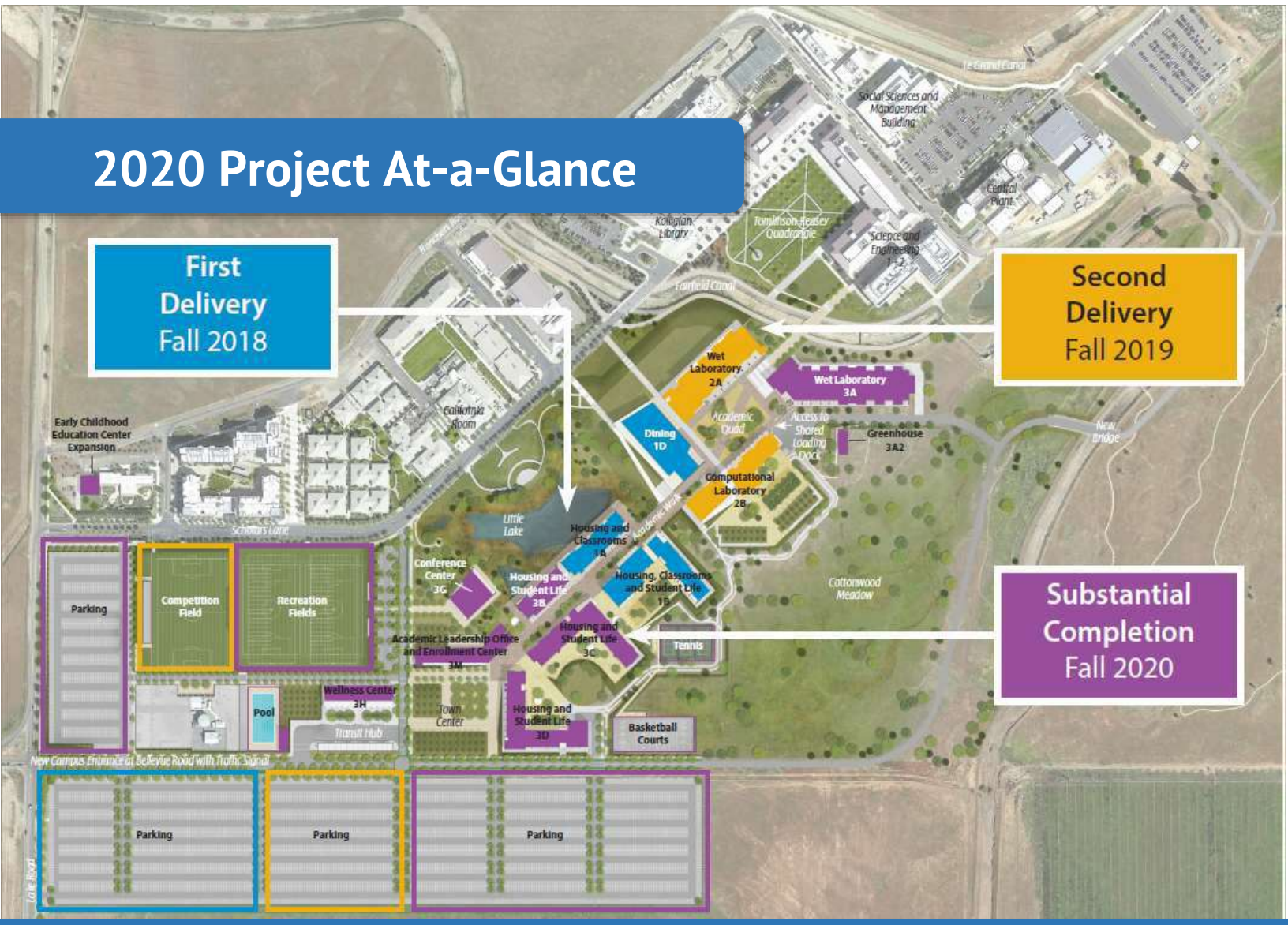
UNIVERSITY OF CALIFORNIA | MERCED 2020 PROJECT

