#### Office of the President

#### TO MEMBERS OF THE FINANCE AND CAPITAL STRATEGIES COMMITTEE:

## **DISCUSSION ITEM**

For the Meeting of November 15, 2017

### **UPDATE ON THE 2020 PROJECT, MERCED CAMPUS**

#### **EXECUTIVE SUMMARY**

This item provides an update on progress related to the Merced 2020 Project (Project). As previously discussed at the July 2016 meeting, the Project involves the capital expansion of the Merced campus to accommodate existing needs and enrollment growth to 10,000 students. The Project consists of the development of 1.2 million gross square feet (790,000 assignable square feet) of academic, research, student residence and student life facilities, as well as infrastructure, roadways, and parking by a single development team.

At the July 2016 meeting, the Regents approved the design and external financing for the Project.

In response to demand for enrollment growth systemwide and a focus on long-term financial sustainability, the campus is applying an innovative framework to develop and maintain its new facilities. In August 2016 the University entered into contract with a multidisciplinary consortium, Plenary Properties Merced (Developer), who was competitively selected to design, build, finance, operate, and maintain major building systems subject to a project agreement (Agreement).

To prepare for the construction phase, the campus established a governance structure to facilitate achieving the Project's objectives and monitor the University's obligations under the Agreement. This structure includes a Project Governance Board that includes active participation from the Chancellor, Provost, and Vice Chancellors. The board is advisory to the Chancellor and is charged with providing input from campus stakeholders and serving as a forum to evaluate the needs of various campus interests.

The Developer began construction in October 2016 and will deliver the facilities in three phases over a period of four years. The first phase includes a student residential building that will provide 590 beds and is 45 percent complete and a dining center with 600 seats that is 47 percent complete. Both of these facilities will reach occupational readiness by July 1, 2018. The first phase also includes a second residential facility consisting of 120 beds that is 39 percent complete. It is estimated to reach occupational readiness prior to the fall 2018 residential move-

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in. The remaining two phases of facility delivery remain on track for June 2019 and June 2020, respectively. To date, the Project remains on budget, review of construction documents is proceeding as contemplated, and more than 245,000 hours of field labor has occurred.

#### **BACKGROUND**

The Merced 2020 Project (Project) consists of the design, construction, operation, and maintenance of approximately 790,000 assignable square feet (1.2 million gross square feet) of critically needed facilities to be delivered by fall 2020 on the Merced campus. Upon completion the Project will provide the physical capacity to accommodate enrollment growth to 10,000 students.

A design, build, finance, operate, and maintain (DBFOM) development model, combining a familiar design-build contract structure with a long-term preventative maintenance and capital renewal program is being used for the Project. This is known as an Availability Payment Concession.

Plenary Properties Merced (Developer) was chosen as the developer and the project agreement (Agreement) to implement the project was signed in August 2016. The executed Agreement includes, among other elements, delivery dates for each phase, design quality standards, sustainability and energy efficiency thresholds, and long-term renewal and maintenance standards as part of the DBFOM structure.

The finance plan for the project is a combination of public and private financing components. This approach balanced the University's lower cost of capital with the goal of assigning some performance risk on to the Developer. Of the \$1,338.48 million budget, \$600 million is being funded from University external financing<sup>1</sup>, developer funding accounts for \$590.35 million, and campus funds (including \$56.6 million of State General Funds allocated to the campus for eligible pay-as-you-go project costs) accounts for \$148.13 million.

As presented in the July 2016 discussion, the Agreement requires the Developer to obtain performance and payment bonds for 100 percent of the design and construction costs (\$1,338.48 million). This condition was satisfied as part of the Agreement's execution.

#### **IMPLEMENTATION**

## Role of Project Governance Board

From its inception, leadership for the Project has come from the highest levels of the campus and the University through the Project Governance Board (Project Board). The Chancellor, Provost, and Vice Chancellors participate on the Project Board and continue to play a pivotal role in the Project's execution.

<sup>&</sup>lt;sup>1</sup> External financing is supported by State General Funds (\$400 million) and campus resources (\$200 million).

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The Project Board is charged with ensuring that the campus and the 2020 Project meet all the Project objectives, providing both timely decision-making and checks and balances on competing campus interests, and proactively managing any internal campus operational refinements necessary to be 2020-ready. The Project Board meets weekly and ratifies monthly summarized Project Performance Reports which are provided to the Office of the President, State Legislature, and are publically available on the Merced 2020 website<sup>2</sup>. The performance reports include observations about project activities, Project budget, Project schedule, developer performance, risk, and process improvement opportunities. The Project Board is advisory to the Chancellor and is responsible for evaluating Project-related requests or concerns from students, faculty, and staff.

## Role of Project Management Team

A campus-led Project Management team is closely monitoring the progress of the Project. The team is comprised of campus staff in construction, space planning, and administration that are advised by consulting subject-matter experts. The campus staff and consultants are housed together at the construction site and coordinate operations.

In addition to standard project management tools, the Agreement contains many requirements for both the Developer and the University as owner. These requirements provide the main structure for day-to-day implementation of the Project. Compliance with the Agreement is being implemented through a structured and documented process of reporting, performance monitoring, trend and forecast analysis, risk management, and quality assurance — coordinated by the Project Management team and supplemented with third-party expertise especially familiar with best practices for Availability Payment Concession project delivery.

