SOUTH DAKOTA BOARD OF REGENTS

Committee on Budget and Finance

**AGENDA ITEM: III - I**

**DATE: December 17-18, 2009**

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**SUBJECT: South Dakota State University – 12th Avenue Parking Lot Construction Preliminary Facility Statement and Facility Program Plan**

South Dakota State University requests approval of their Preliminary Facility Statement and Facility Program Plan to construct a new parking lot at an estimated cost of $921,000. The lot would provide parking for approximately 300 commuter vehicles.

This parking lot will be located between 12th and 13th Avenues and 7th and 8th Streets on the southern boundary of the campus. This area is bordered primarily by residential rental property. The property purchase was authorized by the Board at its May 2009 and August 2009 meetings.

This new parking lot is in accordance with the Campus Master Plan to create a walk-in campus by reducing interior pedestrian hazards by relocating parking to the perimeter of campus. The proposed lot will encompass approximately 140,000 square feet and will allow easier maintenance than smaller existing parking areas.

Additional details of this project can be found in SDSU's attached Preliminary Facility Statement and Facility Program Plan documents and schematic drawing.

Funding for this project will come from bond proceeds and parking revenues. No building committee is required for this project.

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**RECOMMENDED ACTION OF THE EXECUTIVE DIRECTOR**

Approve SDSU's Preliminary Facility Statement and Facility Program Plan to construct a new parking lot near 12th Street at an estimated cost of $921,000. Funding for this project will come from bond proceeds and parking revenues.

# *PRELIMINARY FACILITY STATEMENT*
FOR

# NEW PARKING LOT CONSTRUCTION - 12th AVENUE
# SOUTH DAKOTA STATE UNIVERSITY

## November 05, 2009

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**South Dakota State University (SDSU) requests approval of this Preliminary Facility Statement and budget for the project development.**

### 1. GENERAL PROGRAMMATIC NEEDS TO BE ADDRESSED:

This area will provide parking for approximately 300 commuter vehicles. The construction of this parking lot follows the Campus Master Plan goal of reducing traffic on interior streets by relocating parking to the perimeter of campus. This area will also replace existing interior lots that will be closed due to construction. Site development will be harmonized with existing neighboring residential property by utilizing landscape features to create vegetative screens between the parking area and surrounding residential neighborhood. The paving areas will be designed to retain storm water runoff to limit and control downstream effects on storm sewer system for the city of Brookings. The area will also provide parking on the south side of campus closer to classes and offices than current smaller distributed lots.

### 2. ANALYSIS OF THE STUDENT BODY OR CONSTITUENTS TO BE SERVED:

Will provide parking for commuting students/faculty and staff who are attending class on the south side of campus.

### 3. ADDITIONAL SERVICES TO BE OFFERED:

None.

### 4. COMPLIANCE WITH CAMPUS MASTER PLAN:

The new parking lot is in accordance with the Campus Master Plan to create a walk-in campus by reducing interior pedestrian hazards by relocating parking to the perimeter of campus. The parking area will also prepare and consolidate smaller parking areas into an area that will be easier to maintain.

## 5. ANALYSIS OF NEEDS ASSESSMENT BASED ON THE FACILITIES UTILIZATION REPORT:

Not Applicable.

## 6. LOCATION:

The project is located between 12th & 13th Ave and 7th & 8th Street on block 1 Thornbers Addition, City of Brookings, County of Brookings. The parking area will border the southern boundary of campus.

## 7. REALLOCATION OF OLD SPACE, IF ANY:

Replace existing interior lots that have been closed or will be closed due to new construction.

## 8. PROPOSED FUNDING SOURCE/SOURCES:

Bond revenue proceeds and parking & traffic revenues will fund the project.

## 9. BUDGET FOR DEVELOPMENT OF A FACILITY PROGRAM PLAN:

The facility program plan is being developed by SDSU Facilities & Services. Cost for development will be less than $1,000.

# FACILITY PROGRAM PLAN
# FOR
# NEW PARKING LOT CONSTRUCTION - 12TH AVENUE
# SOUTH DAKOTA STATE UNIVERSITY

## November 5, 2009

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SDSU requests approval of this Facility Program Plan to construct a new parking lot. SDSU requests that this project be exempted from the remainder of the capital improvement process.

