Fiscal Year 2020-21 Capital Construction Request

Adams State University

Plachy Hall HVAC Upgrade and Replacement (Capital Renewal)

PROGRAM PLAN STATUS *2017-023*

Approved Program Plan? Yes **Date Approved:** October 29, 2015

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	1 of 3	
CCHE	2 of 39	
OSPB	15 of 47	Recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2020-21	FY 2021-22	Future Requests	Total Cost
CCF	$3,252,559	$2,819,630	$0	$0	$6,072,189
Total	$3,252,559	**$2,819,630**	$0	$0	$6,072,189

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2020-21	FY 2021-22	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$465,540	$30,000	$0	$0	$495,540
Construction	$2,537,019	$2,533,300	$0	$0	$5,070,319
Equipment	$0	$0	$0	$0	$0
Miscellaneous	$0	$0	$0	$0	$0
Contingency	$250,000	$256,330	$0	$0	$506,330
Software Acquisition	$0	$0	$0	$0	$0
Total	$3,252,559	**$2,819,630**	$0	$0	$6,072,189

PROJECT STATUS

This is a continuation project. It was first requested in FY 2016-17 and Phase I was funded in FY 2018-19. Design work for Phase I has been completed, but the institution is awaiting Phase II funding before starting construction in order to minimize costs.

PROJECT DESCRIPTION / SCOPE OF WORK

Adams State University (ASU) is requesting state funds to retrofit the HVAC system for the 118,054-GSF Plachy Hall, the university's main athletic facility. This is a capital renewal project. The capital renewal approach focuses on upgrading building systems, infrastructure, and the basic building components within existing academic buildings on a building-by-building basis, rather than project by project.

The project will mitigate ongoing disruption to athletic teams and other building users due to failing systems. It addresses a failing boiler system and code compliance issues with the building's HVAC system. Based on a May 2015 recommendation from an engineering and energy management consultant, the project upgrades and replaces

several components of the HVAC system, including:

- 16 air handling units (AHUs);
- 9 powered roof fans;
- 9 exhaust fans;
- finned tube radiation;
- 11 cabinet unit heaters;
- 3 unit heaters;
- 6 large unit heaters;
- 2 convectors;
- 2 new condensing boilers with flues, pumps, expansion tanks, and air separators;
- 1 swimming pool boiler;
- 3 swimming pool pumps;
- 1 domestic hot water side-arm for hot water storage;
- 12 variable air volume (VAV) hot water heating coils;
- piping and pipe insulation; and
- ductwork.

The project also installs a new AHU, exhaust fan, and ductwork in the field house of Plachy Hall.

Cost assumption. The cost assumption was determined by an energy management consultant hired by the university. The cost per GSF for Phase II is $24. The project cost does not account for future inflation. The project is exempt from the Art in Public Places and the High Performance Certification Program requirement.

PROJECT JUSTIFICATION

According to ASU, the boilers and AHUs that service Plachy Hall are at the end of their useful life. The existing AHUs do not meet the required air exchange guidelines established by the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) for indoor air quality. As a result, ASU says occupants of Plachy Hall are at risk of respiratory problems. The AHUs also struggle to move any air and likely do not meet code requirements. Furthermore, only two of the four steam boilers in Plachy Hall are currently working, resulting in a lack of redundancy for the building's HVAC system. The two working boilers are close to 20 years old. ASU says it is constantly patching and mending worn-out piping, fittings, pumps, seals, bearings, pulleys, and belts.

If Phase II of this project is not funded, ASU will use the remainder of the Phase I funding to replace the existing boilers and transition the system from steam to hot water. Outlying issues with heating and ventilation will not be addressed, such as rooms that have no direct heat or ventilation.

PROGRAM INFORMATION

Plachy Hall is the university's main athletic facility. It houses an Olympic-size pool, weight room, trainer's facilities, indoor track, classrooms, and field house, with a seating capacity of 3,200. Plachy Hall was originally constructed in 1963. Heat was originally supplied to the building from a central heating steam plant, which was decommissioned in 1997. At that time, boilers were added to each building on campus. In 2007, renovations were completed to the basketball and swimming pool areas, and additions were added to the south and west sides of the building.

