NEVADA STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS

Interim Board Meeting
February 8, 2024
Virtual

1. Meeting Call to Order

2.Pledge of Allegiance

3. Public Comment

4. NRS 625
Waiver Requests

5. Non-Appearance Applications for Initial Licensure

NEVADA STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS EDUCATION CREDIT GUIDELINES

DEGREE	YEARS CREDIT (MAX)	YEARS ACCEPTABLE EXPERIENCE REQUIRED
Undergraduate (BS): ABET/EAC accredited	4	4
Undergraduate (BS): ABET/ETAC accredited	4	4
Undergraduate (BS Engineering): Washington Accord	4	4
Undergraduate (BS Engineering): Non-ABET/non-Washington Accord (must meet NCEES education standard, any deficiencies to be considered by board)	4	4
Undergraduate (BS Construction Management): ABET accredited	4	4
Undergraduate (BS Construction Management): Not ABET accredited but institution has ABET accredited engineering programs	4	4
Engineering Masters: US Masters with non-US BS and/or non-Washington Accord in Engineering	6	2
Engineering Doctorate: US Doctorate with non-ABET/non-Washington Accord/foreign BS+MS in Engineering	6	2

NEVADA STATE BOARD OF
PROFESSIONAL LAND SURVEYORS
EDUCATION CREDIT GUIDELINES

DEGREE	YEARS CREDIT (MAX)	YEARS ACCEPTABLE EXPERIENCE REQUIRED
Undergraduate (BS Surveying): ABET/EAC accredited	4	4
Undergraduate (BS Surveying): ABET/ETAC accredited	4	4
Undergraduate (BS Surveying): ABET/ANSAC accredited	4	4
Undergraduate (BS Surveying): non-accredited	4	4
Surveying Associates Degree + another associates degree	4	4
Surveying Masters Degree	2	2
Engineering degree with a minimum 30 surveying credits hours (must include a PLSS course)	4	4
Non-Engineering Bachelor of Science degree with a minimum 30 surveying credit hours (must include a PLSS course)	4	4
Bachelor of Arts degree with a minimum 30 surveying credits hours (must include a PLSS course)	4	4
Bachelor of Arts degree + Surveying Associates Degree	4	4
Military Specialty in Surveying + Surveying Associates Degree	4	4

Civil

JEFFREY BICKETT (13-147-94)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
01/29/2024

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
5 years, 5 months

Total Engineering Experience
5 years, 5 months

Experience under licensed engineer
4 years, 9 months

Other Experience
5 years, 11 months

Disciplinary Action
None reported

ABET EAC

FE EXAM

PE EXAM

4+

EDUCATION

Bachelors in Civil Engineering (EAC)
University of Nevada, Reno
August 2002–May 2013

Masters in Civil and Environmental Engineering
University of Nevada, Reno
August 2016–August 2023

EXAMS

Fundamentals of Engineering (FE)
Nevada
April 2011

Principles and Practice of Engineering (PE)
Civil
Nevada
November 2023

LICENSES

Additional Licenses
None

JEFFREY BICKETT (13-147-94)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Dreamer's Coffee Shop
Nevada (United States)
Barista
June 2004—December 2005

Verified by

Experience Summary
Part-Time
Other: 9 months (50%)
Experience under licensed surveyor: None

DESCRIPTION

JEFFREY BICKETT (13-147-94)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

University of Nevada Reno - Campus Escort Service
Nevada (United States)
Driver/Dispatcher
October 2005—May 2006

Verified by

Experience Summary
Part-Time
Other: 2 months (25%)
Experience under licensed surveyor: None

DESCRIPTION

JEFFREY BICKETT (13-147-94)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Summit Engineering
Nevada (United States)
Engineering Intern
May 2006—October 2007

Verified by
Jeffrey Bickett (Self)

Experience Summary
Full-Time
Other: (0%)
Experience under licensed surveyor: None

TASKS

AutocCad designs for Sub-Divisions in the Reno/Sparks area

REPRESENTATIVE PROJECTS

Temp

JEFFREY BICKETT (13-147-94)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

University of Nevada Reno - Campus Escort Service
Nevada (United States)
Driver/Dispatcher
August 2010—May 2012

Verified by

Experience Summary
Part-Time
Other: 6 months (25%)
Experience under licensed surveyor: None

DESCRIPTION

JEFFREY BICKETT (13-147-94)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Avis/Budget Car Rental
Nevada (United States)
Lead Service Agent
May 2012—December 2016

Verified by

Experience Summary
Full-Time
Other: 4 years, 7 months
Experience under licensed surveyor: None

DESCRIPTION

WORK EXPERIENCE

University of Nevada, Reno
Nevada (United States)
Graduate Research Assistant
August 2017—July 2019

Verified by
Zong Tian
zongt@unr.edu

Experience Summary
Part-Time
Engineering: 1 year (50%)
Post EAC degree: 1 year (50%)
Experience under licensed engineer: 1 year

TASKS

While pursuing my masters degree in Transportation Engineering, I worked for the Center for Center for Advanced Transportation Education and Research (CATER) with the Washoe County Regional Transporation Commision (RTC Washoe) in coordination with the City of Reno and Sparks, and Carson City to develop signal timing plans using a new program Trans-Sync without using typical turning movement counts. Current signal timing parameters and plans were extracted from the Active Traffic Management System (ATMS) servers and incorporated into Trans-Sync. Travel runs were performed to record current conditions and note field conditions. Split Histories were extracted from ATMS and used to develop new signal timing plans in addition to updated measurements of road geometry. Discuss recommended signal timing with agencies and implement in ATMS being on location during activation for trouble shooting. Once traffic has adjusted to new traffic patterns, travel runs are collected again with travel times compared from before and after. The process is iterated if any issues are still notes or travel times worsen.

Collect field data on pedestrian facility measurements such as push button to front face of curb, and back face of curb to opposite back face of curb.

Collected turning movement counts as requested by agencies and perform Signal Warrant Analysis per MUTCD.

Collect field data on signal related complaints and provide feedback and solutions to local agencies.

REPRESENTATIVE PROJECTS

RTC Washoe Signal Timing 5 – Primary location the Reno/Sparks region of Washoe County. January 2017- December 2019.

RTC Washoe, as part of an effort to optimize mobility, identified major arterials in the Reno/Sparks area to update and optimize the signal timing. RTC Washoe contracted CATER to provide signal timing recommendations and record before and after travel runs.

For each corridor, I performed the following tasks:
I extracted the existing signal timing from ATMS and input the values into the Trans-Sync software for each ‘time of day’ plan.
I performed a field visit to each signal, noting unique features, typical conditions, Trans-Sync values, and measured the pedestrian facility parameters. I recorded, via Trans-Sync, multiple travel runs per direction, per ‘time of day’ plan, to determine baseline travel time and queueing conditions. I developed new timing plans based on pedestrian requirements, historic data, and field observations. The new timing plans were presented to RTC Washoe and the maintaining city agency with adjustments made as necessary. I verified implementation of new timing and recorded ‘after’ travel runs. I adjusted and reimplemented timing as necessary based on observed deficiencies or queuing. I compiled the travel time and queuing data in addition to the recordings for RTC Washoe.

