120 gallon electric water heaters 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 1-2 years. It is recommended that two new electric water heaters be installed. Removal and disposal of the existing equipment is included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**BUILDING INFORMATION:**

**Gross Area (square feet): 18,090**  
**Year Constructed: 1976**  
**Exterior Finish 1: 100 % Painted Stucco / EIFS**  
**Exterior Finish 2: %**  
**Number of Levels (Floors): 2      Basement? No**  
**IBC Occupancy Type 1: 100 % I-3**  
**IBC Occupancy Type 2: %**  
**Construction Type: Concrete Masonry, Concrete and Steel**  
**IBC Construction Type: III-A**  
**Percent Fire Supressed: 100 %**

**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

<b>Priority Class 1:</b>	<b>\$4,474,710</b>	<b>Project Construction Cost per Square Foot:</b>	<b>\$247.36</b>
<b>Priority Class 2:</b>	<b>\$0</b>	<b>Total Facility Replacement Construction Cost:</b>	<b>\$6,332,000</b>
<b>Priority Class 3:</b>	<b>\$0</b>	<b>Facility Replacement Cost per Square Foot:</b>	<b>\$350</b>
<b>Grand Total:</b>	<b>\$4,474,710</b>	<b>FCNI:</b>	<b>71%</b>

**RECREATION/ GYM(VACANT)  
BUILDING REPORT**

The Recreation /Gym building is a concrete masonry unit (CMU) structure with a painted exterior insulation and finish system (EIFS), single-ply roofing system on a concrete slab-on-grade foundation. The facility contains a gymnasium area, small recreation rooms and offices, and a gun post. The building is not ADA compliant and does not have fire protection. The facility is in poor shape with some glazing panels missing from the upper level observation rooms, and visible water leaks in the restroom/ shower area.

**PRIORITY CLASS 1 PROJECTS** **Total Construction Cost for Priority 1 Projects: \$2,140,300**  
**Currently Critical** **Immediate to Two Years**

**2" BACKFLOW ASSEMBLY** **Project Index #: 0186PLM1**  
**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 double check valves or reduced pressure principle backflow preventers as appropriate to the hazard and in appropriate locations near the potential source of contamination. Costs include an above ground vault, and allowance for 200 feet of 1" conduit to provide power for freeze protection.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**ADA RESTROOM/ SHOWER REMODEL** **Project Index #: 0186ADA5**  
**Construction Cost \$37,000**

The existing restroom and shower area is in poor condition and does not meet ADA accessibility standards. This project would provide for the remodeling of the restroom / shower area including new floor tile and wall finishes, fixtures and providing ADA compliance. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**ADA SIGNAGE** **Project Index #: 0186ADA1**  
**Construction Cost \$4,000**

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 - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0186ADA2**

**Construction Cost \$4,000**

**DUAL LEVEL DRINKING FOUNTAIN INSTALLATION**

This building contains a water fountain. The 2012 IBC Section 1109.5 states where a water fountain is provided, at least half should be accessible. This project would provide funding for the purchase and installation of a new accessible fixed high/ low ADA drinking fountain. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0186ELE2**

**Construction Cost \$512,000**

**ELECTRICAL UPGRADE**

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. The current wiring in the building is #14 and does not meet the current demand. #14 wiring is also against State Public Works Division's Adopted Standards, 8.5.4, for lighting and power circuits. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0186SFT2**

**Construction Cost \$32,000**

**EXIT SIGN & EGRESS LIGHTING UPGRADE**

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 - 2012 Chapter 10, 1011.6.2 exit sign illumination 5 foot candles (54 Lux), was referenced for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0186EXT4**

**Construction Cost \$7,500**

**EXTERIOR DOOR REPLACEMENT**

The existing exterior doors to the Recreation / Gym are original to the building. They are showing signs of wear and deterioration from constant use and inmate abuse. Due to security concerns and the condition of the doors, replacement is recommended. This project would provide for the removal and disposal of the existing doors and frames, and replacement with new exterior security doors including door frames, hardware, security glazing, painting and connections to the security system as required. A total of 5 doors was used to generate this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0186EXT2**

**Construction Cost \$128,000**

**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 1-2 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0186SFT5**  
**Construction Cost \$102,400**

**FIRE ALARM SYSTEM REPLACEMENT**

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and no longer comply with current requirements. It is recommended that the system be upgraded to current requirements to ensure the safety of the occupants. Also, according to NAC 477.917 "If the value of individual or cumulative additions, alterations and repairs to a building or structure in any 12-month period exceeds 50 percent of the value of the building or structure at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure". When completed, the new system will provide visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

**Project Index #: 0186SFT3**  
**Construction Cost \$179,200**

**FIRE SUPPRESSION SYSTEM INSTALLATION**

The building has a floor area greater than 12,000 square feet. Pursuant to the Nevada State Fire Marshal Regulation, NAC 477.915 (c) states, that every building owned or occupied by the state which is designated as a B occupancy, or has a floor area greater than 12,000 square feet on any floor or 24,000 square feet on all floors or is an R-1 occupancy, must have sprinklers installed when the building is remodeled or an addition is proposed. This project would provide funding for the installation of a fire sprinkler system and backflow prevention in the event the building is remodeled or an addition is undertaken.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0186INT3**  
**Construction Cost \$204,800**

**FLOORING REPLACEMENT**

The composite flooring in the gymnasium and the VCT (vinyl composite tile) in the Gun Post 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 a new composite floor in the gymnasium and 12x12 VCT with a 6" base and heavy duty commercial grade carpet in the Gun Post in the next 1-2 years.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0186HVA1**  
**Construction Cost \$320,000**

**HVAC REPLACEMENT**

The Water Source Heat Pumps in the building should be scheduled for replacement. They are not energy efficient and have reached the end of their expected and useful life. This project would provide for installation of new Water Source Heat Pump units and the cleaning of the existing ducting and grilles. This project includes removal and disposal of the existing Water Source Heat Pump units and all required connections to utilities.

**Project Index #: 0186INT1**  
**Construction Cost \$128,000**

**INTERIOR FINISHES**

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.

**Project Index #: 0186ADA4**

**Construction Cost \$6,000**

### **LEVER ACTION HARDWARE INSTALLATION**

Section 4.13.9 of the Americans with Disabilities Act Accessible 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 in this building to meet these guidelines.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0186ENR1**

**Construction Cost \$57,600**

### **LIGHTING UPGRADE**

The existing lighting fixtures are the older fluorescent type, and are not energy efficient. This project will upgrade 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.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0186PLM4**

**Construction Cost \$128,000**

### **PLUMBING REPLACEMENT**

The sanitary wastewater and copper plumbing systems are showing signs of deterioration. Due to this deterioration, the systems are not working to their full potential. The copper lines have rusted and there are pin holes throughout the system. The lines are original to the site and are in poor condition. The hard water is also a contributing factor to this deterioration. Deposits within the pipes have caused restriction, and has slowed the water flow. This project would provide for the complete replacement of the sanitary sewer and copper piping system.

**Project Index #: 0186EXT3**

**Construction Cost \$153,600**

### **ROOF REPLACEMENT**

The roof on this building was in poor condition at the time of the survey. The statewide roofing program has set the useful life of an average roof at 20 years. The roof warranty expires at the end of the same time frame. The temperature fluctuations throughout the year, consistent wind which blows sand and dirt on to the roof membrane, and constant exposure to the sun are contributing factors to wear and deterioration. The current roofing system was installed in 1993. It is recommended to replace the singly-ply membrane and repair the Cor-ten roofing system as needed in the next 1-2 years to be consistent with the roofing program and the end of the warranty period.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0186SEC2**

**Construction Cost \$89,600**

### **SECURITY SURVEILLANCE SYSTEM INSTALLATION**

There is no security camera or recording system in the Recreation/Gym Building. This is a safety issue for the staff and inmates as all areas cannot be seen by the security staff or recorded in case of an incident. This project would provide for the installation of surveillance cameras and a security system for the entire building and all required connections to existing utility systems.

**Project Index #: 0186SFT4**  
**Construction Cost \$21,600**

**WINDOW INSTALLATION**

The upper level room overlooking the gymnasium is missing several window panels. A total of nine panels have been removed creating a safety hazard. It is recommended to reinstall the glazing panels. This estimate is for the purchase and installation 9-6'x5' security glazing panels.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**BUILDING INFORMATION:**

**Gross Area (square feet): 12,800**  
**Year Constructed: 1976**  
**Exterior Finish 1: 100 % Painted Stucco / EIFS**  
**Exterior Finish 2: %**  
**Number of Levels (Floors): 2 Basement? No**  
**IBC Occupancy Type 1: 100 % I-3**  
**IBC Occupancy Type 2: %**  
**Construction Type: Concrete Masonry and Steel**  
**IBC Construction Type: III-A**  
**Percent Fire Supressed: 0 %**

**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

<b>Priority Class 1:</b>	<b>\$2,140,300</b>	<b>Project Construction Cost per Square Foot:</b>	<b>\$167.21</b>
<b>Priority Class 2:</b>	<b>\$0</b>	<b>Total Facility Replacement Construction Cost:</b>	<b>\$4,480,000</b>
<b>Priority Class 3:</b>	<b>\$0</b>	<b>Facility Replacement Cost per Square Foot:</b>	<b>\$350</b>
<b>Grand Total:</b>	<b>\$2,140,300</b>	<b>FCNI:</b>	<b>48%</b>

**HOUSING UNIT 6(VACANT)**

**SPWD Facility Condition Analysis - 0185**

**Survey Date: 3/8/2016**

**HOUSING UNIT 6(VACANT)**

**BUILDING REPORT**

The Housing Unit 6 building is a concrete masonry unit (CMU) structure with a painted exterior insulation and finish system (EIFS), single-ply roofing system on a concrete slab-on-grade foundation. This housing unit contains an A and B wing each with restroom facilities, utility room and a central control room. This unit has all stainless steel fixtures in the cells. This housing unit is the designated ADA accessible unit with ADA cells and showers as well as a route of travel into the building. Plumbing leaks were observed during the survey of 2016.

