

HIGHER EDUCATION



70!
ANNIVERSARY

miyamoto. EARTHQUAKE +
STRUCTURAL
ENGINEERS



miyamoto.

save lives, impact economies

Miyamoto International is a global earthquake + structural engineering and project management company providing critical services that sustain industries and safeguard communities around the world.

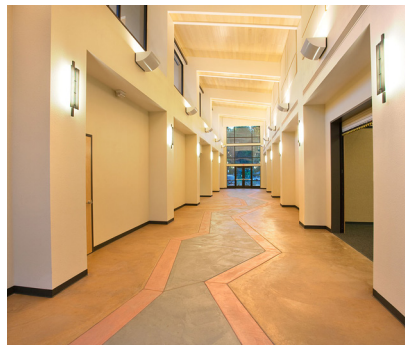
We are experts in high-performance engineering that reduces lifecycle costs and produces a positive net impact on a structure's operation. We assess the performance of structures to identify specific vulnerabilities, and prioritize solutions that limit business interruption and reduce property damage.

Built on decades of earthquake and structural engineering experience in the field, our expertise supports how clients address the economic, political, social, sustainability and resiliency challenges in earthquake risk reduction and post-disaster recovery and reconstruction.

Miyamoto offices are strategically located worldwide in earthquake-hazard regions to positively impact economies and save lives.

Sacramento
San Francisco
San Jose
Los Angeles
Orange County
San Diego
Reno
Washington, D.C.
Mexico
Costa Rica
Colombia
Haiti
Liberia
Italy
Turkey
India
Nepal
Japan
New Zealand

make the world a better, safer place.



The Gateway Science Museum showcases natural diversity and geologic history of Northern California. It allows university faculty and students unique opportunities to utilize both permanent and temporary exhibits in their course curriculum, with the museum providing a venue for traveling exhibits from around the world. The museum also allows the

University to display the wealth of specimens that it currently has as well as to collect and display objects entrusted to the museum for future exhibition and research. The museum was constructed to meet LEED Silver specification and has a community center that promotes science and mathematics education.

California State University, Chico, Gateway Science Museum

LEED Silver®

LOCATION:
Chico, CA

YEAR:
2008

CLIENT:
Anova Architects

CONSTRUCTION COST:
\$3 Million

SCALE:
17,500 SF

DELIVERY METHOD:
Design-Build



Located on the California State University Sacramento campus, the Academic Information Resource Center (AIRC) is home to the university's Computing and Communications and Telecommunications services. The goal for this structure was a high-performance engineering design that will meet university needs well into the 21st century by creating a space

that supports academic success for both commuter and on-campus students. When built, this four-story, 100,000-SF facility was one of the few buildings in the United States to apply 2000 National Earthquake Hazards Reduction Program (NEHRP) procedures to the design of a building with fluid viscous dampers, significantly reducing seismic demand.

California State University, Sacramento, Academic Information Resource Center

LOCATION:
Sacramento, CA

YEAR:
2005

CLIENT:
Dreyfuss and Blackford Architects

CONSTRUCTION COST:
\$19 Million

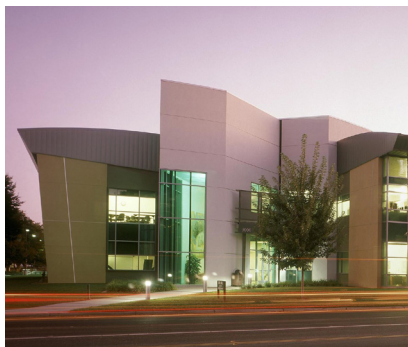
SCALE:
100,000 SF

DELIVERY METHOD:
Design-Bid-Build

AWARDS:
2007 ACSE ENGINEERING MECHANICS AWARD,
AMERICAN SOCIETY OF CIVIL ENGINEERS

2005 CERTIFICATE OF MERIT FOR BEST USE OF
NEW TECHNOLOGY IN NEW CONSTRUCTION,
SEAOC

2005 EXCELLENCE IN STRUCTURAL ENGINEERING
BEST USE OF NEW TECHNOLOGY IN NEW
CONSTRUCTION, SEAOSC



California State University Sacramento, Napa Hall

LOCATION:
Sacramento, CA

YEAR:
2002

CLIENT:
Dreyfuss & Blackford

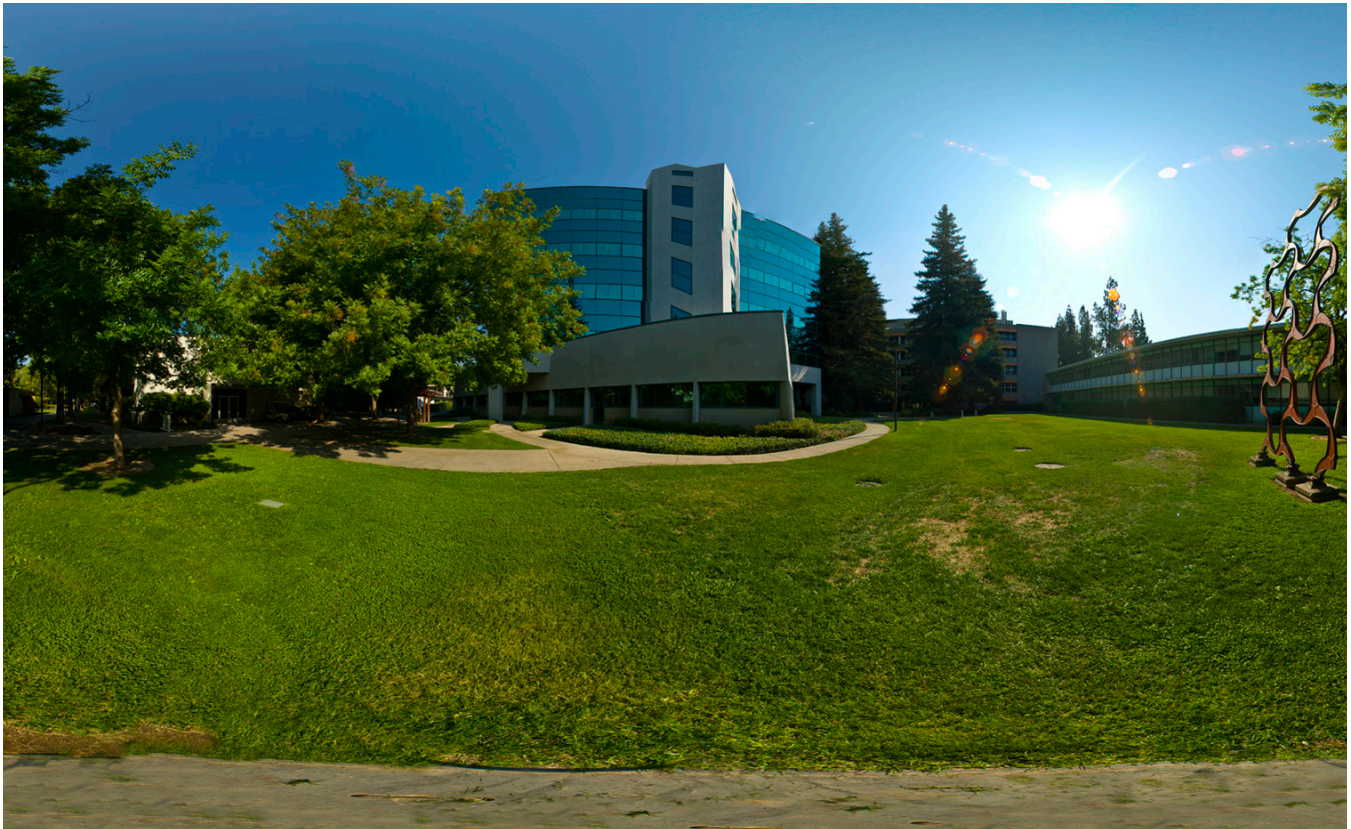
CONSTRUCTION COST:
\$5.8 Million

SCALE:
34,000 SF

DELIVERY METHOD:
Design-Bid-Build

Napa Hall is the 34,000 SF home of California State University, Sacramento's College of Continuing Education. The facility features eight classrooms, three hands-on computer labs and five conference rooms, as well as offices and work areas for administrative, conference and programming staff. Miyamoto International's structural engineering priority was the building's performance

during an earthquake. The lateral force resisting system consists of special concentric braced frames. With its design and advanced engineering, the firm captured the University's goal of utilizing the building, not only as a home for programs and staff, but also as a visual and tangible symbol of the connection between the CSUS campus and the greater Sacramento community.