I utilized the procedure above on the following corridors:
Keystone Ave - 7th St to 1st St
West McCarran Blvd - West 7th St to Plumb Ln
South McCarran Blvd - Greensboro Dr to Greg St
Sun Valley Blvd - El Rancho Dr to West 7th St
Kietzke Ln - East 2nd St to Peckham
Sparks Blvd - East Greg St to Los Altos Pkwy
Vista Blvd - I-80 Interchange to Los Altos Pkwy
Downtown Reno Grid Network - West Liberty St to I-80 Interchange along Sierra St, Virginia St, and Center St.

WORK EXPERIENCE

Nevada Department of Transportation
Nevada (United States)
Senior Operations Analyst
August 2019—January 2024

Verified by
Samuel Ahiamadi
sahiamadi@dot.nv.gov

Experience Summary
Full-Time
Engineering: 4 years, 5 months
Post EAC degree: 4 years, 5 months
Experience under licensed engineer: 3 years, 9 months

TASKS

Worked as an "Operations Analyst" for the first two years with the Nevada Department of Transport (NDOT) prior to current position, sole provider of lane reduction requirements for all NDOT projects that include Traffic Management Plans. Involved extraction of hourly volumes and heavy vehicle percentage from NDOT detectors, determining maximum number of lane closures allowed that could still accommodate an acceptable level of delay based on the impacted roadway type, existing number of lanes, and project requirements.

Currently assigned to between 30-40% of major NDOT projects on Interstate and State routes for evaluating traffic operations requirements, developing scoping, coordinating with contracted consultant design services for evaluation and review of Traffic Operations models. Approve methodology, assumptions and review all macrosimulation and/or microsimulation models calibration.

Project Manager for Intersection Control Evaluations (ICE). First evaluating either safety concerns or signal warrants as needed. Once triggered, NDOT and a consultant develop two to four alternatives for evaluation. All pertinent data, such as turning movement counts, crash history, Right-of-Way, and topography are collected and used to determine a recommended horizon year design based on cost benefit analysis.

Assist NDOT District staff with training and review of major Traffic Impact Studies for permitting. Evaluation of assumptions and compliance with the latest editions of ITE Trip Generation Manual, Highway Capacity Manual, and NDOT requirements with conflict resolution meetings as needed.

Project Manager for On Call Services. Coordinate, scope, and review updates to NDOT Documents to ensure compliance with state of practice and FHWA guidance. Recent update to the NDOT Microsimulation Modeling Guidelines to one all-purpose document including major FHWA changes in methodology.

REPRESENTATIVE PROJECTS

I-15 NV/CA Stateline Project - Primary location I-15 South of Las Vegas entering into California. November 2021 - March 2022. When traveling from Nevada to California, just prior to the border the number of lanes drops from three to two. Due to recurrent congestion on I-15 South leaving Las Vegas on typical weekends and the Media attention to approximately 25 mile or longer queues on holidays, the Governors of Nevada and California called for exploration of the cause and potential solutions.

I developed and calibrated the entirely of the project area, from the California Agricultural Station to the Sloan Interchange, in Vissim microsimulation software. Once the baseline model was calibrated, I developed multiple alternates in Vissim based on the recommended improvement by NDOT and CALTRANS. I extracted the travel time, volume, and queuing data from the models and compiled results for reports.

I-515 Downtown Access Project - Primary location on I-515 East of the I-15/I-515 Interchange.
December 2019 - Ongoing. Due to increasing delay though the project area NDOT is looking into various alternatives to improve traffic conditions to acceptable level of service.

I reviewed the Existing Conditions Vissim microsimulation model, providing comments on calibration parameters, prior to my review of the Final Calibration Memo. I reviewed and replicated the results for the models and reports on speeds, queues, volumes for future No-Build and multiple Build alternate conditions. Recent FHWA comments lead based on NEPA findings lead to the introduction of three new alternatives for which I have reviewed the results reports.

COOPER CARROWAY (20-903-54)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
02/01/2024

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
4 years

Total Engineering Experience
4 years

Experience under licensed engineer
4 years

Disciplinary Action
None reported

EDUCATION

Bachelors in Civil Engineering (EAC)
Colorado School of Mines
August 2016–December 2019

EXAMS

Fundamentals of Engineering (FE)
Nevada
October 2020

Principles and Practice of Engineering (PE)
Civil
Nevada
May 2023

LICENSES

Additional Licenses
None

COOPER CARROWAY (20-903-54)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Westwood
Nevada (United States)
Graduate Engineer
February 2020—February 2024

Verified by
Janegela Burge
Janegela.Burge@westwoodps.com

Experience Summary
Full-Time
Engineering: 4 years
Post EAC degree: 4 years
Experience under licensed engineer: 4 years

TASKS

I worked on a residential land development team that focused primarily on hillside overlay projects. Under the direction of a licensed engineer, I prepared site plans. I designed roadways, retaining wall layouts, and dry/wet utility networks. I made recommendations for drainage and earthworks solutions. I trained engineering interns. I coordinated with reviewers, clients, external firms, surveyors, and field crews. I performed field inspections.

REPRESENTATIVE PROJECTS

Parcel C-2A-1 Phases 1 & 2 at Rainbow Canyon
9 March, 2020 – 10 September, 2022

I served as a designer for a residential subdivision in a hillside overlay. I designed horizontal and vertical roadway geometry, taking care to maintain driver comfort while making steep ascents and descents. I designed layouts for several series of rockery retaining walls, satisfying the provided structural specifications while meeting the client's request that these layouts be aesthetically pleasing and visually interesting. During the project manager's extended leave, I made all design and schedule recommendations to the client and the municipality. I performed field inspections to verify that drainage structures had been constructed per plans.

Southshore Parcel 27 Units 2, 3, & 4
30 March, 2022 - Present

I served as the lead designer for a residential subdivision that had already been partially developed, but now required a new design. I designed the water main, raw water main, sewer main, and sewer force main to reroute through the new site plan, connecting to and preserving the previously constructed on-site utilities where possible. This utility design involved tight clearances and required protection from groundwater. I completed curb and drainage channel designs throughout the project to ensure that peak flows could be conveyed over the surface without the use of storm drain. I closely coordinated the design of the project with the design firm responsible for Unit 1.

Sorrento Phases 1, 2, & 3
June 14, 2022 - Present

I served as the lead designer for a residential subdivision in a hillside overlay. I designed horizontal and vertical roadway geometry for the project. I designed the edge conditions of the site; some areas required extensive series of retaining walls, while other areas required vertical cuts into the existing ground to be obtained through blasting, with requirements for catchment areas per the soils report. I designed a storm drain system that included drop manholes, conveying public flows of up to 157 CFS.

