

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 Heldenfels 2nd Floor Renovation Project, Texas A&M University, College Station, Texas (Project No. 2018-3163)

Background and Prior Actions:

The Heldenfels 2nd Floor Renovation Project was included as an approved project on the FY 2020 – FY 2024 A&M System Capital Plan approved by the Board at the August 2019 meeting.

Proposed Board Action:

- (1) Approve the project scope and budget.
- (2) Appropriate \$6,738,075 for construction services and related project costs; \$748,675 has been previously appropriated.
- (3) Approve construction of the Heldenfels 2nd Floor Renovation Project at Texas A&M University (Texas A&M).

Funding/Budget Amount:

<u>Funding Source</u>	<u>Budget Amount</u>	<u>Average Estimated Annual Debt Service</u>	<u>Debt Service Source</u>
Cash – Designated Tuition	<u>\$7,486,750</u>	N/A	N/A
Total Project Funds	<u>\$7,486,750</u>		

Project Justification:

The enrollment growth in foundational courses in the Departments of Chemistry and Biology has made it impossible for the departments to deliver the quality laboratory educational experience that our students need and deserve.

Beginning in the 2014-15 academic year, the Department of Chemistry implemented a decision that negatively impacted the quality of instruction provided to students in the laboratory for first-year chemistry because it lacked sufficient laboratory space to teach laboratory sessions every week. Specifically, in order to accommodate growing enrollments in first-year courses, CHEM 111 was “compressed” to allow two sections to use the lab on alternating weeks throughout the semester. The effects of compression on curricular goals were mitigated by creating online

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assignments for students to perform in “off weeks,” moving some laboratory experimental work into CHEM 112 and conducting laboratory check-in and check-out days. Nevertheless, student satisfaction with the course has declined.

The Department of Biology laboratories have become increasingly overcrowded; and spaces not designed for biology lab instruction have been pressed into service. The rapid expansion of pre-nursing and other allied health programs, as well as overall enrollment growth at Texas A&M, is driving increased demand for courses in the Department of Biology. Three areas, microbiology, human anatomy and physiology, and zoology are acutely affected, as detailed below.

Microbiology: Enrollment in the Department of Biology’s two undergraduate courses in general microbiology, BIOL 206 for non-majors (predominantly pre-nursing or other allied health majors), and BIOL 351 for biology, microbiology and other life science majors, has risen 40% since the 2009-10 academic year. Several factors, in addition to the general increase in overall enrollment at Texas A&M, are responsible for this increase. However, the rapid expansion of pre-nursing and other allied health programs is driving much of the increased demand for the non-majors course. Current facilities are saturated, and the only way to offer as many seats as were available was to cut the laboratory time in half. While this compression satisfies the minimum requirements, it does not provide an optimal learning experience for students. Moving the labs from their current location in the middle of the research areas to the 2nd floor of Heldenfels will provide more seats and allow a full laboratory experience for students and future health care providers. The project will allow an increase from two microbiology-teaching labs that hold only 20 students at a time to three labs (HELD 204, 205 and 208) that will hold 24 students. These new labs will provide an additional 192 seats each semester and, given the continued expansion of allied health programs, all of these will be needed to accommodate the demand.

Human Anatomy I and II: The two human anatomy and physiology (A&P) courses, BIOL 319 and 320, have also grown to limits of current capacity. Enrollment in these upper-level courses is up 28% since 2009-10. The increase in enrollment since 2013 has only been possible because the Department of Kinesiology allowed the use of HELD 212 as a teaching lab for these A&P courses. The saturation of previous labs prevented many students from taking these courses which delayed entry into upper-level courses and graduation. Saturation of this additional room is rapidly approaching. The room currently holds only 16 students (in space that was not designed to teach biology labs), and the plan is to remodel it to hold 24 students at a time which will accommodate an additional 96 students each semester.

Introductory Zoology: Demand for this course has increased 57% since 2009-10 because of increases in the Department of Health and Kinesiology, whose majors use this course as a pre-requisite for BIOL 319. All 24 seats in this room (HELD 209) will represent new capacity, allowing us to accommodate an additional 288 students per semester.

