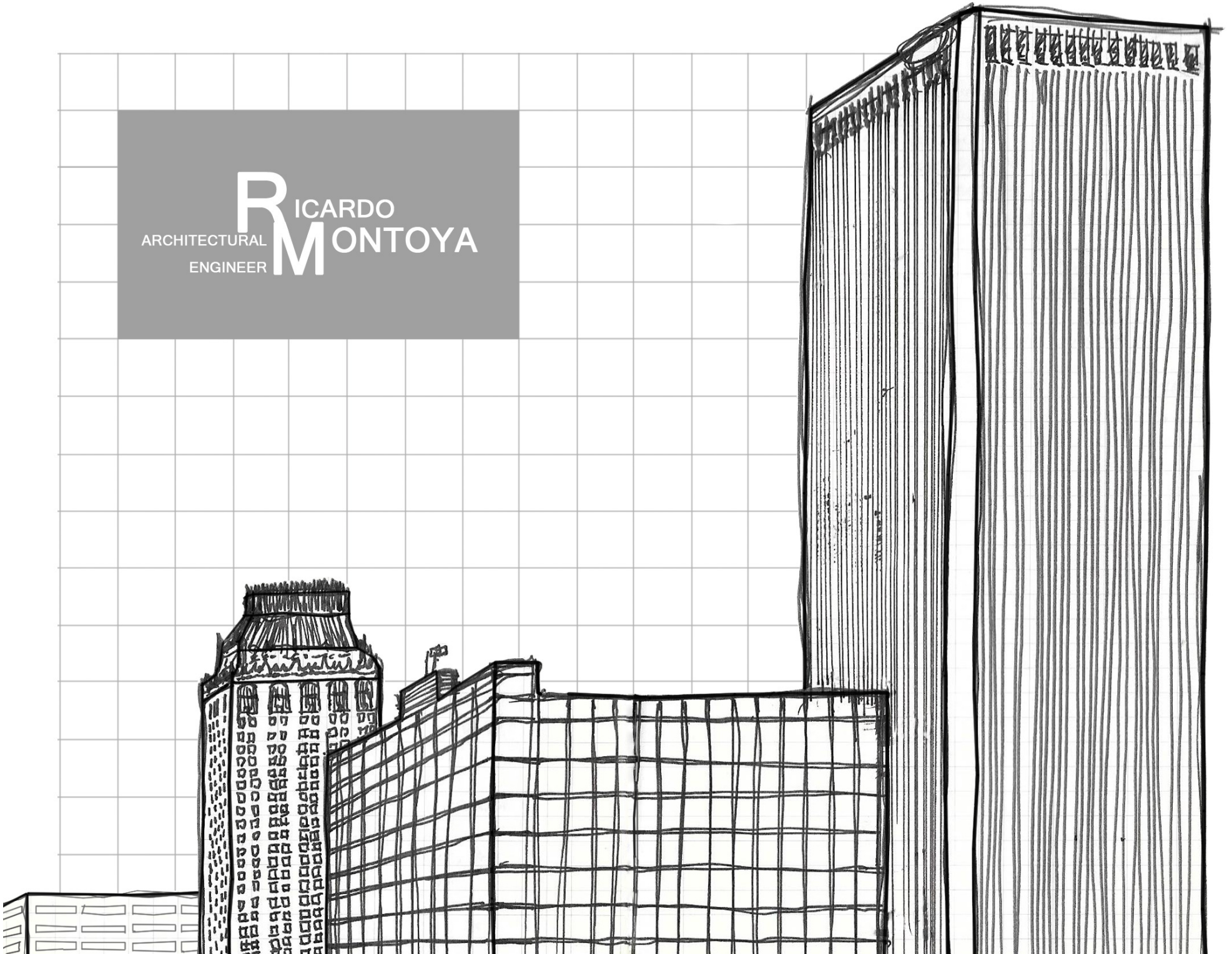


RICARDO
ARCHITECTURAL
ENGINEER
M MONTTOYA





RICARDO
ARCHITECTURAL **M**ONTROYA
ENGINEER

4617 S. Quincy Ave
Tulsa, Oklahoma 74105
405.301.5976
ricardo.montoya@okstate.edu



Ricardo Montoya, EIT, ICC-SI

I am a young member of the Wallace structural design team in Tulsa, OK. I have been an intern at Wallace Engineering since June 2012. Under the guidance of Brian Walker and Andrew Kern, and working with Steve Jacob, Steve Montee, Bryan Sudbrink, and Adam James, my design team members, I have been a project engineer for a wide variety of building types including healthcare, educational, commercial, retail, industrial, municipal, and renovation projects. Additionally, I am a field supervisor for several special inspection projects. I am keen in integrating structural design and detailing with Revit 3d modeling. I am committed to earning my professional engineering license. Outside of engineering, I have volunteered with the Engineering Alliance for the Arts program and I have been a lead designer for a Lego Architecture Series featuring novelty microscale models of buildings in Oklahoma.

Education

Oklahoma State University
Stillwater, Oklahoma
Bachelor of Architectural Engineering
Structures 2007 – 2012

Programs

National Hispanic Scholar
2007-2012
National Hispanic Recognition Program

Louis Stokes Alliances for Minority
Participation
2009-2012
Research Scholars Program

OSU Honors College
2007-2009
Honors Academic Program

Activities and Societies

Architectural Engineering Institute
2008-2012
OSU Chapter Member
(2010 VP/2011 President)

Chi Epsilon Honors Society
2009-2012
OSU Chapter Member

Engineers Without Borders
2012
OSU Chapter Member

Awards

AISC/W&W Steel for Oklahoma State
University
October 2011
AISC Scholarship Program

Tesone Scholarship
August 2011
Continuing Education in Architectural
Engineering Award

Experience

Wallace Engineering, Tulsa, OK
Engineering Intern, June 2012 – Present
Provide structural analysis and design for
new and existing construction. Coordinate
and perform special inspections for new and
existing construction.
-One Wallace Committee
-Glee Club

Oklahoma State University, Stillwater, OK
Teaching Assistant - School of Architecture,
August 2011 – May 2012
Assisted Academic Instructor in a Professional