**A. Programmatic justification for discrete spaces:**

The project will construct a new parking lot located between 12th & 13th Ave and 7th & 8th Street on block 1 Thornbers Addition, City of Brookings. The area will border the southern boundary of campus and be bordered primarily by residential rental property. The property was authorized for purchase by the Board of Regents at its May 21-22, 2009 and August 6, 2009 meeting.

This area will provide parking for approximately 300 commuter vehicles. The construction of this parking lot follows the Campus Master Plan goal of reducing traffic on interior streets by relocating parking to the perimeter of campus. This area will also replace existing interior lots that will be closed due to construction. Site development will be harmonized with existing neighboring residential property by utilizing landscape features to create vegetative strips for onsite retention of run-off and create natural screenings. The area will incorporate adequate electric lighting for safety and security.

**B. Gross square footage:**

The proposed program would construct a parking lot of approximately 140,000 square feet.

**C. Site analysis:**

The site is situated immediately south of the Electrical Engineering and Computer Science building and located as such to provide needed commuter parking adjacent to the south side of campus. The site has a relatively flat contour. The existing houses will be demolished or moved.

**D. Description of key building features:**

Paved parking areas will be paved with concrete or asphalt within concrete curbs over a compacted gravel base. Non paved areas will consist of landscaped vegetative areas for onsite retention of storm water.

Architectural Features: Appropriate landscaping.

Mechanical Systems Features: Plumbing for irrigation system.

Electrical Systems Features: Electric overhead lighting for safety and security.

**E. Illustrative floor plans:**

Schematic drawings include the following:

(1) Site Plan

**F. Initial cost estimates:**

The total project cost is estimated to be approximately $750,000 for the design and construction of the facility. The breakdown is shown in the following table.

| PROJECT COST ESTIMATE | |
|---|---|
| Preliminary Construction Estimate | $750,000.00 |
| Total Construction Costs | $750,000.00 |
| Contingency (6%) | $60,000.00 |
| A/E Fees | $46,000.00 |
| OSE Fees | $22,500 |
| SDSU Fees and Misc. Expenses | $37,500.00 |
| Testing and Survey | $5,000.00 |
| **TOTAL PROJECT COST ESTIMATE** | **$921,000.00** |

