TREND report



University of Arizona: Embracing Post-Covid Pedagogy Through a Design and Construction Lens

Ralph Banks PE, P.ENG • published in the October 2022 issue



The Grand Challenges Building at the University of Arizona

s we progress into a post-Covid-19 Pandemic era with a sense of renewed optimism, the University of Arizona continues to fulfill its purpose, mission, and values. To help facilitate and support that effort from both a physical and built environment aspect, the skillful and dedicated team of professionals at Planning Design & Construction continue to guide University departments through the entire building process while providing comprehensive planning, design excellence, quality construction, exceptional service, and a sustainable campus environment.

The following project examples are scheduled to come on line within the next 12–18 months or were recently completed during the Pandemic.

Grand Challenges Research Building

Scheduled for occupancy in 2024, the Grand Challenges Research Building is an interdisciplinary research facility that will leverage the University of Arizona's core strengths to address the grand challenges identified in Pillar 2 of the University's Strategic Plan.

This seven-story, 108,000 square foot building, located at Cherry Avenue and Fourth Street, will be an integral part of the Wyant College of Optical Sciences complex and will house research laboratories to continue advancing the University's international reputation in the field of optics, as well as new sponsored projects for the University's Office of Research Innovation and Impact.



Applied Research Building

Applied Research Building

Scheduled for occupancy in 2023, the Applied Research Building is a very specialized, one-ofa-kind facility designed specifically to support University research programs that include missions to the earth's stratosphere. This threestory, 89,000 square foot building, located at the southeast corner of Helen Street and the Highland Corridor, will include a variety of programmed spaces including high-bay payload assembly areas, a large-scale thermal vacuum chamber, unique research laboratories, clean rooms, faculty offices, collaboration spaces, and

conference rooms. Site development around the building includes a re-alignment and improvement of an existing pedestrian and bicycle corridor which serves as a main north-south thoroughfare across campus.

Chemistry Building Renovation

Having honorably served the University since 1936, the Chemistry Building is being completely renovated and repurposed into an innovative teaching hub to support evidence-based teaching strategies that will increase student engagement and development of workplace-relevant skills. Scheduled for occupancy in 2023, this 78,000 square foot building, located on the University's Mall, is a wonderful example of the University's commitment to stewardship and preservation of its historic resources.

Campus Infrastructure

Recently completed on the east side of the University's Mall, this project will transform how large rainstorms in this part of campus are mitigated in an economical, efficient, and sustainable manner. Surface water runoff currently flowing south on Cherry Avenue during rainstorms will be intercepted and diverted to reduce the risk of downstream flooding of University buildings including Arizona Stadium and Residence Halls while



Chemistry Building Renovation



Campus Infrastructure



mitigating impacts to 6th Street and neighborhoods to the south. During a rainstorm, catch basins installed in University Boulevard and Cherry Avenue will intercept and channel storm water to a series of interconnected 10 feet diameter, 20 feet long underground tanks installed under the east Mall. Here, water will be held and subsequently drain into a series of 40 feet deep drywells below the Mall from where it will gradually dissipate into the ground. Upon completion, the system will accommodate a one-hour rainfall event of up to 2.3 inches. The current storage volume of the underground tanks is 1.74 million gallons (5.33 acre feet) or enough water to cover the Arizona Stadium football field to an approximate depth of five feet. In the future, the system could be expanded to provide up to 2.54 million gallons. The total length of underground tanks is over half a mile long or approximately ten times the height of the Statue of Liberty.



Andrew Weil Center for Integrative Medicine

Andrew Weil Center for Integrative Medicine

Scheduled for occupancy in Fall 2023, the new Andrew Weil Center for Integrative Medicine will house this internationally recognized evidence-based clinical practice, as well as innovative educational programs and research that substantiates the field of integrative medicine and influences public policy. Located at Cherry Avenue and Helen Street, the new Center will be comprised of three buildings totaling 30,000 square feet surrounded by desert gardens and linked by a series of pathways. Designed to embody the Center's ethos of whole-person wellness and the principles of integrative health, each building will represent an aspect of the whole person: mind, body, and spirit.





College of Veterinary Medicine Equine Center

College of Veterinary Medicine Equine Building

Located at the University's Campus Agricultural Center, this 1936 building was originally constructed and used as a livestock barn and later exclusively for horses. In support of the University's newly established College of Veterinary Medicine, it was decided to rehabilitate and adaptively reuse this 1936 building for incorporation into the veterinary student equine education program. Design and construction were completed during the Pandemic. Similar to the Chemistry Building, this is another great example of the University's commitment to stewardship and preservation of its historic resources.

Excited as we are for the major projects highlighted, the University of Arizona continues to plan for the future while solving today's challenges. Our University is defined by our people, and knowing we are better together. To facilitate that future, the University has a *Three-Year Capital Improvement Plan* that focuses on shaping the future; improving productivity; and inspiring living, learning, growing, and dreaming. This will be achieved while remaining committed to our core values and strategic objectives of productive investment in existing assets while planning and building to best facilitate the success of our students. Currently included in the *Three-Year Capital Plan Forecast* are some incredibly exciting projects that are in the early planning stages including—a Center for Advanced Molecular and Immunological Therapies, Intercollegiate Athletic Venue Upgrades, Arizona State Museum and Arizona Geological Survey Repository, Renovation/Expansion of Centennial Hall, a New Engineering Design Center, new Campus Housing, and a unique new Child Care and Development Center.

As Arizona Wildcats, we are driven by purpose, guided by our mission, and live our core values every day. Bear Down!



For more information on the projects referenced above, and live webcams of the ongoing construction please go the Planning Design & Construction <u>website</u>.

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