PROJECT PERFORMANCE MONTHLY REPORT 16.0

PERIOD ENDING: 31 OCTOBER 2017

2020 Project At-a-Glance



Team

Owner's Authorized Representative & Project Executive
- AVC Michael McLeod (POPD)

Lead Project Manager
- Paul Mackintosh (WT Partnership)

Developer/ProjectCo:
- Plenary Properties Merced ("PPM")

Equity:
- Plenary Group ("Plenary")

Design-Builder:
- Webcor Builders ("Webcor")

Operator:
- Johnson Controls ("JCI")

Commercial

Agreement:
- Availability Payment based P3 incl DBFOM
- 3 phase operational ramp-up

Term:
- 39 Years (incl 4 yr. construction)

Contract Value:
- $1,340,839,588

DB Contract Value:
- $1,166,631,875 (DB)

Annual O&M Cost (Real):
- $4.1m

Total Real Lifecycle Cost Model (over term)
- $101M

Security (equivalent cash value):
- DB Performance bond: $1,166m (100%)
- DB Payment Bond: $1,166m (100%)
- DB Limit of Liability: $583m ($50%)
- OM Limit of Liability: (200% annual cost)
- DB Parent Company Guarantee $583m ($50%)

Schedule

Financial Close
- August 12, 2016

First Delivery Occupancy Readiness Date
- July 1, 2018

Second Delivery Occupancy Readiness Date
- June 1, 2019

Substantial Completion
- June 1, 2020

Final Acceptance
- September 29, 2020

PA Long Stop Date
- June 1, 2021

Construction Schedule
- Circa 46 Months

Operating Period:
35 – 37 Years

merced2020.ucmerced.edu

1. EXECUTIVE SUMMARY

P3 Awards 2017 & Conference

September 26, 2017 - Mayflower Hotel, Washington, D.C.

Gold Award
Best Social Infrastructure Project
UC Merced 2020 Project, USA

Silver Award
Government Agency of the Year
The University of California at Merced on behalf of
The Regents of the University of California

(also shown)
Financial Close 2016 Award
UC Merced 2020 Project

PROJECT EXECUTIVE'S SUMMARY

During the month of October, the Project Team continued to make considerable progress site wide. The project has maintained the daily staggered start times to mitigate site congestion, trade coordination and potential safety related issues.

October was a very productive month relating to concrete construction activities. An estimated 5,300 cubic yards of concrete was placed in the period. Building 1B concrete work is finished, and Building 1A/3B has been topped out, whereby completing two significant project milestones.

Winterization activities continue to progress with the Lime Treating of the Project site and shrink wrapping of Buildings 1B, and 1A/3B. These measures were taken to increase production, contribute to site safety and preserve the integrity of site conditions during the upcoming winter months.

In October, the Project experienced a one-day weather delay shutdown due to poor air quality, resulting from the recent wildfires.

GOVERNANCE & OVERSIGHT

The Project Team continues to liaise with the Governance Board and Office of General Council (OGC) on project issues

DESIGN & CONSTRUCTION

Coordination activities with City and County of Merced, Merced Irrigation District, and State Agencies are ongoing. Design is in varying stages with First delivery buildings primarily completed the construction documentation stage. One-hundred & eighty-five (185) stakeholder meetings have been held to date, to solicit input. Presently, one-hundred and ninety-three (193) design submittals have been received (191 completed and 2 in progress).