Miyamoto provided structural engineering for this five-story science classroom building built at a time when the University was experiencing tremendous growth. Between 1984 and 2003, Placer Hall was one of almost a dozen new academic and service buildings to be built, nearly doubling the campus' size. Since then, this geology building has become

one of the signature structures on the CSU Sacramento Campus. The United States Geological Survey scientists and staff occupy the top floors; and the college's geology department is located on the first and second floors. The structural system is composed of steel moment frames with composite floor beams and fluid viscous dampers for seismic energy dissipation.

California State University, Sacramento, Placer Hall

LOCATION:
Sacramento, CA

YEAR:
1999

CLIENT:
E.M. Kado & Associates

CONSTRUCTION COST:
\$9.6 Million

SCALE:
60,000 SF

DELIVERY METHOD:
Design-Bid-Build



This three-story expansion to the existing University Union provides an amenity-rich addition and a new gateway to the heart of the campus. The 60,000-SF addition includes large meeting spaces and offices for University functions. Delivered using CSU's innovative "Collaborative Design-Build" method, this project engages stakeholders in design workshops, ensuring University staff and students are heard. QR Codes are also being posted across campus and have an embedded path to a live 3D model of the current design.

Several 11"x17" renderings with QR Codes will provide an easy way for students to have a view into the design process. A phone number with text input will capture student comments and recognize student body trends. The design solution takes advantage of the quad to the north, which will provide an active outdoor space for student activity. This project is being built in a very active area of campus and construction phasing is planned to have the least impact on existing operations.

California State University, Sacramento, University Union Expansion

LOCATION:
Sacramento, CA

YEAR:
2018

CLIENT:
Dreyfuss + Blackford Architecture

CONSTRUCTION COST:
\$35 Million

SCALE:
120,000 SF

DELIVERY METHOD:
Design-Build



Phase I of this project expanded the existing University Union, including a dining and seating area in the lobby, reading and meeting rooms. Phase II remodeled the existing Union and added 120,000 SF of additional space, including a new main lobby, meeting rooms, a hair salon, dining room, food service, retail spaces, radio studio, theatre, grand ballroom, art exhibit room, offices and storage areas.

Complex issues of programming, adjacencies, expansion of an existing building, fire/life/safety, seismic upgrade and early occupancies of selected portions of the project were only a few of the challenges, requiring sophisticated planning. Phased construction allowed the existing facility to remain open during the expansion.

California State University, Sacramento, University Union

LOCATION:
Sacramento, CA

YEAR:
1993

CLIENT:
Stafford King Wiese Architects

CONSTRUCTION COST:
\$21 Million

SCALE:
180,000 SF

DELIVERY METHOD:
Design-Bid-Build



California State University, Sacramento, Parking Structure III

LOCATION:
Sacramento, CA

YEAR:
2007

CLIENT:
International Parking Design
McCarthy

CONSTRUCTION COST:
\$25 Million

SCALE:
1,000,000 SF

Six-Level

3,100 Stalls

DELIVERY METHOD:
Design-Build

California State University, Sacramento is primarily a commuter school. With most students living off campus, structured parking meets demands by going vertical, freeing surface lots for academic buildings. The largest parking structure in the CSU system is designed as two independent structures separated by a seismic gap and a light well that runs nearly the full width of the structure. With 3,000 stalls and one million square feet, this six-level structure was constructed using mildly reinforced and post-

tensioned cast-in-place concrete. A special moment-resisting frame (SMRF) system was used in both the transverse and longitudinal directions, which will withstand seismic events and provide safety to students and staff. High performance engineering techniques were used to 1) eliminate grade beams between piles, 2) eliminate the need for shear walls, and 3) limit the seismic gap for the full height of the structure to six inches. The structure was built on a tight budget and aggressive schedule.



California State University, Sacramento is primarily a commuter school. With most students living off campus, structured parking meets demands by going vertical, freeing surface lots for academic buildings. Parking Structure II is a 300,335-SF structure with 1,001 stalls. This four-level structure has a post-tension concrete floor system supported by cast-in-place concrete

columns. The seismic force-resisting system consists of 20" thick concrete shear walls. High performance earthquake engineering techniques were used to optimize the performance based design of the structure and foundation system, resulting in a savings of nearly 2000 cubic yards of concrete and \$750,000 in construction costs.

California State University, Sacramento, Parking Structure II

LOCATION:
Sacramento, CA

YEAR:
2001

CLIENT:
International Parking Design

SCALE
300,035 SF

Four-Level

1,001 Stalls

DELIVERY METHOD:
Design-Build



California State University, Sacramento, Parking Structure I

LOCATION:
Sacramento, CA

YEAR:
1992

CLIENT:
International Parking Design

SCALE:
504,000-SF

DELIVERY METHOD:
Design-Build

California State University, Sacramento is primarily a commuter school. With most students living off campus, structured parking meets demands by going vertical, freeing surface lots for academic buildings. This was the first parking structure at CSUS with

a 6-level structure. It is constructed using mildly reinforced and post-tensioned cast-in-place concrete. Special concrete shear wall systems were used in both the transverse and longitudinal directions.



This new four-level classroom/office building is home to the university's structural engineering department and contains a plethora of laboratory space. The design team worked closely with the contractor to devise the most efficient solution for the shoring system and address a haunch column system that creates a free-beam space for mechanical ductwork and necessary clearances in lab spaces. The laboratories are ultra-efficient and flexible to meet the demands of sundry end-

users. The majority of the structural components, such as beams, girders, slabs, columns and walls, are all architecturally exposed with unique Colton Cement as the primary concrete mix design to express the designers intended color and finishes. The project includes a 65-foot pedestrian bridge with glass decking. This building has been the main location for hosting all of the major events at Jacob School of Engineering at UCSD.

University of San Diego, Structural and Materials Engineering Building*

LEED Gold®

LOCATION:
La Jolla, CA

YEAR:
2012

CLIENT:
Miller Hull Partnership / Safdie Rabines Architects

OWNER:
University of California, San Diego
GENERAL CONTRACTOR:
Mortenson

CONSTRUCTION COST:
\$68 Million

SCALE:
183,000 SF

**Miyamoto Staff Experience*



The Price Student Center includes a cafeteria, restaurants, bookstore, movie theater and meeting space for student organizations. The building was originally constructed in 1989. The expansion consists of new steel framing with Eccentric Braced Frames

(EBF) as the primary lateral system. Richard was a member of the design team which provided structural design and QA/QC related to modernizing the facility for an approximate cost of \$63 million.

