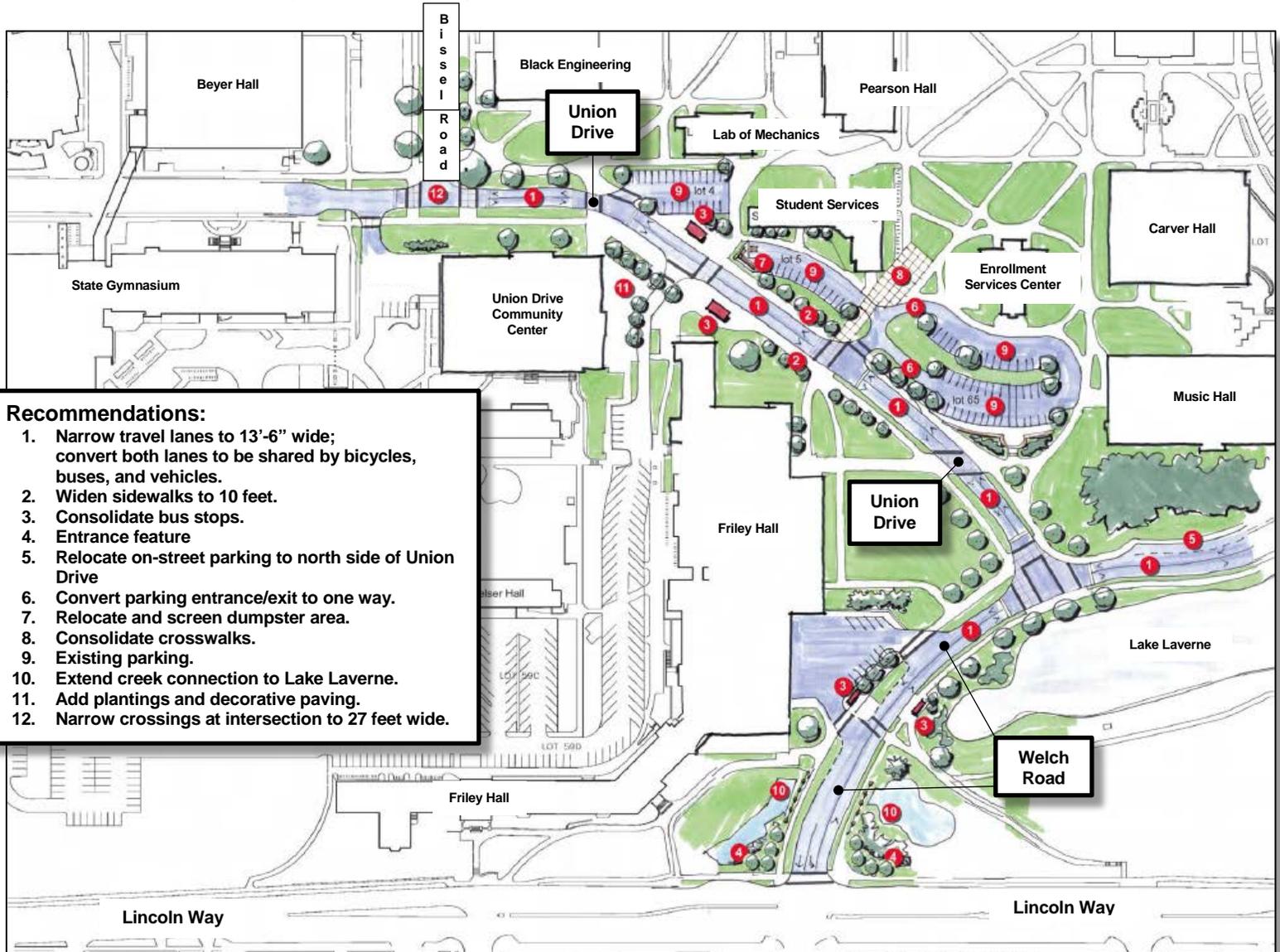


Contact: John Nash

REGISTER OF IOWA STATE UNIVERSITY
CAPITAL IMPROVEMENT BUSINESS TRANSACTIONS

Actions Requested: Consider recommending to the Board approval of the project descriptions and budgets (\$3,200,000) for the **Institutional Roads 2018 – Union Drive and Welch Road Reconstruction** project and (\$8,500,000) for the **Utilities – Chilled Water West Campus Distribution Improvements** project.