Fiscal Year 2020-21 Capital Construction Request

Adams State University

Plachy Hall HVAC Upgrade and Replacement (Capital Renewal)

PROJECT SCHEDULE

	Start Date	Completion Date
Design	April 2020	September 2020
Construction		
Equipment		
Occupancy		

SOURCE OF CASH FUNDS

This project is not funded from cash sources.

OPERATING BUDGET

Operating expenses are paid from institutional sources. The university expects that replacing the AHUs, the boiler system, and the steam system will reduce operating costs due to improvements in energy efficiency.

STAFF QUESTIONS AND ISSUES

All responses to staff questions were incorporated into the project write-up.

Fiscal Year 2020-21 Capital Construction Request

Adams State University

Central Technology Building Renovation and Addition

2017-051

PROGRAM PLAN STATUS

Approved Program Plan? No **Date Approved:**

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	2 of 3	
CCHE	17 of 39	
OSPB	43 of 47	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2020-21	FY 2021-22	Future Requests	Total Cost
CCF	$0	$6,142,225	$0	$0	$6,142,225
CF	$0	$62,043	$0	$0	$62,043
Total	$0	**$6,204,268**	$0	$0	$6,204,268

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2020-21	FY 2021-22	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$639,250	$0	$0	$639,250
Construction	$0	$4,656,453	$0	$0	$4,656,453
Equipment	$0	$382,000	$0	$0	$382,000
Miscellaneous	$0	$61,565	$0	$0	$61,565
Contingency	$0	$465,000	$0	$0	$465,000
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$6,204,268**	$0	$0	$6,204,268

PROJECT STATUS

This is a new, never-before requested project. It has been on the university's projected projects list since FY 2018-19.

PROJECT DESCRIPTION / SCOPE OF WORK

Adams State University (ASU) is requesting state funds and cash funds spending authority to renovate its Central Technology Building, which houses information technology staff, offices, and infrastructure (e.g., servers) for the campus.

The project renovates working spaces, addresses fire codes and accessibility standard deficiencies, and expands the building to accommodate its workforce, which has grown since the building was last renovated from a steam plant in 1999. The project renovates 6,380 GSF of existing space and adds a 5,742 GSF addition. The renovated facility will provide mixed space consisting of staff offices, work stations, workshops, a server room, reception, and secured equipment storage.

Cost Assumption. The project is designed to be completed in a single phase, based on estimates from a third-party

architecture firm. The project incorporates an inflation escalation of 10.8 percent. Between 6,380 GSF of renovation, 2,000 GSF of infill space, and the 5,742 GSF addition, the project's cost per GSF is $439. The project meets the Art in Public Places and High Performance Certification program requirements.

PROJECT JUSTIFICATION

The Central Technology Building is facings issues of occupancy, life safety, and code deficiencies. The university's information technology staff has grown to 20 full-time staff, housed in a building designed with only 13 offices. In addition, many of the building's systems need to be updated; for example, the existing HVAC system is reaching the end of its usable life and its refrigerant (R-22) will be banned next year as part of the Environmental Protection Agency's phaseout of ozone-depleting substances. The building's generator is also nearing the end of its usable life.

The program plan, conducted by a third-party architecture firm, identified code issues related to egress, fire suppression systems, and circulation. This project addresses the issues by renovating current space and constructing an addition to the building. Technology infrastructure has cross-cutting impacts on all university functions, and the building's most recent Facility Condition Index (FCI) is 37.5. The FCI is a measure of the cost of remedying building deficiencies compared to a building's current replacement value, and the state architect's target FCI for all buildings is 85.

PROGRAM INFORMATION

The project directly affects the information technology operations, which maintain the university's hardware and software infrastructure. Because information technology is a core operation of the university, the project indirectly affects most university functions, including administration, instruction, and daily operations.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	June 2020	December 2020
Construction	March 2021	November 2021
Equipment	December 2021	December 2021
Occupancy		January 2022

SOURCE OF CASH FUNDS

The source of cash funds for this project is institutional reserves.

OPERATING BUDGET

Operating expenses are paid from institutional sources. According to the university, additional operating expenses associated with the larger building will be offset by the renovation's efficiency improvements.

STAFF QUESTIONS AND ISSUES

All responses to staff questions were incorporated into the project write-up.