CHRISTOPHER CARTER (16-921-19)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
01/30/2024

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
5 years, 4 months

Total Engineering Experience
6 years, 1 month

Experience under licensed engineer
6 years, 1 month

Disciplinary Action
None reported

EDUCATION

Bachelors in Architectural Engineering (EAC)
California Polytechnic State University, San Luis Obispo
September 2013–September 2018

EXAMS

Fundamentals of Engineering (FE)
California
May 2017

Principles and Practice of Engineering (PE)
Civil
California
January 2024

LICENSES

Additional Licenses
None

CHRISTOPHER CARTER (16-921-19)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

EFI Global
California (United States)
Forensic Technician
December 2017—January 2024

Verified by
Michael James O'Connor
michael.oconnor@efiglobal.com

Experience Summary
Full-Time
Engineering: 6 years, 1 month
Post EAC degree: 5 years, 4 months
Experience under licensed engineer: 6 years, 1 month

TASKS

As an engineer with EFI Global, I have been responsible for producing repair plans, details, calculations, and reports for insurance claims and reconstruction projects. Using AutoCAD, I generated architectural, structural, mechanical, and electrical plans. Additionally, I helped produce calculation packages for these projects, including designs for wood members, beam and column connections, shear walls, concrete foundations, and CMU capacity analysis. I also modified the plans and calculations to comply with plan review comments from local building departments. Furthermore, I produced reports analyzing structural failures, determining the capacity of columns, beams, foundations, and connections, and identifying the applied loads that caused the failures.

REPRESENTATIVE PROJECTS

Bemis Residence Repair Plan- Carnelian Bay, CA (2017-2017)
This project was for a residential deck that failed due to heavy snow load and age. The purpose of the project was to produce the repair plans for the damaged portion of an approximately 200 sf the heavy timber deck of a second story of a residential structure and a replacement staircase. I made recommendations on the configuration of the staircase so that it would meet the constraints of the property line and building elevation. I calculated the live and ground snow load. I calculated the loading and sized the structural members of the deck (beams, girders, and column). I produced the plans for this project with compliance to the 2016 California Building code and selected material that was in compliance with Wildland-Urban Interfaces. This project lasted approximately 8 months from start to final approval from the local building department.

Simonetti Structural Plans- Santa Rosa, CA (2018-2019)
The goal of this project was to develop structural plans for the complete rebuild of a home damaged by fire. I perform critical calculations for appropriate sizing and reinforcement of the concrete foundation. I provided recommendations for the roof and floor framing layouts. My responsibilities also included calculating and designing floor and roof structural members, their connection, shear walls, and the roof diaphragm. I collaborated with the team throughout the project, directly participation in drawing of the plans via AutoCAD. I reviewed the final plans to ensure they matched the calculations I provided. This project lasted approximately a year from start to permit being granted for the building. The plans and calculations were produced in accordance with the 2016 California Building Code as amended by the City of Santa Rosa.

Central International Fellowship Church Fire Repair- Sacramento, CA (2019-2022) Approximately 13,300 sqft church. 2019 California building code.
The scope of the project was to produce the full plans for a 13,300 sqft, multilevel Church that sustained substantial fire damage. I performed the calculations for the roofing loading, the sizing of the ceiling joists and glulam beam, and the design of the third level floor members. The roof load I calculated was then used by the lead engineer to design the custom Glulam Tudor arches in the Nave. The plans and calculations were produced in accordance with the 2019 California Building Code and California Existing building code as amended by the City of Sacramento. This project lasted just shy of three years due to complications with the contractor and building department.

LEOPOLD FALKENSAMMER (18-648-73)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
01/17/2024

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
4 years

Total Engineering Experience
4 years

Experience under licensed engineer
4 years

Disciplinary Action
None reported

EDUCATION

Bachelors in Civil Engineering (EAC)
University of Nevada, Las Vegas
August 2014–August 2018

Masters in Civil and Environmental Engineering
University of Nevada, Las Vegas
August 2018–December 2019

EXAMS

Fundamentals of Engineering (FE)
Nevada
December 2017

Principles and Practice of Engineering (PE)
Civil
Nevada
December 2023

LICENSES

Additional Licenses
None

LEOPOLD FALKENSAMMER (18-648-73)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

HDR
Nevada (United States)
Bridge Engineer in Training
January 2020—January 2024

Verified by
Troy Lee Martin
Troy.Martin@hdrinc.com

Experience Summary
Full-Time
Engineering: 4 years
Post EAC degree: 4 years
Experience under licensed engineer: 4 years

TASKS

As a Bridge Engineer in Training at HDR, I have been responsible for contributing to various aspects of bridge and retaining wall design, as well as the design of other transportation-related structures. Some of this work has been focused on originating calculations and developing computer models of structures or structural elements, and some has been checking others' work. The bridges that I have helped design have been mostly cast-in-place (CIP) concrete, while some have been precast. Many of them were post-tensioned CIP box girder bridges. I have worked on the design of many bridge components, including superstructure elements such as deck, overhang, soffit, webs, end diaphragms, expansion joints, and barrier rails. The substructure elements I have worked on include abutments, columns, and pier caps. I have helped design drilled shafts, tieback walls, and soil nail walls in collaboration with geotechnical engineers. Other structures I have designed are lighting and signal pole foundations, as well as non-standard drainage structures. I have also prepared quantities and detailing on several projects.

REPRESENTATIVE PROJECTS

The first project I worked on was the Centennial Bowl located at the interchange of US95 and CC215 in Las Vegas, NV. I contributed to the independent design checks of the bridges designed by NDOT. Most of this work involved performing detailed structural analysis using software such as Microsoft Excel, Mathcad, Larsa, and SAP2000 to verify NDOT's bridge design. I also designed several components of one post-tensioned box girder bridge as part of this project, including the deck, overhang, soffit, webs, end diaphragms, expansion joints, lighting pedestals, and columns. Lastly, I checked the geometry of the designed bridge and the independently design checked bridges, and I prepared quantities for the post-tensioned box girder bridge.

The next major project I worked on was the I-215 Regional Trail Pedestrian Bridge over Pecos Road in Las Vegas, NV. I designed much of the two pedestrian approach ramps (30-foot cast-in-place concrete slabs) and bridge deck superstructure with a 210-foot span, while the prefabricated steel truss structure on the 210-foot span of the pedestrian bridge was designed by a prefabricated bridge manufacturer. I also worked on the final design of the columns, pier caps, and drilled shafts. Later, I helped respond to construction shop drawings for this project.

Following the Pecos Road pedestrian bridge, I worked on another pedestrian bridge project that I worked on the preliminary and final design of. This was the Craig Road near Upper Las Vegas Wash Pedestrian Bridge to connect the CNLV Lower Wash Trail across Craig Road. The preliminary design consisted of evaluating alternative designs, calculating geometry, estimating cost, and starting the design of the pier caps and cast-in-place slabs. The final pedestrian crossing consisted of a prefabricated steel truss 186-foot span, 16 approach cast-in-place concrete spans, 2 concrete approach ramps, and 2 sets of access stairs. The total span of the pedestrian bridge was 806-foot, and I designed most of the bridge components, including the cast-in-place slab spans, lighting pedestals, ramps, columns, pier caps, stairs, and drilled shafts. The prefabricated steel truss structure was designed by a prefabricated bridge manufacturer. I also evaluated the impact of the structure on the nearby existing concrete channel and prepared quantities as part of the final design.