**PRIORITY CLASS 1 PROJECTS**

**Total Construction Cost for Priority 1 Projects: \$3,601,150**

**Currently Critical**

**Immediate to Two Years**

**2" BACKFLOW ASSEMBLY**

**Project Index #: 0185PLM2**

**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 double check valves or reduced pressure principle backflow preventers as appropriate to the hazard and in appropriate locations near the potential source of contamination. Costs include an above ground vault, and allowance for 200 feet of 1" conduit to provide power for freeze protection.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**ADA SIGNAGE**

**Project Index #: 0185ADA4**

**Construction Cost \$4,000**

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 - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**CONTROL PANEL, DOORS AND LOCKS REPLACEMENT**

**Project Index #: 0185SEC1**

**Construction Cost \$840,000**

Problems exist with the door control panel and door locks for the cells. The panel and locks are original equipment and should be scheduled for replacement. Buttons on the panel do not work or get stuck frequently and the door locks are not consistently responsive to the panel. Repairs to the control panel and locks are difficult because replacement parts are no longer being manufactured for the units. Improper operation will cause security risks to the staff and inmates. It is recommended that the door control panel and 56 door locks be replaced.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0185ELE4**  
**Construction Cost \$554,000**

**ELECTRICAL UPGRADE**

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. The current wiring in the building is #14 and does not meet the current demand. #14 wiring is also against State Public Works Division's Adopted Standards, 8.5.4, for lighting and power circuits. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0185SFT3**  
**Construction Cost \$34,625**

**EXIT SIGN AND EGRESS LIGHTING UPGRADE**

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 - 2012 Chapter 10, 1011.6.2 exit sign illumination 5 foot candles (54 Lux), was referenced for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0185EXT5**  
**Construction Cost \$1,500**

**EXTERIOR DOOR REPLACEMENT**

The existing exterior door to the Housing Unit 6 is original to the building. It is showing signs of wear and deterioration from constant use and inmate abuse. Due to security concerns and the condition of the door, replacement is recommended. This project would provide for the removal and disposal of the existing door and frame, and replacement with new exterior security door including door frame, hardware, security glazing, painting and connections to the security system as required. A total of 1 door was used to generate this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0185EXT6**  
**Construction Cost \$138,500**

**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 1-2 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0185SFT4**  
**Construction Cost \$110,800**

**FIRE ALARM SYSTEM REPLACEMENT**

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and no longer comply with current requirements. The current system is no longer operating. 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 visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

**Project Index #: 0185HVA2**  
**Construction Cost \$346,250**

**HVAC REPLACEMENT**

The Water Source Heat Pumps in the building should be scheduled for replacement. They are not energy efficient and have reached the end of their expected and useful life. This project would provide for installation of new Water Source Heat Pump units and the cleaning of the existing ducting and grilles. This project includes removal and disposal of the existing Water Source Heat Pump units and all required connections to utilities.

**Project Index #: 0185INT4**  
**Construction Cost \$138,500**

**INTERIOR FINISHES**

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 report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0185INT3**  
**Construction Cost \$62,325**

**LIGHTING UPGRADE**

The existing lighting fixtures are the older fluorescent type, and are not energy efficient. This project will upgrade 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.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0185PLM3**  
**Construction Cost \$375,000**

**PLUMBING FIXTURE REPLACEMENT**

Approximately half of the plumbing fixtures in the cells are separate porcelain wall hung lavatories and water closets. These units are in poor condition and should be replaced with stainless steel fixtures designed for correctional facilities. This project would provide for the removal and replacement of the old porcelain plumbing fixtures with new stainless steel fixtures. The estimate is based on installing a 44 separate water closets and sinks in the same place as the existing porcelain fixtures. If combination style units are feasible to install, there may be a cost savings on the materials, but additional work to install.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0185PLM5**  
**Construction Cost \$692,500**

**PLUMBING REPLACEMENT**

The sanitary wastewater and copper plumbing systems are showing signs of deterioration. Due to this deterioration, the systems are not working to their full potential. The copper lines have rusted and there are pin holes throughout the system. The lines are original to the site and are in poor condition. The hard water is also a contributing factor to this deterioration. Deposits within the pipes have caused restriction, and has slowed the water flow. This project would provide for the complete replacement of the sanitary sewer and copper piping system.

**Project Index #: 0185EXT4**

**Construction Cost \$166,200**

**ROOF REPLACEMENT**

The roof on this building was in poor condition at the time of the survey. The statewide roofing program has set the useful life of an average roof at 20 years. The roof warranty expires at the end of the same time frame. The temperature fluctuations throughout the year, consistent wind which blows sand and dirt on to the roof membrane, and constant exposure to the sun are contributing factors to wear and deterioration. The current roofing system was installed in 1993. It is recommended to replace the singly-ply membrane and repair the Cor-ten roofing system as needed in the next 1-2 years to be consistent with the roofing program and the end of the warranty period.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0185SEC2**

**Construction Cost \$96,950**

**SECURITY SURVEILLANCE SYSTEM INSTALLATION**

There is no security camera or recording system in the Housing Unit 6 Building. This is a safety issue for the staff and inmates as all areas cannot be seen by the security staff or recorded in case of an incident. This project would provide for the installation of surveillance cameras and a security system for the entire building and all required connections to existing utility systems.

**Project Index #: 0185PLM4**

**Construction Cost \$15,000**

**WATER HEATER REPLACEMENT**

There are two 120 gallon electric water heaters 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 1-2 years. It is recommended that two new electric water heaters be installed. Removal and disposal of the existing equipment is included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**BUILDING INFORMATION:**

**Gross Area (square feet): 13,850**  
**Year Constructed: 1978**  
**Exterior Finish 1: 100 % Painted Stucco / EIFS**  
**Exterior Finish 2: %**  
**Number of Levels (Floors): 2      Basement? No**  
**IBC Occupancy Type 1: 100 % I-3**  
**IBC Occupancy Type 2: %**  
**Construction Type: Concrete Masonry and Steel**  
**IBC Construction Type: III-A**  
**Percent Fire Supressed: 100 %**

**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

<b>Priority Class 1:</b>	<b>\$3,601,150</b>	<b>Project Construction Cost per Square Foot:</b>	<b>\$260.01</b>
<b>Priority Class 2:</b>	<b>\$0</b>	<b>Total Facility Replacement Construction Cost:</b>	<b>\$4,848,000</b>
<b>Priority Class 3:</b>	<b>\$0</b>	<b>Facility Replacement Cost per Square Foot:</b>	<b>\$350</b>
<b>Grand Total:</b>	<b>\$3,601,150</b>	<b>FCNI:</b>	<b>74%</b>

**HOUSING UNIT 5(VACANT)**

**SPWD Facility Condition Analysis - 0184**

**Survey Date: 3/8/2016**

**HOUSING UNIT 5(VACANT)**

**BUILDING REPORT**

The Housing Unit 5 building is a concrete masonry unit (CMU) structure with a painted exterior insulation and finish system (EIFS), single-ply roofing system on a concrete slab-on-grade. This housing unit contains an A and B wing each with restroom facilities, utility room and a central control room. This unit has a mix of stainless steel and porcelain sinks and toilets. A couple of cells have damaged or missing sinks and toilets and water was leaking from some fixtures during the 2016 survey.

**PRIORITY CLASS 1 PROJECTS**

**Total Construction Cost for Priority 1 Projects: \$3,597,150**

**Currently Critical**

**Immediate to Two Years**

**2" BACKFLOW ASSEMBLY**

**Project Index #: 0184PLM2**

**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 double check valves or reduced pressure principle backflow preventers as appropriate to the hazard and in appropriate locations near the potential source of contamination. Costs include an above ground vault, and allowance for 200 feet of 1" conduit to provide power for freeze protection.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016..

**CONTROL PANEL DOORS AND LOCKS REPLACEMENT**

**Project Index #: 0184SEC1**

**Construction Cost \$840,000**

Problems exist with the door control panel and door locks for the cells. The panel and locks are original equipment and should be scheduled for replacement. Buttons on the panel do not work or get stuck frequently and the door locks are not consistently responsive to the panel. Repairs to the control panel and locks are difficult because replacement parts are no longer being manufactured for the units. Improper operation will cause security risks to the staff and inmates. It is recommended that the door control panel and 56 door locks be replaced.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**ELECTRICAL UPGRADE**

**Project Index #: 0184ELE3**

**Construction Cost \$554,000**

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. The current wiring in the building is #14 and does not meet the current demand. #14 wiring is also against State Public Works Division's Adopted Standards, 8.5.4, for lighting and power circuits. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0184SFT3**  
**Construction Cost \$34,625**

#### **EXIT SIGN AND EGRESS LIGHTING UPGRADE**

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 - 2012 Chapter 10, 1011.6.2 exit sign illumination 5 foot candles (54 Lux), was referenced for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0184EXT7**  
**Construction Cost \$1,500**

#### **EXTERIOR DOOR REPLACEMENT**

The existing exterior door to the Housing Unit 5 is original to the building. It is showing signs of wear and deterioration from constant use and inmate abuse. Due to security concerns and the condition of the door, replacement is recommended. This project would provide for the removal and disposal of the existing door and frame, and replacement with new exterior security door including door frame, hardware, security glazing, painting and connections to the security system as required. A total of 1 door was used to generate this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0184EXT6**  
**Construction Cost \$138,500**

#### **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 1-2 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0184SFT4**  
**Construction Cost \$110,800**

#### **FIRE ALARM SYSTEM REPLACEMENT**

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and no longer comply with current requirements. The current system is no longer operating. 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 visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

**Project Index #: 0184HVA2**  
**Construction Cost \$346,250**

#### **HVAC REPLACEMENT**

The Water Source Heat Pumps in the building should be scheduled for replacement. They are not energy efficient and have reached the end of their expected and useful life. This project would provide for installation of new Water Source Heat Pump units and the cleaning of the existing ducting and grilles. This project includes removal and disposal of the existing Water Source Heat Pump units and all required connections to utilities.

**Project Index #: 0184INT4**  
**Construction Cost \$138,500**

#### **INTERIOR FINISHES**

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 report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0184INT3**  
**Construction Cost \$62,325**

### **LIGHTING UPGRADE**

The existing lighting fixtures are the older fluorescent type, and are not energy efficient. This project will upgrade 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.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0184PLM5**  
**Construction Cost \$375,000**

### **PLUMBING FIXTURE REPLACEMENT**

Approximately half of the plumbing fixtures in the cells are separate porcelain wall hung lavatories and water closets. These units are in poor condition and should be replaced with stainless steel fixtures designed for correctional facilities. This project would provide for the removal and replacement of the old porcelain plumbing fixtures with new stainless steel fixtures. The estimate is based on installing a 50 separate water closets and sinks in the same place as the existing porcelain fixtures. If combination style units are feasible to install, there may be a cost savings on the materials, but additional work to install.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0184PLM6**  
**Construction Cost \$692,500**

### **PLUMBING REPLACEMENT**

The sanitary wastewater and copper plumbing systems are showing signs of deterioration. Due to this deterioration, the systems are not working to their full potential. The copper lines have rusted and there are pin holes throughout the system. The lines are original to the site and are in poor condition. The hard water is also a contributing factor to this deterioration. Deposits within the pipes have caused restriction, and has slowed the water flow. This project would provide for the complete replacement of the sanitary sewer and copper piping system.

**Project Index #: 0184EXT4**  
**Construction Cost \$166,200**

### **ROOF REPLACEMENT**

The roof on this building was in poor condition at the time of the survey. The statewide roofing program has set the useful life of an average roof at 20 years. The roof warranty expires at the end of the same time frame. The temperature fluctuations throughout the year, consistent wind which blows sand and dirt on to the roof membrane, and constant exposure to the sun are contributing factors to wear and deterioration. The current roofing system was installed in 1993. It is recommended to replace the singly-ply membrane and repair the Cor-ten roofing system as needed in the next 1-2 years to be consistent with the roofing program and the end of the warranty period.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0184SEC2**  
**Construction Cost \$96,950**

### **SECURITY SURVEILLANCE SYSTEM INSTALLATION**

There is no security camera or recording system in the Housing Unit 5 Building. This is a safety issue for the staff and inmates as all areas cannot be seen by the security staff or recorded in case of an incident. This project would provide for the installation of surveillance cameras and a security system for the entire building and all required connections to existing utility systems.