University of California, San Diego, Price Student Center Renovation*

LEED Gold

LOCATION:
La Jolla, CA

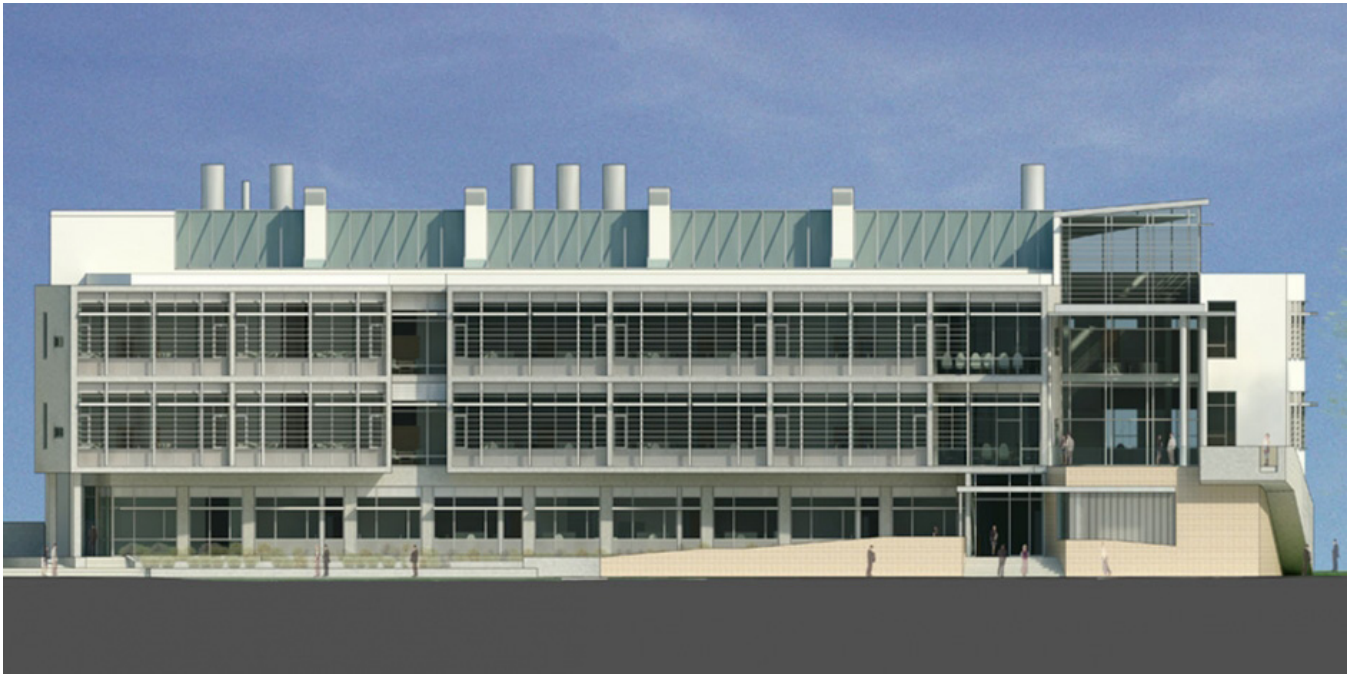
YEAR:
2009

CLIENT:
Cannon Design
Mortensen
University of California, San Diego

CONSTRUCTION COST:
\$63 Million

AWARDS:
2009 DESIGN HONOR AWARD, SAN DIEGO
CHAPTER

*Miyamoto staff experience



The Bioengineering Laboratory and Vivarium is located next to the Davidson Library and provides a combination of labs, classrooms, a lecture hall and a basement vivarium for the Bioengineering Department. The lateral system consists of cast-in-place concrete shear walls diagonally reinforced coupling beams. The gravity system consists of a combination of one-way and two-way slabs supported by beam, columns, and walls. Structural slab and beams are designed to meet vibration criteria for various lab uses. The roof consists of steel framing braced by special

steel moment frames and braced frames. A large steel penthouse, mechanical catwalk and mechanical screens are located at the lower roof to service the MEP equipment. The foundation system consists of CIDH piles. Fiber-reinforced concrete mix were specified to minimize cracking at the architectural exposed concrete slab area. Suspended slabs are designed for vibration criterion of 4,000 micro-in/second. Many structural concrete elements were exposed as part of the architectural design intent.

**University of California,
Santa Barbara,
Bioengineering Laboratory
and Vivarium***

LEED Gold

LOCATION:
Santa Barbara, CA

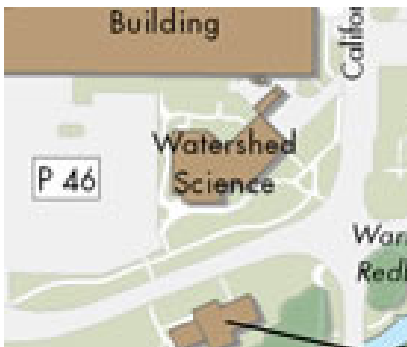
YEAR:
Expected to open fall of 2017

CLIENT:
Moore Ruble Yudell
University of California, Santa Barbara

CONSTRUCTION COST:
\$55 Million

SCALE:
200,000 Square Feet

**Miyamoto staff experience*



This University of California, Davis project is a two-story addition to the Academic Surge. It provides approximately 4,900 SF of research and teaching spaces needed to study the environmental and economic issues related to the Sacramento-San Joaquin Delta and its tributary watersheds. An additional 10,755 SF of unfinished space will be provided to

support future campus development. The structural system of this building consists of special moment resisting steel frames with non-bearing, metal stud exterior walls. The second floor has concrete over metal deck and is supported on composite steel beams. The roof has a metal deck supported on steel beams.

University of California, Davis, Watershed Science Research Center

LOCATION:
Davis, CA

YEAR:
2005

CLIENT:
A.C. Martin Partners

CONSTRUCTION COST:
\$1.8 Million

SCALE:
4,900 SF Research and Teaching Spaces
10,755 SF Campus Development



The University of California, Davis West Village is the largest planned net zero energy community in the United States. Miyamoto provided structural design services for the new student housing portion of this 220-acre, 1,860 bed new mixed-use district integrating student, faculty, staff housing and educational facilities, all centered on a civic village square. West Village housing was planned to be the largest zero-net energy community in the United States. As a net zero energy development, UC Davis West Village is

designed to generate as much energy as it consumes. With a high efficiency 4-megawatt solar power system, on sunny days, the solar panels generate more electricity than is needed for the site and send some back to the power grid. Elements of sustainable design are integrated into the site plan and sustainable elements were used during construction. This enables those living in West Village to limit energy consumption and enjoy the benefits of the local climate in a healthy environment.

