

# CAPITAL PROJECTS DETAIL

Date: 12/14/2006

640 NDSU MAIN RESEARCH CENTER

Time: 10:22:39 AM

Version: 2007-R-03-00640

<b>Capital Project</b>			
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Beef Research Facility

<b>Total Project Cost</b>	Request/Optional 950,000	Recommendation 0
<b>General Fund</b>	0	0
<b>Federal Funds</b>	0	0
<b>Special Funds</b>	0	0
<b>Bonding</b>	950,000	0

<b>Is this a multiennium project?</b> No	<b>No of Biens:</b>	<b>Est. Costs</b>
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**Future Increased Costs Associated with Project Approval**

	2007-2009	2009-2011	2011-2013		2007-2009	2009-2011	2011-2013
Salaries and Wages	0	0	0	FTE	.00	.00	.00
Operating Expenses	5,400	5,400	5,400				
Equipment > \$5,000	0	0	0	General Fund	5,400	5,400	5,400
IT Equipment > \$5000	0	0	0	Federal Funds	0	0	0
Special Lines	0	0	0	Special Funds	0	0	0
<b>Total</b>	<b>5,400</b>	<b>5,400</b>	<b>5,400</b>	<b>Total</b>	<b>5,400</b>	<b>5,400</b>	<b>5,400</b>

<b>Project Specifics and Justification</b>
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BEEF RESEARCH FACILITY \$ 950,000

Main Station Research Farms Priority #3

The Beef Research Facility is needed to fully utilize the potential for beef research at NDSU and to better serve the state's beef producers. It will help fulfill a need for integrated research capabilities in the areas of beef cattle nutrition, reproduction, and management that will complement the Beef Systems Center of Excellence.

The proposed research facility would be approximately 58' X 720' and consist of 36 pens. The building itself would be 30' X 720' and would provide shelter for the cattle and a covered drive-through feeding alley. In addition, an 80' X 58' building would be constructed on the end of the building to house handling facilities, scales, chutes, and a feed preparation center. The facility would be designed to accommodate all aspects of beef cattle management, nutrition, and reproductive physiology research including cow-calf, backgrounding, and finishing.

We estimated an additional \$5,400 for operating and maintenance expenses for a biennium.

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## Capital Project

Hdqtr. Office Building additions and renovations

	Request/Optional	Recommendation
<b>Total Project Cost</b>	1,107,750	1,107,750
<b>General Fund</b>	0	1,107,750
<b>Federal Funds</b>	0	0
<b>Special Funds</b>	0	0
<b>Bonding</b>	1,107,750	0

Is this a multibiennium project? No No of Biens: Est. Costs

### Future Increased Costs Associated with Project Approval

	2007-2009	2009-2011	2011-2013		2007-2009	2009-2011	2011-2013
Salaries and Wages	0	0	0	FTE	.00	.00	.00
Operating Expenses	33,000	33,000	33,000				
Equipment > \$5,000	0	0	0	General Fund	33,000	33,000	33,000
IT Equipment > \$5000	0	0	0	Federal Funds	0	0	0
Special Lines	0	0	0	Special Funds	0	0	0
<b>Total</b>	<b>33,000</b>	<b>33,000</b>	<b>33,000</b>	<b>Total</b>	<b>33,000</b>	<b>33,000</b>	<b>33,000</b>

### Project Specifics and Justification

#### HEADQUARTER OFFICE BUILDINGS ADDITIONS AND RENOVATIONS \$ 1,107,750

*Multiple Research Extension Centers Priority #2*

#### Carrington Research Extension Center Headquarters Office Building Addition \$ 465,000

The proposed project consists of the construction of an addition to the existing REC office/meeting building that would include a dedicated room for video conferencing and computer instruction, additional office space, and a room for equipment storage. The current facility is fully utilized, and subsequently, we are unable to effectively accommodate expanding technologies and programs. The estimated 3,000 sq. ft. addition would allow for expansion of our programs and outreach services.