Site Activities

The following outlines the status of the progress of on-site activities:

First Delivery

- Utility Work (Electrical) - Continued installation in front of Building 2A and extended along Academic Walk. Power Termination to Light poles in P4 is complete. Installation of Temporary Mass Notification is complete, testing to occur in November. Installation of Electrical line West of Building 3C is complete. Lift Station power and commissioning ongoing. Installation of the Building 3A power line between the MID Right of Way and Building 3A continued. Electrical Vault placement along Academic Walk west of Building 3A was set.
- Utility Work (Water Utilities) - Continued installation of the Waterline along Academic Walk and in front of Building 2A. Installation of Water Utilities continued at the Mineral King Road Bridge.
- Utility Work (Telecom) - Continued installation of Fiber/Data cable in Academic Walk along the S- Curve and in front of Building 2B. Installation of Cameras in P4 Parking Lot has begun, and is scheduled for completion in November.
- Central Plant Expansion – The (CPE) underground utility Rough-In installation activities are complete.
- Utility Work (Storm Drainage) - Installation of Little Lake Overflow culvert. Installed the Rain water leaders' storm drain lines from Building 1A/3B to Little Lake.
- Utility Work (Sanitary Sewer) - Power Connection and Tie-In preparation of the Sanitary Lift Station continued this month.
- Utility Work (Fuel Distribution) - Gas Installation west of Building 3C, South of Building 2B, and across Mineral King Road Bridge was completed this month.
- Earthwork - Grading work in the first delivery scope left to be completed includes the remaining Bellevue Grading.
- Landscape - Irrigation and Planting along Parking Lot P4 at Bellevue and Lake Roads and the Little Lake Restoration and Tree Replacement Planting began this month.
- Roads & Bridges - Grading and lime treatment of Bellevue Road to the first entrance to P4 is complete.
- Special Construction (Loading Dock) - Placement of East Walls near Building 3A, and the West face of the Entrance Wall were placed this month. The Roof was formed, and Rebar installation began. The waterproofing of the Tunnels to Building 1D and 2A is complete.
- Early winterization site prep continues to progress throughout the project. Various laydown yards have been established and winterized for Buildings; 2B, 3A, 3C and 3D. Access road preparation activities for the previously mentioned areas are expected to complete by the end of the month.

Second Delivery

- Utility Work (Electrical) - Installation of Electrical Duct bank between Building 2B to Building 1F was completed this month.
- Utility Work (Water Utilities) - Installed Waterline east of Building 3C.
- Utility Work (Telecom) - Installation of the IT Duct bank between Building 3C and Building 1B. Installation along Academic Walk, in front of Building 2B, and across MKR Bridge continued.
- Utility Work (Storm Drainage) - Installed Storm Drain Line between Building 3C and Building 3D. Cotton Wood Meadow Culverts installed along Loop Road.
- Earthwork - Academic Walk and 1H Tunnels were backfilled.
- Landscape - Irrigation and Planting on North Side of Bellevue began this month.

Substantial Completion

- Utility Work (Electrical) - Install Electrical Duct bank to Building 3A point of connection.
- Utility Work (Telecom) - Continued pulling wire site wide, and telecom duct bank infrastructure installation continued.
- Earthwork - Excavation of Building 3A began, Tennis Court grading and lime treatment is complete, and Basketball Court grading and lime treatment is complete. Cottonwood Subgrade has been obtained.
- Roads & Bridges - Installation of utility supports completed. Installation of Bridge deck forms began this month.

Building Activities

First Delivery

- Building 1A/3B – Top out of structural concrete is complete. Interior and exterior framing has started.
- Building 1B – The building will top out has been achieved. During the next month, exterior framing will be finished, and windows will be delivered to site.
- Building 1D – Structural Steel and metal roof deck work is complete, roofing and exterior framing will continue during the month of November.

Second Delivery

- Building 2A – Shear walls to level one has completed, backfill is under way while L1 vertical elements are being poured.
- Building 2B - Underground Electrical and Mechanical activities for the basement are complete. The first rat slab is also complete. Placement of the Tower Crane base was set, and the erection is complete.