A project I have been working on for almost four years is the I-515 Flamingo Interchange Retaining Wall and Soundwall Reconstruction project in Las Vegas, NV. During the preliminary design, I evaluated the geometry and estimated the cost of the soundwall reconstruction. With the assistance of geotechnical engineers, I have contributed to the design of the tieback and soil nail walls on this project. I also started the design of the new soundwalls, and I evaluated the existing bridges to have soundwalls constructed on top of the existing barrier rails.

I have also worked on multiple projects involving the design of streetlight foundations and other transportation-related structures. One of those projects was the Charleston Boulevard Medical District Pedestrian Upgrades, where I analyzed the footing design of proposed streetlights and evaluated the stability of the light poles. I also performed structural analysis of non-standard drop inlets and checked the design of retaining walls on this project. Another project that I worked on was Lake Mead Losee-Simmons Street

for City of Las Vegas, which I designed a custom drop inlet and storm drain outlet headwall as a part of. I checked the retaining wall design for this project too. One more project was Kelso Dunes and Marks for City of Henderson in Las Vegas, NV. As part of this project, I designed a pedestrian signal pole footing using a strut-and-tie model in SAP2000 to evaluate the overstrength moment and the tie reinforcing required. I also evaluated the stability of the signal pole.

ERIC RADEMACHER (20-172-73)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
08/31/2023

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
4 years, 1 month

Total Engineering Experience
4 years, 1 month

Experience under licensed engineer
4 years, 1 month

Other Experience
17 years

Disciplinary Action
None reported

EDUCATION

Non-degree
Glendale Community College
August 2015–May 2017

Bachelors in Civil Engineering (EAC)
University of Nevada, Reno
August 2017–December 2019

EXAMS

Fundamentals of Engineering (FE)
Nevada
October 2019

Principles and Practice of Engineering (PE)
Civil
Nevada
October 2022

LICENSES

Additional Licenses
None

ERIC RADEMACHER (20-172-73)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Rademacher Masonry, Inc.
Colorado (United States)
Vice President
June 1998—February 2010

Verified by

Experience Summary
Full-Time
Other: 11 years, 8 months
Experience under licensed surveyor: None

DESCRIPTION

ERIC RADEMACHER (20-172-73)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Northstar California
California (United States)
Advanced Ski Patrol
March 2010—July 2015

Verified by

Experience Summary
Part-Time
Other: 2 years, 8 months (50%)
Experience under licensed surveyor: None

DESCRIPTION

ERIC RADEMACHER (20-172-73)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Tahoe Donner Association (The Lodge Restaurant)
California (United States)
Waiter
March 2010—July 2015

Verified by

Experience Summary
Part-Time
Other: 2 years, 8 months (50%)
Experience under licensed surveyor:
None

DESCRIPTION

WORK EXPERIENCE

Linchpin Structural Engineering, Inc.
Nevada (United States)
Associate Engineer
December 2019—January 2024

Verified by
Douglas Gadow
doug@linchpinse.com

Experience Summary
Full-Time
Engineering: 4 years, 1 month
Post EAC degree: 4 years, 1 month
Experience under licensed engineer: 4 years, 1 month

TASKS

I am responsible for the structural design of vertical and lateral framing systems and their foundation elements, using a variety of materials, including wood, steel, concrete, reinforced masonry, and structural glass. I calculate design loads in accordance with ASCE 7 and the IBC/CBC building codes, and local jurisdictions. I design and detail elements and connections of structural systems to resist gravity, seismic, and wind forces using code requirements of the NDS, AISC, ACI, and TMS. I review geotechnical reports for project-specific soil design criteria. Many of the structures I design are located in a high snow load region, requiring a special understanding of the region and tendencies snow may have on how it loads a roof. Similarly, many of the structures I design are in a high seismic zone, requiring code knowledge of when special provisions are required. I perform calculations in various ways from hand calculations to using structural design software. For complex design, I use 3d structural analysis software. I am responsible for knowing and interpreting the building code and referenced standards. I use engineering judgment to determine when to maximize material efficiency and when a more conservative design is appropriate. I write project-specific material specifications. I communicate with architects and clients to ensure the structural design meets their needs and design intent, and see projects from preliminary design to permit and construction. During construction, I review submittals such as concrete mix designs, steel shop drawings, and truss design calculations for conformance to the structural drawings and specifications. I also respond to RFI's, providing answers and solutions to varying field conditions. I perform site visits to observe existing structures and write reports presenting findings and recommendations. I mentor junior engineers and provide them guidance based on my experiences.

REPRESENTATIVE PROJECTS

Stairs at Martis Camp Lot 564, Structural Glass Stair Stringers; Truckee, CA
2019-2020
I researched principles for the design of structural glass, referencing design guides and academic papers. I developed spreadsheets and performed calculations for the design of the glass stair stringer, both in-plane bending and out-of-plane bending. The glass stringer supports steel stair treads, and itself is supported by steel brackets. I designed the connection between the steel elements and the structural glass.

Sutter's Fort, Seismic Evaluation and Upgrade of Historic Adobe Structure; Sacramento, CA
2020-2022
I performed site visits to observe existing conditions of the historic unreinforced adobe masonry structure. I analyzed the existing walls for out-of-plane wall slenderness and in-plane shear capacity. Following the analysis of the existing building, I wrote a report providing recommendations of seismic improvements to the client. I calculated and detailed the top of wall anchorage and designed the load path to the new, modern plywood roof diaphragms.

Euer Valley Restoration Project, Bridge and Boardwalk Spanning Creek and Wetland; Truckee, CA
2020-2023
I designed and calculated the bridge and boardwalk. The bridge is a three-span steel bridge supported by helical piles, connected via concrete grade beams. I designed the bridge to meet freeboard requirements above the 100-year flood plain. The boardwalk is steel and wood framed and is supported by helical piles. In early phases of the project, I provided recommendations to the client for the bridge superstructure and span limitations given the high snow loads and poor soil bearing at the site.

Central Plant, Utility Building Housing MEP for J Resort (Sands) Casino; Reno, NV
2021-2022
I calculated, designed, and detailed the CMU and steel building. The building's upper level is steel framed and supports heavy cooling towers, the lateral system at the upper level is a steel moment frame. The lower level is CMU to support the steel framing above, the CMU walls are special masonry shearwalls which are required for high seismic regions. I calculated the seismic

anchorage for the mechanical equipment inside the building. During construction, I reviewed contractor submittals. I also answered RFI's and provided solutions to conditions that arose in the field.

Liberty Dogs Veterans Campus; Reno, NV
2022-2024
The project is a campus of CMU and wood framed buildings. I designed and performed calculations on multiple CMU buildings on the campus. Elements of design include: CMU slender and shear walls, steel roof framing, foundations and grade beams, roof diaphragms, sub diaphragms, out-of-plane wall anchorage and in-plane shear transfer. I supported and mentored junior engineers on the design of subsequent CMU buildings on the campus. During construction (currently in progress), I reviewed submittals including mix designs, foundation steel reinforcing shop drawings and truss design calculations.