University of California, Davis, West Village Student Housing

LEED Gold® Net Zero Energy

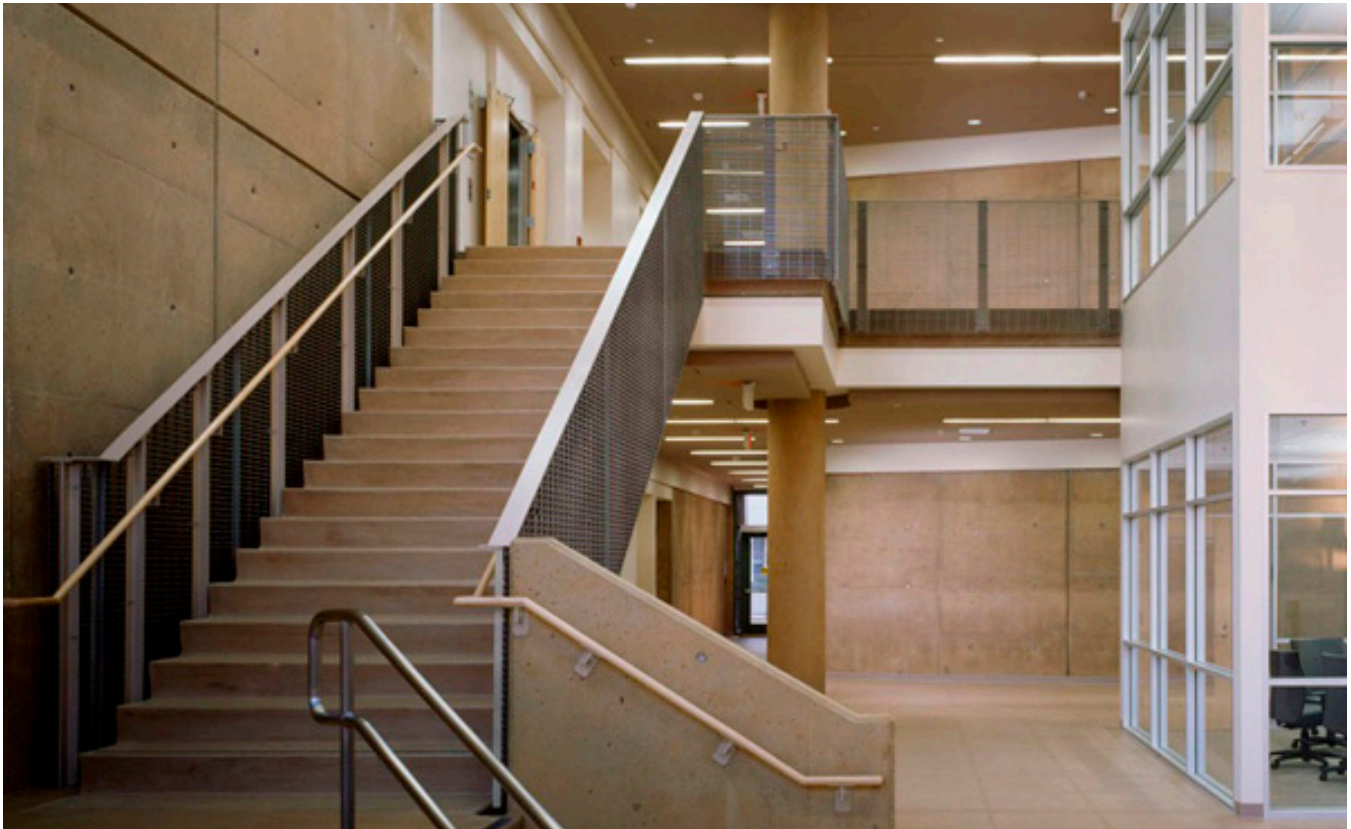
LOCATION:
Davis, CA

YEAR:
2013

CLIENT:
MVE Institutional Inc.

CONSTRUCTION COST:
\$48 Million

SCALE:
220 Acres



As part of a design-build competition, the Biological Sciences Building Unit 3 is a new, four-story, 150,000-SF structure that includes sophisticated research and clinical labs for the School of Biological Sciences, a 400-seat lecture hall and a full vivarium in the basement. The building strengthens the biological research program for graduate and postdoctoral students and creates an environment for collaboration among biologists,

bioengineers and chemists. The team worked strategically with the University and project team to reconfigure the design. Miyamoto International provided peer review services to the University, working closely with the design-build team through all of the design phases as well as construction to assure the University's design criteria and quality expectations were met.

University of California, Irvine, Biological Sciences Unit 3, Peer Review

LOCATION:
Irvine, CA

YEAR:
2008

CLIENT:
UCI Design and Construction Services

SCALE:
150,000 SF



Miyamoto has served UCI for many years while overseeing the University of California Seismic Safety Policy at UCI. We reviewed seismic improvement projects on behalf of UCI to ensure projects reached the intended performance categorization within budget. We also worked collaboratively with the design team or design-build team and University representatives.

- Alumni Center
- Amonix Solar Panel
- Anteatr PS Solar Panel
- Anteatr Recreation Center Playing Field
- Arroyo Vista Housing
- Biological Sciences Buildings 2 & 3
- Business Unit 2
- Cal (IT)2
- Computer Sciences Building 3
- Crawford Hall Bridge Repair
- Croul Hall/Nat Sci Unit
- Emergency Response Plan
- Engineering Laboratory Facilities
- Gillespie Hall Vivarium Expansion
- Hewitt Hall
- Humanities Gateway
- Middle Earth Housing Renovations Evaluation
- Modular Bldg Damage Assessment
- Natural Sciences, Unit 1 & Unit 2
- New Swan Temporary Theater
- Palo Verde Housing Peer Review
- Parking Structure and Multi-purpose Academic and Administrative Building
- Pedestrian Bridge Over-Crossing
- Social & Behavioral Science Building
- Social Sciences Tower and Parking Structure
- Sprague Hall
- Stem Cell Research Center Building.
- Student Center Expansion
- Surge Building
- Verano Housing

University of California, Irvine, Structural Engineering Services

LOCATION:
Irvine, CA

YEAR:
Ongoing

CLIENT:
University of California, Irvine, Design and Construction Services and Facilities Management

CONSTRUCTION COST:
Over \$1 Billion



UNEX consists of a 70,000-GSF, five-story fully-sprinklered structure that will house classrooms, a computer lab, sound studio and recording booth, offices and support spaces for faculty and administrators, as well as shell space for future site development. The design features outdoor plaza spaces and terraces punctuated

by a pedestrian bridge that spans East Peltason Drive. The Miyamoto team is serving as a Structural Peer Reviewer, working closely with the Structural Engineer of Record and the Design-Build contractor to address budget, schedule, performance and constructibility to meet the demand and expectations of the Owner.

University of California, Irvine, UNEX Classroom Building Peer Review

LEED® PLATINUM

LOCATION:
Irvine, CA

YEAR:
2016

CLIENT:
UC Irvine Design & Construction Services (Owner)

CONSTRUCTION COST:
\$35 Million

SCALE:
70,000 SF



Miyamoto provided structural engineering design services for the University of California, Riverside Lothian Residence Hall. This seismic strengthening package consists of bringing three buildings and over 200,000-SF of existing structure into compliance with the University of California's Seismic Safety Policy. Miyamoto proposed and implemented structural solutions that could be quickly constructed during the summer

break and phased the execution of the projects over three summers in order to minimize interruption and maximize the University's business continuity. The seismically deficient building types included a four-story concrete lift-slab residence hall with architectural precast skin, a four-story light framed shear wall dormitory, and a one-story restaurant with pre-cast concrete double-tee roof framing and concrete shear walls.

University of California, Riverside, Lothian Residence Hall, Seismic Upgrades

LOCATION:
Riverside, CA

YEAR:
2013-2016

CLIENT:
UC Riverside Capital Programs
Architects & Engineers

CONSTRUCTION COST:
\$ 8 Million

SCALE:
West Lothian: Approx. 70,000 SF
East Lothian: Approx. 120,000 SF
Restaurant: Approx. 21,000 SF



Structural peer review of 3 new five-story structures over podium consisting of approximately 253,000 square feet. Scope of review included project specific geotechnical evaluations and investigation studies, project specifications, structural

calculations, structural drawings and sketches, together with civil, architectural, mechanical, electrical and landscape design as required for coordination purposes. Miyamoto assisted in construction quality assurance and coordination.

University of California, Irvine, Mesa Court Housing Expansion Peer Review

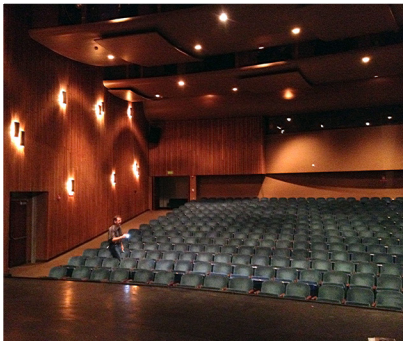
LOCATION:
Irvine, CA

YEAR:
2017

CLIENT:
University of California, Irvine

CONSTRUCTION COST:
\$ 96,702,935

SCALE:
253,354 SF



After UCR observed worsening deterioration of the 60-year-old plaster ceiling above the Olmsted Theater's seats, Miyamoto assessed the conditions, coordinated with a testing lab to determine in-situ properties of existing ceiling materials and developed a repair program. During the design phase, we retained and collaborated with a professional electrical engineer to upgrade house

lighting and worked with an architect and acoustic engineer to confirm the acoustic acceptability of the repair materials and procedures. A critical element to the success of this project was the ability to phase all work to minimize disruption to planned University events and to develop a strategic repair design that was both well-hidden and accommodated the sensitive acoustic needs of the space.

University of California, Riverside, Olmsted Theater Repair

LOCATION:
Riverside, CA

YEAR:
2014

CLIENT:
University of California, Riverside

CONSTRUCTION COST:
\$600,000

SCALE:
7,000 SF



The University of California, San Diego (UCSD) Health Sciences and Medical Center was designed to provide office space for doctors and staff working in the adjacent hospitals. The three-story office building serves as a gateway to UCSD, providing consolidation of research and associated staff who were previously spread around several on-and off-campus locations. Situated behind the Thornton Hospital, the

75,000-SF tilt-up structure features offices, exam rooms, waiting rooms and a café as well as a research institute. The LEED Silver building improves efficiency and enhances collaboration by the medical staff. By utilizing tilt-up construction, the project was built in record time while minimizing disruptions to the surrounding medical facilities.

