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Office of the President

TO MEMBERS OF THE FINANCE AND CAPITAL STRATEGIES COMMITTEE:

ACTION ITEM

For Meeting of January 16, 2019

APPROVAL OF BUDGET AND EXTERNAL FINANCING, FRANKLIN ANTONIO HALL, SAN DIEGO CAMPUS

EXECUTIVE SUMMARY

UC San Diego proposes to construct Franklin Antonio Hall, a building with approximately 128,800 assignable square feet (188,500 gross square feet) of collaborative research space in support of research centers associated with the Jacobs School of Engineering (JSOE). The project seeks to achieve several goals: provide space for an increase in the number of engineering faculty to meet the demand for UC San Diego's engineering program; strengthen quality of education by expanding interdisciplinary opportunities; and increase research and productivity by locating programs together. Achieving these goals would accelerate faculty research and fuel initiatives that encourage industry partnerships of the future for the San Diego region and the state.

The project would provide shared laboratory centers for collaboration in key research programs with strategic industry partners. The research space would include faculty offices. The building would also include: space for the Institute for the Global Entrepreneur; education space (general assignment classrooms including a 250-seat auditorium and two 100-seat classrooms, student collaborative study space, and an executive outreach classroom); space for undergraduate student extracurricular projects; shared meeting space; and a café.

This facility is needed to sustain the excellence of existing engineering programs and to address space deficiencies that are limiting faculty recruitment and the ability of JSOE to support the increasing undergraduate and graduate student population. Undergraduate and graduate student enrollment in the JSOE is projected to increase approximately 22 percent from 2017-18 to 2023-24. This growth will require expansion of existing programs and generate new program initiatives which would need new space.

This project was presented to the Regents for discussion at their September 2017 meeting (*Engineering Interdisciplinary Building, San Diego Campus*). In recognition of alumnus Franklin Antonio's gift of $30 million for programmatic expansion of JSOE, President Napolitano approved naming the building Franklin Antonio Hall in November 2017. In March 2018, the Regents approved preliminary plans funding for the project in the amount of $8 million, funded

from general campus funds. The funding supported scope refinement, detailed programming, preliminary design, design development, and project cost estimating.

The Regents are being asked to: (1) approve the project budget of $185 million to be funded with external financing ($180 million) and general campus funds ($5 million); (2) approve the project scope; and (3) approve $180 million of external financing. This action will reimburse the $8 million in campus funds used for preliminary plans with external financing. Approval of design following action pursuant of California Environmental Quality Act compliance will be requested from the Regents in spring 2019.

RECOMMENDATION

The President of the University recommends that the Finance and Capital Strategies Committee recommend to the Regents that:

A. The 2018-19 Budget for Capital Improvements and the Capital Improvement Program be amended as follows:

From: San Diego: Franklin Antonio Hall – preliminary plans – $8 million to be funded from campus funds.

To: San Diego: Franklin Antonio Hall – preliminary plans, working drawings, construction, and equipment – $185 million to be funded from external financing ($180 million) and campus funds ($5 million).

B. The scope of the Franklin Antonio Hall project shall provide approximately 128,800 assignable square feet (188,500 gross square feet) of collaborative research laboratory centers, faculty offices, space for the Institute for the Global Entrepreneur; education space (general assignment classrooms including a 250-seat auditorium and two 100-seat classrooms, student collaborative study space, and an executive outreach classroom); space for undergraduate student extracurricular projects; shared meeting space; and a café.

C. The President be authorized to obtain external financing in an amount not to exceed $180 million plus additional related financing costs. The President shall require that:

(1) Interest only, based on the amount drawn, shall be paid on the outstanding balance during the construction period.

(2) As long as the debt is outstanding, the general revenues of the San Diego campus shall be maintained in amounts sufficient to pay the debt service and to meet the related requirements of the authorized financing.

(3) The general credit of the Regents shall not be pledged.

D. The President be authorized, in consultation with the General Counsel, to execute all documents necessary in connection with the above.

BACKGROUND

The Jacobs School of Engineering (JSOE) ranks 12th among the nation's top engineering schools, and seventh in the nation among public universities according to the March 2018 *U.S. News and World Report* ranking of graduate schools. JSOE includes six engineering departments: Bioengineering, Computer Science and Engineering, Electrical and Computer Engineering, Mechanical and Aerospace Engineering, Nanoengineering, and Structural Engineering.