**G. Impact to M&R:**

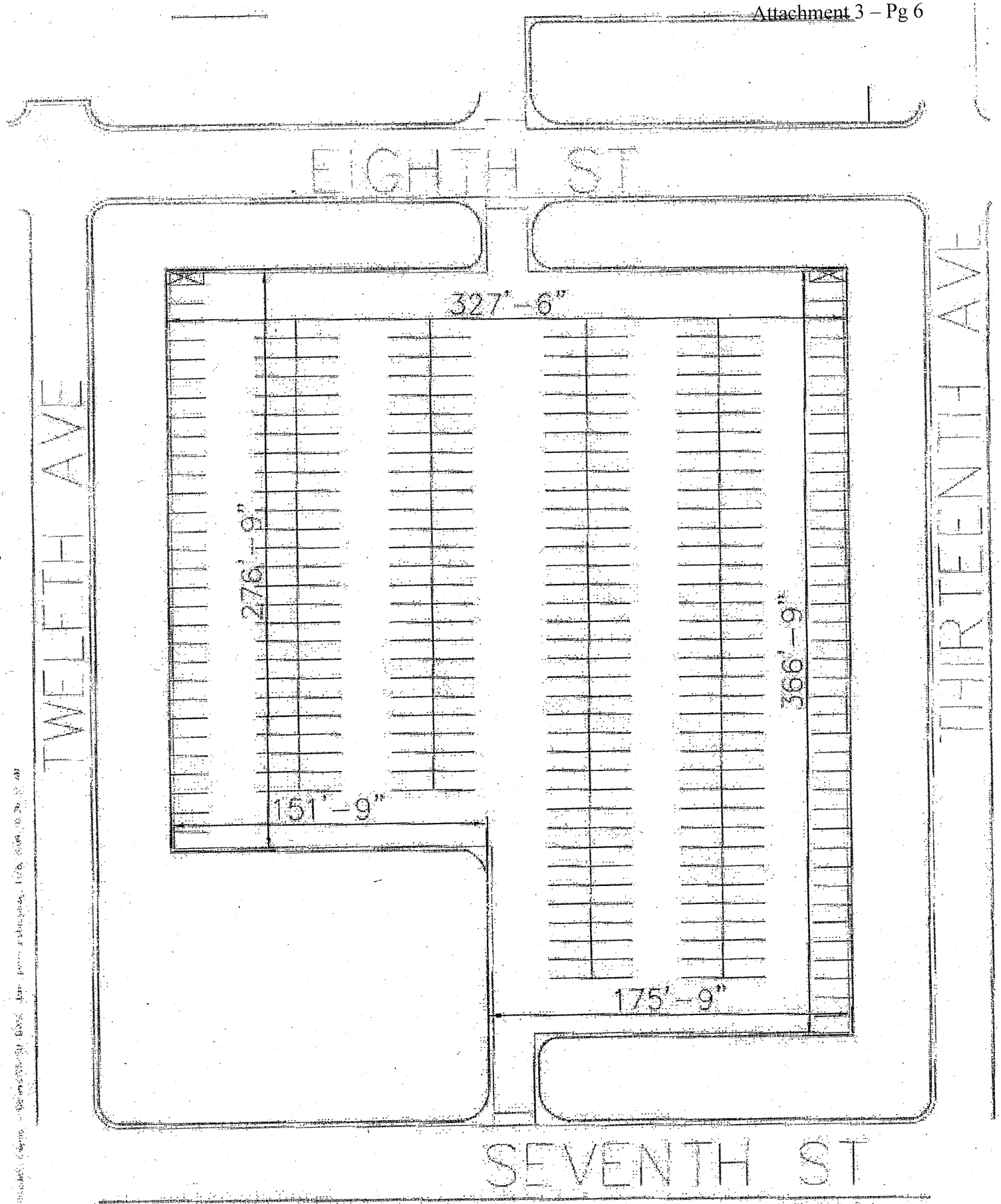
Not Applicable.

**H. Budget for ongoing operational costs:**

Funding for ongoing operational costs will be from parking and traffic revenues.

**I. Proposed funding sources for costs of:**

Construction and ongoing operating expenses will be funded through bond proceeds and parking & traffic revenues.


EIGHTH ST
TWELFTH AVE
THIRTEENTH AVE
SEVENTH ST
327'-6"
276'-9"
366'-9"
151'-9"
175'-9"
1"=60'-0"

**SOUTH DAKOTA BOARD OF REGENTS**

**Committee on Budget and Finance**

**AGENDA ITEM: III - J**

**DATE: December 17-18, 2009**

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**SUBJECT: SDSU – Southeast Campus Steam Upgrades Facility Design Plan**

South Dakota State University requests approval of the Facility Design Plan for the Southeast Campus Steam Upgrades project at an estimated cost of $3.8M. The Preliminary Facility Statement and Facility Program Plan for this project were approved by the Board at their December 2008 meeting. The Building Committee approved the Facility Design Plan at their December 7, 2009 meeting.

In order to alleviate some current demands on the system in the southeast campus quadrant, SDSU would like to add a tunnel section that would create a loop in the steam system. In doing so, the south and east parts of campus could be fed steam from multiple directions, thus increasing reliability and providing a more flexible system for future repairs. This would also allow for a steam connection to any future buildings constructed in that area.

More specific details of SDSU's request can be found in their attached Facility Design Plan document.

Funding for this project will come from designated M&R HEFF funds over a seven-year period starting in FY10. Funds in the amount of $550,000 will be earmarked for each annual M&R HEFF project list through FY16. Cash flow for this project will come from a loan against non-appropriated cash balances.

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**RECOMMENDED ACTION OF THE EXECUTIVE DIRECTOR**

Approve SDSU's Facility Design Plan for the Southeast Campus Steam Upgrades at an estimated cost of $3.8M. Funding for this project will come from seven annual $550,000 M&R HEFF fund payments, beginning in FY10 and running through FY16, to repay the loan designated specifically for this project.

# FACILITY DESIGN PLAN
# FOR

# SOUTHEAST CAMPUS STEAM UPGRADES
# SOUTH DAKOTA STATE UNIVERSITY

**November 2009**
**OSE#R309-17X**

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## Explanation of request.