University of California, San Diego, East Campus Office Building

LEED Silver®

LOCATION:
La Jolla, CA

YEAR:
2011

CLIENT:
C.W. Driver
Gensler

CONSTRUCTION COST:
\$24 Million

SCALE:
75,000 SF

AWARDS

2012 TCA TILT-UP ACHIEVEMENT AWARD – OFFICE DIVISION



Miyamoto International provided design consulting services for an Initial Assessment Study for the Bridge Memorial Hall Structural Renovation Seismic Improvement project. The Miyamoto team provided strengthening solutions for the building while maintaining the unique architectural features of this historic structure constructed in 1928. The objectives of the Initial Assessment Study are to ratify the project goals,

complete a multidisciplinary screening of the building and systems, create an optimal improvement approach, develop the resulting project budget and schedule recommendations for further action and a precise scope of work for the remainder of the seismic improvement project. Miyamoto met with designated facility representatives and end users to learn about the building's operational system, functions and use.

University of Southern California, Bridge Memorial Hall, Initial Assessment Study for Structural Renovation

LOCATION:
Los Angeles, CA

YEAR:
2012

CLIENT:
University of Southern California (USC)

CONSTRUCTION COST:
Est \$13.5 Million

SCALE:
48,000 SF



This new residential Type I construction building consists of an eight-story concrete tower with 900 units for student housing (1,600 beds) and an eight-level parking structure

to house 1,200 cars. The project was completed in 2010 with a construction cost of \$130 million with approximately 1,000,000 SF of concrete construction.

University Gateway at University of Southern California, Student Towers, LEED Certified (Design Build)*

LOCATION:
Los Angeles, CA

YEAR:
2010

CLIENT:
University of Southern California

CONSTRUCTION COST:
\$130 Million

SCALE:
1,000,000 SF
1,200 Cars

**Richard Chen's experience with a prior firm.*



Located within minutes from the university, the Upper Eastside Lofts fulfills the campus' need to provide additional housing for its students. Designed in an urban loft style with modern and upscale decor, this

four-story, 135-unit student residence project has the capacity to house 440 students. The structural design utilized a highly efficient wood-framed shear wall system made possible by the stacked unit design.

California State University, Sacramento, Upper Eastside Lofts

LOCATION:
Sacramento, CA

YEAR:
2006

CLIENT:
Fletcher Farr & Ayotte

CONSTRUCTION COST:
\$20 Million

AWARDS:

2010 TRUSTEES AWARD FOR EXCELLENCE IN HISTORIC PRESERVATION

2010 PRESERVATION TECHNOLOGY CATEGORY, CALIFORNIA PRESERVATION FOUNDATION

2010 STRUCTURAL ENGINEERS ASSOCIATION OF CALIFORNIA, AWARD OF EXCELLENCE RETROFIT



East Los Angeles College, Weingart Stadium

LOCATION:
Monterey Park, CA

YEAR:
2010

CLIENT:
HNTB Architects

CONSTRUCTION COST:
\$2.8 Million

SCALE:
330,000 SF

Miyamoto designed improvements for one of Southern California's largest community college sports venues, the Weingart Stadium at LACCD's East Los Angeles College. Services included an improved scoreboard, as well as new one-story rest rooms, concession stand, and dining terrace. All buildings are composed of masonry construction with wood roof framing. The terrace is cantilevered over an existing earth slope and

is cast-in-place concrete with pile foundations. Solutions created by Miyamoto included ramps and steps to address the steep natural site conditions with various elevations. Audio enhancements were applied to the scoreboard, which contained audio technology for the entire stadium. These new stadium improvements will be enjoyed by students, faculty and visitors for years to come.



This Los Angeles Community College District (LACCD) project was a renovation of the Van de Kamp's Bakery building as well as the structural design of a new two-story education building and central plant, resulting in over 70,000 SF of construction. The bakery was extensively strengthened by the addition of shotcrete walls, new foundations, as well as reinforced floor and roof diaphragms. Miyamoto's

scope of work involved completing and improving the constructability of basic design as well as responding to questions from the field, reviewing contractor submittals, and providing structural observation of the work in progress. Sustainable features included use of decomposed granite and permeable paving, the use of recycled materials and locally procured materials. The project is targeted to attain a minimum LEED rating of Silver.

Van de Kamp Innovation Center Renovation

LOCATION:
Los Angeles, CA

YEAR:
2010

CLIENT:
Quatro Design Group

CONSTRUCTION COST:
\$38.5 Million

SCALE:
70,000 SF



Miyamoto was the structural engineer for the design-build team that developed a new student union for this Los Angeles City College (LACC) commuter campus. Located in the heart of the campus, the building is a landmark facility celebrating diversity and providing a central home for the LACC community. The student union provided greater opportunities for LACC to engage in meaningful

ways with its surrounding community. With programming inspired by contemporary and sustainable design, this 63,500-SF facility met LEED Gold certification. Toward this certification, Miyamoto assisted in identifying design solutions and building materials that utilized the building as a thermal mass to create maximum energy efficiencies.

Los Angeles City College, Student Union Building

LEED Gold®

LOCATION:
Los Angeles, CA

YEAR:
2011

OWNER:
Los Angeles Community College District (LACCD)

CLIENT:
Harley Ellis Deveraux
S.J. Amoroso Construction

CONSTRUCTION COST:
\$32.6 Million

SCALE:
63,500 SF

PROJECT DELIVERY:
Design-Build



This Facilities and Maintenance Operations complex consists of a new office building, warehouse, workshops, recycling building and vehicle storage areas. It was designed to consolidate various maintenance services into a single location away from the central campus core, freeing up space in the heart of the campus for more development of academic and student service facilities. Although utilitarian

in its function, all buildings designed around a common architectural vocabulary featuring strong geometric shapes and variations in exterior color and texture. To achieve this, Miyamoto engineers worked closely with the architect, RNL Design, to create structures that used a combination of colored tilt-up concrete panels and concrete masonry, exposed steel braces and roof framing.

Los Angeles Harbor College Facilities and Maintenance Operations

LOCATION:
Wilmington, CA

YEAR:
2008

CLIENT:
RNL Design

CONSTRUCTION COST:
\$6.8 Million

SCALE:
30,000 SF



Los Angeles Pierce College Central Plant

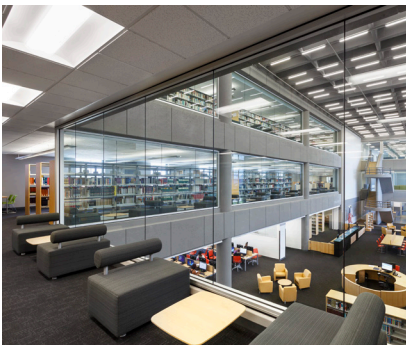
LOCATION:
Woodland Hills, CA

YEAR:
2007

CLIENT:
Tetra Design

Working under funding from the Chevron Corporation, Miyamoto provided structural design for the expansion and renovation of the main central plant and library central plant at Pierce College. The work included structural design of new buildings, support and anchorage for chillers, thermal storage, piping, and other

equipment. Thermal storage units were placed on raised platforms, built into the adjacent hillside. Chillers and air handlers were designed per the building code. Miyamoto also strengthened the roof based on the heavy equipment load needed to operate these plants.



Miyamoto International provided structural engineering services for the renovation of an existing five-story 90,000-SF library building and a 21,500-SF theater building and the addition of a new single story, 10,400-SF administration building. This project was delivered in a Design Build method in conjunction with Hensel Phelps Construction Co. This project was completed concurrently with the renovation of a Fitness & Wellness

complex and the northeast quadrant parking structure by the design build team. The Fitness and Wellness Center is a two-story existing structure housing the gymnasium, locker rooms, dance classrooms and other athletic support functions, plus an outdoor aquatics center. The work in the building included a modernization of the entire building and addition of second floor space in the previous racquetball courts.