Fiscal Year 2020-21 Capital Construction Request

Adams State University

Facility Services Center Replacement

2017-052

PROGRAM PLAN STATUS

Approved Program Plan? No **Date Approved:**

PRIORITY NUMBERS

Prioritized By	Priority	
DeptInst	3 of 3	
CCHE	24 of 39	
OSPB	NP of 47	Not recommended for funding.

PRIOR APPROPRIATION AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2020-21	FY 2021-22	Future Requests	Total Cost
CCF	$0	$15,283,605	$0	$0	$15,283,605
CF	$0	$154,380	$0	$0	$154,380
Total	$0	**$15,437,985**	$0	$0	$15,437,985

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2020-21	FY 2021-22	Future Requests	Total Cost
Land Acquisition	$0	$0	$0	$0	$0
Professional Services	$0	$1,088,075	$0	$0	$1,088,075
Construction	$0	$13,171,454	$0	$0	$13,171,454
Equipment	$0	$221,600	$0	$0	$221,600
Miscellaneous	$0	$221,714	$0	$0	$221,714
Contingency	$0	$735,142	$0	$0	$735,142
Software Acquisition	$0	$0	$0	$0	$0
Total	$0	**$15,437,985**	$0	$0	$15,437,985

PROJECT STATUS

This is a new, never-before-requested project. It has been on the university's planned project list since FY 2016-17.

PROJECT DESCRIPTION / SCOPE OF WORK

Adams State University (ASU) is requesting state funds and cash funds spending authority to construct a new, 33,867-GSF facility to replace its Facility Services Center. The project will address space and facility deficiencies facing Facility Services, which maintain the grounds, buildings, and vehicles owned by the university. The new Facility Services Center will house the administrative offices, a structural department shop, and a vehicle maintenance shop on a site adjacent to the current building.

Cost assumption. Costs were estimated by an independent firm based on architectural diagrams and system narratives. The cost per GSF is $456. The university uses an annual escalation rate of 4.0 percent, leading to a factor of 11.0 percent by February 2022, the midpoint of construction. The project meets the Art in Public Places and High Performance Certification requirements.

Fiscal Year 2020-21 Capital Construction Request

Adams State University

Facility Services Center Replacement

PROJECT JUSTIFICATION

The university says that the current building is inadequate to serve its needs. It was originally constructed in 1947 as a regional armory. An addition was built in 1968, bringing the building up to 21,700 GSF. The HVAC systems are mostly original and past their useful life; no part of the building is sprinklered; the fire alarm panel is obsolete; plumbing systems are not ADA compliant; and hazardous materials have been identified in the building, including lead paint and asbestos. In addition, the university says that the finished floor of the original building collects standing water from the adjacent maintenance yard, which poses an ice hazard during cold weather. The existing building's Facility Condition Index (FCI) is 14.7. The FCI is a measure of the cost of remedying building deficiencies compared to a building's current replacement value, and the state architect's target FCI for all buildings is 85.

The university's Facility Master Plan has identified the Facility Services Center location as a "potential campus gateway opportunity" due to the high volume of traffic nearby, so replacing the building would allow for more strategic use of space on that side of campus property.

Project alternatives. The university considered several alternatives, including renovation and another addition, but determined that full replacement would best serve the institution's needs, would cause the least disruption to campus operations, and would provide the best long-term value.

PROGRAM INFORMATION

Facility Services is a cross-cutting department on campus which supports the needs of all academic, athletic, and auxiliary programs, including:

- managing all activities related to maintenance, operations, and capital improvement project planning and execution;
- storing and servicing the fleet of ASU buses, vans, and maintenance staff trucks; it maintains the campus grounds;
- maintaing the 102-acre campus grounds;
- fabrication of campus keys;
- custodial cleaning of all campus buildings; and
- storing supplies, attic stock of building materials, and bulk landscaping materials.

PROJECT SCHEDULE

	Start Date	Completion Date
Design	July 2020	April 2021
Construction	July 2021	October 2022
Equipment	July 2022	August 2022
Occupancy		September 2022

SOURCE OF CASH FUNDS

The source of cash funds for this project is institutional reserves.

OPERATING BUDGET

Operational expenses are paid from institutional sources. The university says that additional costs associated with operating a larger building will be offset by efficiency gains from modern systems such as HVAC and LED lights.

STAFF QUESTIONS AND ISSUES

All responses to staff questions were incorporated into the project write-up.