All departments strive to provide their students with the best possible training in basic science and engineering. JSOE students have the reputation for their ability to work in interdisciplinary teams, their integrative thinking and training, and their general knowledge of information technology, independent of their field of engineering. These attributes provide JSOE students with the flexibility to adapt to the rapidly changing job market, driven by changes in communication and information technology.

JSOE is a premier research school set apart by an entrepreneurial culture and integrative engineering approach. JSOE educates tomorrow's technology leaders, conducts leading edge research, and drives innovation and the transfer of discoveries for the benefit of society. Adequate facilities are necessary to continue to support and enhance these achievements, as well as to ensure the retention and recruitment of excellent faculty and staff.

The majority of JSOE's space is in seven buildings, the newest being the Structural and Materials Engineering Building, which was completed in 2012. The proposed project is a key element in JSOE's need to further grow and develop its programs.

PROJECT DRIVERS

Student and Faculty Growth

JSOE has experienced significant growth in the past six years since construction of the last JSOE building in 2012. Undergraduate and graduate engineering students have increased from 6,188 in 2011-12 to 8,116 in 2017-18 (31 percent growth); faculty headcount has increased from 192 to 240 (25 percent growth) in this same time period. To accommodate its growth plans, JSOE plans to increase the number of engineering faculty to approximately 286 by 2023-24, many of whom would work in this new facility.

Actual and projected student and faculty growth for JSOE is shown in Tables 1 and 2.

Table 1

Jacobs School of Engineering Student Enrollment

	Actual 2011-12	Actual 2017-18	Projected 2023-24	Overall Change 2017-18 to 2023-24
Undergraduate Students	4,790	5,599	5,880	--
Graduate Students	1,398	2,517	4,019	--
Total	**6,188**	**8,116**	**9,899**	**22%**

Table 2

Jacobs School of Engineering Faculty, Post Docs, T.A.s (headcount)

	Actual 2011-12	Actual 2017-18	Projected 2023-24	Overall Change 2017-18 to 2023-24
Faculty	192	240	286	--
Postdoctoral Scholars	118	122	149	--
Teaching Assistants	133	419	512	--
Total	**443**	**781**	**947**	**21%**

Student to Faculty Ratio

JSOE is focusing on increasing its number of faculty in order to reduce its undergraduate student-to-faculty ratio from 23:1 in 2017-18 to 21:1 to be more competitive with other top tier engineering schools. The average ratio for top tier schools is 16:1. In addition, JSOE is growing its graduate programs and must provide faculty with a more manageable balance between undergraduate and graduate instruction, research, and service (e.g. participating in committees, task forces, etc.) so that faculty members can continue to grow their research programs and educate the next generation of researchers. The new space in this project would allow faculty to grow and bring the student-to-faculty ratio closer to 21:1.

Space Deficit

Currently, JSOE's space is organized by academic department, with very few large laboratories that allow for multi-principal investigator collaborations. All of the existing space is utilized to capacity, with many faculty having already outgrown their laboratories, putting tremendous pressure on facilities at JSOE, as well as operational strain on departments and faculty due to the higher student-to-faculty ratio. Some faculty will be relocated from their existing department laboratory space to the proposed new building; relocating existing faculty will release space for new faculty. The proposed building will allow faculty to easily collaborate with their colleagues and engage with industry partners.

Using the California Postsecondary Education Commission space standards, JSOE currently has a shortfall of space of over 129,000 assignable square feet (asf), which has increased with the arrival of new faculty this fall. As JSOE continues to grow, this space deficit is projected to increase by another 141,000 asf, leaving a projected shortfall of at least 270,000 asf in 2023-24 without the proposed project.

Need for Additional Classroom Space

The campus has experienced recent growth of 5,500 undergraduate students from fall 2014 to fall 2018 and the number of undergraduate students is expected to grow by nearly 14 percent from fall 2016 (28,100 total headcount) to fall 2023 (32,000 total headcount).

In fall 2017, the overall classroom utilization was 114 percent. Currently, large classrooms and lecture halls on campus (over 100 seats) are heavily utilized. For example, lecture halls with 201 to 300 seats have a utilization rate of 146 percent of standard and rooms with 100 to 200 seats have a utilization rate of 124 percent. The proposed project would add a large 250-seat auditorium and two 100-seat classrooms. With these additional seats as well as classroom seats provided by three other capital projects, the overall classroom utilization rates will decrease from 114 percent (fall 2017) to 102 percent (fall 2023).