Southwest College, Cox Building and Little Theater, Fitness and Wellness Center

LOCATION:
Los Angeles, CA

YEAR:
2014

OWNER:
Los Angeles Community College District (LACCD)

CLIENT:
Hensel Phelps Construction Co.
Carrier Johnson+Culture

CONSTRUCTION COST:
\$46.6 Million

SCALE:
10,000 SF Addition and Renovation
90,000 SF Library Building
21,500 SF Theater Building
69,530 SF Fitness & Wellness Center

PROJECT DELIVERY:
Design-Build



The client requested Miyamoto to be involved as the contract plan checker for DSA during this high profile, extremely tight deadline seismic retrofit of Building A. The project was a complete seismic retrofit of the 1920s historic building and then seismically upgraded in the 1930s subsequent to the Field Act. The structural engineering work was performed and reviewed under the 2001 California Building Code, utilizing provisions of DSA Division VIR which has subsequently become Sections 3415 through 3421 of the 2007 California Building Code.

The project had a tight schedule to obtain matching funds for the retrofit work, thus allowing only three and a half months from original DSA submission to Stamp Out of the project. Miyamoto was able to assure the district that the schedule would be maintained by establishing in-process meetings with the design team and DSA to expedite the process and keep all parties working on the critical path. Miyamoto performed a high quality plan review, maintained the District's schedule and protected the matching funding to help make the project a success.

Los Angeles Trade Technical College Building A Structural Plan Check

LOCATION:
Los Angeles, CA

YEAR:
2008

CLIENT:
DSA

CONSTRUCTION COST:
\$47.6 million

SCALE:
73,000 SF



Miyamoto provided structural engineering services for this 169-bed residence hall that serves both graduate and undergraduate students. The 4½-story building is separated vertically into distinct sections with apartment-style units for graduate students and standard suites for undergraduates. This hilly site posed a challenge for accessibility, but the team ultimately exceeded Americans with Disabilities Act (ADA) guidelines. The team also excelled in providing

green features that meet LEED Gold criteria. Most notably is the locally-sourced repurposed wood on the building exterior. Other water-wise and energy-efficient elements are featured throughout. Miyamoto's Advancing Framing techniques reduce the need for thermal bridging in exterior walls, which reduces building shrinkage and creates a more durable and energy-efficient space that students will enjoy for many years.

Lewis & Clark College, Residence Hall

LEED® GOLD

LOCATION:
Portland, OR

YEAR:
2012

CLIENT:
Mahlum Architects

CONSTRUCTION COST:
\$9 Million

SCALE:
55,000 SF



Miyamoto was engaged to improve and modernize an existing three-story building of approximately 28,300 GSF consisting mostly of existing office space. The building has parking on the first level and approximately 19,821 ASF of office space on the second and third floors. The second and third floors were converted to instructional, conference, office and support spaces for the District's Workforce and Economic Development program. This

project required full DSA approval and inspection. The Los Rios Community College District is the second largest community college district in the State of California with an enrollment of over 86,000 students. Our work was consistent with the high value Los Rios places on innovation which supports and invests in change that increases the effectiveness of their programs, the productivity of their work and the successful outcomes of their students.

Los Rios Community College District, Workforce and Economic Development Building Adaptive Reuse and Seismic Retrofit

LOCATION:
Sacramento, CA

YEAR:
2015

CLIENT:
Los Rios Community College District

CONSTRUCTION COST:
\$4.4 Million

SCALE:
28,300 SF



Riverside Community College District, Coil School of Arts Parking Structure

LOCATION:
Riverside, CA

YEAR:
2015

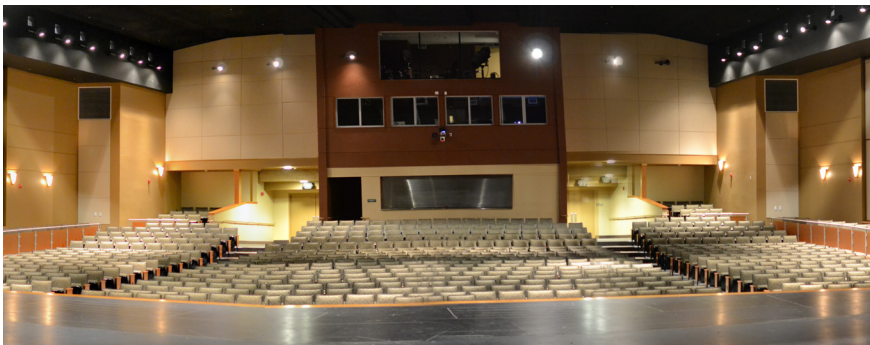
CLIENT:
Riverside Community College District (RCCD)

CONSTRUCTION COST:
\$5.8 Million

SCALE:
83,368 SF
224 Stalls

The 4-level post-tensioned concrete parking structure, accommodating a total of 224 parking stalls, has been designed to accommodate the additional students, staff and community for the new Performing Arts facility. Early in the design process, Miyamoto explored a value-engineering solution for the foundation system. Due to the amount of artificial fill material a deep

foundation system (drilled piers) was proposed in the geotechnical report. We recommended an alternate system, rammed aggregate pier (RAP), which is a ground improvement technique to increase the capacity of the soil. By using the alternative foundation system, construction costs and schedule were reduced compared to the drilled pier system.



Sacramento City College Performing Arts Theater Renovation

LOCATION:
Sacramento, CA

YEAR:
2011

CLIENT:
NTD Architecture

CONTRACTOR:
DPR Construction

CONSTRUCTION COST:
\$13 Million

SCALE:
50,423 SF

The renovation and seismic upgrade of this 1930s-era cast-in-place concrete theater building at the Sacramento City College included the following key features:

- 600 luxury theater seats over a new mechanical plenum distribution system
- new stage rigging system
- new suspended lighting catwalks
- new audio/ video system and design features
- new operable orchestra pit
- new stage trap door and sub-floor tunnel system

Other upgrades include seismic strengthening of wood roof diaphragms, concrete walls and their anchorage to roof and floor framing, obtaining DSA certification for prior non-certified improvements to “Little Theater” classroom, and multiple improvements to classroom and “Black Box” theater wings.



The Miramar College Library and Learning Resource Center (LLRC) has been designed to be the new flagship building on this rapidly growing San Diego Community College Campus (SDCCC). The building serves the campus and community not only as a library building, but also houses space for labs, classrooms, administrative offices and a 236-seat auditorium. The building has achieved a LEED Silver certification in accordance with the SDCCC's strategic goal of "becoming a sustainable advocate

within the community." SDCCC has a LEED Certified minimum requirement for all of their new and renovated campus buildings. The building's structural system is a structural steel special moment resisting space frame to not inhibit the large uninterrupted spaces demanded for this type of educational facility and also to provide a high-performance structure in an elevated earthquake risk environment. Additional features of interest include a large roof plaza and photovoltaic panel capacity on the roof.

Miramar College, Library and Learning Resource Center (LLRC)

LEED Silver®

LOCATION:
San Diego, CA

YEAR:
2010-2011

CLIENT:
San Diego Community College
Campus (SDCCC)
Zagrodnik + Thomas

CONSTRUCTION COST:
\$27 Million

SCALE:
105,000 SF



This performing arts theater renovation and expansion project include improvements to the existing 25,230-SF building and a 2,000-SF expansion for the Solano Community College's music and theatre arts programs. In addition to architectural and functional improvements, the project also addressed health, safety, accessibility, seismic, and other code regulation non-compliance and failing infrastructure deficiencies. Structural improvement included redesign tiered audience seating, including a new

second floor/ balcony level, a glass entry lobby addition, redesigned catwalk system, theater grid iron and gallery improvements, bathroom and classroom additions, and seismic upgrades. One of Miyamoto's key contributions to this project was to provide structural solutions that mitigated unaffordable, code-mandated seismic rehabilitation of the building, thus allowing for strategically targeted voluntary seismic upgrades to be focused on the building's primary seismic deficiencies.

Solano Community College Theater

LOCATION:
Fairfield, CA

YEAR:
2017

CLIENT:
LPAS, Inc.

