MICHIGAN STATE
UNIVERSITY

February 3, 2010

MEMORANDUM

To: Trustee Finance Committee

From: Fred L. Poston

Subject: **Project Approval – Authorization to Proceed**
T.B. Simon Power Plant – Coal Handling Improvements – Phase I
(budget and scope adjustment)

RECOMMENDATION

BE IT RESOLVED that the Trustee Finance Committee recommends that the Board of Trustees authorize the Administration to increase the budget from $15,000,000 to $18,500,000 for the project entitled T.B. Simon Power Plant – Coal Handling Improvements – Phase I.

BE IT FURTHER RESOLVED that the Trustee Finance Committee recommends that the Board of Trustees authorize the Administration to amend the project scope to include an enhanced dust mitigation system and an additional coal conveyor belt for the project entitled T.B. Simon Power Plant – Coal Handling Improvements – Phase I.

BACKGROUND

Program Need:

The national rail delivery service standard for coal trains is a minimum of 75 cars. The existing coal handling system at the T.B. Simon Power Plant can only receive approximately 40 coal cars for processing at any one time, which means that the university must pay the more expensive single rail car rate. Michigan State University pays demurrage fees, based upon the number of days that the university keeps rail cars on site while unloading. A fast car unloading system will increase capacity from one car per hour to three coal cars per hour; substantially reducing demurrage fees.

Description of the Project:

The T.B. Simon Power Plant is located on the south side of Service Drive in the Service District. The additional scope includes a fast car unloading system by way of a second coal conveyor belt in the coal conveyor gallery on the south side of the power plant. This will reduce the length of time the coal cars remain on site and to process more coal by simultaneously fueling the plant and unloading the coal cars. The additional scope also includes an enhanced dust mitigation system to minimize the university's risk exposure in the coal crusher house and gallery. The resulting demurrage savings would pay for this added scope in eight years.

OFFICE OF THE
VICE PRESIDENT FOR FINANCE AND OPERATIONS AND TREASURER

Fred L. Poston
Vice President

Michigan State University
412 Administration Building
East Lansing, MI
48824-1046

517/355-5014
FAX: 517/353-6772

The Architect/Engineer is Black and Veatch. The Construction Manager is MSU Engineering and Architectural Services.

Based on an assessment of the factors stated in the Project Planning and Approval process concerning Project Labor Agreements (PLA), the Vice President for Finance and Operations has determined that a PLA would not have utility for this project.

Communication Feedback:
The campus community has been given opportunities to provide feedback during the planning phase; no issues or concerns were raised.

The Office of Campus Planning and Administration has reviewed this project and found it to be consistent with the Campus Master Plan and Planning Principles. The Campus Infrastructure Planning Work Group also supports the recommendation to proceed with the project.

As construction proceeds, the schedule and phasing will be reviewed with key administrators in the Service District.

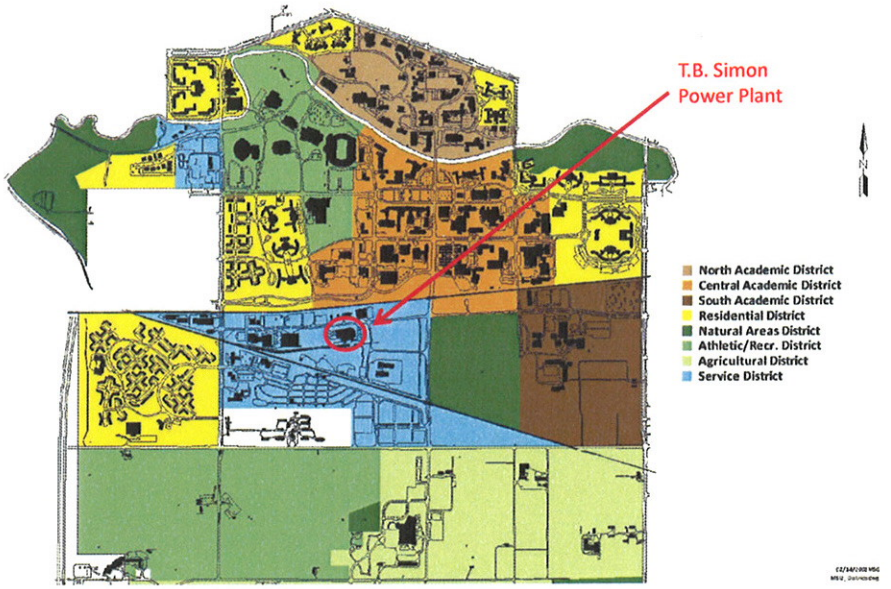
Project Cost and Timetable:
The budget for this Construction Manager project is $18,500,000, which is being funded from savings on the original project, tax-exempt financings with debt repayment by the general fund, and from the general fund – Physical Plant.