**Project Index #: 0184PLM4**  
**Construction Cost \$15,000**

**WATER HEATER REPLACEMENT**

There are two 120 gallon electric water heaters 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 1-2 years. It is recommended that two new electric water heaters be installed. Removal and disposal of the existing equipment is included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**BUILDING INFORMATION:**

**Gross Area (square feet): 13,850**  
**Year Constructed: 1978**  
**Exterior Finish 1: 100 % Painted Stucco / EIFS**  
**Exterior Finish 2: %**  
**Number of Levels (Floors): 2      Basement? No**  
**IBC Occupancy Type 1: 100 % I-3**  
**IBC Occupancy Type 2: %**  
**Construction Type: Concrete Masonry and Steel**  
**IBC Construction Type: III-A**  
**Percent Fire Supressed: 100 %**

**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

<b>Priority Class 1:</b>	<b>\$3,597,150</b>	<b>Project Construction Cost per Square Foot:</b>	<b>\$259.72</b>
<b>Priority Class 2:</b>	<b>\$0</b>	<b>Total Facility Replacement Construction Cost:</b>	<b>\$4,848,000</b>
<b>Priority Class 3:</b>	<b>\$0</b>	<b>Facility Replacement Cost per Square Foot:</b>	<b>\$350</b>
<b>Grand Total:</b>	<b>\$3,597,150</b>	<b>FCNI:</b>	<b>74%</b>

**HOUSING UNIT 4(VACANT)**

SPWD Facility Condition Analysis - 0183

Survey Date: 3/8/2016

**HOUSING UNIT 4(VACANT)**

**BUILDING REPORT**

The Housing Unit 4 building is a concrete masonry unit (CMU) structure with a painted exterior insulation and finish system (EIFS), single-ply roofing system on a concrete slab-on-grade. This housing unit contains an A and B wing each with restroom facilities, utility room and a central control room. This unit has a mix of stainless steel and porcelain fixtures in the cells. Some of the plumbing fixtures were leaking at the time of the 2016 survey.

**PRIORITY CLASS 1 PROJECTS**

**Total Construction Cost for Priority 1 Projects: \$3,606,750**

**Currently Critical**

**Immediate to Two Years**

**2" BACKFLOW ASSEMBLY**

**Project Index #: 0183PLM3**

**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 double check valves or reduced pressure principle backflow preventers as appropriate to the hazard and in appropriate locations near the potential source of contamination. Costs include an above ground vault, and allowance for 200 feet of 1" conduit to provide power for freeze protection.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**CONTROL PANEL, DOORS AND LOCKS REPLACEMENT**

**Project Index #: 0183SEC1**

**Construction Cost \$840,000**

Problems exist with the door control panel and door locks for the cells. The panel and locks are original equipment and should be scheduled for replacement. Buttons on the panel do not work or get stuck frequently and the door locks are not consistently responsive to the panel. Repairs to the control panel and locks are difficult because replacement parts are no longer being manufactured for the units. Improper operation will cause security risks to the staff and inmates. It is recommended that the door control panel and 56 door locks be replaced.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**ELECTRICAL UPGRADE**

**Project Index #: 0183ELE3**

**Construction Cost \$554,000**

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. The current wiring in the building is #14 and does not meet the current demand. #14 wiring is also against State Public Works Division's Adopted Standards, 8.5.4, for lighting and power circuits. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0183SFT3**

**Construction Cost \$34,625**

**EXIT SIGN AND EGRESS LIGHTING UPGRADE**

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 - 2012 Chapter 10, 1011.6.2 exit sign illumination 5 foot candles (54 lux), was referenced for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0183EXT7**

**Construction Cost \$1,500**

**EXTERIOR DOOR REPLACEMENT**

The existing exterior door to the Housing Unit 4 is original to the building. It is showing signs of wear and deterioration from constant use and inmate abuse. Due to security concerns and the condition of the door, replacement is recommended. This project would provide for the removal and disposal of the existing door and frame, and replacement with new exterior security door including door frame, hardware, security glazing, painting and connections to the security system as required. A total of 1 door was used to generate this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0183EXT6**

**Construction Cost \$138,500**

**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 1-2 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0183SFT4**

**Construction Cost \$110,800**

**FIRE ALARM SYSTEM REPLACEMENT**

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and no longer comply with current requirements. The current system is no longer operating. 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 visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

**Project Index #: 0183HVA2**

**Construction Cost \$346,250**

**HVAC REPLACEMENT**

The Water Source Heat Pumps in the building should be scheduled for replacement. They are not energy efficient and have reached the end of their expected and useful life. This project would provide for installation of new Water Source Heat Pump units and the cleaning of the existing ducting and grilles. This project includes removal and disposal of the existing Water Source Heat Pump units and all required connections to utilities.

**Project Index #: 0183INT4**

**Construction Cost \$138,500**

**INTERIOR FINISHES**

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 report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0183INT3**  
**Construction Cost \$62,325**

**LIGHTING UPGRADE**

The existing lighting fixtures are the older fluorescent type, and are not energy efficient. This project will upgrade 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.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0183PLM1**  
**Construction Cost \$375,000**

**PLUMBING FIXTURE REPLACEMENT**

Approximately half of the plumbing fixtures in the cells are separate porcelain wall hung lavatories and water closets. These units are in poor condition and should be replaced with stainless steel fixtures designed for correctional facilities. This project would provide for the removal and replacement of the old porcelain plumbing fixtures with new stainless steel fixtures. The estimate is based on installing a 50 separate water closets and sinks in the same place as the existing porcelain fixtures. If combination style units are feasible to install, there may be a cost savings on the materials, but additional work to install.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0183PLM5**  
**Construction Cost \$692,500**

**PLUMBING REPLACEMENT**

The sanitary wastewater and copper plumbing systems are showing signs of deterioration. Due to this deterioration, the systems are not working to their full potential. The copper lines have rusted and there are pin holes throughout the system. The lines are original to the site and are in poor condition. The hard water is also a contributing factor to this deterioration. Deposits within the pipes have caused restriction, and has slowed the water flow. This project would provide for the complete replacement of the sanitary sewer and copper piping system.

**Project Index #: 0183EXT4**  
**Construction Cost \$166,200**

**ROOF REPLACEMENT**

The roof on this building was in poor condition at the time of the survey. The statewide roofing program has set the useful life of an average roof at 20 years. The roof warranty expires at the end of the same time frame. The temperature fluctuations throughout the year, consistent wind which blows sand and dirt on to the roof membrane, and constant exposure to the sun are contributing factors to wear and deterioration. The current roofing system was installed in 1993. It is recommended to replace the singly-ply membrane and repair the Cor-ten roofing system as needed in the next 1-2 years to be consistent with the roofing program and the end of the warranty period.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0183SEC2**  
**Construction Cost \$96,950**

**SECURITY SURVEILLANCE SYSTEM INSTALLATION**

There is no security camera or recording system in the Housing Unit 4 Building. This is a safety issue for the staff and inmates as all areas cannot be seen by the security staff or recorded in case of an incident. This project would provide for the installation of surveillance cameras and a security system for the entire building and all required connections to existing utility systems.

**Project Index #: 0183PLM4**  
**Construction Cost \$15,000**

**WATER HEATER REPLACEMENT**

There are two 120 gallon electric water heaters 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 1-2 years. It is recommended that two new electric water heaters be installed. Removal and disposal of the existing equipment is included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0183EXT5**  
**Construction Cost \$9,600**

**WINDOW WEATHER-STRIPPING REPLACEMENT**

The exterior glazing currently has metal window stops and weather-stripping that is rusted, damaged and is in need of replacement, especially at the main entrance to the housing unit at grade level. This project would provide for the removal and replacement of the window stops and weather-stripping. This estimate includes painting to match existing conditions.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**BUILDING INFORMATION:**

**Gross Area (square feet): 13,850**  
**Year Constructed: 1976**  
**Exterior Finish 1: 100 % Painted Stucco / EIFS**  
**Exterior Finish 2: %**  
**Number of Levels (Floors): 2 Basement? No**  
**IBC Occupancy Type 1: 100 % I-3**  
**IBC Occupancy Type 2: %**  
**Construction Type: Concrete Masonry and Steel**  
**IBC Construction Type: III-A**  
**Percent Fire Supressed: 100 %**

**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

<b>Priority Class 1:</b>	<b>\$3,606,750</b>	<b>Project Construction Cost per Square Foot:</b>	<b>\$260.42</b>
<b>Priority Class 2:</b>	<b>\$0</b>	<b>Total Facility Replacement Construction Cost:</b>	<b>\$4,848,000</b>
<b>Priority Class 3:</b>	<b>\$0</b>	<b>Facility Replacement Cost per Square Foot:</b>	<b>\$350</b>
<b>Grand Total:</b>	<b>\$3,606,750</b>	<b>FCNI:</b>	<b>74%</b>

**HOUSING UNIT 3(VACANT)**

SPWD Facility Condition Analysis - 0182

Survey Date: 3/8/2016

**HOUSING UNIT 3(VACANT)**

**BUILDING REPORT**

The Housing Unit 3 building is a concrete masonry unit (CMU) structure with a painted exterior insulation and finish system (EIFS), single-ply roofing system on a concrete slab-on-grade. This housing unit contains an A and B wing each with restroom facilities, utility room and a central control room. This unit has a mix of stainless steel and porcelain fixtures in the cells. Some plumbing fixtures were showing signs of leaking during the 2016 survey.