This project management structure has been key to engendering confidence among campus stakeholders as well as providing the structure to enable the campus to act as an engaged owner post-construction, which will be critical to the success of the Project over the long term.

During construction, the Project Management team provides auditing and periodic testing of processes, expenditures, and compliance, and also provides recommendations on progress payment draws from the allocated funding. Beyond administration of the Agreement, the team is charged with relationship management with the Developer. This is a critical component to the partnership established through this procurement model.

#### Technical Review Process

In the Agreement, the Developer is responsible for preparing designs, plans, and specifications for buildings as well as related infrastructure. Although the Developer is responsible for errors and omissions in the design documents, the Agreement includes a time-sensitive protocol for campus review of the plans as they are finalized.

<sup>&</sup>lt;sup>2</sup> http://merced2020.ucmerced.edu/

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The Project Management team has engaged architectural and engineering advisors to take the lead on assessing compliance with the detailed technical requirements and to integrate user feedback into the design refinement process. To ensure the submittals reflect the campus's needs, they have been informed by approximately 680 hours of stakeholder workshops led by the Project Management team.

## Project Budget and Scope

The total Project budget of \$1,338.48 million remains unchanged since the July 2016 approval by the Regents. The budget includes \$600 million of external financing, \$590.35 million of developer funding, and \$148.13 million of campus funds (including \$56.6 million of State General Funds allocated to the campus for eligible pay-as-you-go project costs). No adjustments have been made to the program scope set out in the Regents' approval.

Sources (\$Ms)	Approved Funding	Drawn As of August 2017	Funds Remaining
External Financing	600.00	76.69	523.31
Developer Funding	590.35	206.58	383.77
Campus Funds <sup>1</sup>	148.13	10.14	137.99
<b>Total Funds</b>	1,338.48	293.41	1,045.07
1. Includes a total of \$56.6 million of State General Funds allocated to the campus for eligible			

## Progress Payments to Developer to Date

The Agreement established that the Developer will receive monthly progress payments during construction in an amount equal to approximately 50 percent of the Design and Construction work completed, up to an aggregate amount of \$585 million. Payment of these monthly transactions are monitored by the Project Management team to ensure that the value of work "inthe-ground" is comparable to outgoing payments. As of August 2017, the Developer has received cumulative monthly progress payments from the University totaling \$76.6 million, which represents 13 percent of the total cumulative progress payment commitment.

## **Operations and Maintenance Preparation**

With the delivery of the first buildings by fall 2018, the Developer is required to commence the Operation and Maintenance Services for major building systems. In preparation for these and future facilities, the Project Management team, the campus Facilities department, and the Developer have been coordinating on a regular basis.

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#### **Project Schedule**

Construction began in October 2016 and the schedule anticipates delivery of buildings for use in fall 2018, fall 2019, and fall 2020. The Project Management team monitors schedule progress on a weekly basis as part of its risk management protocol.

First delivery represents 20 percent of the development's program's assignable square footage. It consists of a 600-seat dining facility, a six-story student residential building with 590 beds, a four-story student residential building with 120 beds, and 940 surface parking spaces.

As of late August 2017, the 600-seat dining center is 47 percent complete and the 590-bed student residential building is 45 percent complete. Both facilities have an estimated readiness date of July 1, 2018. The 120-bed student residential building is 39 percent complete and the Developer has implemented various actions, such as moving to a six-day workweek, to ensure the facility is delivered prior to the start of the fall 2018 academic year.

The second delivery includes 150,820 assignable square feet (asf) of teaching and research facilities, accounting for another 20 percent of the development program, and a competition athletic field. Preliminary infrastructure has already been established and these facilities are on track for fall 2019 delivery.

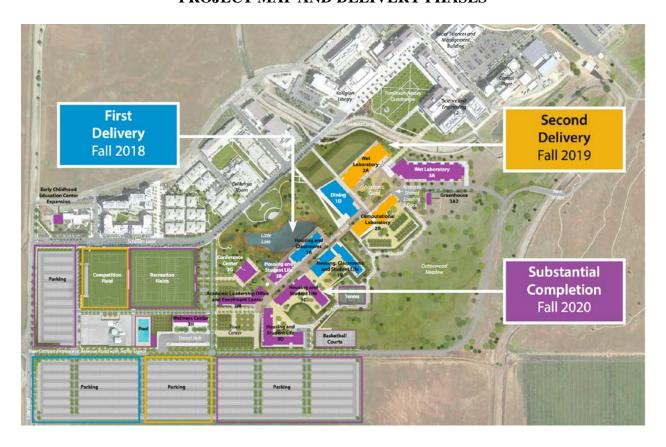
The third delivery phase accounts for 60 percent of the program and includes a sizeable portion of the student life and recreation facilities (87,535 asf), 988 additional beds, a large wet laboratory (207,969 asf), and 630 surface parking spaces. Initial site preparation for these facilities is underway at this time. The facilities are on track for a fall 2020 delivery.

Attachments:

Attachment 1: Project Map and Delivery Phases
Attachment 2: Project Construction Photo

# ATTACHMENT 1

# PROJECT MAP AND DELIVERY PHASES



# **ATTACHMENT 2**

# **PROJECT CONSTRUCTION PHOTO**September 2017



The first delivery buildings include a dining hall, residence halls and infrastructure serving the complete program.