Schedule Activities Planned for November 2017

- Design and Permitting Activities will continue to progress.
- Central Plant site infrastructure will continue to progress.
- Underground Utilities will continue to progress site wide.
- Utility activities will continue to progress at the Mineral King Bridge location.
- Landscape activities will continue along Bellevue Road.
- The 70% turn-over of the P4 Parking Lot is scheduled for the end of November.

PROJECT CONTROLS

Schedule

The Developer's October '17 Schedule Update was accepted with notations for the of the November '17 update. There will be a series of schedule review meetings next month focusing on 1st and 2nd delivery milestones.

Budget

The Campus Budget is retained as approved at a total of $148.13 million comprising: Owner Operating Budget ($79.38 million) and Campus Contingency ($68.75 million). Adequate cost control measures continue to be implemented to ensure suitable funds are retained to close out the Project. Expenditure is currently at $14.26 million (9.63%) of total forecast. Careful measures continue to be enacted in the consideration of Change Requests to mitigate impacts and avoid budget overspends.

Scope

There continues to be a series of collaborative design review meetings with the Developer and with feedback from the Stakeholders. Reviews during the period included:

50% CD	2D Research Server	Design Development
90% CD	Package 4D	Design Development
50% CD	2B CompLab	Design Development
100% CD	P4 Parking Lot	Issue for Permit Back Check 4
90% CD	1D Dining	Design Development Back Check 3
90% CD	1D Dining EHS	EHS Back Check 2 Comments
90% CD	1E CPE	Design Development Back Check 1
90% CD	Package 7A Landscape	Design Development
90% CD	1F Generators	Design Development Back Check 1
90% CD	2A Lab	Design Development Permit Back Check 1
100% DD	3A Lab	Design Development
90% CD	2E Compfield	Design Development Back Check 1

CONTRACT MANAGEMENT

The Developer continues to deliver both Administrative and Design Submittals in the period.

The following were issued to the Developer during the period: Six (6) Change Orders; four (4) Preliminary Change Orders and seven (7) Unilateral Change Orders. Also, during the period, the Developer has formally submitted two (2) Developer Change Proposals which are currently under review.

There was one Relief Notice submitted by the Developer on October 12, 2017 for Force Majeure Event due to the Project site being inundated by smoke as a result of recent wildfires.

OPERATIONS

The primary focus for Project Operations in the period continues to be budgeting and forecasting each of the key contracts to enable proactive budget management of the constrained Project funds. Additional interface meetings continue with Johnson Controls (JCI).

PROJECT PROGRESS PHOTOS

SITE PANORAMA – 10/5/2017

SITE PANORAMA – 10/31/2017

1D DINING – 10/31/2017

1D DINING – 10/31/2017

1D DINING DETAIL – 10/31/2017

1D DINING DETAIL – 10/31/2017

1B HOUSING, INSULATION AND DUCTWORK – 10/5/2017

INTERIOR MOCKUP PROGRESS– 10/5/2017

COVERED LAB 2A TUNNEL/FUTURE ACADEMIC QUAD– 10/31/2017

EXTERIOR MOCKUP – 10/31/2017

LAB 2A SHEAR WALL FORMWORK – 10/5/2017

LAB 2A SHEAR WALL FORMWORK – 10/31/2017

LAB 2A GROUND FLOOR REBAR– 10/5/2017

EXPOSED LAB 2A/LOADING DOCK TUNNEL – 10/5/2017

1H LOADING DOCK– 10/5/2017

1H LOADING DOCK AND LAB 3A SHORING– 10/31/2017

1A3B HOUSING LEVEL PROGRESS – 10/5/2017

1A3B HOUSING, 1A EXTERNAL STAIR – 10/5/2017

3B HOUSING, FRAMING – 10/31/2017

1A HOUSING, FRAMING– 10/31/2017

LAB 2B SHORING WALL – 10/5/2017

LAB 2B SHORING WALL – 10/31/2017

1B HOUSING FRAMING AND INSULATION – 10/31/2017

3A LAB SHORING – 10/31/2017

2. PROJECT HEALTH DASHBOARD

No concerns | Unable to comment | Monitoring required | Immediate action required

Schedule	During the period, the Project Team reviewed the Developer's October 2017 Schedule update and added notations for the Developer to reconcile in the November update. There will be a series of schedule review meetings held next month that will be focusing on necessary mitigation actions to comply with the first and second delivery Contractual Completion Milestones. The Project Team is actively engaged with the Developer on a weekly basis to monitor the milestone activities.