Coushatta Casino Hotel; Kinder, LA
2023-2024
The project is a 9-story post-tensioned concrete building with deep augered concrete pile foundations. Working on a team within my firm, I was responsible for the design of the deep foundations. To design the deep foundations, I followed requirements provided in the Geotechnical Report and coordinated loads/reactions at the column and shearwall bases from the structure above. Using a combination of design software and judgment, I designed the concrete pile caps and concrete piles to resist the vertical and lateral building design loads.

Land Surveyor

JEFF PRINZ (20-366-44)

All work experience reviewed by two licensed professionals

DISCIPLINE: LAND SURVEYING

GENERAL

Applying To
Nevada

Application Type
Initial - PS

Application Date
01/18/2024

Citizenship
United States

SUMMARY

Total Surveying Experience
5 years, 4 months

Experience under licensed surveyor
5 years, 4 months

Disciplinary Action
None reported

FS EXAM

PS EXAM

4+

EDUCATION

Bachelors in Music
California State University, East Bay
September 1993–May 2020

Bachelors in Land Surveying/Geomatics
Great Basin College
September 2019–August 2023

EXAMS

Fundamentals of Surveying (FS)
Nevada
September 2021

Principles and Practice of Surveying (PS)
Nevada
November 2023

LICENSES

Additional Licenses
None

JEFF PRINZ (20-366-44)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

F3 & Associates, Inc.
Nevada (United States)
Survey Technician
September 2018—January 2024

Verified by
Gene James Feickert
gfeickert@f3-inc.com

Experience Summary
Full-Time
Surveying: 5 years, 4 months
Experience under licensed surveyor: 5 years, 4 months

TASKS

Tasks and Duties

• Developed Quality Control process to work with varied software.
• Provide oversight for Quality Control team
• Survey calculations for field crews
• Process Topographic Surveys
• Calculate Quantities
• Create Exhibits for Submittals to US Army Corps of Engineers
• Creation of Cross Sections
• Perform Record Research
• Boundary – Calculate Final Maps and provide search corners
• Assist with boundary solutions
• Draft Records of Survey, Parcel Maps, ALTAs, Certificates of Amendments, and Corner Records
• Traverse Adjustments
• GPS Network Adjustments
• Construction Staking Survey / Topographic Survey / Drone Flights / Boundary Surveys

REPRESENTATIVE PROJECTS

Representative Projects

Isabella Lake Dam – Dam Safety Modification Project, Kern County, CA
2018-2024

• Gather, organize, and Quality Control daily field data
• Process terrestrial scan data and integrate with conventional survey data
• Review plan sets
• Prepare Digital Terrain Model surfaces
• Calculate for staking and layout
• Quality Control calculations for staking and layout
• Prepare Pre-Construction survey exhibits
• Create cross sections to be used for monthly quantities
• Calculate monthly quantities and prepare monthly exhibits for submission to US Army Corp of Engineers
• Regular interaction with client

US 50 State Highway, Sacramento, CA
2021-2024

• Gather, organize, and Quality Control daily field data
• Review plan sets
• Calculate for staking and layout
• Quality Control calculations for staking and layout
• Prepare Digital Terrain Model surfaces
• Create cross sections showing cross slopes and spot elevations for lanes
• Regular interaction with client

ALTA – Corporate Blvd, Reno, NV Project
2023

- Research record documents
- Gather and organize Schedule B documents
- Draft maps and easements
- Visit site and assist field crew
- Process field data and create topographic survey exhibit
- Create exhibit for review by supervising Licensed Surveyor

Record of Survey – Bell St, Gardnerville, NV Project
2022

- Research record documents
- Gather and organize record documents
- Draft maps and provide search corners
- Process field data
- Analyze and assist with boundary solutions
- Process field data and create topographic survey exhibit
- Create exhibit for review by supervising Licensed Survey

Structural

TAYE OJO (17-707-04)

All work experience reviewed by two licensed professionals

DISCIPLINE: STRUCTURAL

GENERAL

Applying To
Nevada

Application Type
Comity - PE

Application Date
01/17/2024

Citizenship
Nigeria

SUMMARY

Engineering Experience after EAC degree

Total Engineering Experience
6 years, 7 months

Experience under licensed engineer
2 years, 5 months

Disciplinary Action
None reported

FE EXAM
PE EXAM
SE16 EXAM
NCEES EDU
4+

EDUCATION

Meets NCEES Engineering Education Standard

Bachelors in Civil Engineering
Obafemi Awolowo University
September 2007–March 2013

Masters in Civil Engineering
University of North Carolina - Charlotte
August 2016–May 2018

Doctorate in Civil Engineering
Virginia Polytechnic Institute and State University
August 2018–August 2021

NOTE: First discipline specific structural license.

EXAMS

Fundamentals of Engineering (FE)
North Carolina
July 2018

Principles and Practice of Engineering (PE)
Civil
North Carolina
April 2022

NCEES 16HR Structural (SE)
Nevada
October 2023

LICENSES

Initial License
North Carolina
Issued: July 2022
Expires: December 2024

Additional Licenses
TX

WORK EXPERIENCE

Civil Sphere
Lagos (Nigeria)
Engineering Co-op (Student Industrial Work Experience Scheme)
June 2011—December 2011

Verified by
Lanre Aiyegoro
lanreaiyegoro@gmail.com

Experience Summary
Full-Time
Engineering: 6 months
Experience under licensed engineer: None

TASKS

- Created and used excel spread sheets to calculate diaphragm deflection, calculate the forces on anchors, slab reinforcement.

- Calculated Load combinations based on IBC

- Calculated shear, axial and moments demand of structural members using moment distribution method.

- Designed structural members using STAADPro, Prokon and AutoCAD

REPRESENTATIVE PROJECTS

1- Analysis and Design of a concrete slab for a Two-storey concrete structure at Gerald street,LA. I analysed and designed the slab of this project using excel spreadsheet. I performed the structural design of the elevated slab. I performed the design using the strength design limit state. I prepared calculation reports that was reviewed by my supervisor.

2- Analysis and Design of Roof Trusses of One-story warehouse in Cole Street, LA . The warehouse consisted of a system of howe trusses. I carried out the analysis by considering dead loads, live loads, wind loads for the proposed structure. I analyzed this by using method of session and method of joint and also validated my results using 3D model of the truss that I developed in STAADPro. I carried out the designs as per provisions of relevant IBC. I prepared the calculation reports that was reviewed by my supervisor.