**PRIORITY CLASS 1 PROJECTS**

**Total Construction Cost for Priority 1 Projects: \$3,597,150**

**Currently Critical**

**Immediate to Two Years**

**2" BACKFLOW ASSEMBLY**

**Project Index #: 0182PLM2**

**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 double check valves or reduced pressure principle backflow preventers as appropriate to the hazard and in appropriate locations near the potential source of contamination. Costs include an above ground vault, and allowance for 200 feet of 1" conduit to provide power for freeze protection.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**CONTROL PANEL, DOORS AND LOCKS REPLACEMENT**

**Project Index #: 0182SEC1**

**Construction Cost \$840,000**

Problems exist with the door control panel and door locks for the cells. The panel and locks are original equipment and should be scheduled for replacement. Buttons on the panel do not work or get stuck frequently and the door locks are not consistently responsive to the panel. Repairs to the control panel and locks are difficult because replacement parts are no longer being manufactured for the units. Improper operation will cause security risks to the staff and inmates. It is recommended that the door control panel and 56 door locks be replaced.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**ELECTRICAL UPGRADE**

**Project Index #: 0182ELE3**

**Construction Cost \$554,000**

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. The current wiring in the building is #14 and does not meet the current demand. #14 wiring is also against State Public Works Division's Adopted Standards, 8.5.4, for lighting and power circuits. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0182SFT4**  
**Construction Cost \$34,625**

#### **EXIT SIGN AND EGRESS LIGHTING UPGRADE**

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 - 2012 Chapter 10, 1011.6.2 exit sign illumination 5 foot candles (54 lux), was referenced for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0182EXT5**  
**Construction Cost \$1,500**

#### **EXTERIOR DOOR REPLACEMENT**

The existing exterior door to the Housing Unit 3 is original to the building. It is showing signs of wear and deterioration from constant use and inmate abuse. Due to security concerns and the condition of the door, replacement is recommended. This project would provide for the removal and disposal of the existing door and frame, and replacement with new exterior security door including door frame, hardware, security glazing, painting and connections to the security system as required. A total of 1 door was used to generate this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0182EXT6**  
**Construction Cost \$138,500**

#### **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 1-2 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0182SFT5**  
**Construction Cost \$110,800**

#### **FIRE ALARM SYSTEM REPLACEMENT**

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and no longer comply with current requirements. the current system is no longer operating. 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 visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

**Project Index #: 0182HVA2**  
**Construction Cost \$346,250**

#### **HVAC REPLACEMENT**

The Water Source Heat Pumps in the building should be scheduled for replacement. They are not energy efficient and have reached the end of their expected and useful life. This project would provide for installation of new Water Source Heat Pump units and the cleaning of the existing ducting and grilles. This project includes removal and disposal of the existing Water Source Heat Pump units and all required connections to utilities.

**Project Index #: 0182INT4**  
**Construction Cost \$138,500**

#### **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 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 report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0182INT3**  
**Construction Cost \$62,325**

**LIGHTING UPGRADE**

The existing lighting fixtures are the older fluorescent type, and are not energy efficient. This project will upgrade 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.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0182PLM5**  
**Construction Cost \$375,000**

**PLUMBING FIXTURE REPLACEMENT**

The plumbing fixtures in the cells are a mix of porcelain and stainless steel wall hung lavatories and water closets. These units are in poor condition and should be replaced with stainless steel fixtures designed for correctional facilities. This project would provide for the removal and replacement of the old porcelain plumbing fixtures with new stainless steel fixtures. The estimate is based on installing 50 separate water closets and sinks in the same place as the existing porcelain fixtures. If combination style units are feasible to install, there may be a cost savings on the materials, but additional work to install.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0182PLM6**  
**Construction Cost \$692,500**

**PLUMBING REPLACEMENT**

The sanitary wastewater and copper plumbing systems are showing signs of deterioration. Due to this deterioration, the systems are not working to their full potential. The copper lines have rusted and there are pin holes throughout the system. The lines are original to the site and are in poor condition. The hard water is also a contributing factor to this deterioration. Deposits within the pipes have caused restriction, and has slowed the water flow. This project would provide for the complete replacement of the sanitary sewer and copper piping system.

**Project Index #: 0182EXT4**  
**Construction Cost \$166,200**

**ROOF REPLACEMENT**

The roof on this building was in poor condition at the time of the survey. The statewide roofing program has set the useful life of an average roof at 20 years. The roof warranty expires at the end of the same time frame. The temperature fluctuations throughout the year, consistent wind which blows sand and dirt on to the roof membrane, and constant exposure to the sun are contributing factors to wear and deterioration. The current roofing system was installed in 1993. It is recommended to replace the singly-ply membrane and repair the Cor-ten roofing system as needed in the next 1-2 years to be consistent with the roofing program and the end of the warranty period.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0182SEC2**  
**Construction Cost \$96,950**

**SECURITY SURVEILLANCE SYSTEM INSTALLATION**

There is no security camera or recording system in the Housing Unit 3 Building. This is a safety issue for the staff and inmates as all areas cannot be seen by the security staff or recorded in case of an incident. This project would provide for the installation of surveillance cameras and a security system for the entire building and all required connections to existing utility systems.

**Project Index #: 0182PLM4**  
**Construction Cost \$15,000**

**WATER HEATER REPLACEMENT**

There are two 120 gallon electric water heaters 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 1-2 years. It is recommended that two new electric water heaters be installed. Removal and disposal of the existing equipment is included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**BUILDING INFORMATION:**

**Gross Area (square feet): 13,850**  
**Year Constructed: 1976**  
**Exterior Finish 1: 100 % Painted Stucco / EIFS**  
**Exterior Finish 2: %**  
**Number of Levels (Floors): 2      Basement? No**  
**IBC Occupancy Type 1: 100 % I-3**  
**IBC Occupancy Type 2: %**  
**Construction Type: Concrete Masonry and Steel**  
**IBC Construction Type: III-A**  
**Percent Fire Supressed: 100 %**

**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

<b>Priority Class 1:</b>	<b>\$3,597,150</b>	<b>Project Construction Cost per Square Foot:</b>	<b>\$259.72</b>
<b>Priority Class 2:</b>	<b>\$0</b>	<b>Total Facility Replacement Construction Cost:</b>	<b>\$4,848,000</b>
<b>Priority Class 3:</b>	<b>\$0</b>	<b>Facility Replacement Cost per Square Foot:</b>	<b>\$350</b>
<b>Grand Total:</b>	<b>\$3,597,150</b>	<b>FCNI:</b>	<b>74%</b>

HOUSING UNIT 2(VACANT)

SPWD Facility Condition Analysis - 0181

Survey Date: 3/8/2016

**HOUSING UNIT 2(VACANT)**

**BUILDING REPORT**

The Housing Unit 2 building is a concrete masonry unit (CMU) structure with a painted exterior insulation and finish system (EIFS), single-ply roofing system on a concrete slab-on-grade. This housing unit contains an A and B wing each with restroom facilities, utility room and a central control room. This unit has a mix of stainless steel and porcelain fixtures in the cells. Some of the plumbing fixtures were showing signs of leaking during the 2016 survey.

**PRIORITY CLASS 1 PROJECTS**

**Total Construction Cost for Priority 1 Projects: \$3,597,150**

**Currently Critical**

**Immediate to Two Years**

**2" BACKFLOW ASSEMBLY**

**Project Index #: 0181PLM2**

**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 double check valves or reduced pressure principle backflow preventers as appropriate to the hazard and in appropriate locations near the potential source of contamination. Costs include an above ground vault, and allowance for 200 feet of 1" conduit to provide power for freeze protection.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**CONTROL PANEL, DOORS AND LOCKS REPLACEMENT**

**Project Index #: 0181SEC1**

**Construction Cost \$840,000**

Problems exist with the door control panel and door locks for the cells. The panel and locks are original equipment and should be scheduled for replacement. Buttons on the panel do not work or get stuck frequently and the door locks are not consistently responsive to the panel. Repairs to the control panel and locks are difficult because replacement parts are no longer being manufactured for the units. Improper operation will cause security risks to the staff and inmates. It is recommended that the door control panel and 56 door locks be replaced.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**ELECTRICAL UPGRADE**

**Project Index #: 0181ELE3**

**Construction Cost \$554,000**

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. The current wiring in the building is #14 and does not meet the current demand. #14 wiring is also against State Public Works Division's Adopted Standards, 8.5.4, for lighting and power circuits. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

**Project Index #: 0181SFT3**

**Construction Cost \$34,625**

### **EXIT SIGN AND EGRESS LIGHTING UPGRADE**

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 - 2012 Chapter 10, 1011.6.2 exit sign illumination 5 foot candles (54 lux), was referenced for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0181EXT5**

**Construction Cost \$1,500**

### **EXTERIOR DOOR REPLACEMENT**

The existing exterior door to the Housing Unit 2 is original to the building. It is showing signs of wear and deterioration from constant use and inmate abuse. Due to security concerns and the condition of the door, replacement is recommended. This project would provide for the removal and disposal of the existing door and frame, and replacement with new exterior security door including door frame, hardware, security glazing, painting and connections to the security system as required. A total of 1 door was used to generate this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0181EXT6**

**Construction Cost \$138,500**

### **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 1-2 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0181SFT4**

**Construction Cost \$110,800**

### **FIRE ALARM SYSTEM REPLACEMENT**

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and no longer comply with current requirements. The current system is no longer operating. 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 visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

**Project Index #: 0181HVA2**

**Construction Cost \$346,250**

### **HVAC REPLACEMENT**

The Water Source Heat Pumps in the building should be scheduled for replacement. They are not energy efficient and have reached the end of their expected and useful life. This project would provide for installation of new Water Source Heat Pump units and the cleaning of the existing ducting and grilles. This project includes removal and disposal of the existing Water Source Heat Pump units and all required connections to utilities.

**Project Index #: 0181INT4**

**Construction Cost \$138,500**

### **INTERIOR FINISHES**

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 report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0181INT3**  
**Construction Cost \$62,325**

### **LIGHTING UPGRADE**

The existing lighting fixtures are the older fluorescent type, and are not energy efficient. This project will upgrade 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.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0181PLM5**  
**Construction Cost \$375,000**

### **PLUMBING FIXTURE REPLACEMENT**

The plumbing fixtures in the cells are a mix of porcelain and stainless steel wall hung lavatories and water closets. These units are in poor condition and should be replaced with stainless steel fixtures designed for correctional facilities. This project would provide for the removal and replacement of the old porcelain plumbing fixtures with new stainless steel fixtures. The estimate is based on installing a 50 separate water closets and sinks in the same place as the existing porcelain fixtures. If combination style units are feasible to install, there may be a cost savings on the materials, but additional work to install.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0181PLM6**  
**Construction Cost \$692,500**

### **PLUMBING REPLACEMENT**

The sanitary wastewater and copper plumbing systems are showing signs of deterioration. Due to this deterioration, the systems are not working to their full potential. The copper lines have rusted and there are pin holes throughout the system. The lines are original to the site and are in poor condition. The hard water is also a contributing factor to this deterioration. Deposits within the pipes have caused restriction, and has slowed the water flow. This project would provide for the complete replacement of the sanitary sewer and copper piping system.

**Project Index #: 0181EXT4**  
**Construction Cost \$166,200**

### **ROOF REPLACEMENT**

The roof on this building was in poor condition at the time of the survey. The statewide roofing program has set the useful life of an average roof at 20 years. The roof warranty expires at the end of the same time frame. The temperature fluctuations throughout the year, consistent wind which blows sand and dirt on to the roof membrane, and constant exposure to the sun are contributing factors to wear and deterioration. The current roofing system was installed in 1993. It is recommended to replace the singly-ply membrane and repair the Cor-ten roofing system as needed in the next 1-2 years to be consistent with the roofing program and the end of the warranty period.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0181SEC2**  
**Construction Cost \$96,950**

### **SECURITY SURVEILLANCE SYSTEM INSTALLATION**

There is no security camera or recording system in the Housing Unit 2 Building. This is a safety issue for the staff and inmates as all areas cannot be seen by the security staff or recorded in case of an incident. This project would provide for the installation of surveillance cameras and a security system for the entire building and all required connections to existing utility systems.