PROJECT DESCRIPTION

JSOE is currently engaged in a number of strategic themes with campus partners. Many of these initiatives, including those described below, would be housed in or supported by the new building, either within the collaboration laboratories or in dedicated space (such as the Institute for the Global Entrepreneur).

Institute for the Global Entrepreneur, currently located in the Powell-Focht Bioengineering Building, trains influential engineering leaders, who drive innovation from concept to commercialization using principles of engineering, business, and practical entrepreneurial thinking, working towards a common goal. The institute educates students so they are able to bring research discoveries from the laboratory bench to the marketplace, utilizing workshops, personal mentoring, and connections to investors.

The proposed building would include a teaching facility, incubator space for emerging companies, as well as prototyping facilities where researchers can build and assemble their projects.

Agile Research Centers, currently dispersed in various locations at JSOE, apply emerging and converging technologies to address challenges facing society. Faculty and industry teams are focused on application-driven research. The desired outcome is systems-level research, solutions to industry challenges, students prepared in engineering fields in demand by industry, and the University better positioned to leverage industry funds for larger federal investment. The centers will be designed with flexibility to adapt

as research challenges and opportunities evolve.

The building would include meeting space where up to 200 collaborators could hold multi-day scientific review meetings. Such space would allow for plenary sessions, small group discussions, poster sessions, and receptions.

Contextual Robotics Institute, currently located in Atkinson Hall, provides a platform for research collaboration at the intersection of machine learning, cognitive computing, computer vision and sensing, and controls and embedded systems. The institute promotes integrated systems research projects such as those focused on human assists for medicine, elder care, disaster response, environmental monitoring, and autonomous vehicles.

A core robotics laboratory or a showcase laboratory where researchers can focus on human-machine interaction would be included in the building.

Executive Education Programs, currently using space throughout JSOE**,** are Master's Degree programs that cater to working engineering professionals with a Friday/Saturday schedule on alternating weekends. This program allows for a smaller class size and completion after two years of study. Classes are taught by JSOE faculty experts, with an interdisciplinary focus and students complete team-based industry design projects. This program provides an academic path that allows working engineering professionals to continue advancing their knowledge without sacrificing their careers.

Space for this growing field of Executive Education programs and online courses would be included in the building.

Franklin Antonio Hall would provide approximately 128,800 asf (188,500 gsf) of new space that would include approximately 13 research collaboration laboratories and faculty offices. The building would also include: space for the Institute for the Global Entrepreneur; education space (general assignment classrooms including a 250-seat auditorium and two 100-seat classrooms, student collaborative study space, and an executive outreach classroom); collaborative work space for undergraduate student extracurricular projects; shared meeting space; and a café. The building will serve as a living laboratory for advanced research in critical areas related to the digital future and will be designed to foster interactions among and across the research teams, laboratories, and strategic industry partners. In addition, it will provide space needed for faculty growth in JSOE and improve the faculty-student ratio in all engineering departments.

The space program summary is provided in Table 3 below:

Table 3
Franklin Antonio Hall
Space Area Summary by Program

Program Category	Area	Quantity	ASF
Research	Collaboration Laboratory and Faculty Offices	13	92,720
	Scholarly Activity	3	800
	Subtotal - Research	--	**93,520**
Institute for the Global Entrepreneur	Collaboration/Team Rooms, Incubator Space, Offices, Small Conference	--	**4,900**
Undergraduate Student Extracurricular Projects	Open collaborative work space	1	**1,600**
Education	Auditorium (250 seats)	1	5,000
	Auditorium Storage, Support, Lobby, Vestibule, Audio Visual	--	3,800
	General Assignment Classroom (100 seats each)	2	5,130
	Classroom Storage/Support	2	350
	Executive Outreach Classroom	1	1,700
	Student Collaborative Study Space	1	5,500
	Subtotal – Education	--	**21,480**
Shared Conference Rooms	Large Conference/Audio Visual/Storage	1	1,800
	Medium Conference	3	2,100
	Small Conference and Storage	4	1,900
	Subtotal – Shared Conference Rooms	--	**5,800**
Public Spaces	Café and Support	1	**1,500**
	TOTAL	--	**128,800**

The building would have flexible spaces; laboratory configurations could be modified periodically as existing centers conclude their work and new centers are funded. The building would include core laboratories that are shared among faculty, and used by industry collaborators.