South Dakota State University (SDSU) requests approval of this Facility Design Plan for the Southeast Campus Steam Upgrades project. This submittal is a result of the schematic design completed by Stanley Consultants. SDSU also requests authorization to continue planning the project and completion of design development and construction drawings.

### A. Architectural, Mechanical & Electrical Schematic Design

Summary of Architectural Work:

1. Construction of a shallow trench from the existing south walk-through tunnel to Building B of the new residence halls, housing steam and condensate return to supply a heat source to the residence halls.

2. Construction of a walk-through tunnel from Building B of the new residence halls to the walk-through tunnel north of Brown Hall to create a steam loop providing redundancy in the system.

3. Construction of steam and condensate return in a shallow trench from Building B of the new residence halls to Mathews Hall, creating a loop to allow flexibility in future campus planning and maintenance. This would allow for the continued steam service to all the residence halls in the southeast part of campus should service to Grove Hall be terminated.

4. Repairs to existing tunnel located south of the Heating Plant including cracks, concrete spalling and exposed rebar.

5. Repair sidewalks, parking lots, roads, curb and gutter damaged by construction.

Description of Mechanical Systems:

1. Steam and condensate lines will be installed to the south in the existing tunnel from a point just west of the heating plant to the new residence hall providing steam for space heating and domestic hot water for the new residence halls. New steam and condensate lines will be routed through a new walk-through tunnel to connect to existing lines in the existing tunnel north of Brown Hall. The extension to the existing walk-through tunnel will create some redundancy in the system.

2. Steam and condensate lines in the south tunnel will also be extended to the south of Solberg Hall to provide additional capacity for future construction projects and provide some redundancy to that area of campus.

3. Expansion joints in the existing 50 plus year old steam line will be replaced with new joints.

4. The Administration, Communications, Old Horticulture, Solberg Annex, and Industrial Arts building are currently supplied by a low pressure steam main. When the project is complete, they will be served by the new high pressure main and the low pressure line will be abated and removed freeing up space in the tunnel for the new high pressure steam and condensate lines and removing asbestos containing materials.

5. Direct buried chilled water lines will be installed from the chilled water plant to Building B of the residence halls to provide cooling to the residence halls. The new main lines will be sized to meet the future building connections in that area of campus.

Description of Electrical Systems:

New energy efficient lighting and service outlets will be added in the walk-through tunnels and the vaults in this project. New cable trays for phone, cable TV and data will also be included in the walk-through tunnels.

Project Timeline:

The engineers will work through design development and complete construction documents to anticipate a January 2010 bid date. Construction will begin in February of 2010 weather permitting. With utilities established to the new residence halls by June 15, 2010. Final completion of the project is scheduled for October 1, 2010.

Project Schedule:

Key Dates:
Advertisement: December 28, 2009 to January 21, 2010
Bid Opening: January 21, 2010
Construction: February 2010 to September 2010
Completion Date: October 1, 2010

## B. Changes from Facility Program Plan

The proposed schematic design includes the direct buried chilled water line to the new residence halls. This was not included in the Facility Program Plan. It was added to this project since it follows roughly the same path as the steam line and providing chilled water from the central plant versus individual chillers at the new complex was deemed to be an appropriate choice based on life cycle costs.

## C. Impact to Existing Building or Campus Wide Heating/Cooling/Electrical Systems

Electrical Distribution:

There will be no impact to the electrical distribution system.

Impact to Existing Tunnels (and associated utilities)

New tunnels and trenches will be attached to existing south tunnel and the tunnel north of Brown Hall. The south tunnel will receive repairs to the tunnel structure itself as well as some new pipe and upgrades to expansion joints and supporting of the existing pipe. New cable trays and energyefficient lighting will be installed in the south tunnel. The tunnel north of Brown Hall will be connected to, new lighting and a new egress door will be added for safety.

Water:

The existing water service will not be affected.

Sanitary Sewer:

The existing sewer service will not be affected.

Storm Sewer

The existing storm sewer service will not be affected.

Natural Gas:

The existing natural gas service will not be affected.

