

MEMORANDUM

To: Board of Regents

From: Board Office

Subject: Register of University of Northern Iowa Capital Improvement Business Transactions for Period of September 21, 2000 through October 18, 2000

Date: November 6, 2000

Recommended Action:

Approve the Register of Capital Improvement Business Transactions for the University of Northern Iowa.

Executive Summary:

The University of Northern Iowa requests permission to proceed with project planning for the **Steam Distribution System Replacement—Phase 1** project which is the first phase of work to replace approximately 10,000 feet of existing direct-buried steam and condensate piping with piping located within tunnels. The estimated cost of the Phase 1 project, which will replace approximately 4,100 feet of piping, is \$12.7 million to be funded by state appropriations; this amount is included in the Board's FY 2002 capital request. The Board's Five-Year Plan (FY 2002 – FY 2006) includes an additional \$8 million in FY 2006 for the Phase 2 project.

The University requests approval of the following project descriptions and budgets:

- **West Gym Renovation—Phase 3** project (\$416,000) which will upgrade the electrical, heating and other building systems to continue the improvements for the facility;
- **Schindler Education Center—Telecommunications Infrastructure—Phase 2** project (\$400,000) which will complete the upgrade of the telecommunications system throughout the facility; and
- **Power Plant—Overhaul Turbine Generator** project (\$350,000) which will provide a preventative maintenance inspection and improvements to the turbine generator system of the Power Plant.

Background and Analysis:

Steam Distribution System Replacement—Phase 1

Source of Funds: Capital Appropriations

Project Summary

<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed	Nov. 2000	Requested

The University lacks a reliable steam distribution system between the Power Plant and central campus, and between some campus buildings and the existing campus steam distribution system. Two direct buried piping systems (south line installed in 1971 and north line installed in 1978) are the only means of supplying steam to campus. The direct buried piping systems have outlived their useful lives; they also have a lower reliability than tunnel systems. The existing piping continues to fail and must be repaired and/or replaced each year. In calendar year 2000 to date, there have been nine system failures, including seven failed condensate lines.

The total project will replace approximately two-thirds (9,700 feet) of the direct-buried steam and condensate lines with piping within tunnels. This will increase the reliability of the system and eliminate the potential loss of steam service to campus buildings. It is envisioned that the project will result in savings in energy costs and annual maintenance.

The Phase 1 project will install approximately 3,100 feet of main tunnel to connect the Power Plant to Central Campus, and approximately 1,000 feet of branch tunnel to connect campus facilities. The branch tunnels connecting the facilities will provide redundant steam service which currently does not exist in these areas. The life expectancy for the replacement tunnels is estimated to be more than 50 years, which will result in lower life-cycle costs than a direct buried system.

In addition to the installation of new tunnels, modifications will be made to existing tunnel areas. The modifications will include the installation of new control valves, and ventilation and ingress/egress improvements to increase the safety and reliability of the overall system.

By beginning planning at this time, the University would be able to start construction shortly after the beginning of FY 2002 if appropriated funds are approved for the project. This lead time will help ensure that the project is completed as expeditiously as possible.

West Gym Renovation—Phase 3

Source of Funds: Income from Treasurer's Temporary Investments

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Project Description and Total Budget	\$ 416,000	Nov. 2000	Requested

This project is the third phase of a multi-phased plan to renovate the West Gym. The Phase 1 project provided for the renovation of space to accommodate the relocation of occupants in preparation for the Lang Hall Renovation project. The Phase 2 project provided new restroom areas, created a second level in the former pool area for future expansion in the facility, and developed a new electrical room.

The Phase 3 project will continue the upgrade of the facility and will focus primarily on the electrical and heating systems. The project will also upgrade the domestic hot water, telephone and data communications systems.

Project Budget

Contracts/Purchase Orders	\$ 340,000
Consultant/Design Services	50,000
Contingency	<u>26,000</u>
TOTAL	<u>\$ 416,000</u>

Schindler Education Center—Telecommunications Infrastructure—Phase 2

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Project Description and Total Budget	\$ 400,000	Nov. 2000	Requested

The Phase 2 project will complete the replacement and upgrade of the telecommunications infrastructure in Schindler Education Center. The system is original to the building's 1973 construction and is not sufficient to meet current data transmission standards.

The Phase 1 project replaced the infrastructure which serves the basement, level one, and the lecture rooms on level two of the building. The Phase 2 project will address the remainder of level two plus levels three through six. The project will install new telephone, data and voice cabling, and voice and data outlets. The project will also require the replacement of ceilings in these areas.

Project Budget

Contracts/Purchase Orders	\$ 336,000
Consultant/Design Services	44,000
Contingency	<u>20,000</u>
TOTAL	<u>\$ 400,000</u>
Source of Funds:	
Building Repair Funds	\$ 200,000
Information Network Services	<u>200,000</u>
TOTAL	<u>\$ 400,000</u>

Power Plant—Overhaul Turbine Generator

Source of Funds: Income from Treasurer's Temporary Investments and/or
Residence System Improvement Funds

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Project Description and Total Budget	\$ 350,000	Nov. 2000	Requested

In addition to the preventative maintenance inspection, the project will replace the existing obsolete control system which is approximately 20 years old. The inspection work is undertaken by the University approximately every five years to keep the generator operating at maximum efficiency.

The use of Residence System Improvement Funds as one source of funds for the project reflects the Department of Residence's share of campus energy use, plus additional charges for maintenance and upgrades which are not built into the Department's energy costs.

Project Budget

Contracts/Purchase Orders	\$ 300,000
Consultant/Design Services	30,000
Contingency	<u>20,000</u>
TOTAL	<u>\$ 350,000</u>

Source of Funds:

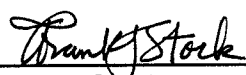
Income from Treasurer's Temporary Investments	\$ 250,000
Residence System Improvement Funds	<u>100,000</u>
TOTAL	<u>\$ 350,000</u>

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Included in the University's capital register for Board ratification is one project budget under \$250,000. This item is listed in the register prepared by the University and is included in the Regent Exhibit Book.



Sheila Lodge

Approved: 

Frank J. Stork