

AGENDA ITEM BRIEFING

Submitted by: Michael K. Young, President
Texas A&M University

Subject: Approval of the Project Scope and Budget, Appropriation for Construction Services, and Approval for Construction for the Campus Thermal Systems Improvements Project, Texas A&M University, College Station, Texas (Project No. 1-2016)

Background and Prior Actions:

The Campus Thermal Systems Improvements Project was included as an approved project on the FY 2017 —FY 2021 A&M System Capital Plan approved by the Board of Regents at the September 2016 meeting.

Proposed Board Action:

- (1) Approve the project scope and budget.
- (2) Appropriate \$8,698,875 for construction services and related project costs; \$967,000 has been previously appropriated.
- (3) Approve construction of the Campus Thermal Systems Improvements Project at Texas A&M University (Texas A&M).

Funding/Budget Amount:

<u>Funding Source</u>	<u>Budget Amount</u>	Average <u>Estimated Annual Debt Service</u>	Debt Service <u>Source</u>
Revenue Financing System Debt Proceeds	<u>\$9,665,875</u>	\$783,600	Utility Revenue
Total Project Funds	<u>\$9,665,875</u>		

Project Justification:

This project will improve the chilled water and heating hot water distribution systems by replacing existing lines that are at the end of their useful life and installing new lines for better distribution. Expansion tank and air/dirt separator upgrades will be implemented at utility plants to improve thermal loop performance and reliability.

Agenda Item No. 3.7
Agenda Item Briefing

Scope:

The project will replace existing thermal (Chilled Water and Heating Hot Water) lines on the campus that are at the end of their useful life as well as installing new thermal lines to provide better distribution. New thermal expansion tanks will be installed at Satellite Utility Plant (SUP) No. 1 and SUP No. 3. New air/dirt separators will be installed at the Central Utility Plant, SUP No. 1 and SUP No. 2 to improve thermal loop performance and reliability.

Construction on this project is scheduled to start in September 2017 with substantial completion scheduled for August 2018. The total project budget is \$9,665,875.

Other Major Fiscal Impacts:

None.

Agenda Item No. 3.7

TEXAS A&M UNIVERSITY

Office of the President

June 30, 2017

Members, Board of Regents
The Texas A&M University System

Subject: Approval of the Project Scope and Budget, Appropriation for Construction Services, and Approval for Construction for the Campus Thermal Systems Improvements Project, Texas A&M University, College Station, Texas (Project No. 01-2016)

I recommend adoption of the following minute order:

“The project scope along with a project budget of \$9,665,875 for the Campus Thermal Systems Improvements Project is approved.

The amount of \$8,698,875 is appropriated from Account No. 01-083540, Revenue Financing System Debt Proceeds (Utility Revenue), construction services and related project costs.

The Campus Thermal Systems Improvements Project, Texas A&M University, College Station, Texas, is approved for construction.

The Board of Regents of The Texas A&M University System (Board) reasonably expects to incur debt in one or more obligations for this project, and all or a portion of the proceeds received from the sale of such obligations is reasonably expected to be used to reimburse the account(s) for amounts previously appropriated and/or expended from such account(s).

As required by Section 5(a) of the Master Resolution of the Revenue Financing System, the Board hereby determines that it will have sufficient funds to meet the financial obligations of The Texas A&M University System, including sufficient Pledged Revenues to satisfy the Annual Debt Service Requirements of the Revenue Financing System and to meet all financial obligations of the Board relating to the Revenue Financing System and that

the Participants, on whose behalf the debt is issued, possess the financial capacity to satisfy their Direct Obligations.”