Level Structures Course
-2011 Fall Semester: Steel I
-2012 Spring Semester: Timbers I

Oklahoma State University, Stillwater, OK
Academic Tutor - Learning and Student
Success Opportunity Center,
January 2009 – May 2012
Assisted Students in General Math and
Science Courses

Drexel University, Philadelphia, PA
Student Researcher - Engineering Cities REU,
June 2011 – August 2011
Conducted Research through a National Sci-
ence Foundation Funded Research Program

Organizations

Oklahoma State Engineering Association
Young Members - Eastern Chapter
Chair, June 2015 - Present
Create, Direct and Manage Young Member
Group Programs with assistance of Group
Coordinators.

Engineering Alliance for the Arts, Tulsa, OK
Co-Lead Mentor, January 2015 – May 2015
Introduced a pilot program into the Science
and Math curriculum at Tulsa Union High
School in collaboration with the Tulsa Regional
STEM Alliance.

Volunteer

Church of Saint Mary
Youth Ministry Mentor, August 2014 – Present
Plan and lead weekly small group discussions
with Tulsa Middle School Youth

Certifications

Engineer Intern
Oklahoma State Board of Licensure for
Professional Engineers & Land Surveyors,
License No. 14906
Starting June 2012

Structural Steel and Bolting Special Inspector
International Code Council,
License No. 8186452
December 2012 – December 2015

Structural Masonry Special Inspector
International Code Council,
License No. 8186452
December 2013 – December 2016

Revit Architecture 2014 Certified Professional
Autodesk, License No. 00333035
Starting December 2013

Concrete Field Testing Technician—Grade I
American Concrete Institute,
License No. 01307879
December 2014 – November 2019

Reinforced Concrete Special Inspector
International Code Council,
License No. 81816452
April 2015 – April 2017

Skills

RISA-3D, Revit, AutoCad, Excel, Structural
Analysis, Steel Design, Concrete Design,
Masonry Design, Timber Design, Cold-Formed
Steel Design

Interests

Architectural Design, Structural Engineering
Design, Building Information Management,
3D Rendering/Visualization, Graphic Design,
Environmental Stainability, Urban Design,
Urban Agriculture, Architectural Theory,
Environmental Psychology, Marketing,
Business Development, Monitoring, Travel,
Architectural Photography, Lego Architecture

Inside:

Community Outreach
Leisure
Tulsa Paper Company Building
Green Arch Development
TCU Marion-Clark Halls
OSU Library Storage Facility
OSU University Commons
Gilcrease Helmerich Center
TCU Worth Hills Phase III Dining
Universal Ford Building
TU Hardesty Hall
SEG Office Building
TPS Edison High School Lecture Halls
Hampton Inn and Suites
GSI Building
Bishop Kelley Phase 2

outreach

Engineering Alliance for the Arts



This program offered me the opportunity to serve a group of 11th graders and teach them about bridge structures. The model bridge load test provided a tangible example of applied physics. As a mentor, I found it most rewarding when the students became excited to learn. I cannot stress how this investment for our future engineering generation is most important.

KSQ Classroom Makeover



The KSQ design team really shined here. They had done their research, developed a concept, ran through a few design iterations and set a game plan for the classroom makeover at Kindle Whittier. I was inspired by their efforts and I joined the team when work was underway. This project was great example of stewardship from our A&E community. It is always refreshing to see others respond to the call to share their time, talent and treasures.

Oklahoma Structural Engineering Association



I have attended OSEA conferences since my 3rd year in college. Now as a professional, I am motivated take a leadership role. As chair for the Eastern Young Members Group, my team of coordinators and I have produced letters, contacts lists, budgets, flyers, by-laws and a Linked-In page. We have hosted a successful social event kickoff and planned future events for the upcoming year.

Glee Club



The Wallace Glee Club is not a band of engineers who think they can sing. It is a group that is committed to keeping employees engaged through a number of office events. Our Cinco de Mayo fiesta was a hit this year.

AIA Eastern Oklahoma



Being involved with AIA allows me to reconnect with architecture studio classmates and build personal relationships with my architecture colleagues. From Happy Hours to CHiT | CHaT events, I never miss the chance to exercise my creativity with my peers. Their passion for design motivates me to do my best.

Edge Youth Group



I have to admit, I had reservations when I was asked to mentor middle school students. But to my surprise, my students ask many challenging questions. Sometimes it can be hard to relate to that age, but I find a lot of grace through tested patience. Ultimately my students, just like anyone else, are searching for authenticity. I pray that, through example, I can guide them in a positive direction.

Travel



Having family in Peru has made me a frequent international traveler. I have visited about once every 2-3 years for the last 25 years. Sometimes it takes me a good week to get back into the Spanish speaking rhythm, but when I do, I can even start to dream in Spanish! I have a lot of respect for other cultures and architecture and I am always looking for new design ideas when I travel.

Music



Music has always held a special place in my heart. I was classically trained on the piano from 5th-8th grade. Then I shifted my focus to jazz and funk in high school. From the keyboard, I picked up the bass guitar, and by late senior year had begun learning the acoustic guitar. My high school years were my most prolific years of original composition. However, I have had my share of covers in pseudo-bands: Complex Design, The Helicopters, The Satalite Lazorz. I still enjoy a good jam session.