WORK EXPERIENCE

Zillion Grids Associate Ltd
Lagos (Nigeria)
Graduate Structural Engineer
December 2012—August 2016

Verified by
AKINOLA AKINWALE OMOTOSO
akinomot@gmail.com

Experience Summary
Full-Time
Engineering: 3 years, 8 months
Experience under licensed engineer: None

TASKS

•Created analysis models and interpreted results for 2D and 3D structural frames

• Calculated both gravity and lateral loads based on appropriate building codes

• Performed design calculations of building elements and well-defined structural systems using proprietary manufacturer software and design codes

•Developed design red-lines through sketches, electronic models, diagrams, and other visual formats for designers and drafters

•Reviewed shop drawings and submittals, responded to RFIs and prepared site observation reports

•Prepared and revised documentation in various project phases including site plans, floor plans, diagrams, and details

• Recommended and specified engineered systems for project and verified compliance with applicable codes and engineering standards/practices

•Coordinated with other engineering disciplines and professionals to ensure compatibility with the design intent

•Performed field work related to review of construction related activities as required

•Prepared technical studies and reports

•Performed peer-review of structural calculations

•Prepared written response to technical QA/QC session of structural calculations and design

•Performed structural evaluation of existing buildings

REPRESENTATIVE PROJECTS

In this position, I was involved in numerous projects but a few highlighting different categories of projects are listed below:

1- Three-story concrete moment frame hostel building in Lagos, Nigeria. I designed the concrete frame structure including the slab for gravity loads and wind loads. The design included multiple slab and moment resisting frame. I performed the analysis and structural design of the whole concrete building using company proprietary software called ‘Civilsoft structural design software’. I performed the design using the strength design limit state. I prepared calculation reports that went through technical QA/QC process. I also prepared red-lines for construction drawings, for all plans and details of each structural element.

2- One-story warehouse with roof trusses in Ikeja, Nigeria. The warehouse consisted of steel columns and a system of howe trusses. I carried out the analysis by considering dead loads, live loads, wind loads and for the proposed structure. I developed 3D model, performed the analysis and design of the truss, and other structural elements with software program, STAADPro. I carried out the designs as per provisions of relevant IBC. I prepared the calculation reports and also provided response for QA/QC questions.

3- Four-story dual system steel frame office building in Lagos, Nigeria. The analysis and design of the building included moment frames in one direction and brace frames in the other orthogonal direction as well as gravity columns. The design was performed

using AISC design manual. I developed the 3D-model of the structure in STAADPro design and analysis software. I analyzed and designed each element of the structure in STAADPro. I prepared calculation report for QA/QC session. I developed red-lines and sketched for designers.

4- Three-story concrete moment frame hostel building in Lagos, Nigeria. I performed the analysis of the structure based on the finite element analysis method using SAP 2000. I designed the concrete sections using S-Frame based on analysis results extracted from SAP 2000. I was responsible for structural modelling, analysis and design and supervision of the production of construction drawings with the collaboration of MEP engineers.

5- Nugacourt estate development in Lagos, Nigeria. This project consisted of several 1-story concrete residential buildings sitting on a Raft foundation. I was responsible for the design and analysis of four of the buildings in this project. I performed the analysis and designed both the foundation and frame structure in Ram concept and STAADPro respectively.

6- Four-story steel observatory tower analysis for Nigeria Port Authority, Nigeria. This is a 60 ft high steel tower that included steel columns, beams and steel deck. I performed the analysis for gravity load as well as wind load in STAADPro. I also prepared calculation reports for QA/QC review.

WORK EXPERIENCE

Jacobs Engineering Group
Texas (United States)
Structural Engineer Associate
August 2021—January 2024

Verified by
Larry Pereira Faria
larry.faria@jacobs.com

Experience Summary
Full-Time
Engineering: 2 years, 5 months
Experience under licensed engineer: 2 years, 5 months

TASKS

Manager: Larry Faria
Company: Jacobs Engineering Group
Job role: Structural Engineer Associate (Full time)
Employment date: August 2021 – Current
Duration:
Tasks and Duties

• Create analysis models and interprete results for 2D and 3D structural frames

• Calculate both gravity and lateral loads based on appropriate building codes

• Perform design calculations of building elements and well-defined structural systems using proprietary manufacturer software and design codes

•Develop design red lines through sketches, electronic models, diagrams, and other visual formats for designers and drafters

•Review shop drawings and submittals, responded to RFIs and prepared site observation reports

•Prepare and revise documentation in various project phases including site plans, floor plans, diagrams, and details

•Coordinate with other engineering disciplines and professionals to ensure compatibility with the design intent

•Perform field work related to review of construction related activities as required

•Prepare technical studies and reports

•Perform peer-review of structural calculations

•Prepare written response to technical QA/QC session of structural calculations and design

•Perform structural evaluation of existing building

REPRESENTATIVE PROJECTS

POSITION - STRUCTURAL ENGINEER E.I.T

In this position, I was involved in the project listed below:
Due to nature of the NDA signed, I will just give a general idea of the projects:

1 – Semi Conductor Manufacturing Facility in United States (FAB)
Semi-conductor manufacturing facility (Fab), United States. This project involves the design of two Fab buildings, namely Module 1 and Module 2. Each building has 5 stories above ground level and a sub-utility tunnel below ground level. Each Fab is approximately 840 ft x 738 ft x 130ft high. My responsibility for each module is highlighted below;

1) Fab Building Mod 1

I analyzed and designed the utility level mat foundation using Ram Concept. I performed the analysis based on ACI 318 strength design and ASCE 7 for dead, live and seismic loads. I prepared calculation reports that went through technical QA/QC process. I also created red-line markups in Bluebeam for construction drawings, for all plans and section details in this scope. I reviewed shop drawings as well as other submittals. I prepared response to RFIs.

2) Fab Building Mod 2

I analyzed and designed the sub-utility tunnel retaining walls using Ram element and SpWall design software packages. I performed the analysis based on ACI 318 strength design, IBC and ASCE 7 for dead, live, earth pressure and seismic loads. I checked P-delta effect. I also analyzed and designed the utility level mat foundation using Ram Concept. I performed the analysis based on criteria set forth by ACI 318 and ASCE 7. I performed the design and analysis for dead, live and seismic loads.
For these designs, I prepared calculation reports that went through technical QA/QC process. I also created red-line markups in Bluebeam for construction drawings, for all plans and section details in this scope. I reviewed shop drawings as well as other submittals. I prepared response to RFIs.

POSITION -STRUCTURAL ENGINEER ASSOCIATE

In this position, I was involved in numerous projects, but a few highlighting different categories of projects are listed below:

2 - Semi Conductor Manufacturing Facility in Israel (FAB). This project is similar to the first project described above but in a different country. This project involves the design of two FAB buildings for the same client in project 1. Each building has 5 stories above ground level and a sub-utility tunnel below ground level non-building structures similar to buildings and non-structural components for different piping, cable trays, mechanical ducts support systems like hanging steel moment frames, steel braced frames, trapeze, Unistrut frames, mechanical ducts steel towers to mentions a few. I performed these designs for various applicable loads such as dead, live, thermal, wind and seismic in accordance with IBC, PIP STC01015, "ASCE Wind Load Design for Petrochemical and Other Industrial Facilities" and ASCE7 design codes. I performed all the designs for ASD and LRFD load combinations where applicable. I performed serviceability checks (drift and deflection) in accordance with ASCE 7 guidelines. I also created red-line markups in Bluebeam for construction drawings, for all plans and section details in this scope.

3- Rocket Manufacturing Campus in Utah, United State. I worked on the tramway building on the campus, which is a PEMB one - story building. Specifically, I estimated the column reactions from these frames by modelling the frames in STAAD Pro and using these reactions to design the slab-On-grade, isolated and combined footings, column anchorage, door jamb frame and I also developed details for all these designs. I also designed the slab-on-grade for all the buildings on the campus for different dead and industrial vehicular/wheel loads. I designed the column anchorage incorporating shear lugs and seismic anchors for maximum forces that can be delivered to the system based on material strength.