## D. Total Estimated Construction Costs:

Funding for the project has been approved in the amount of $3,800,000. The total project cost is estimated to be approximately **$3,557,182** for the design and construction of the facility. The breakdown is shown in the following table.

| | |
|---|---|
| Preliminary Construction Estimate | $2,725,743 |
| Contingency (10%) | $272,574 |
| A/E Fees (Engineering, Bidding, Project Management) | $371,692 |
| OSE Fees | $40,886 |
| SDSU Fees and Misc. Expenses (5%) | $136,287 |
| Testing and Survey | $30,000 |
| Total Project Cost | **$3,577,182** |
| Unobligated Project Balance | $222,818 |
| Project Funding Available | **$3,800,000** |

Additionally the utility infrastructure for the new residence hall will be bid and constructed concurrently with this project. The estimate for the residence hall portion is $616,000 which will be paid from bond funds. This estimate is included as a line item under the residence hall construction estimate on the Facility Design Plan approved by the Building Committee in February 2009 and at the April 2009 Board of Regents meeting. To maximize bidding advantages, we will bid and construct these two projects simultaneously for a current total construction estimate of $4,193,182.

## E. Changes from Cost Estimates for Operation or M&R Expenses

SDSU does not anticipate any changes from the estimated expenses noted in the previously approved Facility Program Plan.

## SOUTH DAKOTA BOARD OF REGENTS

**Committee on Budget and Finance**

**AGENDA ITEM: III - K**

**DATE: December 17-18, 2009**

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**SUBJECT: SDSU – Young Hall Bathroom Renovations Preliminary Facility Statement and Facility Program Plan**

South Dakota State University requests approval of their Preliminary Facility Statement and Facility Program Plan to renovate the bathrooms and shower rooms in Young Hall. The estimated cost of this renovation project is $1,952,000.

The existing restrooms have not been updated since the Young Hall's construction in 1967. Existing plumbing systems have served their expected life and are subject to increased maintenance. As part of the renovation, showers will be converted to individual shower stalls, plumbing fixtures will be upgraded, finishes will be replaced and facilities for disabled students will be added. Water piping, waste and vent piping will also be replaced.

Additional details of SDSU's Preliminary Facility Statement can be found in the attached document. Funding for this project will come from rent revenues. If the project is approved, the Board president should appoint a building committee representative to the project.

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## RECOMMENDED ACTION OF THE EXECUTIVE DIRECTOR

Approve SDSU's Preliminary Facility Statement and Facility Program Plan for Young Hall Bathroom Renovations at an estimated cost of $1,952,000. Funding for this project will come from rent revenues. If this project is approved, the Board President should designate a representative to the building committee.

PRELIMINARY FACILITY STATEMENT
FOR
YOUNG HALL – BATHROOM RENOVATIONS
SOUTH DAKOTA STATE UNIVERSITY
PREPARED: October 14, 2009

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South Dakota State University (SDSU) requests the approval of this Preliminary Facility Statement and budget for project development.

1. GENERAL PROGRAMMATIC NEEDS TO BE ADDRESSED:
The intent of this project is to renovate all bathrooms and shower rooms in Young Hall.

SDSU plans to complete this project during the summer of 2011, when the residence hall is unoccupied. The entire scope of the project is confined to a small floor area within the building. Scheduling and timely management of manpower is critical to the successful completion of the work. It is advantageous to bid this project during the school year and allow the awarded contractor time to procure materials and schedule deliveries. This allows construction to begin immediately in the summer when the spring semester ends. SDSU intends to Design and plan this project in the fall of 2010 and bid the project during the winter of 2010 to meet this schedule.

2. ANALYSIS OF THE STUDENT BODY OR CONSTITUENTS TO BE SERVED:
The project will serve the residents and visitors to Young Hall (Approximately 500 Bed Spaces). The existing restrooms have not been modified since the construction of the building in 1967. Existing plumbing systems have served longer than their expected life and are subject to increased maintenance. During the past few years SDSU has made efforts to update and upgrade shower facilities in Hansen Hall, Mathews Hall, Pierson Hall, and Binnewies Hall and intends to continue these efforts to all older residence halls. Young Hall is the next building to be renovated. In the other buildings, showers have been converted from gang type showers to individual shower stalls. Plumbing fixtures have been upgraded to more energy efficient fixtures. Finishes have been replaced. Facilities for disabled students have been added to the bathrooms.