**Project Index #: 0181PLM4**

**Construction Cost \$15,000**

**WATER HEATER REPLACEMENT**

There are two 120 gallon electric water heaters 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 1-2 years. It is recommended that two new electric water heaters be installed. Removal and disposal of the existing equipment is included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**BUILDING INFORMATION:**

**Gross Area (square feet): 13,850**  
**Year Constructed: 1976**  
**Exterior Finish 1: 100 % Painted Stucco / EIFS**  
**Exterior Finish 2: %**  
**Number of Levels (Floors): 2      Basement? No**  
**IBC Occupancy Type 1: 100 % I-3**  
**IBC Occupancy Type 2: %**  
**Construction Type: Concrete Masonry and Steel**  
**IBC Construction Type: III-A**  
**Percent Fire Supressed: 100 %**

**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

<b>Priority Class 1:</b>	<b>\$3,597,150</b>	<b>Project Construction Cost per Square Foot:</b>	<b>\$259.72</b>
<b>Priority Class 2:</b>	<b>\$0</b>	<b>Total Facility Replacement Construction Cost:</b>	<b>\$4,848,000</b>
<b>Priority Class 3:</b>	<b>\$0</b>	<b>Facility Replacement Cost per Square Foot:</b>	<b>\$350</b>
<b>Grand Total:</b>	<b>\$3,597,150</b>	<b>FCNI:</b>	<b>74%</b>

**HOUSING UNIT 1(VACANT)**

SPWD Facility Condition Analysis - 0180

Survey Date: 3/8/2016

**HOUSING UNIT 1(VACANT)**

**BUILDING REPORT**

The Housing Unit 1 building is a concrete masonry unit (CMU) structure with a painted exterior insulation and finish system (EIFS), single-ply roofing system on a concrete slab-on-grade. This housing unit contains an A and B wing each with restroom facilities, utility room and a central control room. This unit has a mix of stainless steel and porcelain fixtures in the cells. Some of the plumbing fixtures were showing signs of leaking during the 2016 survey.

**PRIORITY CLASS 1 PROJECTS**

**Total Construction Cost for Priority 1 Projects: \$3,597,150**

**Currently Critical**

**Immediate to Two Years**

**2" BACKFLOW ASSEMBLY, VAULT, AND POWER**

**Project Index #: 0180PLM2**

**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 double check valves or reduced pressure principle backflow preventers as appropriate to the hazard and in appropriate locations near the potential source of contamination. Costs include an above ground vault, and allowance for 200 feet of 1" conduit to provide power for freeze protection.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**DOORS, LOCKS AND CONTROL PANEL REPLACEMENT**

**Project Index #: 0180SEC1**

**Construction Cost \$840,000**

Problems exist with the door control panel and door locks for the cells. The panel and locks are original equipment and should be scheduled for replacement. Buttons on the panel do not work or get stuck frequently and the door locks are not consistently responsive to the panel. Repairs to the control panel and locks are difficult because replacement parts are no longer being manufactured for the units. Improper operation will cause security risks to the staff and inmates. It is recommended that the door control panel and 56 door locks be replaced.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**ELECTRICAL UPGRADE**

**Project Index #: 0180ELE3**

**Construction Cost \$554,000**

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. The current wiring in the building is #14 and does not meet the current demand. #14 wiring is also against State Public Works Division's Adopted Standards, 8.5.4, for lighting and power circuits. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

**Project Index #: 0180SFT3**  
**Construction Cost \$34,625**

**EXIT SIGN AND EGRESS LIGHTING UPGRADE**

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 - 2012 Chapter 10, 1011.6.2 exit sign illumination 5 foot candles (54 lux), was referenced for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0180EXT5**  
**Construction Cost \$1,500**

**EXTERIOR DOOR REPLACEMENT**

The existing exterior door to the Housing Unit 1 is original to the building. It is showing signs of wear and deterioration from constant use and inmate abuse. Due to security concerns and the condition of the door, replacement is recommended. This project would provide for the removal and disposal of the existing door and frame, and replacement with new exterior security door including door frame, hardware, security glazing, painting and connections to the security system as required. A total of 1 door was used to generate this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0180EXT6**  
**Construction Cost \$138,500**

**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 1-2 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0180SFT4**  
**Construction Cost \$110,800**

**FIRE ALARM REPLACEMENT**

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and no longer comply with current requirements. the current system is no longer operating. 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 visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

**Project Index #: 0180HVA2**  
**Construction Cost \$346,250**

**HVAC REPLACEMENT**

The Water Source Heat Pumps in the building should be scheduled for replacement. They are not energy efficient and have reached the end of their expected and useful life. This project would provide for installation of new Water Source Heat Pump units and the cleaning of the existing ducting and grilles. This project includes removal and disposal of the existing Water Source Heat Pump units and all required connections to utilities.

**Project Index #: 0180INT4**  
**Construction Cost \$138,500**

**INTERIOR FINISHES**

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 report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0180ENR1**  
**Construction Cost \$62,325**

### **LIGHTING UPGRADE**

The existing lighting fixtures are the older fluorescent type, and are not energy efficient. This project will upgrade 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.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0180PLM5**  
**Construction Cost \$375,000**

### **PLUMBING FIXTURE REPLACEMENT**

The plumbing fixtures in the cells are separate porcelain wall hung lavatories and water closets. These units are in poor condition and should be replaced with stainless steel fixtures designed for correctional facilities. This project would provide for the removal and replacement of the old porcelain plumbing fixtures with new stainless steel fixtures. The estimate is based on installing a 100 separate water closets and sinks in the same place as the existing porcelain fixtures. If combination style units are feasible to install, there may be a cost savings on the materials, but additional costs would be incurred for relocating plumbing.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0180PLM3**  
**Construction Cost \$692,500**

### **PLUMBING REPLACEMENT**

The sanitary wastewater and copper plumbing systems are showing signs of deterioration. Due to this deterioration, the systems are not working to their full potential. The copper lines have rusted and there are pin holes throughout the system. The lines are original to the site and are in poor condition. The hard water is also a contributing factor to this deterioration. Deposits within the pipes have caused restriction, and has slowed the water flow. This project would provide for the complete replacement of the sanitary sewer and copper piping system.

**Project Index #: 0180EXT4**  
**Construction Cost \$166,200**

### **ROOF REPLACEMENT**

The roof on this building was in poor condition at the time of the survey. The statewide roofing program has set the useful life of an average roof at 20 years. The roof warranty expires at the end of the same time frame. The temperature fluctuations throughout the year, consistent wind which blows sand and dirt on to the roof membrane, and constant exposure to the sun are contributing factors to wear and deterioration. The current roofing system was installed in 1993. It is recommended to replace the singly-ply membrane and repair the Cor-ten roofing system as needed in the next 1-2 years to be consistent with the roofing program and the end of the warranty period.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0180SEC2**  
**Construction Cost \$96,950**

### **SECURITY SURVEILLANCE SYSTEM INSTALLATION**

There is no security camera or recording system in the Housing Unit 1 Building. This is a safety issue for the staff and inmates as all areas cannot be seen by the security staff or recorded in case of an incident. This project would provide for the installation of surveillance cameras and a security system for the entire building and all required connections to existing utility systems.

**Project Index #: 0180PLM4**

**Construction Cost \$15,000**

**WATER HEATER REPLACEMENT**

There are two 120 gallon electric water heaters 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 1-2 years. It is recommended that two new electric water heaters be installed. Removal and disposal of the existing equipment is included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**BUILDING INFORMATION:**

**Gross Area (square feet): 13,850**  
**Year Constructed: 1976**  
**Exterior Finish 1: 100 % Painted Stucco / EIFS**  
**Exterior Finish 2: %**  
**Number of Levels (Floors): 2      Basement? No**  
**IBC Occupancy Type 1: 100 % I-3**  
**IBC Occupancy Type 2: %**  
**Construction Type: Concrete Masonry and Steel**  
**IBC Construction Type: III-A**  
**Percent Fire Supressed: 100 %**

**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

<b>Priority Class 1:</b>	<b>\$3,597,150</b>	<b>Project Construction Cost per Square Foot:</b>	<b>\$259.72</b>
<b>Priority Class 2:</b>	<b>\$0</b>	<b>Total Facility Replacement Construction Cost:</b>	<b>\$4,848,000</b>
<b>Priority Class 3:</b>	<b>\$0</b>	<b>Facility Replacement Cost per Square Foot:</b>	<b>\$350</b>
<b>Grand Total:</b>	<b>\$3,597,150</b>	<b>FCNI:</b>	<b>74%</b>

CHAPEL/ LAW LIBRARY(VACANT)

SPWD Facility Condition Analysis - 0179

Survey Date: 3/8/2016

CHAPEL/ LAW LIBRARY(VACANT)

BUILDING REPORT

The Chapel/ Law Library is a wood post and beam, wood framed structure with a painted exterior insulation and finish system (EIFS), single-ply roofing system on a concrete slab-on-grade foundation. The building contains office, classroom or library spaces, a central assembly area and restrooms. The central assembly area has a pitched ceiling with clerestory windows facing south and the interior is primarily painted gypsum board. There are Men's and Women's restrooms which are not ADA compliant and one unisex restroom which is mostly ADA compliant. It has a stand alone electric forced air unit and a fire alarm system, but no sprinklers.