Sports



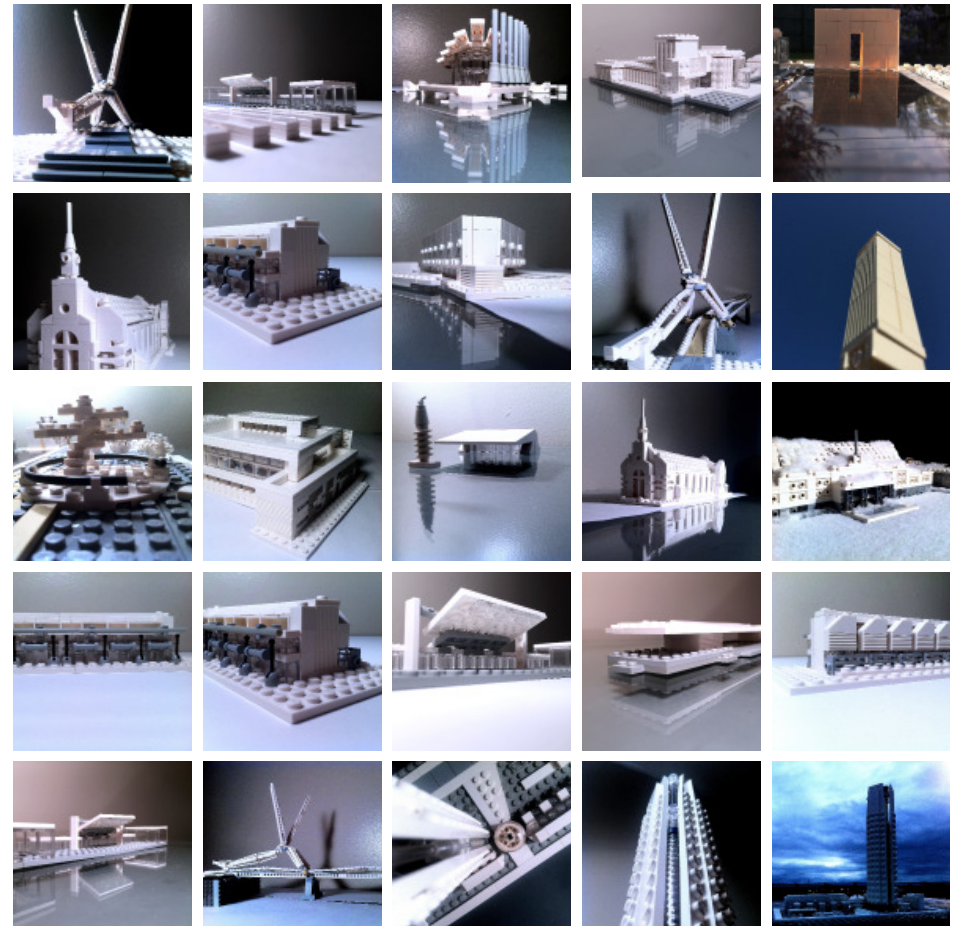
I grew up playing soccer, but my favorite sports are sand volleyball and ultimate frisbee. I find these sports are not as overly competitive. I am also starting to rediscover my love for cross-country/long distance running. It requires a lot more discipline and personal training.

Lego Architecture

Katy surprised me with the Lego Studio set and I quickly rekindle my love of designing with Lego bricks. Since then, I have modeled a number of buildings and I have established my own design process. I study the building contours and key features to understand the essence of the building's design, much like reverse engineering. I find the build a very enjoyable activity that a lot of others have taken interest in. We will see where these Lego models will lead.