3. ADDITIONAL SERVICES TO BE OFFERED:
No additional services are intended. The project is primarily a maintenance and repair project.

4. COMPLIANCE WITH CAMPUS MASTER PLAN:
This project is consistent with plans for major projects intended for the residence halls and their overall maintenance and repair.

5. ANALYSIS OF NEEDS ASSESSMENT BASED ON THE FACILITIES UTILIZATION REPORT:
Not Applicable.

6. LOCATION:
Young Hall is one residence hall in the southeast corner of campus that forms a complex with Binnewies Hall and Larson Commons. Other nearby residence halls include Mathews, Pierson, Brown, and Caldwell Halls, State Court and State Village. This building is a mirror image of Binnewies Hall.

7. REALLOCATION OF OLD SPACE, IF ANY:
Not Applicable

8. PROPOSED FUNDING SOURCE/SOURCES:
This project is to be funded by rent revenues.

9. BUDGET FOR DEVELOPMENT OF A FACILITY PROGRAM PLAN:
Estimated cost for preliminary design and cost estimates of the project is $1,000. The design of the project will mimic work completed in Binnewies Hall and Pierson Hall. SDSU Facilities & Services and SDSU Residential Life will use the past experience and services provided through these other projects to prepare the Facility Program Plan for this project.

FACILITY PROGRAM PLAN
FOR
YOUNG HALL – BATHROOM RENOVATIONS
SOUTH DAKOTA STATE UNIVERSITY
DATE: October 15, 2009

SDSU requests approval of their Facility Program Plan to renovate all bathrooms and shower rooms in Young Hall.

A. Programmatic Justification for Discrete Space:
The proposed renovations will be focused on the restroom areas of Young Hall. The existing restrooms are original to the building which was constructed in 1967. Existing plumbing systems have served longer than their expected life and are subject to increased maintenance. Over the past few years, SDSU has made efforts to update and upgrade shower facilities in Hansen Hall, Mathews Hall, Pierson Hall, and Binnewies Hall and intends to continue these efforts to all older residence halls. Young Hall (approximately 500 bed spaces) is the next building to be renovated. In the other buildings, showers have been converted from gang type showers to individual shower stalls. Plumbing fixtures have been upgraded to use water more efficiently. Finishes have been replaced. Facilities for disabled students have been added to the bathrooms. Domestic hot and cold water piping, along with all waste and vent piping have been replaced.

B. Gross Square Footage:
The estimated gross area of the Young restroom upgrade will be approximately 825 sf. per floor or a total of 3,300 sf for the four floors.

C. Site Analysis:
Not applicable

D. Description of Key Building Features:
No structural work will be required in the building. The existing floor will be removed in order to re-configure the drain lines. Walls will be moved to form the new layout. All supply, waste, and vent plumbing will be replaced to accommodate the new layout. The existing air handling unit in each bathroom has reached the end of their useful life and will be replaced. The rooms will be finished with new floor and wall tile. New sinks, countertops and toilet fixtures will be installed. Bathrooms will be made accessible to individuals with disabilities.

E. Illustrative Floor Plans:
See the attached floor plan of the Binnewies Hall bathroom renovation, which was completed in the summer of 2008. This project will mimic the work completed in Binnewies Hall.

F. Initial Cost Estimates:
The preliminary cost estimate is shown below. This estimate is based on the Binnewies Hall bathroom renovation project, which was completed in the last calendar year.