Respectfully submitted,

[ORIGINAL SIGNED BY]

Michael K. Young, President
President

Approval Recommended:

Approved for Legal Sufficiency:

[ORIGINAL SIGNED BY]

John Sharp
Chancellor

[ORIGINAL SIGNED BY]

Ray Bonilla
General Counsel

[ORIGINAL SIGNED BY]

Billy Hamilton
Executive Vice Chancellor and
Chief Financial Officer

CAMPUS THERMAL SYSTEMS IMPROVEMENTS	PROJECT BUDGET
TEXAS A&M UNIVERSITY	
PROJECT NO. 01-2016	

1.	Amount Available for Construction Contract.....	\$8,024,825
2.	Owner Contingencies	\$433,675
3.	A/E Fees	\$962,375
4.	Project Management	\$215,000
5.	SSC/Physical Plant Services	\$25,000
6.	Testing	\$5,000
7.	TOTAL ESTIMATED COST OF PROJECT.....	<u>\$9,665,875</u>

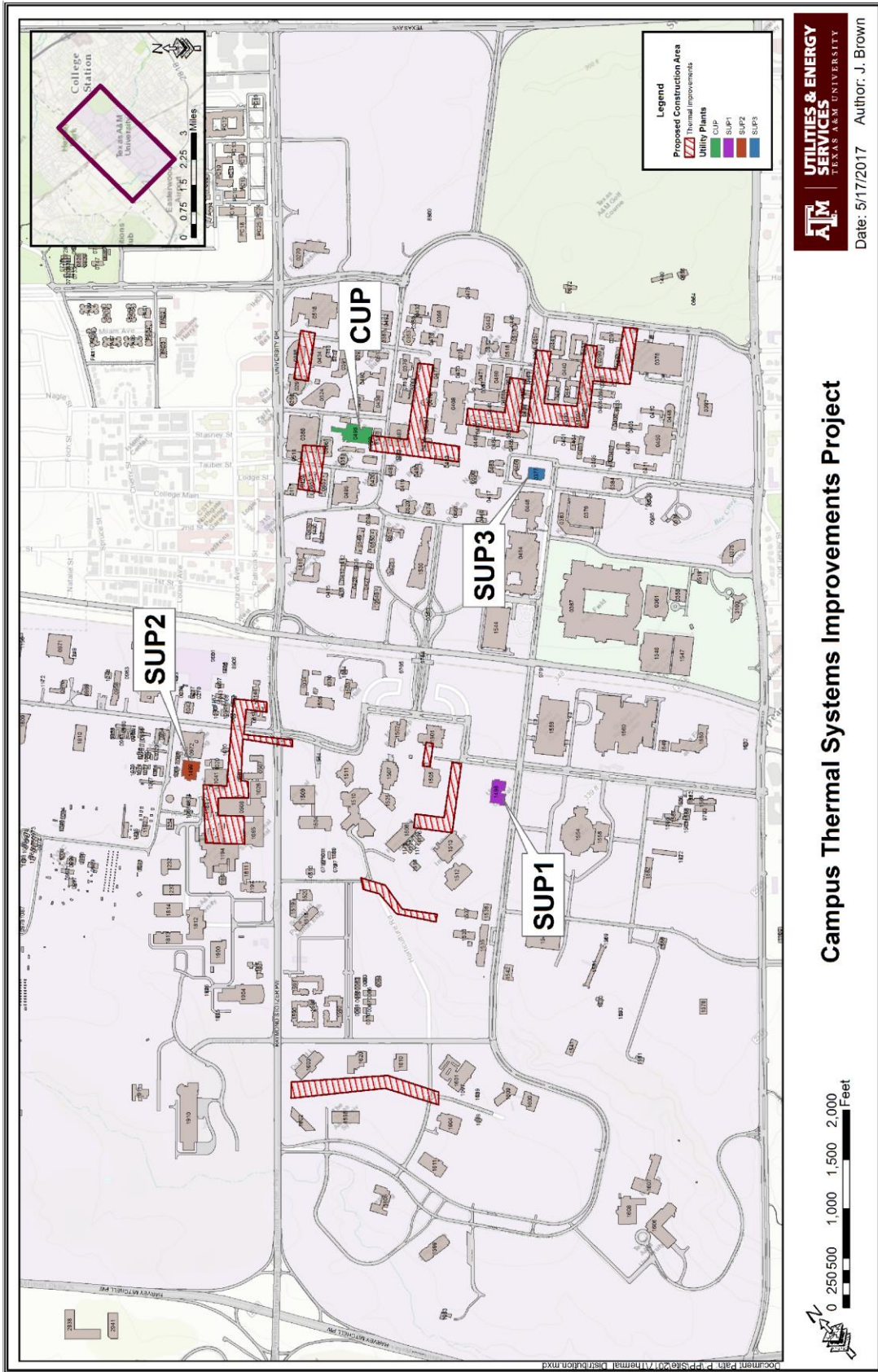
1. Complete Construction Documents June 21, 2017
2. Advertise for Competitive Sealed Proposals (CSP)..... June 28, 2017
3. Receive CSP's.....August 2, 2017
4. Complete CSP Evaluation.....August 9, 2017
5. Board of Regents Approval for ConstructionAugust 23, 2017
6. Notice to Proceed with ConstructionSeptember 1, 2017
7. Substantial Completion/Start UpAugust 31, 2018