Construction is planned to begin in May 2011 and will be substantially complete by December 2011, with final completion by September 2012.

cc: D. Brower, R. Flinn, J. Kacos, G. Klein, B. Kranz, K. Lindahl, M. McCabe, J. Mumma, R. Nestle, D. Quinney, R. Ellerhorst, L. Adams

CP07177

Project Approval – Authorization to Proceed
T.B. Simon Power Plant – Coal Handling Improvements



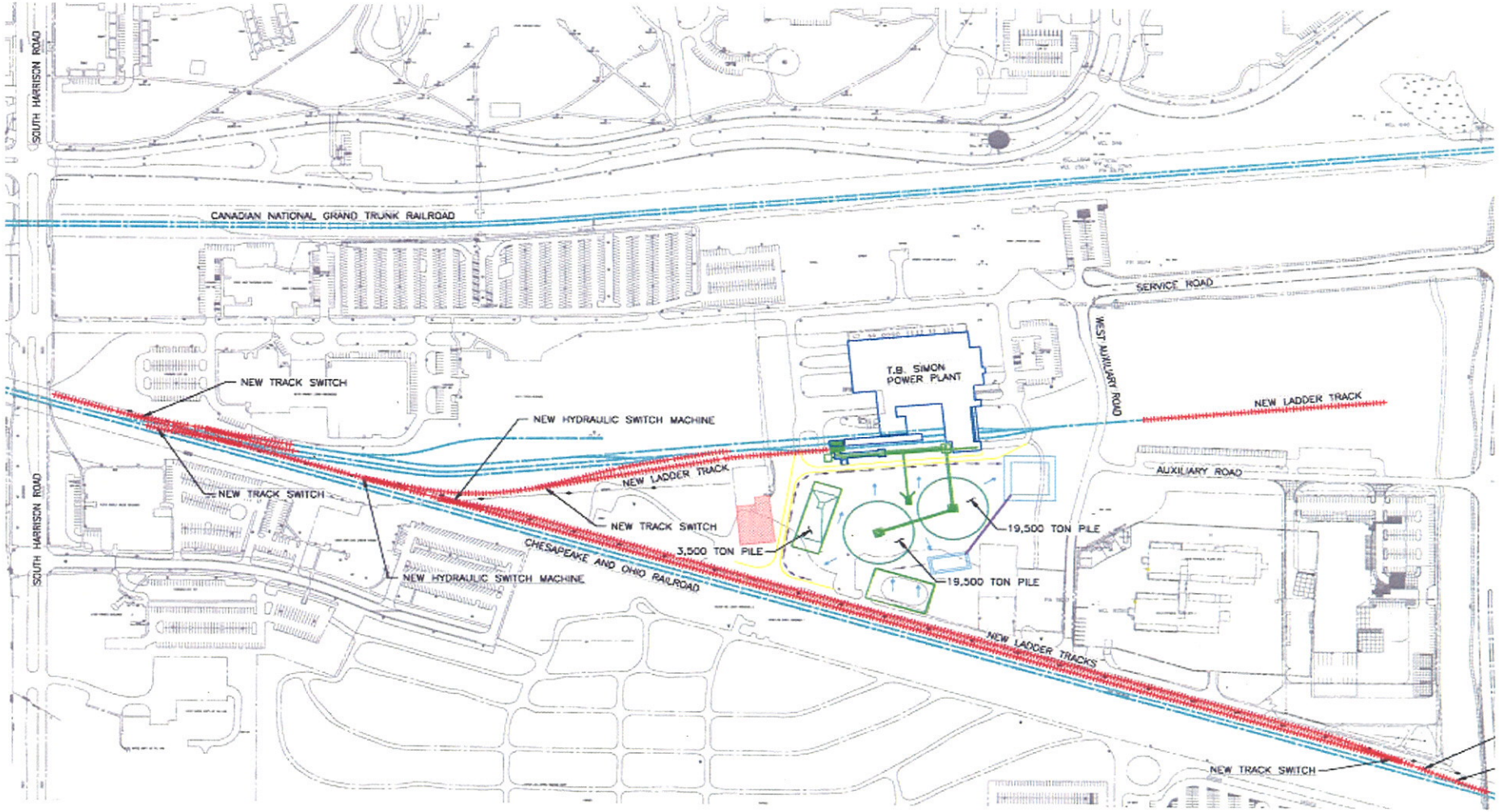
Project Approval – Authorization to Proceed
T.B. Simon Power Plant – Coal Handling Improvements

