

Anchorage Armory Roof Replacement**FY2009 Request: \$4,000,000****Reference No: 45205****AP/AL:** Appropriation**Project Type:** Deferred Maintenance**Category:** Public Protection**Location:** Fort Richardson**Contact:** John Cramer**House District:** Military (HD 18)**Contact Phone:** (907)428-6009**Estimated Project Dates:** 07/01/2008 - 06/30/2009**Brief Summary and Statement of Need:**

The aging roof on the Anchorage National Guard Armory, located on the Fort Richardson Army Base, requires replacement. The existing EPDM (Ethylene Propylene Diene Monomer) roof system, nearing its expected lifespan, is experiencing small leaks throughout the building. The fire proofing on the structural system will fail if the existing roof has substantial leaks necessitating significant maintenance and repair costs to the facility. The tapered foam insulation replacement roof system will bring insulation up to code and reduce the cost of utilities as well as roof maintenance.

Funding:	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	Total
Fed Rcpts	\$2,000,000						\$2,000,000
G/F Match	\$2,000,000						\$2,000,000
Total:	\$4,000,000	\$0	\$0	\$0	\$0	\$0	\$4,000,000

<input checked="" type="checkbox"/> State Match Required	<input checked="" type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input type="checkbox"/> On-Going
50% = Minimum State Match % Required		<input type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill	

Operating & Maintenance Costs:

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	0	0
<u>One-Time Startup:</u>	<u>0</u>	<u>0</u>
Totals:	0	0

Additional Information / Prior Funding History:

New project, no prior funding history

Project Description/Justification:

This project funds the roof replacement of the Anchorage National Guard Armory located on the Fort Richardson Army Base. The replacement will include energy saving upgrades as well. The federal funding is provided by the National Guard Bureau (NGB) with a required 50% general fund match under the Sustainment, Restoration and Maintenance Agreement.

The current roofing membrane will reach the manufacturer's expected life cycle in 2009. Recent testing, using infrared technology, suggests an excessive amount of moisture beneath the membrane and a loss in original construction insulation value. The new roofing system will have higher insulating values and carry a 20-year manufacturer's warranty. This will keep maintenance costs to a minimum.

The project includes a tapered foam insulation system with modified bitumen roof overlay. This project will replace the existing EPDM (Ethylene Propylene Diene Monomer) aging roofing system. The existing roof system, nearing its expected life span, is experiencing small leaks throughout the building. The tapered foam insulation system will lower operating costs for utilities by bringing the insulation up to code with R38 insulating factor.

Each year specific federal funding is earmarked for energy projects that are completed based on their scoring of saving into investment ratio (SIR) calculation. The SIR considers how much is spent over the economic life of the upgrade. This means that both large and small projects compete on the same basis. This SIR will have a pay back of approximately 20-years.

Alternatives to the new roof were considered including re-seaming / repairing the existing roof. The cost to re-seam the

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existing 20-year-old membrane can be 50% of the cost of a new roof. This would not address the problem of excessive moisture beneath the membrane nor would it address the problem of below code insulating values and high energy costs. The warranty for re-seaming the current roof would be limited to a one year warranty for workmanship and there would be no warranty on materials. The aging membrane would continue to have escalating future maintenance costs.

One consequence of not funding this project is if the existing roof has substantial leaks, the fire proofing on the structural system will fail causing substantial maintenance and repair cost to the facility.

The energy portion of the project will reduce the annual operating consumption rates for heating and electrical energy requirements.

This project will generate economic activity when materials are purchased and construction labor is utilized.