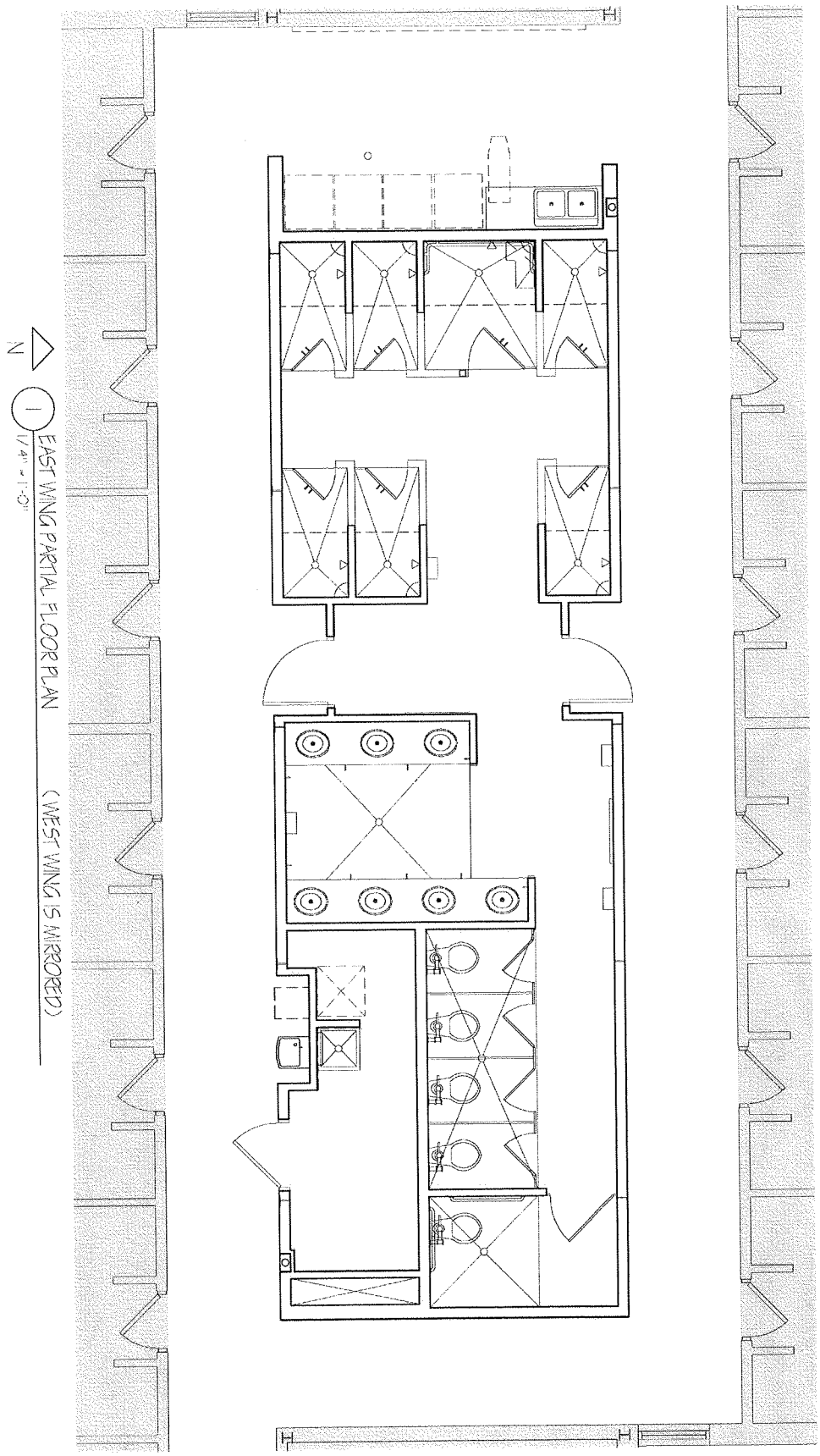
**PROJECT COST ESTIMATE**

| | |
|---|---|
| Preliminary Construction Estimate | $1,600,000 |
| Contingency (10%) | $160,000 |
| A/E Fees | $144,000 |
| OSE Fees | $16,000 |
| SDSU Fees and Misc. Expenses | $24,000 |
| Abatement | $8,000 |
| **TOTAL PROJECT COST ESTIMATE** | **$1,952,000** |

G. Impact to M&R:
There will be no impact.

H. Budget for Ongoing Operational Costs:
Water will be the only utility impacted after the completion of this project. The choice of plumbing fixtures will follow current LEED standards, and are estimated to reduce the water consumption of the plumbing fixtures by 20-30%.

I. Proposed funding sources for costs of:
   I. Construction: The source will be rent revenues.
   II. Ongoing Operations: The source will be rent revenues.
   III. Maintenance and Repair: The source will be rent revenues.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1/4" = 1'-0"
EAST WING PARTIAL FLOOR PLAN
(WEST WING IS MIRRORED)