- Original scope:
  - Rail yard expansion for unit trains
  - Coverage of coal pile
  - Site remediation and enhanced DEQ compliance
  - Upgrade electrical systems
- Additional scope:
  - Fast-car unloading
    - Strategy:
      - Increase the speed of unloading coal from cars
      - Improve the financial reliability of the plant
      - Enhance safety and housekeeping through coal dust mitigation

Project Approval – Authorization to Proceed

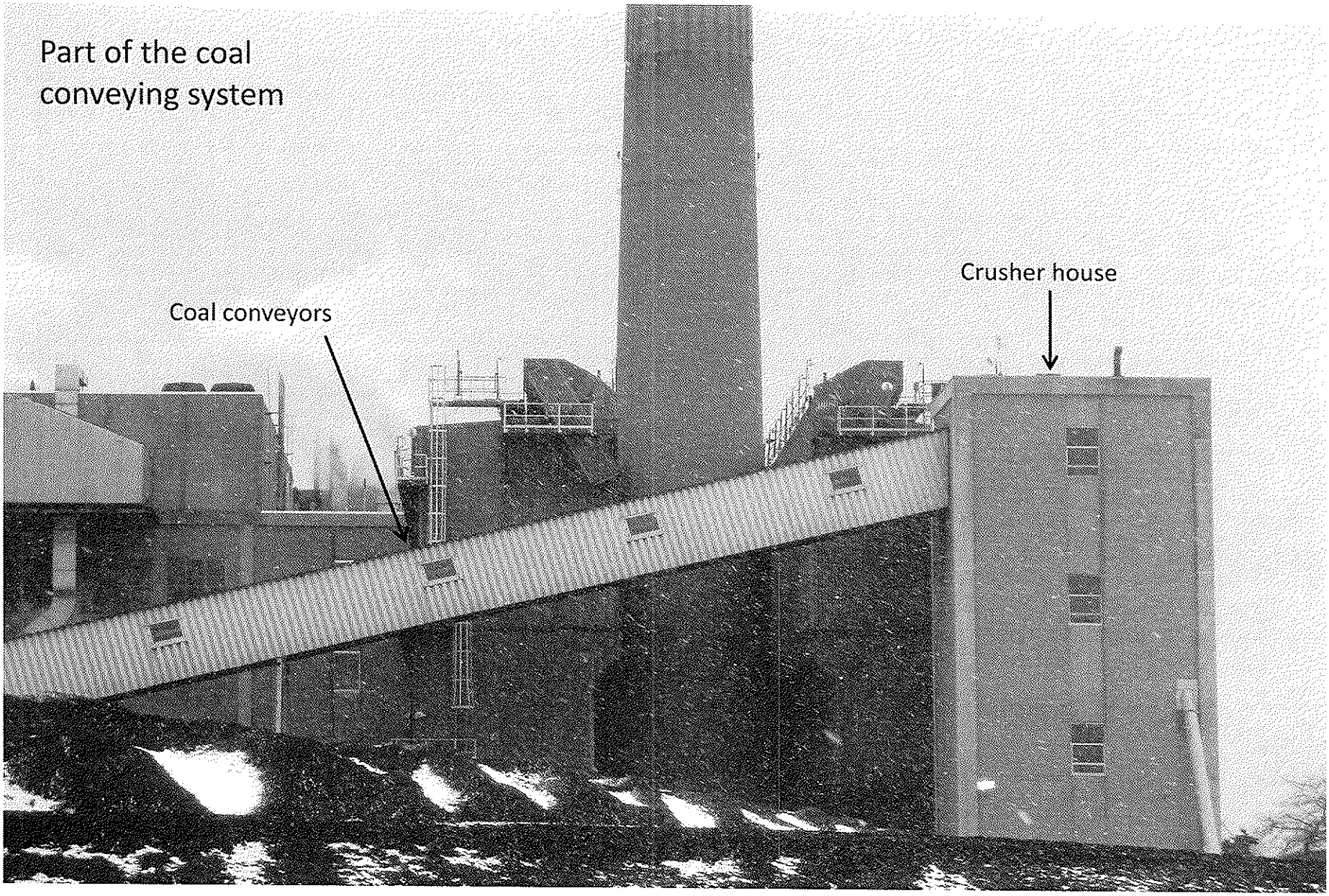
T.B. Simon Power Plant – Coal Handling Improvements