Financial Justification: When all five biology-teaching labs are renovated, they will accommodate 1,440 students each semester in modern teaching facilities. After this renovation, 567 seats represent new capacity. Each new student will pay approximately \$1,200 tuition for a four-hour course and generate approximately \$356 in subvention (assuming lower-level subvention for all of the new seats). In total, the new capacity has the potential to generate

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\$1,764,504 per year and pay back the estimated \$3.1 million renovation cost in 1.76 years. If only half of the new seats are filled, the investment will be paid back in about 3.5 years.

Scope:

As a result of some other moves on campus, the Department of Chemistry now has the space to correct the situation and improve first-year chemistry instruction by adopting a more flexible laboratory. This new design will permit the laboratories to serve as places that facilitate teamwork and permit effective recitations.

The project will convert approximately 5,000 square feet of space that was appropriate for clinical lab space for the Department of Kinesiology to do exercise and physiological monitoring to teaching laboratory space for General Chemistry laboratory instruction. The lab space created will have a capacity of 120 students per time slot, adding a capacity of 1,800 students per semester.

In addition, the renovation to five biology-teaching labs will accommodate 1,440 students each semester in modern teaching facilities. The project will move the labs from their current location to the 2nd floor of Heldenfels and restore a full laboratory experience for students and future health care providers.

In total and in summary, the ten chemistry/biology laboratories being created are in every sense a *conversion* from space that had none of the accoutrements necessary for modern chemistry/biology laboratories to labs that are appropriately equipped.

The renovation of space for chemical storage and temporary waste storage will be included, as will some limited office space.

Demolition on this project is scheduled to start in February 2020, with substantial completion scheduled for July 2020. The total project budget is \$7,486,750.

Other Major Fiscal Impacts:

None.

Strategic Plan Imperative(s) this Item Advances:

Approval of this agenda item will advance The Texas A&M University System strategic imperative 1 by increasing Texas A&M's capacity for high quality instruction in chemistry and biology, helping to ensure that all qualified students will have an array of pathways to pursue their ambitions and interests, including careers in pre-nursing and other allied health fields.

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TEXAS A&M UNIVERSITY
Office of the President
January 8, 2020

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 Heldenfels 2nd Floor Renovation Project, Texas A&M University, College Station, Texas (Project No. 2018-3163)

I recommend adoption of the following minute order:

“The project scope along with a project budget of \$7,486,750 for the Heldenfels 2nd Floor Renovation Project is approved.

The amount of \$6,738,075 is appropriated from Account No. 02-243507, DT Contingent Income.

The Heldenfels 2nd Floor Renovation Project, Texas A&M University, College Station, Texas, is approved for construction.”

Respectfully submitted,

[ORIGINAL SIGNED BY]

Michael K. Young
President

Approval Recommended:

[ORIGINAL SIGNED BY]

John Sharp
Chancellor

Approved for Legal Sufficiency:

[ORIGINAL SIGNED BY]