#### Hettinger Research Extension Center Headquarters Office Addition \$ 222,750

Construction and dedication of the existing center was completed in 1991. Use of the facility has grown immensely to the point that more room is needed for office and conference uses. Annual use of the meeting and conference complex has grown from around 4,000 in 1991 to approximately 10,000 in 2001. Part of this growth comes from the interactive connection for distance learning directed from other NDUS entities and the computer cluster located here that is used by many people and entities for technology training. Funds utilized for establishment of the technology supplied from the center came from local and grant fund sources. The original facility was constructed from community and grant fund sources without any requirement for North Dakota general fund dollars.

Two new efforts in southwestern North Dakota potentially will come with requirements for office space: 1) Southwest Feeders is a local effort that will require housing for one or two personnel; 2) Value Added Ruminant Consortia (VARAC) is a federally funded, four-state initiative that will require additional office and conference space. In that other

similar facilities have enjoyed participation of state general funds in construction of these much needed centers for technology transfer, it is anticipated that the general fund will allow for construction of this addition.

*North Central Research Extension Center Office & Technology Transfer Building Addition. \$ 420,000*

All offices in the current building are fully occupied, so three workstations are being used in the room designed to be the electronic library. The use of video-conferencing and “teleplant medicine” have exceeded our expectations and have also caused congestion in the classroom and video-conferencing room. The proposed addition would add additional office space, specimen analysis areas, and data processing rooms to the current office and technology transfer building. The project would also encompass the replacement of the present carpeting and painting the existing headquarters office building.

We estimated operating and maintenance expenses for these three projects at \$33,000.

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## Capital Project

Research Greenhouse Complex - Phase II

	Request/Optional	Recommendation
<b>Total Project Cost</b>	9,000,000	9,000,000
<b>General Fund</b>	0	9,000,000
<b>Federal Funds</b>	0	0
<b>Special Funds</b>	0	0
<b>Bonding</b>	9,000,000	0

Is this a multiennium project? No No of Biens: Est. Costs

### Future Increased Costs Associated with Project Approval

	2007-2009	2009-2011	2011-2013		2007-2009	2009-2011	2011-2013
Salaries and Wages	0	0	0	FTE	.00	.00	.00
Operating Expenses	160,000	160,000	160,000				
Equipment > \$5,000	0	0	0	General Fund	160,000	160,000	160,000
IT Equipment > \$5000	0	0	0	Federal Funds	0	0	0
Special Lines	0	0	0	Special Funds	0	0	0
<b>Total</b>	<b>160,000</b>	<b>160,000</b>	<b>160,000</b>	<b>Total</b>	<b>160,000</b>	<b>160,000</b>	<b>160,000</b>

### Project Specifics and Justification

The North Dakota Agricultural Experiment Station (NDAES) needs secure greenhouse space to conduct research on transgenic crops to meet consumer demands and to respond to the threat of bio terrorism. This project will continue new construction and will implement the renovation of selected existing greenhouses in order to address the critical need for state-of-the-art greenhouse space for NDAES researchers. The Phase II project has a height priority ranking because of the current condition of the existing greenhouses and the requirements for expanding AES research needs.

Each greenhouse compartment within a range shall have de-ionized and regular water systems, a fertilizer injection system, heating, lighting, ventilation and environmental controls. Independent room access is required for security purposes and to minimize contamination of rooms by workers and transported plant materis. Approximately 24 compartments, each 800 sq. ft. in size, are needed to meet current and expected future demands for high quality research space.

The headhouse area will include 8 laboratories, controlled environment seed storage rooms, a large threshing/storage room, propagating material room, freezer room, three drying rooms (with 15 dryer units), two large growth chamber areas sufficient for 24 chambers each. The structure shall include restrooms and changing/locker rooms. It will be planned with future expansion in mind to conform to the future needs of NDAES research priorities and goals.

The location of this facility shall be in proximity to other on-campus laboratory research facilities because of the need to transport plant material between building in the winter, for access by student labor and for the convenience of graduate students and faculty. We estimated additional operational and maintenance expenses of \$160,000 a biennium.