Approximately 2 miles of new railroad track will be added as part of this project (in red).



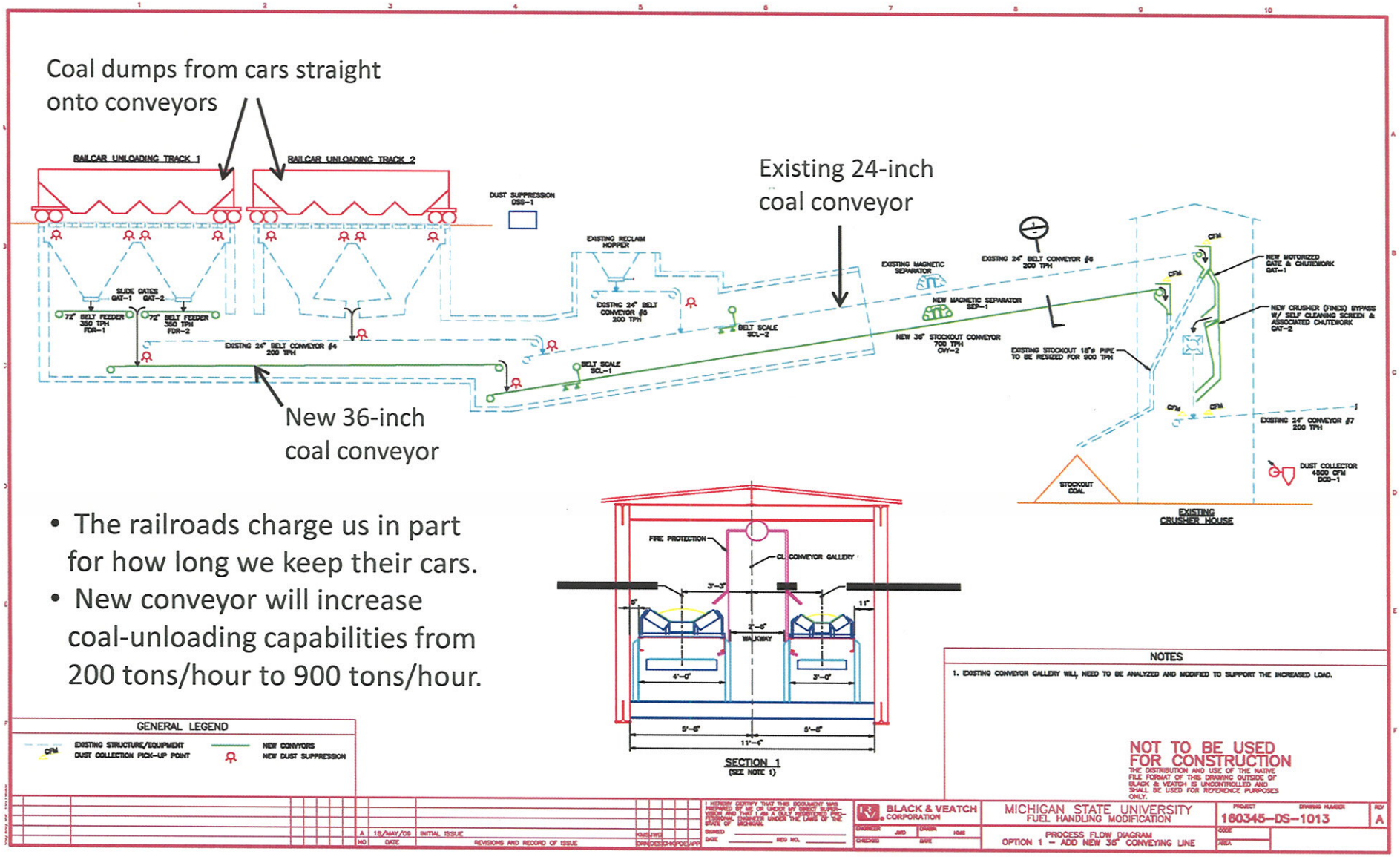
Project Approval – Authorization to Proceed

T.B. Simon Power Plant – Coal Handling Improvements



Project Approval – Authorization to Proceed

T.B. Simon Power Plant – Coal Handling Improvements



- The railroads charge us in part for how long we keep their cars.
- New conveyor will increase coal-unloading capabilities from 200 tons/hour to 900 tons/hour.

Background Information

MICHIGAN STATE
UNIVERSITY

June 6, 2007

MEMORANDUM

To: Trustee Finance Committee

From: Fred L. Poston

Subject: **Authorization to Plan**
T.B. Simon Power Plant – Coal Handling Improvements

RECOMMENDATION
BE IT RESOLVED that the Trustee Finance Committee recommends to the Board of Trustees that it authorize the administration to plan for the project entitled T.B. Simon Power Plant – Coal Handling Improvements.

BACKGROUND
Program Need:
The existing coal handling system at the T.B. Simon Power Plant can only receive approximately 40 coal cars for processing at any time. The national rail delivery service standard is at least 75 cars, which requires the University to pay a premium for the single rail car rate.

General Description of the Project:
The planning of this project is anticipated to include replacement of the existing coal handling equipment, expansion of the rail yard to accommodate more cars, covered storage or silos for coal, possible alternative fuel handling, and a faster rail car unloading system. This project would provide increased power plant operational reliability, address several environmental concerns, and provide overall cost savings to the University. The proposed coal handling system would drastically reduce the potential for fugitive dust, coal pile runoff, and coal pile contamination which are regulated items by the Michigan Department of Environmental Quality (MDEQ).

The T.B. Simon Power Plant is located on the south side of Service Drive in the Service District. The location of this project is consistent with the Campus Master Plan.

Communication Plan:
During the planning phase, the campus community will be given an opportunity to provide feedback on the project as it is being designed. Input from the project planning team will also be solicited during design.

Preliminary Project Cost Information:
Based on cost experience for similar projects and current pricing information, the preliminary project cost estimate is $20,000,000.