Ray Bonilla
General Counsel

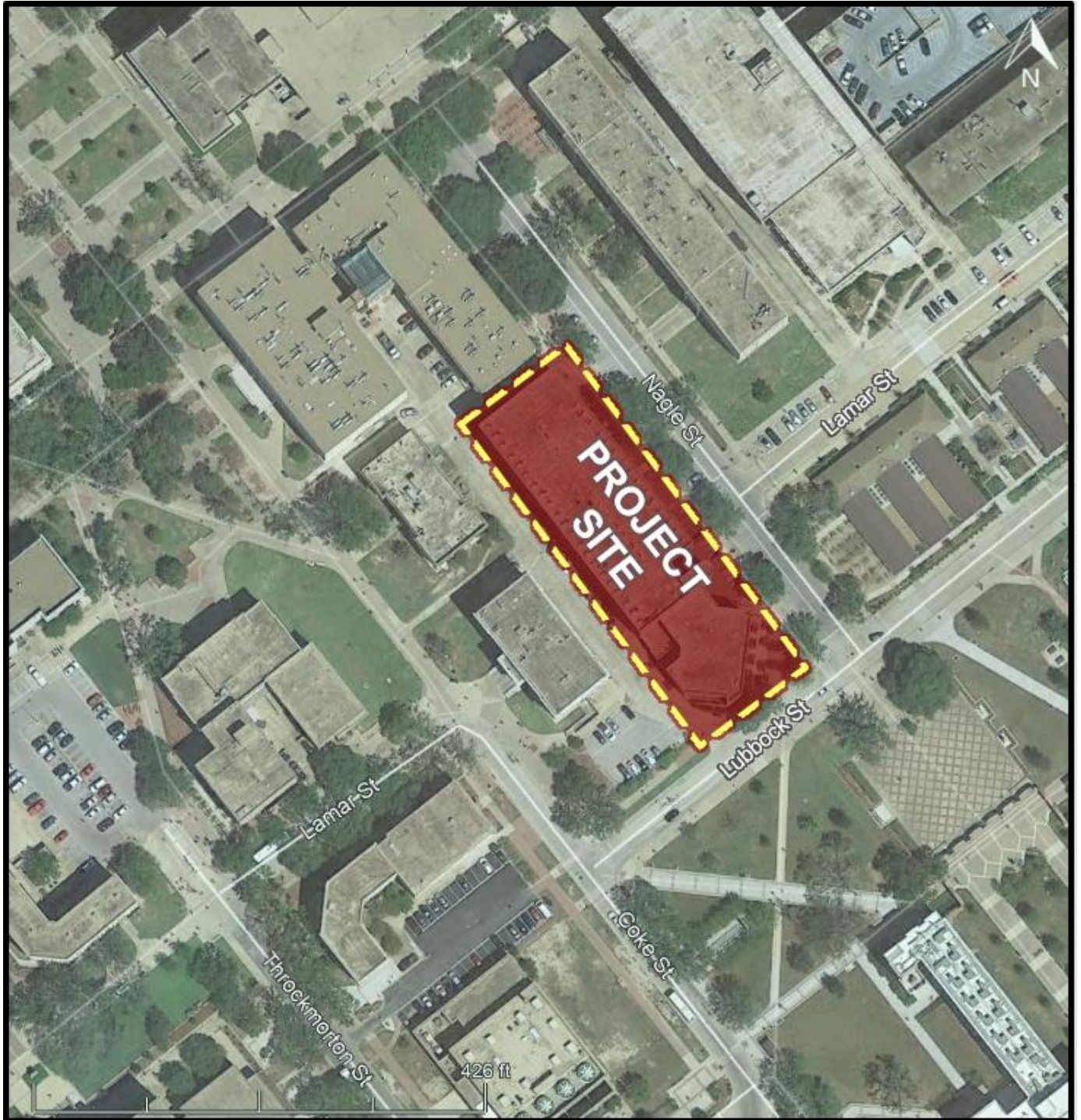
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Billy Hamilton
Deputy Chancellor and
Chief Financial Officer

HELDENFELS 2ND FLOOR RENOVATION TEXAS A&M UNIVERSITY PROJECT NO. 2018-3163	PROJECT BUDGET
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1.	Amount Available for Construction Contract	\$ 6,225,530
2.	Pre-Construction Services	\$ 14,000
3.	Professional Fees	\$ 608,020
4.	Data	\$ 10,000
5.	Telecommunications	\$ 25,000
6.	Hazardous Materials	\$ 55,450
7.	Testing and Air Balancing.....	\$ 25,000
8.	Construction Materials Testing	\$ 10,000
9.	A/V Equipment.....	\$ 10,000
10.	SSC Project Management.....	\$ 198,750
11.	Owner's Contingency	\$ 300,000
12.	SSC Support Services	<u>\$ 5,000</u>
13.	TOTAL ESTIMATED COST OF PROJECT	<u>\$ 7,486,750</u>

1. BOR Approval of Capital Plan August 16, 2018
2. Issue A/E Request for Qualifications (RFQ) September 18, 2018
3. Evaluation of A/E RFQ.....October 11, 2018
4. Issue Request for Proposal (RFP) for CMAR.....November 30, 2018
5. Evaluation of Construction Manager at Risk (CMAR) December 14, 2018
6. Execute CMAR Agreement for Pre-Construction Services..... January 18, 2019
7. Design Kickoff Meeting March 25, 2019
8. Issue Construction Document Package..... December 17, 2019
9. BOR Approval for Construction..... February 6, 2020
10. Notice to Proceed..... February 2020
11. Substantial Completion..... July 2020
12. Owner Occupancy..... August 2020



Heldenfels 2nd Floor Renovation

Texas A&M University

Project No. 2018-3163