leisure

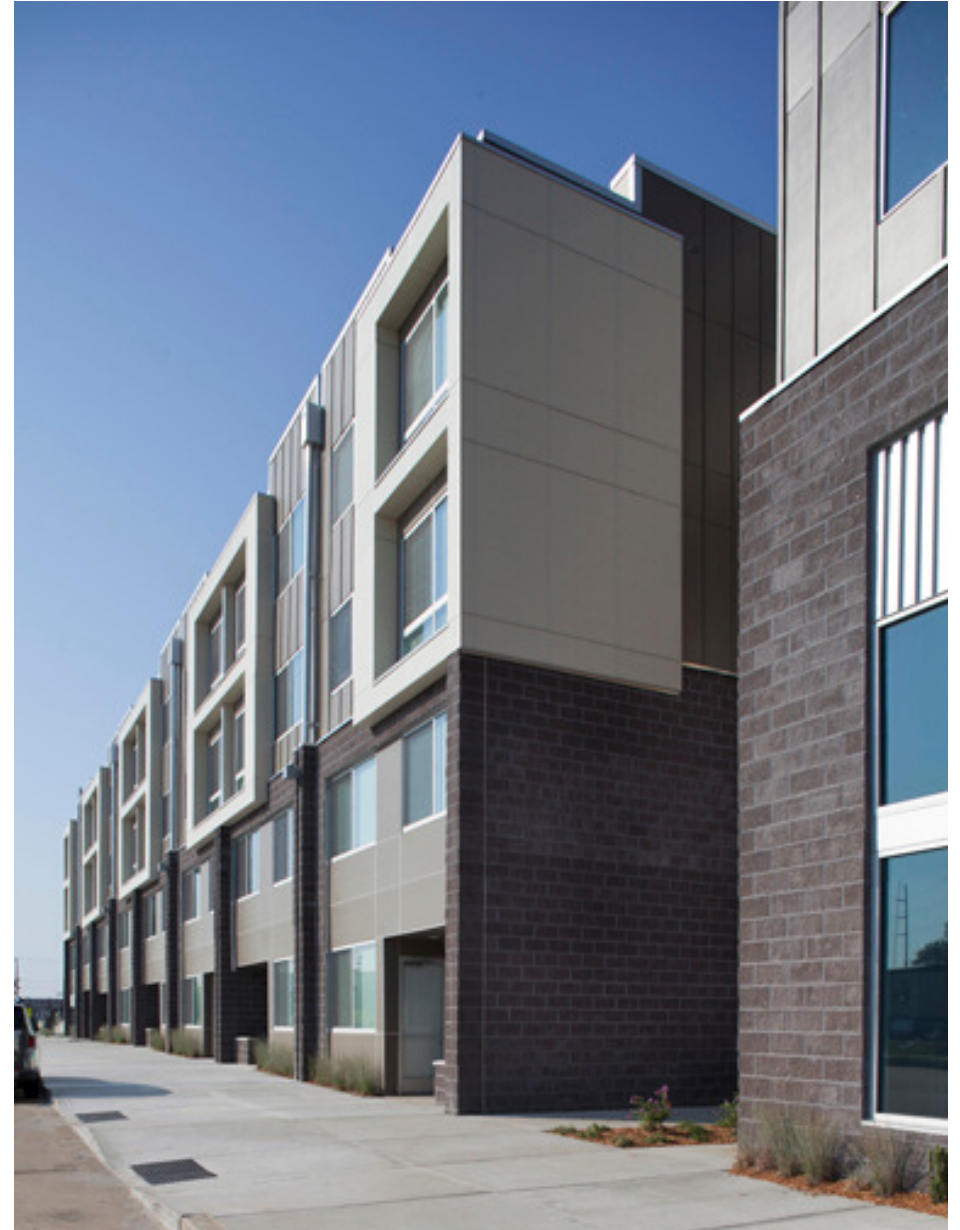




Tulsa Paper Company Building

location	Tulsa, Oklahoma
architect	KKT Architects
contractor	Manhattan Construction
task	Special Inspections
awards	AIA Eastern OK Merit Award

This project was under construction right at the heart of the historic Brady Arts District in 2012. The Tulsa Paper Company Building was originally built in 1922. Today, the building is home to the Philbrook Downtown, classroom space for the Gilcrease Museum, and an exhibit space for the University of Tulsa. This is one of the very first projects I worked on as part of a special inspection team. We reviewed concrete and steel construction.



GreenArch Development

location	Tulsa, Oklahoma
architect	Freese Architecture
contractor	Manhattan Construction
task	Special Inspections

GreenArch is a mixed use development located in the historic Greenwood District in Tulsa with apartments retail and commercial space. The apartments building consists of masonry and wood construction. The commercial building is wood construction on a composite concrete deck podium level. This is another project I worked on as with a special inspection team early in my career. We reviewed concrete and wood construction.



TCU Marion-Clark Halls

location	Fort Worth, Texas
architect	KSQ Architects
contractor	The Beck Group
task	Design / Revit Modeling / Drafting
awards	LEED Gold



I worked on the CA portion of Phase I and CD and CA portions Phase II of the student residence halls for TCU Worth Hills Village. Phase I utilized a post-tensioned floor system with a concrete frame system. Phase II utilized a two way slab with mild steel. I contributed structural steel framing design and design for miscellaneous site elements. These projects achieved LEED Gold certifications with use of high quality building materials and sustainable construction methods.



OSU Library Storage Facility

location	Stillwater, Oklahoma
architect	Studio Architecture
contractor	CMS Willowbrook
task	Design/ Revit Modeling / Drafting

Also known as the Library Auxiliary Building, this facility houses thousands of books. The building features a superflat slab with stringent criteria on long term deflection as to accommodate an automated storage and retrieval system. The precast panels and foundations were designed for future additions of the facility. I was part of the design team from CD through CA.



OSU University Commons

location	Stillwater, Oklahoma
architect	KSQ Architects
contractor	Flintco Construction
task	Design / Revit Modeling / Drafting

This University Commons includes (3) 5-story traditional style residence halls that will house 964 students. The residence halls feature a main lounge, study and kitchen. The structural system uses a two-way post-tensioned gravity system and a concrete shear wall system for lateral resistance. I contributed structural steel framing design and design of miscellaneous site elements. These residence halls provide the newest housing on campus as of the 2015 fall semester.