4- (2) one story metal building in Saudi Arabia. This project consists of several independent buildings. I worked on the metal treatment and medium caliber buildings. Both buildings are PEMB structures with a mezzanine steel floor. I sized the steel members for wind loads using ASCE 7 directional procedure, seismic loads using the seismic definition in STAAD Pro, thermal loads as well as other gravity loads. I also designed all the isolated and combined footings using STAAD Foundation.

ROBERT PIRIAK (15-404-74)

All work experience reviewed by two licensed professionals

DISCIPLINE: STRUCTURAL

GENERAL

Applying To
Nevada

Application Type
Comity - PE

Application Date
07/05/2023

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree

Total Engineering Experience
17 years, 8 months

Experience under licensed engineer
17 years, 8 months

Other Experience
6 years, 10 months

Disciplinary Action
None reported

PE EXAM
FE EXAM
SE16 EXAM
4+

EDUCATION

Non-degree
University of Akron
September 1994–May 1995

Bachelors in Civil and Construction Engineering Technology (ETAC)
Youngstown State University
September 1995–December 2003

NOTE: First discipline specific structural license

EXAMS

Principles and Practice of Engineering (PE)
Civil
Ohio
October 2014

Fundamentals of Engineering (FE)
Ohio
April 2004

Principles and Practice of Engineering (PE)
Montana
October 2009

NCEES 16HR Structural (SE)
Nevada
October 2023

LICENSES

Initial License
Montana
Issued: October 2009
Expires: June 2024

Initial License
Ohio
Issued: December 2014
Expires: December 2025

Additional Licenses
FL PE, PA, WA

WORK EXPERIENCE

Engineering Services & Consultants
Ohio (United States)
Engineering Technician
July 1999—September 1999

Verified by

Experience Summary
Full-Time
Other: 2 months
Experience under licensed surveyor: None

DESCRIPTION

ROBERT PIRIAK (15-404-74)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

National Refractories and Minerals
Ohio (United States)
Drafter
September 1999—September 2002

Verified by

Experience Summary
Full-Time
Other: 3 years
Experience under licensed surveyor: None

DESCRIPTION

WORK EXPERIENCE

Steelcon, Inc.
Ohio (United States)
General Manager
September 2002—July 2004

Verified by

Experience Summary
Full-Time
Other: 1 year, 10 months
Experience under licensed surveyor: None

DESCRIPTION

ROBERT PIRIAK (15-404-74)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Maronda, Inc.
Pennsylvania (United States)
Wall/Floor Panel Designer
July 2004—February 2005

Verified by

Experience Summary
Full-Time
Other: 7 months
Experience under licensed surveyor: None

DESCRIPTION

ROBERT PIRIAK (15-404-74)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Resco Products
Pennsylvania (United States)
CAD Specialist
February 2005—May 2006

Verified by

Experience Summary
Full-Time
Other: 1 year, 3 months
Experience under licensed surveyor: None

DESCRIPTION

WORK EXPERIENCE

Thorson Baker + Associates
Ohio (United States)
Principal
May 2006—January 2024

Verified by
Don Joseph Schehl
DSchehl@thorsonbaker.com

Experience Summary
Full-Time
Engineering: 17 years, 8 months
Experience under licensed engineer: 17 years, 8 months

TASKS

I was originally hired on as a design engineer, performing tasks and taking on small projects of my own. As I worked my way up to the position of principal, I have held titles of project engineer, project manager, senior project manager, and associate. I have worked as a structural engineer in building design from conceptual stage to producing construction documents to construction administration. I have been involved in all aspects of the structural design of the projects I have worked on, including decision making, selection of structural systems, preliminary schematic design, building code review, structural analysis using software and hand calculations, creating hand sketches used by drafters to produce drawings, overseeing the production of construction documents, writing specifications, reviewing shop drawings, answering RFI's, and performing construction site observations. I have also been actively involved in my company's standard protocols and QA/QC including typical details, general notes, specifications, project checklists, design criteria, back-checking projects, and other QA/QC procedures.

REPRESENTATIVE PROJECTS

Restaurant Depot – Las Vegas, NV
2006-2007
Designed structure for new 1-story big box retail facility; steel bar joist roof with concrete tilt-wall panels and spread footings in high seismic zone.

Cleveland Metropolitan School District, Segment 3 – Cleveland, OH
2006-2007
Designed structure for four new K-8 school buildings; masonry bearing structures with steel bar joist floors and roofs and spread footing foundations; my duties included design from start to finish of foundations, reinforced masonry walls, and floor and roof structure, and construction administration including shop drawing review, answering RFI’s, and site observations.

Cleveland Metropolitan School District, Segment 4 – Cleveland, OH
2007-2008
Designed structure for four new K-8 school buildings; masonry bearing structures with steel bar joist floors and roofs and spread footing foundations; my duties included design from start to finish of foundations, reinforced masonry walls, and floor and roof structure, as well as construction administration including shop drawing review, answering RFI’s, and site observations.

Cloverleaf School District, New Elementary School – Lodi, OH
2009-2010
Designed structure for new 2-story elementary school building; masonry bearing structures with steel bar joist floors and roof and spread footing foundations; my duties included design from start to finish of foundations, reinforced masonry walls, and floor and roof structure, as well as construction administration including shop drawing review, answering RFI’s, and site observations

Mercer Commons Parking Garage – Cincinnati, OH
2011-2012
Designed structure for new 4½-story parking garage; reinforced concrete structure with post-tensioned beams/slabs and auger-cast pile foundations.

Cleveland State University, Center for Innovation in Health Professions – Cleveland, OH
2013-2014
Managed designed structure for new 3-story with basement classroom building; steel-framed structure with spread footings, and concrete basement walls; project featured architecturally-exposed structural steel.

Lake Forest College, Johnson Science Center – Lake Forest, IL

2015-2016
Managed/designed structure for 4-story with basement addition and renovation to existing science building; new steel-framed structure with spread footing foundations.

Canopy by Hilton – Columbus, OH
2016-2017
Managed/designed structure for new 13-story hotel building; reinforced concrete structure with post-tensioned slabs and auger-cast pile foundations.

Summa Health System West Tower – Akron, OH
2016-2017
Managed/designed structure for new 7-story with basement hospital building; conventionally reinforced cast-in-place concrete structure with combination of drilled pier deep foundations and spread footings with concrete basement walls.

Twin Valley Behavioral Healthcare Hospital Replacement – Columbus, OH
2018-2020
Managed/designed structure for new 2-story hospital facility; steel-framed structure with spread footing foundations.

Warner Theatre – Erie, PA
2018-2020
Managed/designed structure for renovation and addition to existing theater, including new stage with basement, floor, loading bridges, gridiron, and roof support of rigging, etc.; new 4-story conventionally reinforced cast-in-place addition; and elevated pedestrian walkway; design included analysis of existing structure's stability during demolition of stage structure and temporary support of fire curtain.

Erie Hall, Penn State Behrend – Erie, PA
2019-2021
Managed/designed structure for new 2-story athletic center; steel-framed structure with spread footing foundations and partial basement retaining walls.