**TEXAS A&M UNIVERSITY
REVENUE FINANCING SYSTEM
Campus Thermal Systems Improvements
Utility Revenue**

Dates	Outstanding Principal	Principal Amount	Interest Amount	Annual Total	Coverage 1.15x
BONDS	9,765,000.00				
YEAR 1	9,470,000.00	295,000.00	488,250.00	783,250.00	900,737.50
YEAR 2	9,160,000.00	310,000.00	473,500.00	783,500.00	901,025.00
YEAR 3	8,835,000.00	325,000.00	458,000.00	783,000.00	900,450.00
YEAR 4	8,495,000.00	340,000.00	441,750.00	781,750.00	899,012.50
YEAR 5	8,135,000.00	360,000.00	424,750.00	784,750.00	902,462.50
YEAR 6	7,755,000.00	380,000.00	406,750.00	786,750.00	904,762.50
YEAR 7	7,360,000.00	395,000.00	387,750.00	782,750.00	900,162.50
YEAR 8	6,945,000.00	415,000.00	368,000.00	783,000.00	900,450.00
YEAR 9	6,510,000.00	435,000.00	347,250.00	782,250.00	899,587.50
YEAR 10	6,050,000.00	460,000.00	325,500.00	785,500.00	903,325.00
YEAR 11	5,570,000.00	480,000.00	302,500.00	782,500.00	899,875.00
YEAR 12	5,065,000.00	505,000.00	278,500.00	783,500.00	901,025.00
YEAR 13	4,535,000.00	530,000.00	253,250.00	783,250.00	900,737.50
YEAR 14	3,980,000.00	555,000.00	226,750.00	781,750.00	899,012.50
YEAR 15	3,395,000.00	585,000.00	199,000.00	784,000.00	901,600.00
YEAR 16	2,780,000.00	615,000.00	169,750.00	784,750.00	902,462.50
YEAR 17	2,135,000.00	645,000.00	139,000.00	784,000.00	901,600.00
YEAR 18	1,455,000.00	680,000.00	106,750.00	786,750.00	904,762.50
YEAR 19	745,000.00	710,000.00	72,750.00	782,750.00	900,162.50
YEAR 20	-	745,000.00	37,250.00	782,250.00	899,587.50
		<u>\$ 9,765,000.00</u>	<u>\$ 5,907,000.00</u>	<u>\$ 15,672,000.00</u>	<u>\$ 18,022,800.00</u>

Estimated issuance costs and rounding of \$99,125 are included in this schedule.
Long-term rates are assumed to be 5.00%. Rates are subject to market change.
Prepared by the Office of the Treasurer - Treasury Services 6/6/17

Rates are subject to market change. Amounts are preliminary estimates that will be revised at the time bonds are issued.



Campus Thermal System Improvements