The conference space would be for informal and formal meetings, including small group discussions and one- to two-day research reviews. The meeting rooms would be designed to accommodate up to 200 collaborators. Finally, the building would include space for teaching and online courses related to the Master's Program. This would allow the Master of Advanced Study Degree Executive Education Programs, which caters to working engineers, to continue to meet the needs of industry.

Project Site

The building would be located in the Warren College neighborhood, on the site of an existing 355-space parking lot (P502), north of the Engineering Complex (refer to Attachment 6, Project Location Map and Attachment 7, Project Site Map). The project site is 3.25 acres. The campus plans to mitigate the loss of parking by reallocating spaces within the existing parking supply and implementing operational changes.

Sustainability

The project will comply with the *University of California Sustainable Practices Policy*. As required, the project will exceed the required provisions of the California Energy Code's Title 24 energy efficiency standards by a minimum of 20 percent, with a goal to exceed Title 24 by 30 percent. The project will be designed to achieve a minimum of LEED™ "Gold" rating and will participate in the San Diego Gas and Electric *Savings by Design* program.

Delivery Method

The delivery model for this project is an Integrated Construction Manager/General Contractor delivery method. The campus has competitively bid a Construction Manager/General Contractor (CM/GC) for the project. Phase One, preconstruction services, includes ongoing detailed construction cost validations though several design phases of the project. This includes active participation with design/assist subcontractors in order to significantly reduce the risk of construction cost overruns. The Integrated CM/GC delivery methodology affords opportunities to re-bid and fine tune sub-trade construction costs, if necessary, to fit the overall project construction cost budget.

Project Schedule

It is anticipated that the campus would return to the Regents in spring 2019 for design approval following action pursuant to the California Environmental Quality Act. The campus plans to begin construction in winter 2019 and complete construction in winter 2021.

Funding Plan and Financial Feasibility

The project budget is $185 million and will be funded from external financing ($180 million) and campus funds ($5 million). The estimated debt service for the $180 million of external financing at a planning rate of six percent is $13,427,000 per year, including principal and interest, over a 30-year term. Over a ten-year period, the campus is projected to have a modified cash flow margin greater than 2.1 percent and a debt service to operations maximum of 6.7 percent. An exception to the University's Debt Policy has been granted by the Office of the Chief Financial Officer as it has been demonstrated that the campus is projected to meet the required debt service to operations ratio by fiscal year 2026. Additional information about project budget and financial feasibility is provided in Attachments 1 and 3.

KEY TO ACRONYMS

JSOE	Jacobs School of Engineering
ASF	Assignable-Square-Feet
GSF	Gross-Square-Feet
CM/GC	Construction Manager/General Contractor

ATTACHMENTS:

Attachment 1:	Project Sources and Uses
Attachment 2:	Comparable Project Information
Attachment 3:	Summary of Financial Feasibility
Attachment 4:	Alternatives Considered
Attachment 5:	Project Location Map
Attachment 6:	Project Site Map

ATTACHMENT 1

PROJECT SOURCES AND USES
FRANKLIN ANTONIO HALL
(CCCI 7213)

PROJECT SOURCES		
Sources	**Total**	**%**
External Financing	$180,000,000	97.3
Campus Funds	5,000,000	2.7
Total Sources	**$185,000,000**	**100%**

Cost Category	**Total**	**%**
Site Clearance	$480,000	0.3
Building Construction	126,306,000	70.2
Exterior Utilities	3,000,000	1.7
Site Development	3,545,000	2.0
A/E Fees (1)	9,570,000	5.3
Campus Administration (2)	4,730,000	2.6
Surveys, Tests, Plans	1,426,000	0.8
Special Items (3)	8,373,000	4.7
Interest During Construction	12,570,000	7.0
Contingency	10,000,000	5.6
Total P-W-C	180,000,000	**100%**
Groups 2 & 3 Equipment (4)	5,000,000	
Total Project Uses	**$185,000,000**	