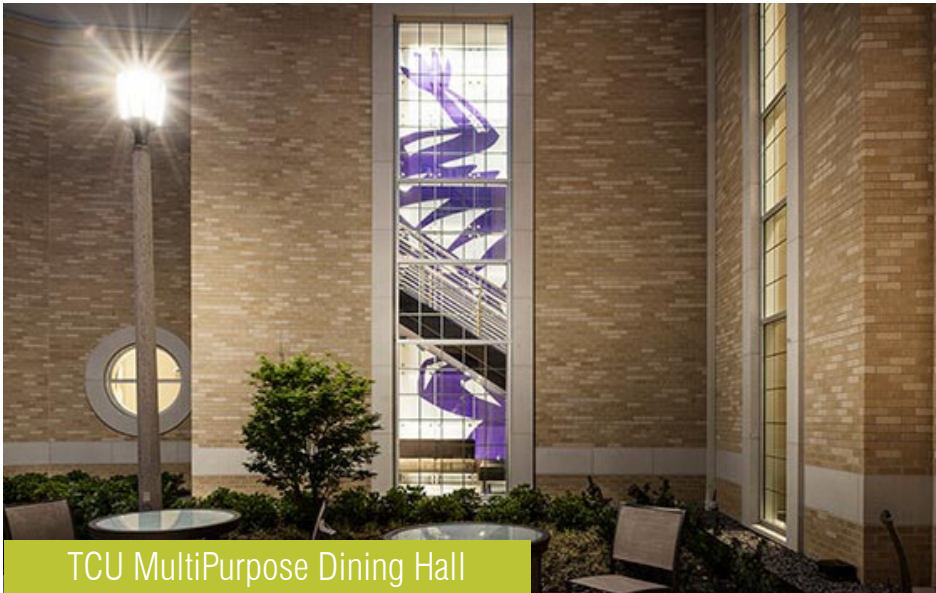


Gilcrease Helmerich Center



location	Tulsa, Oklahoma
architect	Hastings + Chivetta
contractor	Key Construction
task	Special Inspections

The Helmerich Research Center supports the Gilcrease Museum, which houses the largest collection of Western American art in the United States. Special attention was given in the archival space, which houses delicate and rare documents. This space is environmentally and visually controlled, and the building was designed to provide the best fire protection and for maximum control of humidity and temperature. I worked with a team of special inspectors reviewing steel and concrete construction.



TCU MultiPurpose Dining Hall

location	Fort Worth Texas
architect	KSQ Architects
contractor	The Beck Group
task	Design / Revit Modeling / Drafting
Awards	LEED Gold

Phase III of the The Worth Hills Village creates an anchor for the housing community and supplements the amenities offered to students on the Main Campus. The grand dining area features a high, classical barrel-vault ceiling that offers an open and light space. A balcony from the second floor features a unique cantilever system with a lot of heavy steel sections. I was part of the CD and CA phases of this project.



Universal Ford Building

location	Tulsa, Oklahoma
architect	Lilly Architects
contractor	Manhattan Construction
task	Design / Revit Modeling/ Drafting

This project features adaptive reuse and preservation of the historic, 45,000 square foot car showroom and repair center built in 1917. This building will contain apartments, commercial space, and restaurant and brewpub. The facility will also house 36 Degrees North, a basecamp for Tulsa's startup community. I was part of the CD and CA phases of this project. Expected completion is set for January 2016.





TU Hardesty Hall

location	Tulsa, Oklahoma
architect	Hastings + Chivetta
contractor	Key Construction
task	Special Inspections