	Start	Contractual Finish	Potential Finish	Slippage	Status
First Delivery	20 Jun 2016	1 July 2018	6 Aug 2018	36 - Days	Potential delay
Second Delivery	15 Aug 2016	1 Jun 2019	1 June 19	None	On-target
Final Delivery	3 Jan 2017	1 Jun 2020	1 June 19	None	On-target

Cost	The Project Budget continues to be further developed by the Project Team and Financial Analyst. Sixty-seven (67) Preliminary Change Orders (PCO) have been raised to date, of which, twenty-one (26) Change Orders have been issued, nine (11) Unilateral Change Orders (UCO) have been instructed, a further nineteen (22) are under various stages of development and eight (8) have been cancelled. In addition, (seven) 7 Developer Change Proposals (DCP) have been approved at nil cost. The cumulative potential impact of all authorized changes is in the order of $5.60m resulting in a **net decrease to contingency**. Amounts shown in table are in millions ($MM)

	Regents Approval	Transfers	Adjusted Budget	Expenditure to Date	Pending Committed Costs	Forecast
(A)Project Operations	$90.22	(-$2.15)	$88.07	$10.10	$0.00	$88.07
(B) Campus Integration	$22.00	$2.15	$24.15	$4.16	$0.00	$24.15
(C) Construction Contingency	$35.91	$0.00	$35.91	$0.00	$5.60	$35.91
(D) Construction Credits	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
(E) Total	**$148.13**	**$0.00**	**$148.13**	**$14.26**	**$5.60**	**$148.13**

Scope	Currently eleven (11) UCOs are with the Developer and are in various stages of review and negotiations. Stakeholder requests for scope changes continue to be carefully monitored, and all issues require justification and approvals through the Governance structure.

	Executed Change Orders	Change Price Requests	Forecast Changes
Quantity (No.)	26	11	22
Aggregate Cost ($k)	EST $0.56m	EST $5.04m	$TBD
Annualized Cost($k)	EST $0.00m	$TBD	$TBD
Time Impact	EST Nil	Nil	Nil

Developer Compliance	OPEN/NEW NON-CONFORMANCE ISSUES - Water stop issue #9 is still outstanding and the team is working on a solution to close. Mat slab at building 2A and retaining wall issue is outstanding. The Team is working on a solution to close the issue. Cores have been taken at areas of cold joints and the results are pending for determining the next steps.
Contract Notices	None from the Developer in the period.
Labor Compliance	No issues to report.
Health & Safety	In the period: Recordable Injury – One on 10/30/17 First Aid - 15 No Lost Time Injuries (LTI) to date. Webcor now have a full-time paramedic on site assisting the safety team and is also available to provide help in cases of emergency.
Community Engagement	No complaints have yet been reported from the construction hotline.
Communication	Communication between the Project 2020 team, external authorities, the Developer, and Stakeholders continues to work positively.
Stakeholder Engagement	Stakeholders are actively engaged in design review and shared governance. Their concerns focus largely on campus logistics and operational use of the buildings. Each case has been addressed and will be brought to a close imminently. There were 5 (five) Stakeholder meetings held during the period.
Risk	The Team continues to systematically evaluate areas of risk with mitigation plans for each. Current delays which are not compensated under the contract give concern that PPM cannot achieve First Delivery by the contract dates. Campus is undertaking contingency planning to consider how to minimize the impact of late delivery.