Institutional Roads 2018 – Union Drive and Welch Road Reconstruction project: site plan

Executive Summary:

The University requests approval of the project description and budget (\$3,200,000) for the **Institutional Roads 2018 – Union Drive and Welch Road Reconstruction** project, which would replace over 1,300 feet of roadway, sidewalks, and storm sewer piping east of Friley Hall between Lincoln Way and Bissell Road (see page one for map). The project would be funded by utility funds, institutional roads funds, and utility roads funds.

The University requests approval of the project description and budget (\$8,500,000) for the **Utilities – Chilled Water West Campus Distribution Improvements** project, which would install a larger underground chilled water distribution system, replace underground utilities and completely reconstruct Bissell Road on the west side of campus (see Attachment A). The project would be funded by utility infrastructure funds and utility repair funds.

Details of the Projects:

Institutional Roads 2018 – Union Drive and Welch Road Reconstruction

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Selection of Design Professional Olsson Associates (West Des Moines)		Dec. 2016	Not Required*
Design Professional Agreement (Pre-Design – Construction Admin.)	\$ 176,000	Mar. 2017	Not Required*
Project Description and Budget	3,200,000	Apr. 2017	Requested

*Approved by Executive Director, consistent with Board policies.

Union Drive/Welch Road was originally constructed in the early 1930's and has had several rehabilitation projects completed over the years, most recently in the late 1980's and again in 2009. The current Pavement Condition Index (PCI) rating ranges from 39 (Poor) to 44 (Fair), a significant drop from 2010 when the PCI rating ranged from 59 (Good) to 95 (Excellent). The existing pavement is not adequate to handle the stress from today's constant bus and vehicular traffic.

With a 44% growth in student enrollment over the last decade, the number of pedestrians, vehicles and bikes sharing this corridor has increased significantly. Welch Road/Union Drive is a main campus corridor used by a wide array of vehicles and connects campus to student housing and Campus Town. Addressing this roadway issue provides the opportunity to reduce crosswalk lengths, more safely accommodate bicycles on the road, widen sidewalks, and enhance campus character by increasing landscaping and overall greenspace.

Project Budget

Construction	\$2,585,000
Planning, Design & Management	537,380
Contingency	77,620
Total Project Cost	\$3,200,000

<u>Source of Funds</u>	
Utility Funds	\$ 300,000
Institutional Roads Funds	1,700,000
<u>Utilities Roads Funds</u>	<u>1,200,000</u>
Total Funds	\$3,200,000

Utilities – Chilled Water West Campus Distribution Improvements

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed with Project Planning		June 2016	Approved
Selection of Design Professional Shive Hattery (Iowa City)		Nov. 2016	Not Required*
Design Professional Agreement (Pre-Design – Schematic Design)	\$ 119,270	Dec. 2016	Not Required*
Project Description and Budget	8,500,000	Apr. 2017	Requested

*Approved by Executive Director, consistent with Board policies.

The existing chilled water piping system under Bissell Road is 49 years old. During that time, numerous buildings have been constructed or remodeled on the west side of campus and connected to the chilled water system. The University is now experiencing operational issues on the west and south campus areas during peak demands for cooling, especially in Friley Hall, Martin Hall, Eaton Hall, Union Drive Community Center, and State Gym. The addition of the Student Innovation Center and the planned renovation of Beyer Hall would only increase this demand for cooling. This project's installation of new and larger chilled water piping system would correct these issues and better prepare the University for development in the future.

The existing storm sewer under Bissell Road is 77 years old and serves approximately 30 acres of land. Engineering modeling indicates that the system no longer meets common benchmarks, 1-year and 5-year storm recurrences, for storm sewer capacity. During rainfall events, the storm sewer backs up into the steam tunnels and could continue into buildings.

This project would install a new chilled water distribution system consisting of a pair of 24-inch pipes, storm sewer system, steam tunnels, domestic water lines and completely reconstruct Bissell Road.

<u>Project Budget</u>	
Construction	\$7,132,440
Planning, Design & Management	1,184,820
<u>Contingency</u>	<u>182,740</u>
Total Project Costs	\$8,500,000

Source of Funds: Utility Infrastructure Funds, Utility Repair Funds

IOWA STATE UNIVERSITY
Utilities – Chilled Water West Campus Distribution Improvements Map