PROJECT STATISTICS	
GSF (5)	188,500
ASF (5)	128,800
Efficiency Ratio: ASF / GSF (5)	68%
Building Cost / GSF (5)	$670
Project Cost / GSF (5)(6)	$955

(1) A/E Fees include executive architect fees, and other professional design contract costs.
(2) Campus Administration includes project and contract management staff and campus inspection services.
(3) Special items include: preparation of the detailed project program; environmental documentation and California Environmental Quality Act; special design consultants; value engineering; pre-construction CM/GC fees, and other costs.
(4) Groups 2 and 3 Equipment consists of equipment which is not built-in or permanently affixed to the structure of the building.
(5) Gross square feet (GSF) is the total area, including usable area, stairways, and space occupied by the structure itself. Assignable square feet (ASF) is the net useable area.
(6) Project Cost excludes Group 2&3 Equipment.

ATTACHMENT 2

COMPARABLE PROJECT INFORMATION

The cost figures shown in the following table demonstrate that the proposed budget for the Franklin Antonio Hall project at UC San Diego compares favorably to UC and private university projects.

Project Name	Location	GSF	Start of Constr.	Building Construction Cost[1]	Building Constr. Cost Adjusted to Subject Project[2]	Adjusted Building Constr. Cost ($/GSF)	Project Cost (excluding equipment)	Adjusted Project Cost to Subject Project[3]	Adjusted Project Cost ($/GSF)
Franklin Antonio Hall (proposed project)	***UC San Diego***	***188,500***	***12/2019***	***$126,306,000***	***$126,306,000***	***$670***	***$180,000,000***	***$180,000,000***	***$955***
Interdisciplinary Science and Engineering Building	UC Irvine	204,750	6/5/2018	$131,163,000	$137,131,000	$670	$168,618,000	$176,291,000	$861
Engineering VI Phase 2	UC Los Angeles	94,000	4/1/2015	$54,271,000	$60,650,000	$645	$72,700,000	$81,245,000	$864
Jeff and Judy Henley Hall	UC Santa Barbara	49,296	5/1/2018	$37,519,000	$39,689,000	$805	$56,000,000	$59,239,000	$1,202
Biological and Physical Sciences Building (Tata Hall)	UC San Diego	129,440	7/1/2016	$85,044,000	$95,891,000	$741	$110,900,000	$125,045,000	$966
Schlinger Lab for Chemistry and Chemical Engineering	CalTech	60,000	3/1/2008	$34,020,000	$48,052,000	$801	$45,000,000	$63,561,000	$1,059
Center for Nanoscale Science and Engineering	Stanford	99,415	6/1/2008	$71,317,000	$89,992,000	$905	$87,506,000	$110,419,000	$1,111
Jacobs Hall (Jacobs Institute for Design Innovation)	UC Berkeley	24,035	7/29/2014	$17,654,000	$18,504,000	$770	$23,294,000	$24,415,000	$1,016

Notes:

(1) Building cost at budget approval.

(2) Adjusted for several factors including location and inflation to the start of construction of the proposed project; CCCI for projects with a future start date have been indexed by five percent per year.

(3) All Project Costs include interest during construction, where applicable, but do not include moveable (Groups 2 & 3) equipment.

ATTACHMENT 3

SUMMARY OF FINANCIAL FEASIBILITY San Diego Campus	
Project Name	Franklin Antonio Hall
Project ID	962800
Total Estimated Project Costs	$185,000,000
Estimated Interest During Construction	$12,570,000
Proposed Sources of Funding	
External Financing	$180,000,000
Campus Funds	$5,000,000
Total	$185,000,000

SECTION I. Externally Financed Projects

Financing Assumptions	
External Financing Amount	$180,000,000
Anticipated Repayment Source	General Revenues of the San Diego Campus
Anticipated Fund Source	General Campus Funds
Financial Feasibility Rate	6.0%
First Year of Repayment (e.g. year 10)	FY 2022-23
Term (e.g. 30 years)	30 years, 2 years interest only
Final Maturity	FY 2051-52
Estimated Average Annual Debt Service	$13,427,000

Below are results of the financial feasibility analysis for the proposed project using the campus' Debt Affordability Model. The model includes projections of the campus' operations and planned financings. A new Debt Affordability Model with revised metrics was implemented August 1, 2015.