PROJECT TEAM:
The Shalleck Collaborative
Charles M. Salter & Associates

CONSTRUCTION COST:
\$11.9 Million

SCALE:
27,230 SF



Miyamoto provided structural engineering design services for a new central plant and field house on the Southwestern College campus. Miyamoto lead the development of all structural concepts, oversaw the design engineering team and provided quality assurance throughout construction. Phase I included the new central plant and Phase II included the design for the field

house. The buildings were designed with a combination of steel braces, steel moment frames and buckling restraint braced framing. The campus expansion included a four-story, 30,000 SF field house building and one-story, 8,000 SF central plant building. The field house features an auditorium that cantilevers from the building 32 feet, supported by two, two-story deep structural steel trusses.

Southwestern College, Central Plant and Field House

LOCATION:
Chula Vista, CA

YEAR:
2014

CLIENT:
Gensler

CONSTRUCTION COST:
\$34 Million

SCALE:
30,000 SF Field House
8,000 SF Central Plant



Southwestern College, Wellness and Aquatic Center

LOCATION:
Chula Vista, CA

YEAR:
2017

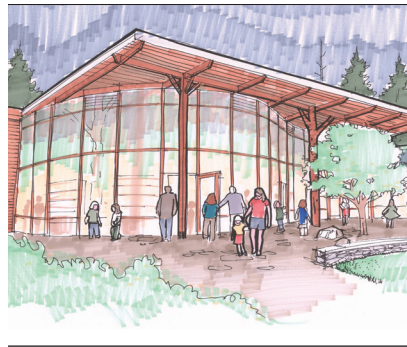
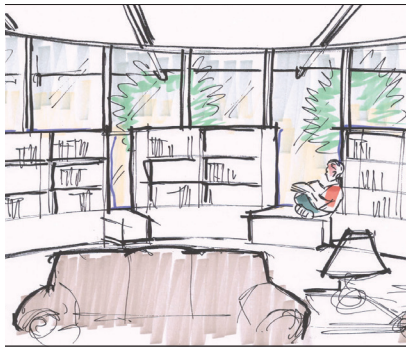
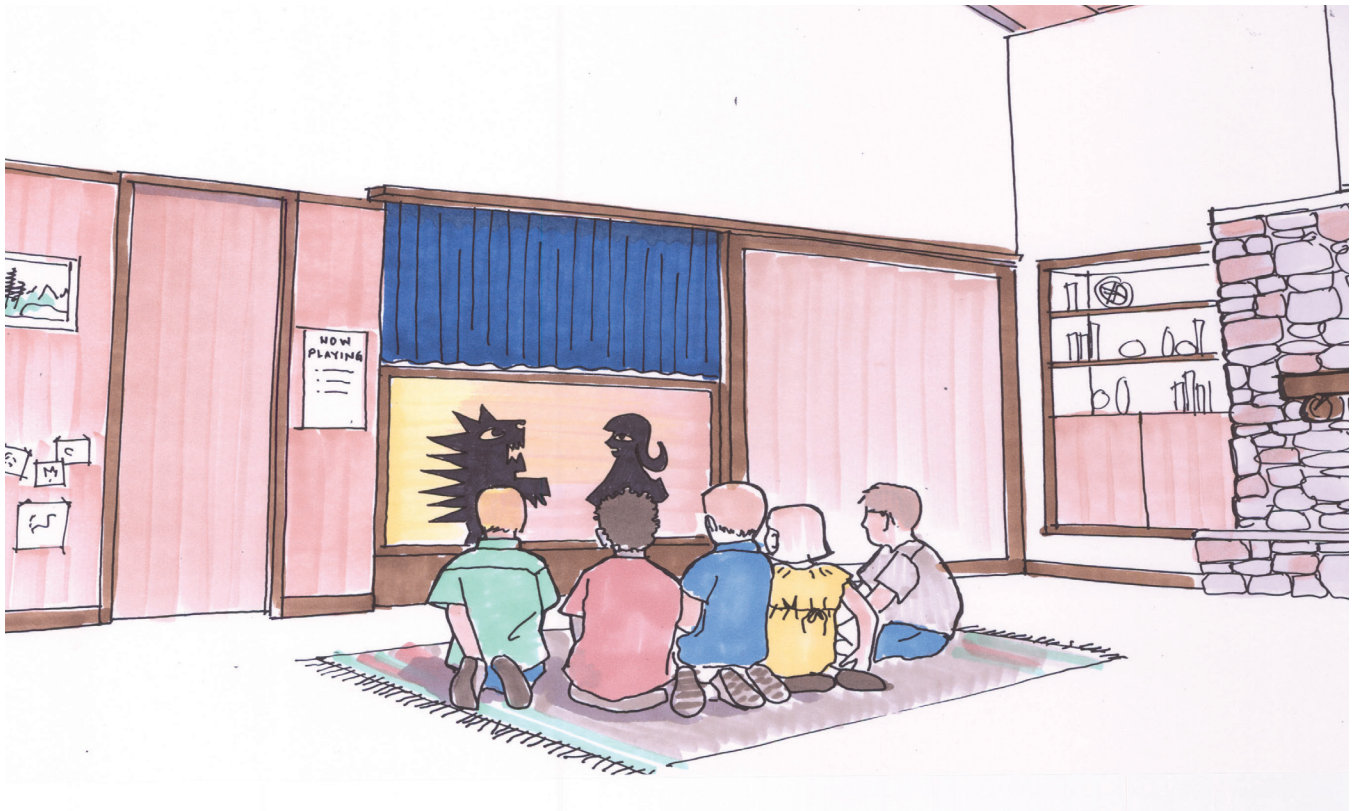
CLIENT:
Gensler

CONSTRUCTION COST:
\$46 Million

SCALE:
80,000 SF

As part of Southwestern College's master planning effort for its facilities, this new wellness and aquatic complex is planned to replace the college's existing facilities. The new building will house a competitive gymnasium, fitness labs, cardio-workout rooms, training and testing rooms, offices, locker rooms and multipurpose exercise rooms. Adjacent to the buildings will be two Olympic-sized

pools and a therapy pool. From its site on a prominent campus corner, the complex will be highly visible, providing convenient access to wellness services for students and the local community. Now, in conjunction with the recently completed DeVore Field House and Stadium renovation, Southwestern will enjoy a fully integrated athletic and wellness complex.



Clark College Early Learning Center

LOCATION:
Vancouver, WA

YEAR:
2010

CLIENT:
LSW Architects

CONSTRUCTION COST:
\$1.5 Million

SCALE:
5,000 SF

Miyamoto is providing structural engineering services for Clark College's Early Learning Center. The facility will be a comfortable, stimulating and nurturing environment for children, families and students. The structural design uses a rich combination of heavy lumber and site harvested log columns to provide the building support systems. The entire structure is open and exposed with the ability to view the log columns and roof beams from all classroom and gathering spaces. The Center structural system accommodates an

extensive glass wall system that allows natural light to pour into the learning spaces and provides a seamless transition from exterior environment to interior classroom. Miyamoto has worked collaboratively with LSW to design all the visible structural framing connections that will become part of the building architectural fabric. In addition, our innovative use of the structural roof decking as a seismic load collection system has resulted in a minimal amount of shear walls along the building front entry.