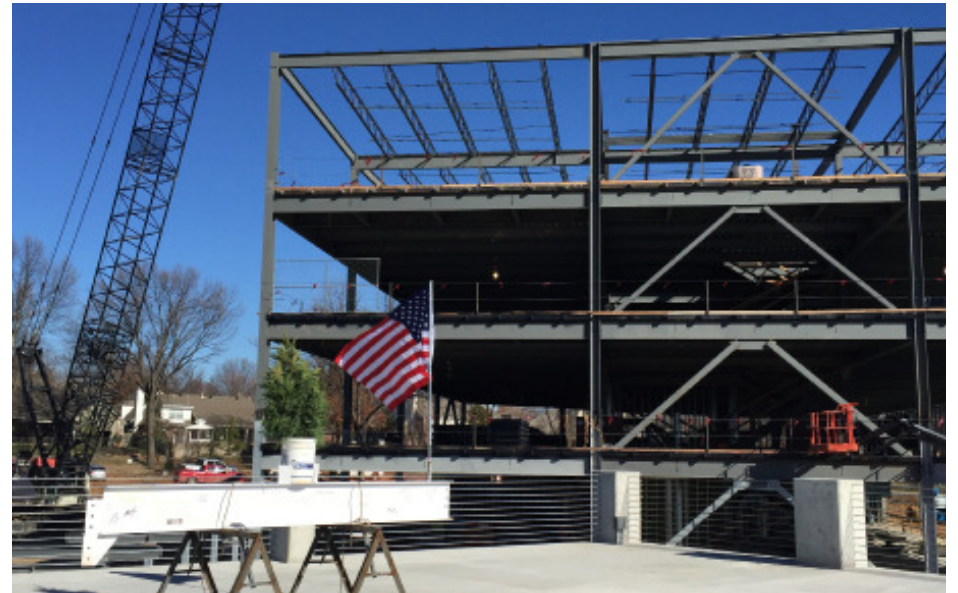
This new residence hall has a Gothic expression consistent with the historic campus context. The building is organized by two three-story wings that are connected at the third level. North residential wing accommodates suite style rooms. The south wing includes eight classrooms, a computer lab, campus orientation offices and the Multicultural Center. I was part of the special inspection team for this project. Our scope included steel, concrete, and fireproofing special inspections.



SEG Office Building

location	Tulsa, Oklahoma
architect	GH2 Architects
contractor	Manhattan Construction
task	Special Inspection

This new four-story Class A office building will be the new headquarters for the Society of Exploration Geophysicists. The new building features a black glass curtain wall exterior drawing inspiration from the older six-story building located on site. An extremely efficient composite steel beam floor system provides for column free leasable space between the building core and exterior. I was part of the inspection team for the office building and the adjacent (3) level post-tensioned garage.





TPS Edison - Lecture Halls

location	Tulsa, Oklahoma
architect	KSQ Architects
contractor	Crossland Construction
task	Design / Revit Modeling / Drafting

Built in 1954, Thomas Edison Preparatory High School is part of the choice-based Tulsa Public School district and emphasizes college-level course work. This project features two classroom/lecture halls that double as ICC 500 storm shelters. The building also showcases a giant 40 foot cantilever steel frame system with a stringent deflection criteria. It was part of the CD and CA phases of this project which is expected to be completed in 2016.



GSI Ambulatory Surgery Center

location	Tulsa Oklahoma
architect	Selser Schaefer
contractor	CMS Williwbrook
task	Special Inspection



This building will be the new headquarters for Gastroenterology Specialists Incorporated featuring office space and clinic for their practice. Architecturally, the building facade consists of a unique paneling system and a glass curtain wall system. I am the Field Supervisor for this special inspection project which includes steel and concrete construction. Expected completion is predicted for late 2015



Hampton Inn and Suites

location	Tulsa, Oklahoma
architect	GH2 Architects
contractor	Ross Group
task	Design / Revit Modeling / Drafting

The Hampton Inn is one of several major hospitality projects that are slated for construction in Downtown Tulsa. This project has been through a few design iterations and has landed on using a Diversakore superstructure and drilled pier foundation system. Our revised scope of work for foundation design tackles a challenging site with vaults and large grade changes. I was part of the SD, DD, and CD phases of this project and construction is to begin late 2015.



Bishop Kelley Sports Complex

location	Tulsa, Oklahoma
architect	Selser Schaefer Architects
contractor	CMS Willowbrook
task	Special Inspections

Phase II of the Bishop Kelley Athletic Facility renovation and expansion includes a larger locker rooms, a weight training facility, indoor batting and pitching cages, a larger concessions area, coaches' offices, and a conference room. The challenges on this site include working around existing metal building frames. I am the Field Supervisor for this special inspection project which includes steel, concrete, and masonry construction.