	Campus Financing Benchmarks		
Measure	**10 Year Projections**	**Approval Threshold**	**Requirement**
Modified Cash Flow Margin[1]	2.1% (min), FY 2028	≥ 0.0%	Must Meet
Debt Service to Operations[2]	6.7% (max), FY 2023	≤ 6.0%	Must Meet 1 of 2
Expendable Resources to Debt	n/a	≥ 1.00 x	
Auxiliary Project Debt Service Coverage	n/a	≥ 1.10 x	Must Meet for Auxiliary Projects
Auxiliary System Debt Service Coverage[3]	n/a	≥ 1.25 x	Must Meet for Auxiliary Projects

[1] Modified Cash Flow Margin, Debt Service to Operations, and Expendable Resources to Debt are campus metrics.
[2] The campus' debt service to operations ratio does not meet the maximum six percent approval threshold in FY 2023. An exception to the University's debt policy has been granted by the Office of the Chief Financial Officer as it has been demonstrated that the campus is projected to meet the required debt service coverage ratio by FY 2026.
[3] Auxiliary Debt Service Coverage is a campus auxiliary system metric.

ATTACHMENT 4

SUMMARY OF ALTERNATIVES CONSIDERED

The proposed site is the last unbuilt parcel in the JSOE complex within the Warren College Neighborhood. It is located on the site of an existing parking lot (P502) that includes 355 spaces, just north of Voigt Drive and across from Atkinson Hall. The site covers a total of 3.25 acres and is bordered by Voigt Drive to the south, an Ecological Reserve on the west and north, and Warren Housing to the east.

A. Alternative Solution Analysis

The campus evaluated four potential alternatives: 1) new construction; 2) lease/purchase; 3) renovation; and 4) "do nothing".

1) **New construction**: The last unbuilt parcel in the JSOE complex within the Warren College Neighborhood could be developed to accommodate the proposed program. New construction would provide appropriately designed space to meet growth needs of the research programs, and allow JSOE to locate programs together and increase research productivity.

2) **Lease/Purchase:** Space totaling 129,000 asf with large open areas and the supporting infrastructure for experimental and multidisciplinary research is not available for lease or purchase near the campus. The only available space for lease at this size is office-type space and it would require significant tenant improvements to accommodate engineering laboratory needs. Leasing smaller amounts of non-contiguous space detached from the campus would hinder research collaboration and result in a lack of connection among faculty, students, and staff. Additionally, spaces detached from the campus would not be within walking distance for undergraduate students.

3) **Renovation:** Existing facilities in the engineering complex and across the campus are fully utilized and are not configured to provide open and flexible laboratory space. Spaces that could become available in different parts of the campus would not be at the scale that is needed. This alternative would not increase capacity, and thus does not address growth needs.

4) **"Do Nothing": Opportunity Cost of Not Building the Project**

- JSOE has experienced significant growth in the past 15 years and is projected to continue growing through 2023 and beyond. Demand for engineering education and research continues to increase. JSOE has outgrown existing facilities and is compacted within existing space, which is limiting research activities and expansion of highly sought-after graduate programs. In addition, JSOE does not have adequate space to support collaborative research activities. The lack of space is affecting student attraction and retention.

- This new facility is essential to enable further research funding opportunities for faculty, to provide greater access to research for students, to foster an expansion of JSOE's Agile Research Centers that partner with industry, and to enable continued growth of JSOE's graduate program.

- Prospective faculty hires at competing institutions are typically offered guaranteed access to modern research space in their recruitment package. UC San Diego must have an available inventory of collaborative and flexible laboratory space to hire additional faculty. Without the proposed building JSOE would not meet its growth plan: to increase the number of faculty by approximately 60 and graduate students by approximately 1,500 by 2023.

- Federal and industrial funding agencies require the identification of modern research space as a prerequisite for the grant funding of research centers. Availability of additional inventory of modern laboratory space will support continued growth in this area.

