Agenda Item No. 3.8

AGENDA ITEM BRIEFING

Submitted by: Billy Hamilton, Deputy Chancellor and Chief Financial Officer

The Texas A&M University System

Subject: Approval of the Project Scope and Budget, Appropriation for Construction

Services, and Approval for Construction for the Hypersonic Wind Tunnel Project, Texas A&M Engineering Experiment Station, Bryan, Texas (Project

No. 28-3419)

Background and Prior Actions:

The Hypersonic Wind Tunnel Project was included as a proposed project on the FY 2024 – FY 2028 A&M System Capital Plan approved by the Board at the August 2023 meeting with an FY 2024 start date and a planning amount of \$30,000,000. The project planning amount was reduced to \$10,000,000 on the FY 2025 – FY 2029 A&M System Capital Plan approved by the Board at the May 2024 meeting.

Proposed Board Action:

- (1) Approve the project scope and budget.
- (2) Appropriate \$9,000,000 for construction services and related project costs. \$1,000,000 has been previously appropriated to this project.
- (3) Approve construction of the Hypersonic Wind Tunnel Project at Texas A&M Engineering Experiment Station (TEES).

Funding/Budget Amount:

Funding Source	Budget Amount	Average Estimated Annual <u>Debt Service</u>	Debt Service Source
Cash (General Revenue)	\$10,000,000	N/A	N/A
Total Project Funds	\$10,000,000		

Project Justification:

The TEES mission is to perform the highest quality, relevant engineering- and technology-oriented research. As a research and development agency of the state and a member of The Texas A&M University System, TEES innovates and advances research that supports industry and enhances the economic development of the state and nation. TEES supports initiatives to solve problems through applied engineering research and development, technology, and

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collaboration with industry, government, and academia. TEES focuses on strategic research and market sectors for the greatest impact: energy and power, healthcare, materials and manufacturing, infrastructure, and national security. Within the national security initiative, hypersonic research is of critical interest to modernize national defense and continue aeronautical advancements and space research. While TEES has access to basic research capabilities and bridge research, test and evaluation scale capabilities are lacking. Providing large-scale aerodynamic testing in the range of Mach 5 to 9, the new Hypersonic Wind Tunnel (HWT) facility is poised to become the largest academic facility of its kind in the country.

Scope:

As currently programmed, the HWT single-story facility totals approximately 8,600 gross square feet (GSF), which translates to approximately 5,100 assignable square feet. Located on the Texas A&M-RELLIS campus, this facility will complement research at the adjacent Ballistics Aerooptics, and Materials (BAM) Range, and the Detonation Research Test Facility. The new facility is being constructed to accommodate TEES with space and infrastructure to house advanced hypersonic research equipment.

Construction on this project is scheduled to start in December 2024 with substantial completion scheduled for February 2026. The total project budget is \$10,000,000.

Other Major Fiscal Impacts:

None.

Strategic Plan Imperative(s) this Item Advances:

The new HWT facility will support The Texas A&M University System (A&M System) Strategic Plan Imperatives Nos. 3, 4, and 5.

Imperative No. 3: Our students will leave the A&M System as responsible and engaged citizens prepared for successful careers in an increasingly global economy. Our member institutions will develop the educational experiences, experiential opportunities, and service opportunities that our students need to succeed post-graduation in a global economy.

Imperative No. 4: The A&M System will increase its prominence by building a robust and targeted research portfolio. We will continue to encourage cross-institution and cross-discipline collaboration, and we will support our member institutions in their research pursuits, including obtaining emerging research status.

Imperative No. 5: The A&M System will provide services that respond to the needs of the people of Texas and contribute to the strength of the state's economy. We will continue to address the needs of Texas and use technology to reach citizens in new ways. The HWT facility will directly support hands-on educational and research experiences that are critical to training the next generation of research-driven engineers. As the only academic facility of its kind in the country, the new HWT will continue to advance hypersonic research in support of national defense.

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THE TEXAS A&M UNIVERSITY SYSTEM FACILITIES PLANNING AND CONSTRUCTION

Office of the Deputy Chancellor and Chief Financial Officer September 23, 2024

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 Hypersonic Wind Tunnel Project, Texas A&M

Engineering Experiment Station, Bryan, Texas (Project No. 28-3419)

I recommend adoption of the following minute order:

"The project scope along with a project budget of \$10,000,000 for the Hypersonic Wind Tunnel Project is approved.

The amount of \$9,000,000 is appropriated from Account No. 28-810950 Hypersonic Wind Tunnel Appropriation, for construction services and related project costs.

The Hypersonic Wind Tunnel Project, Texas A&M Engineering Experiment Station, Bryan, Texas, is approved for construction."

Respectfully submitted,

[ORIGINAL SIGNED BY]

Billy Hamilton

Deputy Chancellor and Chief Financial Officer

Approval Recommended:

Approved for Legal Sufficiency:

[ORIGINAL SIGNED BY]

John Sharp

Chancellor

[ORIGINAL SIGNED BY]

Ray Bonilla General Counsel

[ORIGINAL SIGNED BY]

Phillip Ray

Vice Chancellor for Business Affairs

[ORIGINAL SIGNED BY]

Robert H. Bishop, Director

Texas A&M Engineering Experiment Station

HYPERSONIC WIND TUNNEL	PROJECT BUDGET
TEXAS A&M ENGINEERING EXPERIMENT STATION	
PROJECT NO. 28-3419	

1.	Construction	\$7,500,000
2.	Project Contingency	471,295
3.	Program of Requirements	188,000
4.	Pre-Construction Services	750,405
5.	Commissioning	15,300
6.	Construction Testing	52,400
7.	Campus Services & Technology	242,000
8.	Furnishings	200,000
9.	Equipment	252,585
10.	Other Project Costs	74,441
11.	Project Management & Inspection	\$253,574
12.	TOTAL ESTIMATED COST OF PROJECT	<u>\$10,000,000</u>

PROJECT SCHEDULE

HYPERSONIC WIND TUNNEL TEXAS A&M ENGINEERING EXPERIMENT STATION PROJECT NO. 28-3419

1.	BOR Approval to Include in Capital Plan	August 16, 2023
2.	Issue A/E RFQ	January 5, 2024
3.	Receive A/E RFQ Responses	January 31, 2024
4.	Shortlist A/E Firms	February 7, 2024
5.	Interview A/E Shortlist	February 14, 2024
6.	A/E Ranked Order Approved by Chancellor	March 6, 2024
7.	Execute A/E Agreement	April 17, 2024
8.	A/E Design Kick-Off	April 18, 2024
9.	Complete Schematic Design	June 4, 2024
10.	Complete Design Development	July 18, 2024
11.	Complete Construction Documents	September 3, 2024
12.	Advertise for CSP	September 4, 2024
13.	Receive CSP Response	October 1, 2024
14.	CSP Ranked Order Approved by Chancellor	October 15, 2024
15.	Submit THECB Application	August 16, 2024
16.	BOR Approval for Construction	November 7, 2024
17.	Begin Construction	December 2024
18.	Substantial Completion	February 2026
19.	Owner Occupancy	March 2026



Hypersonic Wind Tunnel

Texas A&M Engineering Experiment Station

Project No. 28-3419