STATE OF IOWA DEPARTMENT OF Health and Human services

Woodward Tunnel Decentralization



Summary

The Department of Health and Human Services is requesting \$34.6 million between SFY24 and SFY27 to decentralize the utilities at the Woodward Resource Center and decommission the tunnel system. The Governor has recommended \$5.6 million for the project in SFY 2024 from RIIF.

- The campus is currently served by a central steam plant and utility distribution system that primarily consists of tunnels built in the 1960s.
- The central steam plant and distribution system is now over 50 years old with much of its original equipment and piping in place.
- The Department of Administrative Services (DAS) is responsible for major maintenance at the HHS Facilities, but due to the size of the request, does not have the resources to address the issue.

This presentation will lay out the current conditions the tunnel system and the utilities and outline a timeline for decentralization.





Shive-Hattery (architecture and engineering firm) first assessed the Woodward tunnels for the Department of Administrative Services in January 2018 and along with Eldora State Training School (STS) tunnel system. At that time, it was determined Eldora STS was a higher priority for decentralization and the project was recently completed in four years at a cost of \$11.5 million from DAS Major Maintenance. A supplemental assessment of the Woodward tunnels was completed in October 2022 by Shive-Hattery, and it was determined, "that without substantial improvements, the current tunnel and utility distribution system is at risk of having substantial failures and utility interruptions with potential impacts to ongoing campus operations."



Issues with the tunnels based on the Shive-Hattery report include:

- A majority of the tunnel system is classified as having moderate to severe structural deterioration.
- The utilities in the tunnels are at or nearing the end of their useful lives which typically leads to accelerated levels of leaks and failures.
- The utility and steam systems operate year-round and with multiple ongoing steam leaks and tunnel water infiltration. This creates humid and/or wet conditions throughout which accelerates deterioration of the tunnel structural and utility systems.







Corroded form deck and widened horizontal crack on right wall in main tunnel.

Typical pipe corrosion observed.







Failed pipe support base.

Ceiling deterioration, lots of concrete on floor.





DULT147202

Temporary bracing to shore up walls and ceilings.





Woodard Tunnel Decentralization Plan

It has been determined the most cost-effective approach to reduce ongoing maintenance and operational costs moving forward is decentralization of the tunnel system. The project components include:

Campus gas distribution.	Decentralization of chiller plant.	Asbestos abatement.
Replacement of the fire alarm system.	Fiber relocation.	Tunnel abandonment/removal.





Estimated Cost and Funding Source

The estimated cost and timeline for the tunnel decentralization project is as follow:

Fiscal Year	Phase	Utility Decentralization	Fire Alarm Project	Total Cost	Funding Source
SFY23	Phase I	\$ 750,000	\$ 0	\$ 750,000	Funded by Major Maintenance
SFY23	Phase 2a	3,400,000	0	3,400,000	Funded by Major Maintenance

Funding Request

SFY24	Phase2b	5,000,000	880,000	5,880,000	TBD
SFY25	Phase 3	10,000,000	750,000	10,750,000	TBD
SFY26	Phase 4	10,000,000	1,205,000	11,205,000	TBD
SFY27	Phase 5	3,500,000	3,245,000	6,745,000	TBD
Total		\$ 28,500,000	\$ 6,080,000	\$ 34,580,000	