UNIVERSITY PROJECT EXPERIENCE

California State University

California State University, Chico,
Colusa Building
Chico, CA

California State University, Chico,
Natural History Museum
Chico, CA

California State University,
Dominguez Hills, Stadium
Dominguez Hills, CA

California State University,
Dominguez Hills, Classrooms &
Facility Office Buildings
Dominguez Hills, CA

California State University,
Dominguez Hills, Health Center
Dominguez Hills, CA

California State University,
Dominguez Hills, Gymnasium &
Sand Pits
Dominguez Hills, CA

California State University, Fullerton,
Student Housing
Fullerton, CA

California State University, Fullerton,
Student Union
Fullerton, CA

California State University, Long
Beach, Science Building Addition
Long Beach, CA

California State University, Los
Angeles, Campus Security Building
Los Angeles, CA

California State University, Los
Angeles, Parking Structure III
Los Angeles, CA

California State University, Los
Angeles, Welcome Center
Los Angeles, CA

California State University, Los
Angeles, Physical
Sciences Seismic Evaluation
Los Angeles, CA

California State University,
Northridge, Student Union
Northridge, CA

California State University,
Sacramento, Academic Information
Resource Center
Sacramento, CA

California State University,
Sacramento, Baseball Stadium
Sacramento, CA

California State University,
Sacramento, Central Plan
Sacramento, CA

California State University,
Sacramento, Child Development
Center Expansion
Sacramento, CA

California State University,
Sacramento, Hornet Scoreboard
Sacramento, CA

California State University,
Sacramento, Hornet
Stadium Repair
Sacramento, CA

California State University,
Sacramento, Library
Sacramento, CA

California State University,
Sacramento, Mariposa Hall
Sacramento, CA

California State University,
Sacramento, Napa Hall
Sacramento, CA

California State University,
Sacramento, Parking Structure, I, II, III
Sacramento, CA

California State University,
Sacramento, Placer Hall
Sacramento, CA

California State University,
Sacramento, Regional Continuing
Education Building
Sacramento, CA

California State University,
Sacramento, Student Union
Sacramento, CA

California State University,
Sacramento, Thermal
Energy Expansion
Sacramento, CA



CSUS Academic Information
Resource Center
Sacramento, CA



UC Davis West Village
Student Housing
Davis, CA

California State University, San Bernardino, Student Center
San Bernardino, CA

California State University, Stanislaus, Science Center
Stanislaus, CA

Humboldt State University, Scoreboard
Humboldt, CA

University of California

University of California Davis, West Village Student Housing
Davis, CA

University of California Davis Contained Research Facility
Davis, CA

University of California Davis "Hot Dog" Lab Building
Davis, CA

University of California Davis Large Animal Quarters
Davis, CA

University of California, Davis, Medical Records Building
Davis, CA

University of California, Davis, Seed Resource Building
Davis, CA

University of California, Davis Core Greenhouse
Davis, CA

University of California, Davis Watershed Science Research Center
Davis, CA

University of California Davis Substation
Davis, CA

University of California, Irvine, Anteater Recreation Center Playing Field Seismic Retrofit
Irvine, CA

University of California, Irvine, Arroyo Vista Housing Seismic Retrofit
Irvine, CA

University of California, Irvine, Arts Renovation and Seismic Upgrade, Phase 2 Peer Review
Irvine, CA

University of California, Irvine, Biological Sciences Building 2 Seismic Retrofit
Irvine, CA

University of California, Irvine, Biological Sciences Unit 3 Seismic Retrofit
Irvine, CA

University of California, Irvine, Bren Theatre Peer Review
Irvine, CA

University of California, Irvine, Cal (IT)2 Peer Review
Irvine, CA

University of California, Irvine, Computer Sciences Building 3 Peer Review
Irvine, CA

University of California, Irvine, Graduate School of Management, Seismic Upgrade
Irvine, CA

University of California, Irvine, Hewitt Hall Peer Review
Irvine, CA

University of California, Irvine, Irvine Hall, Seismic Upgrade
Irvine, CA

University of California, Irvine, Mesa Commons Renovation Peer Review
Irvine, CA

University of California, Irvine, Multi-purpose Science and Technology Building Peer Review
Irvine, CA

University of California, Irvine, Natural Sciences, Unit 1 Peer Review
Irvine, CA

University of California, Irvine, Natural Sciences, Unit 2 Peer Review
Irvine, CA

University of California, Irvine, Palo Verde Housing Peer Review
Irvine, CA

University of California, Irvine, Parking Facility No. 3 Peer Review
Irvine, CA

University of California, Irvine, Parking Structure Peer Review
Irvine, CA

University of California, Irvine, Multi-purpose Academic and Administrative Building Peer Review
Irvine, CA

University of California, Irvine, Pedestrian Bridge Over-Crossing Peer Review
Irvine, CA

University of California, Irvine, Sprague Hall Peer Review
Irvine, CA

University of California, Irvine Student Health Center Peer Review
Irvine, CA

University of California, Irvine, Student Recreation Center Peer Review
Irvine, CA

University of California, Irvine, UCI Medical Center Replacement Hospital Peer Review
Irvine, CA

University of California, Irvine, UCI Medical Center Building 53 Seismic Upgrade
Irvine, CA

University of California, Irvine, UNEX Classroom Building Peer Review
Irvine, CA

University of California, Irvine, Natural Sciences Unit 1 & 2 Peer Review
Irvine, CA

University of California, Los Angeles, Stein Eye Institute Addition
Los Angeles, CA

University of California, Riverside, Humanities Building Theater Modernization
Riverside, CA

University of California, Riverside, Lothian Residence Hall Seismic Assessment and Upgrades
Riverside, CA

University of California, Riverside, Olmstead Theater Ceiling Repair
Riverside, CA

University of California San Diego East Campus Medical Office Building
San Diego, CA

University of California, San Diego, Price Student Center Renovation
La Jolla, CA

University of San Diego, Structural and Materials Engineering Building
San Diego, CA

University of San Diego Third College Academic Unit One
San Diego, CA

University of California, Santa Barbara, Bioengineering Laboratory and Vivarium
Santa Barbara, CA

University of Southern California

University Gateway at University of Southern California, Student Towers, LEED Certified (Design Build)*
Los Angeles, CA

University of Southern California Harris Hall Ceiling Support
Los Angeles, CA

University of Southern California Law Library
Los Angeles, CA

Other/Private

Biola University, Student Union
La Mirada, CA

Biola University, Theme Sculpture
La Mirada, CA

Biola University, Student Housing
La Mirada, CA

California Institute of Technology, Dabney Hall of Humanities Building
Pasadena, CA

California Institute of Technology, Guggenheim Laboratory
Pasadena, CA

California Institute of Technology, Satellite Plant and Holliston Parking Structure
Pasadena, CA

California Institute of Technology, Moore Engineering Laboratory
Pasadena, CA

California Institute of Technology, Drescher Graduate School of Business
Pasadena, CA

Capital Unity Center
Sacramento, CA

Claremont McKenna College Kravis Center
Claremont, CA

Heald College Stockton
Stockton, CA

Hope International University
Irvine, CA

Occidental College Science Building
Los Angeles, CA

Occidental College Student Housing
Los Angeles, CA

Oregon Health Sciences University, Risk Study
Portland, OR

Pepperdine University, Music Building
Malibu, CA

Pepperdine University, Graduate Student Housing
Malibu, CA

Pepperdine University, Seaver Student Housing
Malibu, CA

Biola University, Student Union
La Mirada, CA

Biola University, Theme Sculpture
La Mirada, CA

Biola University, Student Housing
La Mirada, CA

California Institute of Technology, Dabney Hall of Humanities Building
Pasadena, CA

California Institute of Technology, Guggenheim Laboratory
Pasadena, CA

California Institute of Technology, Satellite Plant and Holliston Parking Structure
Pasadena, CA

California Institute of Technology, Moore Engineering Laboratory
Pasadena, CA

California Institute of Technology, Drescher Graduate School of Business
Pasadena, CA

Capital Unity Center
Sacramento, CA

Claremont McKenna College Kravis Center

Claremont, CA

Heald College Stockton
Stockton, CA

Hope International University
Irvine, CA

Occidental College Science Building
Los Angeles, CA

Occidental College Student Housing
Los Angeles, CA

Oregon Health Sciences University, Risk Study
Portland, OR

Pepperdine University, Music Building
Malibu, CA

Pepperdine University, Graduate Student Housing
Malibu, CA

Pepperdine University, Seaver Student Housing
Malibu, CA

Portland State University, Boiler Evaluation & Anchorage
Portland, OR

University of Redlands Boiler Room
Redlands, CA

Western University of Health Science, Necropsy Building
Pomona, CA

Westmont College, Science Building
Santa Barbara, CA

Whittier College, Wardman Library
Whittier, CA



miyamotointernational.com

© 2018 Miyamoto International, Inc.

Sacramento | San Francisco | San Jose | Los Angeles | Orange County | San Diego | Reno | Washington, D.C.
Mexico | Costa Rica | Colombia | Haiti | Liberia | Italy | Turkey | India | Nepal | Japan | New Zealand