PRIORITY CLASS 1 PROJECTS

Total Construction Cost for Priority 1 Projects: \$1,233,700

Currently Critical

Immediate to Two Years

2" BACKFLOW ASSEMBLY, VAULT, AND POWER

Project Index #: 0179PLM1

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 double check valves or reduced pressure principle backflow preventers as appropriate to the hazard and in appropriate locations near the potential source of contamination. Costs include an above ground vault, and allowance for 200 feet of 1" conduit to provide power for freeze protection.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

ADA SIGNAGE

Project Index #: 0179ADA2

Construction Cost \$1,500

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 - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

ADA UPGRADES - STAGE

Project Index #: 0179ADA4

Construction Cost \$2,500

The Chapel is lacking an accessible path to the stage. The stage is required to have an accessible path to it per the Americans with Disabilities Act (ADA) regulations. This project would provide for an accessible ramp or powered lift to access the stage. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0179INT2**  
**Construction Cost \$88,900**

**CARPET/ TILE 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 1-2 years.

This project or a portion there of was previously recommended in the FCA report dated 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0179ADA3**  
**Construction Cost \$4,000**

**DUAL LEVEL DRINKING FOUNTAIN INSTALLATION**

This building contains a water fountain. The 2012 IBC Section 1109.5 states where a water fountain is provided, at least half should be accessible. This project would provide funding for the purchase and installation of a new accessible fixed high/ low ADA drinking fountain. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0179ELE2**  
**Construction Cost \$254,000**

**ELECTRICAL UPGRADE**

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. The current wiring in the building is #14 and does not meet the current demand. #14 wiring is also against State Public Works Division's Adopted Standards, 8.5.4, for lighting and power circuits. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

**Project Index #: 0179SFT1**  
**Construction Cost \$15,875**

**EXIT SIGN & EGRESS LIGHTING UPGRADE**

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 - 2012 Chapter 10, 1011.6.2 exit sign illumination 5 foot candles (54 lux), was referenced for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0179EXT4**  
**Construction Cost \$6,000**

**EXTERIOR DOOR REPLACEMENT**

The existing exterior doors to the Chapel/Law Library are original to the building. They are showing signs of wear and deterioration from constant use and inmate abuse. Due to security concerns and the condition of the doors, replacement is recommended. This project would provide for the removal and disposal of the existing doors and frames, and replacement with new exterior security doors including door frames, hardware, security glazing, painting and connections to the security system as required. A total of 4 doors was used to generate this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0179EXT3**  
**Construction Cost \$63,500**

**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 1-2 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0179SFT4**  
**Construction Cost \$50,800**

**FIRE ALARM SYSTEM REPLACEMENT**

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and no longer comply with current requirements. The current system is no longer operating. 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 visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

**Project Index #: 0179SFT3**  
**Construction Cost \$88,900**

**FIRE SUPPRESSION SYSTEM INSTALLATION**

The building is a B occupancy per the 2012 IBC. Pursuant to the Nevada State Fire Marshal Regulation, NAC 477.915 (c) states, that every building owned or occupied by the state which is designated as a B occupancy, or has a floor area greater than 12,000 square feet on any floor or 24,000 square feet on all floors or is an R-1 occupancy, must have sprinklers installed when the building is remodeled or an addition is proposed. This project would provide funding for the installation of a fire sprinkler system and backflow prevention in the event the building is remodeled or an addition is undertaken.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0179HVA1**  
**Construction Cost \$158,750**

**HVAC REPLACEMENT**

The Water Source Heat Pumps in the building should be scheduled for replacement. They are not energy efficient and have reached the end of their expected and useful life. This project would provide for installation of new Water Source Heat Pump units and the cleaning of the existing ducting and grilles. This project includes removal and disposal of the existing Water Source Heat Pump units and all required connections to utilities.

**Project Index #: 0179INT4**  
**Construction Cost \$63,500**

**INTERIOR FINISHES**

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 including the damaged area where the HVAC unit was removed. 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 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0179ADA1**  
**Construction Cost \$10,000**

### **LEVER ACTION HARDWARE INSTALLATION**

Section 4.13.9 of the Americans with Disabilities Act Accessible 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 in this building to meet these guidelines. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0179INT3**  
**Construction Cost \$28,575**

### **LIGHTING UPGRADE**

The existing lighting fixtures are the older fluorescent type, and are not energy efficient. This project will upgrade 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, closets and other low occupancy areas for additional savings. Any electrical wiring upgrades are not included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0179PLM4**  
**Construction Cost \$158,750**

### **PLUMBING REPLACEMENT**

The sanitary wastewater and copper plumbing systems are showing signs of deterioration. Due to this deterioration, the systems are not working to their full potential. The copper lines have rusted and there are pin holes throughout the system. The lines are original to the site and are in poor condition. The hard water is also a contributing factor to this deterioration. Deposits within the pipes have caused restriction, and has slowed the water flow. This project would provide for the complete replacement of the sanitary sewer and copper piping system.

**Project Index #: 0179ADA5**  
**Construction Cost \$90,000**

### **RESTROOM REMODEL**

The water closets and the lavatories in the three restrooms are worn from many years of use. It is recommended that all fixtures be replaced with new units. The new units and restroom layouts are also required to comply with ADA requirements. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0179EXT2**  
**Construction Cost \$76,200**

### **ROOF REPLACEMENT**

The roof on this building was in poor condition at the time of the survey. The statewide roofing program has set the useful life of an average roof at 20 years. The roof warranty expires at the end of the same time frame. The temperature fluctuations throughout the year, consistent wind which blows sand and dirt on to the roof membrane, and constant exposure to the sun are contributing factors to wear and deterioration. The current roofing system was installed in 1993. It is recommended to replace the singly-ply membrane and repair the Cor-ten roofing system as needed in the next 1-2 years to be consistent with the roofing program and the end of the warranty period.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**SECURITY SURVEILLANCE SYSTEM INSTALLATION**

**Project Index #: 0179SEC1  
Construction Cost \$44,450**

There is no security camera or recording system in the Chapel/Law Library Building. This is a safety issue for the staff and inmates as all areas cannot be seen by the security staff or recorded in case of an incident. This project would provide for the installation of surveillance cameras and a security system for the entire building and all required connections to existing utility systems.

**WATER HEATER REPLACEMENT**

**Project Index #: 0179PLM5  
Construction Cost \$2,500**

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 1-2 years. It is recommended that a new electric water heater be installed. Removal and disposal of the existing equipment is included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**BUILDING INFORMATION:**

**Gross Area (square feet): 6,350**  
**Year Constructed: 1979**  
**Exterior Finish 1: 100 % Painted Stucco / EIFS**  
**Exterior Finish 2: %**  
**Number of Levels (Floors): 1      Basement? No**  
**IBC Occupancy Type 1: 60 % A-3**  
**IBC Occupancy Type 2: 40 % B**  
**Construction Type: Wood Post & Beam**  
**IBC Construction Type: III-B**  
**Percent Fire Supressed: 0 %**

**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

<b>Priority Class 1:</b>	<b>\$1,233,700</b>	<b>Project Construction Cost per Square Foot:</b>	<b>\$194.28</b>
<b>Priority Class 2:</b>	<b>\$0</b>	<b>Total Facility Replacement Construction Cost:</b>	<b>\$2,064,000</b>
<b>Priority Class 3:</b>	<b>\$0</b>	<b>Facility Replacement Cost per Square Foot:</b>	<b>\$325</b>
<b>Grand Total:</b>	<b>\$1,233,700</b>	<b>FCNI:</b>	<b>60%</b>

EDUCATION A(VACANT)

SPWD Facility Condition Analysis - 0178

Survey Date: 3/8/2016

**EDUCATION A(VACANT)  
BUILDING REPORT**

The Education A building is a wood post and beam, wood framed structure with a painted exterior insulation and finish system (EIFS), single-ply roofing system on a concrete slab-on-grade foundation. The building contains classrooms, a central assembly area and restrooms. The central assembly area has a pitched ceiling with clerestory windows facing south and the interior is primarily painted gypsum board. There are restrooms present which are not ADA compliant. It has a stand alone electric forced air unit, a fire alarm system but no sprinklers.

**PRIORITY CLASS 1 PROJECTS**

**Total Construction Cost for Priority 1 Projects: \$1,105,700**

**Currently Critical**

**Immediate to Two Years**

**2" BACKFLOW ASSEMBLY, VAULT, AND POWER**

**Project Index #: 0178PLM1  
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 double check valves or reduced pressure principle backflow preventers as appropriate to the hazard and in appropriate locations near the potential source of contamination. Costs include an above ground vault, and allowance for 200 feet of 1" conduit to provide power for freeze protection.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**ADA SIGNAGE**

**Project Index #: 0178ADA2  
Construction Cost \$1,500**

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 - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**DUAL LEVEL DRINKING FOUNTAIN INSTALLATION**

**Project Index #: 0178ADA3  
Construction Cost \$4,000**

This building contains a water fountain. The 2012 IBC Section 1109.5 states where a water fountain is provided, at least half should be accessible. This project would provide funding for the purchase and installation of a new accessible fixed high/ low ADA drinking fountain. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0178ELE2**  
**Construction Cost \$254,000**

**ELECTRICAL UPGRADE**

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. The current wiring in the building is #14 and does not meet the current demand. #14 wiring is also against State Public Works Division's Adopted Standards, 8.5.4, for lighting and power circuits. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

**Project Index #: 0178SFT1**  
**Construction Cost \$15,875**

**EXIT SIGN & EGRESS LIGHTING UPGRADE**

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 - 2012 Chapter 10, 1011.6.2 exit sign illumination 5 foot candles (54 lux), was referenced for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0178EXT4**  
**Construction Cost \$7,500**

**EXTERIOR DOOR REPLACEMENT**

The existing exterior doors to the Education are original to the building. They are showing signs of wear and deterioration from constant use and inmate abuse. Due to security concerns and the condition of the doors, replacement is recommended. This project would provide for the removal and disposal of the existing doors and frames, and replacement with new exterior security doors including door frames, hardware, security glazing, painting and connections to the security system as required. A total of 5 doors was used to generate this estimate.

**Project Index #: 0178EXT3**  
**Construction Cost \$63,500**

**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 1-2 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0178SFT5**  
**Construction Cost \$50,800**

**FIRE ALARM SYSTEM REPLACEMENT**

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and no longer comply with current requirements. The current system is no longer operating. 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 visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

**Project Index #: 0178SFT3**  
**Construction Cost \$50,800**

### **FIRE SUPPRESSION SYSTEM INSTALLATION**

The building is a B occupancy per the 2012 IBC. Pursuant to the Nevada State Fire Marshal Regulation, NAC 477.915 (c) states, that every building owned or occupied by the state which is designated as a B occupancy, or has a floor area greater than 12,000 square feet on any floor or 24,000 square feet on all floors or is an R-1 occupancy, must have sprinklers installed when the building is remodeled or an addition is proposed. This project would provide funding for the installation of a fire sprinkler system and backflow prevention in the event the building is remodeled or an addition is undertaken.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0178HVA1**  
**Construction Cost \$158,750**

### **HVAC REPLACEMENT**

The Water Source Heat Pumps in the building should be scheduled for replacement. They are not energy efficient and have reached the end of their expected and useful life. This project would provide for installation of new Water Source Heat Pump units and the cleaning of the existing ducting and grilles. This project includes removal and disposal of the existing Water Source Heat Pump units and all required connections to utilities.

**Project Index #: 0178INT4**  
**Construction Cost \$63,500**

### **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 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 report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0178ADA1**  
**Construction Cost \$10,000**

### **LEVER ACTION HARDWARE INSTALLATION**

Section 4.13.9 of the Americans with Disabilities Act Accessible 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 in this building to meet these guidelines. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0178INT3**  
**Construction Cost \$28,575**

### **LIGHTING UPGRADE**

The existing lighting fixtures are the older fluorescent type, and are not energy efficient. This project will upgrade 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, closets and other low occupancy areas for additional savings. Any electrical wiring upgrades are not included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0178PLM4**  
**Construction Cost \$158,750**

### **PLUMBING REPLACEMENT**

The sanitary wastewater and copper plumbing systems are showing signs of deterioration. Due to this deterioration, the systems are not working to their full potential. The copper lines have rusted and there are pin holes throughout the system. The lines are original to the site and are in poor condition. The hard water is also a contributing factor to this deterioration. Deposits within the pipes have caused restriction, and has slowed the water flow. This project would provide for the complete replacement of the sanitary sewer and copper piping system.