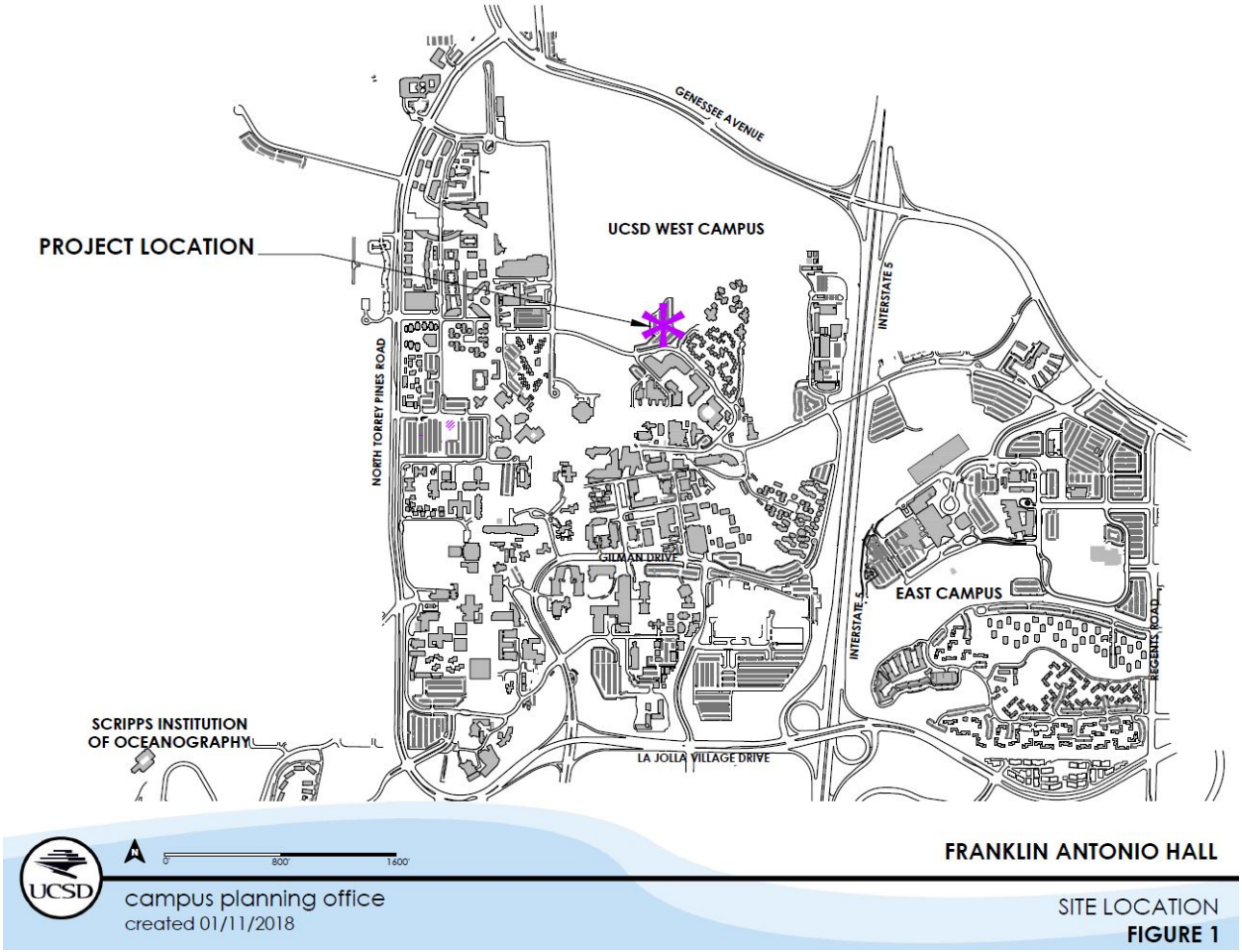
- Absence of an Executive Education center would constrain the growth opportunities of JSOE's self-supporting Master of Advanced Studies programs, as well as the addition of new Master of Science programs that are aligned with student demand and industry needs.

B. Conclusion

New construction is the only feasible alternative for this project due to the unique nature of the building. The mission of collaborative research requires a building layout that is unavailable in older building stock. Renovation of existing space would not contribute a solution to the desperate need for new space due to recent growth in faculty, students, and staff. The 2004 Long Range Development Plan identifies "Academic" as the predominant land use for this area. The proposed project is in conformance: it would help further the academic mission of the campus and aligns with the campus's strategic vision to support a collaborative and interdisciplinary research culture that advances the frontiers of knowledge, shapes new fields, and disseminates discoveries that transform lives.

ATTACHMENT 5

PROJECT LOCATION MAP



ATTACHMENT 6

PROJECT SITE MAP