The source of funds for this project is expected to be from a tax-exempt bond offering with initial funding and debt repayment from the General Fund.

cc: D. Brower, R. Flinn, J. Kacos, G. Klein, W. Latta, K. Lindahl, M. McCabe, J. Mumma, R. Nestle, D. Quinney, R. Ellerhorst, N. Carter

CP07177

OFFICE OF THE
VICE PRESIDENT FOR FINANCE AND OPERATIONS AND TREASURER
Fred L. Poston
Vice President
Michigan State University
420 Administration Building
East Lansing, MI
48824-1046
517/355-5014
FAX: 517/353-6772

MICHIGAN STATE
UNIVERSITY

December 2, 2008

MEMORANDUM

To: Trustee Finance Committee

From: Fred L. Poston

Subject: **Project Approval - Authorization to Proceed – Phase I**
T.B. Simon Power Plant - Coal Handling Improvements

RECOMMENDATION

BE IT RESOLVED that the Trustee Finance Committee recommends to the Board of Trustees that it authorize the administration to proceed with the project entitled T.B. Simon Power Plant - Coal Handling Improvements – Phase I and to approve a budget of $15,000,000.

BACKGROUND

Program Need:

The existing coal handling system at the T.B. Simon Power Plant can only receive approximately 40 coal cars for processing at any time. The national rail delivery service standard is at least 75 cars, which requires the University to pay a premium for the single rail car rate. The current coal storage method does not assure dry coal, which is essential to also accommodate bio-fuels such as wood chips and corn starch product waste. The coal piles which supply units 1, 2 and 3 are encumbered by a former chemical dump site which needs to be remediated. The drainage system for storm water runoff from the coal piles needs to be enhanced to eliminate any potential of river contamination. Improvements to the ash handling system are also needed to minimize fugitive dust.

Description of the Project:

The T.B. Simon Power Plant is located on the south side of Service Drive in the Service District. This project involves the replacement of the existing coal handling equipment, expansion of the rail yard (adding 5,000 feet of new track) to accommodate more cars, a large structure to cover the coal for boiler #4, an improved retention pond and associated apertures to improve the handling of storm water runoff, remediation of the former chemical dump site, and an increase in ash silo capacity. This project would provide increased power plant operational reliability, address several environmental concerns, and provide cost savings to the University. The proposed coal handling system would drastically reduce the potential for fugitive dust, coal pile runoff, and coal pile contamination which are regulated items by the Michigan Department of Environmental Quality (MDEQ). Phase II of this project is under consideration to help speed coal unloading, which could save the university demurrage charges from the railroad.

The Architect/Engineer is Black & Veatch. The Construction Manager has not been selected.

OFFICE OF THE
VICE PRESIDENT
FOR FINANCE
AND OPERATIONS
AND TREASURER

Fred L. Poston
Vice President

Michigan State University
412 Administration Building
East Lansing, MI
48824-1046

517/355-5014
FAX: 517/353-6772

Communication Feedback:
The campus community was given an opportunity or to provide feedback during the planning phase; there were concerns raised about potential lengthy closures of Harrison Road, which have been addressed.

The Office of Campus Planning and Administration has reviewed this project and found it to be consistent with the Campus Master Plan and Planning Principles. The Campus Infrastructure Planning Work Group also supports the recommendation to proceed with the project.

As construction proceeds, the schedule and phasing will be reviewed with key administrators in the service district.

Project Cost and Timetable:
The budget for this Construction Manager project is $15,000,000. The source of funds for this project will be from tax-exempt bond financings with debt repayment from the General Fund.

Construction is planned to begin in March 2009, and will be substantially complete by September 2009, with final completion by September 2010.

cc: D. Brower, R. Flinn, J. Kacos, G. Klein, B. Kranz, K. Lindahl, M. McCabe, J. Mumma, R. Nestle, D. Quinney, N. Carter, R. Elllerhorst

CP07177