**Project Index #: 0178ADA4**  
**Construction Cost \$90,000**

### **RESTROOM REMODEL**

The water closets and the lavatories in the three restrooms and the lavatory in the hallway are worn from many years of use and inactivity. It is recommended that all fixtures be replaced with new units. The new units and restroom layouts are also required to comply with ADA requirements. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0178EXT2**  
**Construction Cost \$76,200**

### **ROOF REPLACEMENT**

The roof on this building was in poor condition at the time of the survey. The statewide roofing program has set the useful life of an average roof at 20 years. The roof warranty expires at the end of the same time frame. The temperature fluctuations throughout the year, consistent wind which blows sand and dirt on to the roof membrane, and constant exposure to the sun are contributing factors to wear and deterioration. The current roofing system was installed in 1993. It is recommended to replace the singly-ply membrane and repair the Cor-ten roofing system as needed in the next 1-2 years to be consistent with the roofing program and the end of the warranty period.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0178SEC1**  
**Construction Cost \$44,450**

### **SECURITY SURVEILLANCE SYSTEM INSTALLATION**

There is no security camera or recording system in the Education Building. This is a safety issue for the staff and inmates as all areas cannot be seen by the security staff or recorded in case of an incident. This project would provide for the installation of surveillance cameras and a security system for the entire building and all required connections to existing utility systems.

**Project Index #: 0178PLM5**  
**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 1-2 years. It is recommended that a new electric water heater be installed. Removal and disposal of the existing equipment is included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**BUILDING INFORMATION:**

**Gross Area (square feet): 6,350**  
**Year Constructed: 1979**  
**Exterior Finish 1: 100 % Painted Stucco / EIFS**  
**Exterior Finish 2: %**  
**Number of Levels (Floors): 1      Basement?    No**  
**IBC Occupancy Type 1: 60 % A-3**  
**IBC Occupancy Type 2: 40 % B**  
**Construction Type: Wood Post & Beam**  
**IBC Construction Type: III-B**  
**Percent Fire Supressed: 0 %**

**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

<b>Priority Class 1:</b>	<b>\$1,105,700</b>	<b>Project Construction Cost per Square Foot:</b>	<b>\$174.13</b>
<b>Priority Class 2:</b>	<b>\$0</b>	<b>Total Facility Replacement Construction Cost:</b>	<b>\$2,064,000</b>
<b>Priority Class 3:</b>	<b>\$0</b>	<b>Facility Replacement Cost per Square Foot:</b>	<b>\$325</b>
<b>Grand Total:</b>	<b>\$1,105,700</b>	<b>FCNI:</b>	<b>54%</b>



ADMINISTRATION/ VISITATION(VACANT)

SPWD Facility Condition Analysis - 0176

Survey Date: 3/8/2016

ADMINISTRATION/ VISITATION(VACANT)

BUILDING REPORT

The Administration/ Visitation building is a concrete masonry unit (CMU) structure with a painted exterior insulation and finish system (EIFS), with a single-ply roofing system on a concrete slab-on-grade foundation. The facility contains all of the administrative support offices for personnel, restrooms, control room and the visitation area which has access to an enclosed courtyard. The facility has some ADA accessibility issues which will be addressed in the report.

It also has a gun post above the control room and it has a stand alone wall mounted heat pump. The rest of the facility is on the central plant loop system with individual water source heat pumps. There is a fire alarm system but no sprinklers.

PRIORITY CLASS 1 PROJECTS

Total Construction Cost for Priority 1 Projects: \$1,910,850

Currently Critical

Immediate to Two Years

Project Index #: 0176PLM1

Construction Cost \$25,000

2" BACKFLOW ASSEMBLY, VAULT, AND POWER

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 double check valves or reduced pressure principle backflow preventers as appropriate to the hazard and in appropriate locations near the potential source of contamination. Costs include an above ground vault, and allowance for 200 feet of 1" conduit to provide power for freeze protection.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

Project Index #: 0176ADA4

Construction Cost \$5,000

ADA SIGNAGE

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 and is confusing for public access to visitation. It is recommended that applicable signage be installed where required. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**DUAL LEVEL DRINKING FOUNTAIN INSTALLATION**

**Project Index #: 0176ADA1  
Construction Cost \$4,000**

This building contains a water fountain. The 2012 IBC Section 1109.5 states where a water fountain is provided, at least half should be accessible. This project would provide funding for the purchase and installation of a new accessible fixed high/ low ADA drinking fountain.

NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**ELECTRICAL UPGRADE**

**Project Index #: 0176ELE2  
Construction Cost \$298,750**

This building was constructed before the high demand for electrical services were needed for computers, communications systems and other electrical devices. As time has progressed, the buildings electrical demand and communications system has changed. The electrical system is utilized to its current maximum potential and the communications system is outdated. The electrical panels, switches and receptacles are at their limit. The current wiring in the building is #14 and does not meet the current demand. #14 wiring is also against State Public Works Division's Adopted Standards, 8.5.4, for lighting and power circuits. It is recommended to upgrade the entire electrical system and communications system to meet the evolving needs of the building.

**EXIT SIGN & EGRESS LIGHTING UPGRADE**

**Project Index #: 0176SFT2  
Construction Cost \$29,875**

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 - 2012 Chapter 10, 1011.6.2 exit sign illumination 5 foot candles (54 Lux), was referenced for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**EXTERIOR DOOR REPLACEMENT**

**Project Index #: 0176EXT6  
Construction Cost \$13,500**

The existing exterior doors to the Administration/ Visitation are original to the building. They are showing signs of wear and deterioration from constant use and inmate abuse. Due to security concerns and the condition of the doors, replacement is recommended. This project would provide for the removal and disposal of the existing doors and frames, and replacement with new exterior security doors including door frames, hardware, security glazing, painting and connections to the security system as required. A total of 9 doors was used to generate this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**EXTERIOR FINISHES**

**Project Index #: 0176EXT5  
Construction Cost \$119,500**

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 1-2 years and that this project be scheduled on a cyclical basis to maintain the integrity of the structure.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0176SFT4**  
**Construction Cost \$95,600**

**FIRE ALARM SYSTEM REPLACEMENT**

This building is equipped with an outdated automatic fire detection and alarm system. Parts cannot be obtained and no longer comply with current requirements. The current system is no longer operating. 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 visual, as well as audible notification, in accordance with the 2012 IBC Chapter 9, Section 907 and the State Fire Marshal's requirements.

**Project Index #: 0176SFT3**  
**Construction Cost \$95,600**

**FIRE SUPPRESSION SYSTEM INSTALLATION**

The building is a B occupancy per the 2012 IBC. Pursuant to the Nevada State Fire Marshal Regulation, NAC 477.915 (c) states, that every building owned or occupied by the state which is designated as a B occupancy, or has a floor area greater than 12,000 square feet on any floor or 24,000 square feet on all floors or is an R-1 occupancy, must have sprinklers installed when the building is remodeled or an addition is proposed. This project would provide funding for the installation of a fire sprinkler system and backflow prevention in the event the building is remodeled or an addition is undertaken.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0176HVA1**  
**Construction Cost \$298,750**

**HVAC REPLACEMENT**

The Water Source Heat Pumps in the building should be scheduled for replacement. They are not energy efficient and have reached the end of their expected and useful life. This project would provide for installation of new Water Source Heat Pump units and the cleaning of the existing ducting and grilles. This project includes removal and disposal of the existing Water Source Heat Pump units and all required connections to utilities.

**Project Index #: 0176INT4**  
**Construction Cost \$119,500**

**INTERIOR FINISHES**

The interior finishes are in poor condition. It is recommended that the interior walls and ceilings be painted prior to occupancy. Prior to painting, all surfaces should be repaired and prepped. An epoxy-based paint should be utilized in areas where water is present, such as the kitchen and bathrooms, for added durability.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0176ADA3**  
**Construction Cost \$12,000**

**LEVER ACTION HARDWARE INSTALLATION**

Section 4.13.9 of the Americans with Disabilities Act Accessible 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 in this building to meet these guidelines. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0176ENR1**  
**Construction Cost \$53,775**

**LIGHTING UPGRADE**

The existing lighting fixtures are the older fluorescent type, and are not energy efficient. This project will upgrade 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.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0176PLM5**  
**Construction Cost \$298,750**

**PLUMBING REPLACEMENT**

The sanitary wastewater and copper plumbing systems are showing signs of deterioration. Due to this deterioration, the systems are not working to their full potential. The copper lines have rusted and there are pin holes throughout the system. The lines are original to the site and are in poor condition. The hard water is also a contributing factor to this deterioration. Deposits within the pipes have caused restriction, and has slowed the water flow. This project would provide for the complete replacement of the sanitary sewer and copper piping system.

**Project Index #: 0176ADA5**  
**Construction Cost \$22,500**

**REMOVE/ REPLACE CONCRETE PATIO**

Outside of the Visitation Room is a concrete patio with stairs and terraces which provides an outdoor space to visit with inmates. The patio is in disrepair with major cracks in the concrete, stairs that do not comply with code and no compliance with ADA requirements. This project would provide for removal of the existing improvements and installation of a new flat concrete patio which complies with all applicable codes. Removal and disposal of the existing concrete is included in this estimate. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0176EXT2**  
**Construction Cost \$139,200**

**REPLACE WINDOWS**

The steel framed window assemblies are damaged from exposure and age and the frames and stops should be scheduled for replacement. They are located in the Visitation room and near the employee entrance to the Warden's Office. The frames and glazing stops are rusting and approaching failure due to water infiltration at joints, adjacency to grade and expansion and contraction over time. The heat and exposure to the sun have warped and bent the frames and glazing stops beyond repair. This project will include removal and disposal of the existing frame assembly and replacement with new steel frames and glazing stops. Reinstallation of the existing glazing panels is included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0176ADA6**  
**Construction Cost \$30,000**

**RESTROOM REMODELS**

The water closets and the lavatories in the six restrooms throughout the building are worn from many years of use and being idle due to multiple closures. It is recommended that all fixtures be replaced with new units. The new units and restroom layouts are also required to comply with ADA requirements. NRS 338.180, IBC - 2012, ICC/ANSI A117.1 - 2009 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) were used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0176EXT4**  
**Construction Cost \$143,400**

### **ROOF REPLACEMENT**

The roof on this building was in poor condition at the time of the survey. The statewide roofing program has set the useful life of an average roof at 20 years. The roof warranty expires at the end of the same time frame. The temperature fluctuations throughout the year, consistent wind which blows sand and dirt on to the roof membrane, and constant exposure to the sun are contributing factors to wear and deterioration. The current roofing system was installed in 1993. It is recommended to replace the singly-ply membrane and repair the Cor-ten roofing system as needed in the next 1-2 years to be consistent with the roofing program and the end of the warranty period.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0176SEC1**  
**Construction Cost \$83,650**

### **SECURITY SURVEILLANCE SYSTEM INSTALLATION**

There is no security camera or recording system in the Administration/ Visitation Building. This is a safety issue for the staff and inmates as all areas cannot be seen by the security staff or recorded in case of an incident. This project would provide for the installation of surveillance cameras and a security system for the entire building and all required connections to existing utility systems.

**Project Index #: 0176ADA2**  
**Construction Cost \$20,000**

### **TDD INSTALLATION**

The visitation area is not equipped with a telecommunications device for the deaf (TDD). In order to comply with ADA requirements it is recommended to install a TDD system in the non-contact visitation area. The 2012 IBC, ICC/ANSI A117.1 - 2009, NRS 338.180 and the most current version of the Americans with Disabilities Act Accessible Guidelines (ADAAG) was used as a reference for this project.

This project or a portion there of was previously recommended in the FCA report dated 05/04/1998, 03/21/2006 and 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**Project Index #: 0176PLM4**  
**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 1-2 years. It is recommended that a new electric water heater be installed. Removal and disposal of the existing equipment is included in this estimate.

This project or a portion there of was previously recommended in the FCA report dated 04/26/2011. It has been amended accordingly to reflect conditions observed during the most recent survey date of 03/08/2016.

**BUILDING INFORMATION:**

Gross Area (square feet): 11,950  
Year Constructed: 1978  
Exterior Finish 1: 100 % Painted Stucco / EIFS  
Exterior Finish 2: %  
Number of Levels (Floors): 1 Basement? No  
IBC Occupancy Type 1: 70 % B  
IBC Occupancy Type 2: 30 % A-3  
Construction Type: Concrete Masonry, Wood and Steel  
IBC Construction Type: III-B  
Percent Fire Supressed: 0 %

**PROJECT CONSTRUCTION COST TOTALS SUMMARY:**

Priority Class 1:	\$1,910,850	Project Construction Cost per Square Foot:	\$159.90
Priority Class 2:	\$0	Total Facility Replacement Construction Cost:	\$4,182,000
Priority Class 3:	\$0	Facility Replacement Cost per Square Foot:	\$350
Grand Total:	\$1,910,850	FCNI:	46%

**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 341.128 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



Housing Unit 5 - Building #0184  
Description: Water damage from leaking pipes.



Southern Nevada Correctional Center Site - Site #9994  
Description: AC paving in need of replacement.



Southern Nevada Correctional Center Site - Site #9994  
Description: AC paving in need of replacement.



Administration/ Visitation - Building #0176  
Description: View of exterior and ADA path of travel from parking area.



Administration / Visitation - Building #0176  
Description: Damaged curtain window glazing stops.



Administration/ Visitation - Building #0176  
Description: View of Visitation patio area.



Dog Kennel - Building #0177  
Description: Exterior of the building.



Education A - Building #0178  
Description: Exterior of the building.



**Chapel/ Law Library - Building #0179**  
Description: Exterior of the building.



**Housing Unit 1 - Building #0180**  
Description: Exterior of the building.



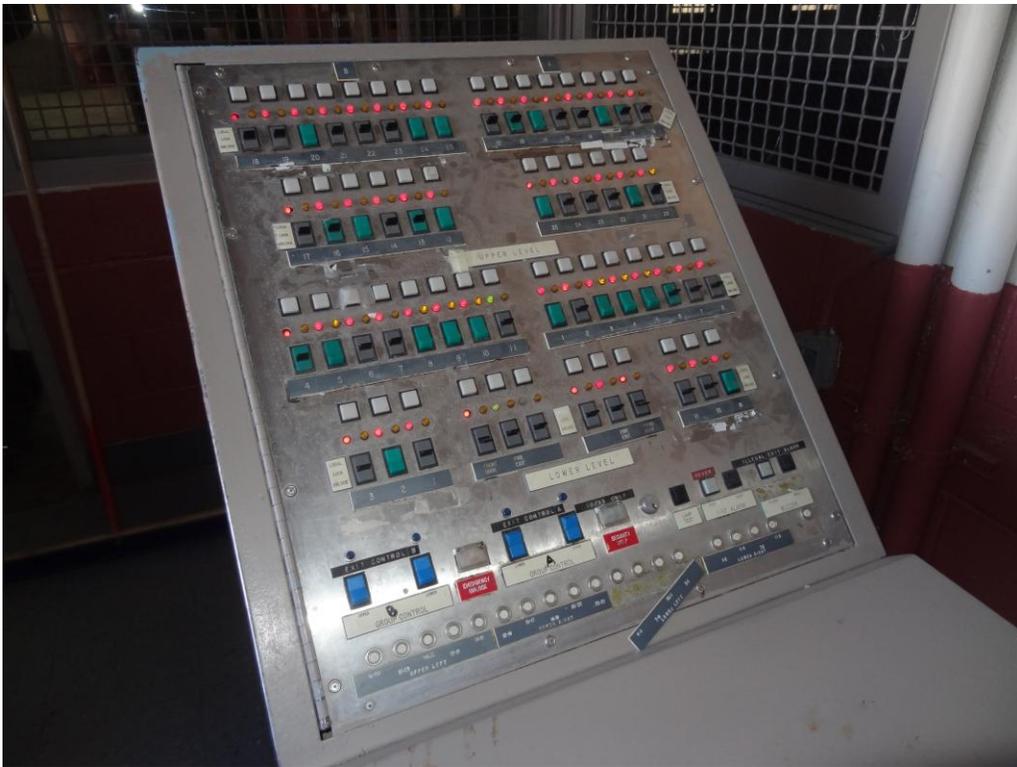
Housing Unit 1 - Building #0180  
Description: Interior of the building.



Housing Unit 1 - Building #0180  
Description: Water damage from leaking pipes.



Housing Unit 1 - Building #0180  
Description: Water damage from leaking pipes at cell fixtures.



Housing Unit 1 - Building #0180  
Description: Control panel in need of replacement.



Housing Unit 2 - Building #0181  
Description: Exterior of the building.



Housing Unit 3 - Building #0182  
Description: Active and repaired pinhole leaks in copper plumbing.



Housing Unit 3 - Building #0182  
Description: Porcelain fixture in cell with dried out water closet.



Housing Unit 4 - Building #0183  
Description: Exterior of the building.



Housing Unit 4 - Building #0183  
Description: Officer station with limited line of sight to cells.



Housing Unit 5 - Building #0184  
Description: Broken drinking fountain.



Housing Unit 5 - Building #0184  
Description: Water damage from leaking pipes.



Housing Unit 6 - Building #0185  
Description: Exterior of the building and ADA accessible route.



Housing Unit 6 - Building #0185  
Description: ADA accessible cell.



Housing Unit 6 - Building #0185  
Description: Water damage in shower area.



Recreation/ Gym - Building #0186  
Description: Exterior of the building.



Recreation/ Gym - Building #0186  
Description: Roof mounted electrical box in need of cover plate.



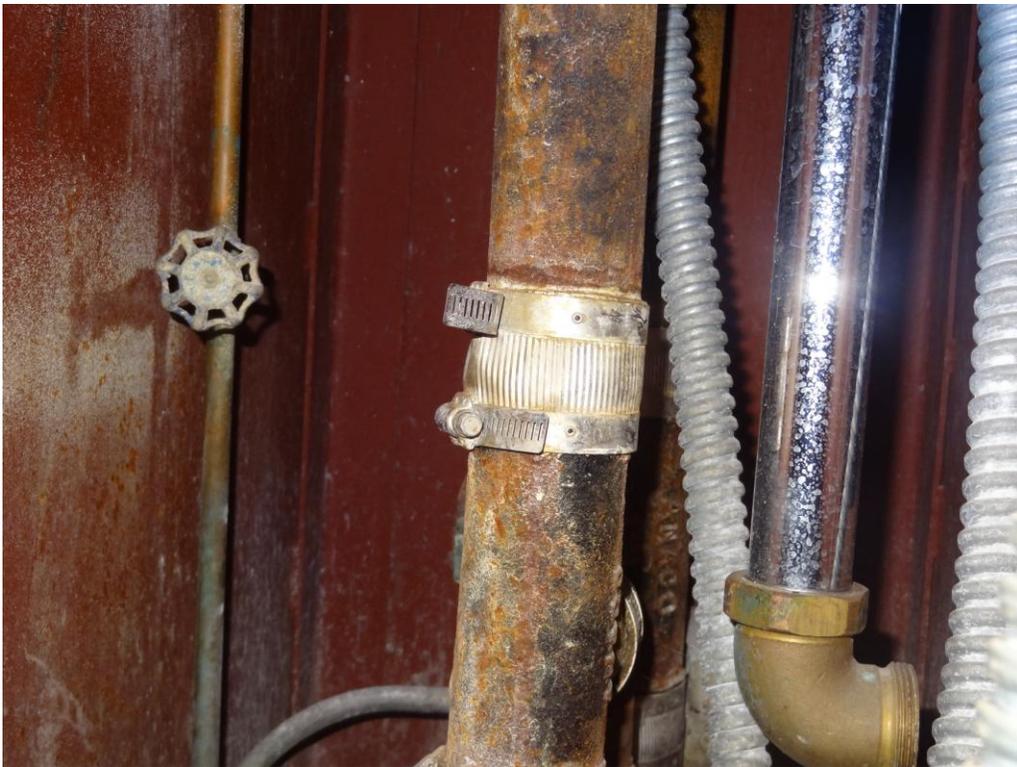
Recreation/ Gym - Building #0186  
Description: Typical non-ADA restroom stall.



Recreation/ Gym - Building #0186  
Description: Electrical equipment in need of replacement.



Housing Unit 7 - Building #0187  
Description: Exterior of the building.



Housing Unit 7 - Building #0187  
Description: Plumbing lines in need of replacement.



Housing Unit 7 - Building #0187  
Description: Water damage from plumbing leaks.



Housing Unit 7 - Building #0187  
Description: Control panel in need of upgrade.



Medical Unit 8 - Building #0188  
Description: Outdated medical equipment.



Culinary/ Dining/ Central Plant - Building #0190  
Description: Exterior of the building.



Culinary/ Dining/ Central Plant - Building #0190  
Description: Central Plant equipment in need of replacement.



Culinary/ Dining/ Central Plant - Building #0190  
Description: Electrical equipment in need of replacement.



Culinary/ Dining/ Central Plant - Building #0190  
Description: Non-ADA compliant ramp in dining.



Culinary/ Dining/ Central Plant - Building #0190  
Description: Damaged and missing cooking equipment.



Laundry & Dry Cleaning - Building #0191  
Description: Interior of the building.



Auto Maintenance Shop/ Warehouse - Building #0192  
Description: Exterior of the building.



Auto Maintenance Shop/ Warehouse - Building #0192  
Description: Interior of the building with water damage.



Maintenance Shop - Building #0193  
Description: Exterior of the building.



Maintenance Shop - Building #0193  
Description: Interior of the building.



Guard Tower 2 - Building #0195  
Description: Exterior of the building.



Guard Tower 2 - Building #0195  
Description: Interior of the building.



Sally Port - Building #2567  
Description: Exterior of the building.