Restaurant Depot – Concord, CA
2020
Managed/overseen design for new 1-story big box retail facility; steel bar joist roof with concrete tilt-wall panels and spread footings in high seismic zone.

Franciscan University of Steubenville, Christ the Teacher Academic Building – Steubenville, OH
2020-2022
Managed/designed structure for new 3-story academic building and conference center; steel-framed structure with drilled pier deep foundations and building retaining walls at floor steps and grade differentials.

Restaurant Depot – Tulsa, OK
2022-2023
Managed/designed structure for new 1-story big box retail facility; steel bar joist roof with precast concrete walls, drilled pier deep foundations, and structural slab on grade over void forms due to expansive soils.

JOSHUA VALOV (16-508-86)

All work experience reviewed by two licensed professionals

DISCIPLINE:STRUCTURAL

GENERAL

Applying To
Nevada

Application Type
Comity - PE

Application Date
01/10/2024

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
6 years, 6 months

Total Engineering Experience
6 years, 6 months

Experience under licensed engineer
6 years, 6 months

Other Experience
1 year, 3 months

Disciplinary Action
None reported

MLE · ABET EAC · FE EXAM · PE EXAM · SE16 EXAM · 4+

EDUCATION

Bachelors in Structural Engineering (EAC)
University of California, San Diego
September 2013–June 2016

Masters in Structural Engineering
University of California, San Diego
September 2016–December 2017

NOTE: First discipline specific structural license.

EXAMS

Fundamentals of Engineering (FE)
California
April 2016

Principles and Practice of Engineering (PE)
Civil
California
October 2021

NCEES 16HR Structural (SE)
Nevada
October 2023

LICENSES

Initial License
California
Issued: September 2022
Expires: December 2024

Additional Licenses
None

WORK EXPERIENCE

The Old Spaghetti Factory
California (United States)
Server
September 2008—June 2012

Verified by

Experience Summary
Part-Time
Other: 1 year (25%)
Experience under licensed surveyor: None

DESCRIPTION

JOSHUA VALOV (16-508-86)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

King's Fish House
California (United States)
Server
June 2012—June 2013

Verified by

Experience Summary
Part-Time
Other: 3 months (25%)
Experience under licensed surveyor: None

DESCRIPTION

WORK EXPERIENCE

KPFF Consulting Engineers
California (United States)
Project Manager
June 2017—June 2023

Verified by
Cara Lynn Tashjian
cara.tashjian@kpff.com

Experience Summary
Full-Time
Engineering: 6 years
Post EAC degree: 6 years
Experience under licensed engineer: 6 years

TASKS

Project Engineer - 2017 to 2019: As a project engineer, I performed the design of buildings and non-building structures under gravity and lateral loads. Tasks and duties I performed include creating load takeoffs by determining appropriate dead loads based on architectural finishes and structural assemblies and appropriate live loads from occupancy and use of space, and designing gravity systems of beams, columns, and foundations utilizing RAM structural. I also designed lateral systems including moment frames, braced frames, and shear walls utilizing ETABS by deciding appropriate drift limits, strength utilization, and stability limits. I prepared calculation packages (including creating, assembling, and exporting model results), responded to plan review comments (including deciding which action to take, making revisions to calculations and drawings, and justifying with relevant adopted code provisions, commentary, or technical reports), and performed construction administration duties to review submittals and respond to RFIs to ensure conformance with contract drawings and engineering intent.

Project Manager - 2019 to 2023: In addition to Project Engineer duties, I supervised engineers' calculations and designs by providing corrections that meet the building code’s intent, and suggesting more efficient designs such as bolts in lieu of welds. I prepared drawing, inspection, and specification deliverables including the curation of applicable general notes and typical details necessary for construction, determining the code required inspections based on material requirements, and making revisions to project specifications for methods of construction, assembly, and fabrication that complies with the code and meets the owner’s and structural engineer of record (SEOR’s) intended performance of the building. I reviewed budgeting (project fee and labor costs), prepared project proposals including writing the relevant project scope and estimating a competitive fee, and coordinated with clients and contractors on designs. I also performed site visits to review construction conformance.

REPRESENTATIVE PROJECTS

Hoag Hospital Expansion – Irvine, CA. Project manager from 2021 – 2023
Project Duration: 2.5 Years from Schematic Design through Plan Approval of Increment 1
Structure: Multi-level 100,000+ square foot building with Sideplate Special Moment Frames, Special Concrete Shear Wall retaining walls at basement, and Ordinary Concentrically Braced Frames at elevator and stair penthouses.
Jurisdiction: HCAI
Roles: I designed the lateral system (moment frames and shear walls) by developing the 3D model in ETABS and performing response spectrum analysis on the building. This included determining the dead loads and mass at each area of the building, determining the design response spectrum values to use given the site-specific geotechnical parameters and building period, ensuring an accurate modal analysis with minimum mass participation and number of modes, verifying building stiffness to meet ASCE 7-16 drift requirements, and structure strength and stability by checking the model stresses and performing the Direct Analysis Method. I also calculated diaphragm forces to determine if the deck concrete shear strength and number of headed shear studs at moment frames and collector beams were adequate. I designed the concrete shear walls using loads from the 3D model and specified the minimum wall thickness and number of vertical and longitudinal reinforcement bars to meet strength for in-plane and out-of-plane loading. I also calculated the expected inelastic drift of the existing adjacent 1980 structure and the new building to determine the minimum required seismic separation. I reviewed the Sideplate drawings and calculations to verify code compliance. As project manager, I created the necessary loading criteria, specified which deflection limits to utilize, recommended framing sizes and locations, and stated more efficient design methods my team were to utilize. I directed the team on their design by instructing how to do specific analysis including demonstrating and performing specific calculations. During plan review, I discussed engineering behavior and design aspects to provide understanding to the reviewer and resolve disagreements. I also decided which methods to follow, and which parameters of code provisions to use in order to resolve comments. I wrote responses to comments and made drawing revisions that would satisfy the code and the comment itself.

Castle Heights Elementary School – Los Angeles, CA. Project engineer from 2018 – 2021
Project Duration: 3 Years from Design Development through Plan Approval
Structure: Two story 14,000 square foot classroom building with Sideplate Special Moment Frames and exterior metal stud façade.
Jurisdiction: DSA-LA
Role: I performed the analysis of the structure to specify required beam and column sizes to meet stress and drift limits, remove irregularities, meet ductility width-to-thickness ratios, and strong-column weak-beam requirements. I engineered and detailed the gradebeam connections including generating constructible details, and analyzing the connection between steel gradebeam and the foundation. I also designed the exterior metal studs with appropriate connections to grade, floor, and roof to allow for lateral movement.

Yorba Linda Library– Yorba Linda, CA. Project Engineer from 2017 – 2020
Project Duration: 3.5 years from Schematic Design through end of construction.
Structure: Two-story 45,000 square foot library and single-story 13,000 square foot arts center. Both buildings consist of Steel Special Concentric Braced Frames.
Jurisdiction: City of Yorba Linda
Roles: I designed the lateral force resisting system and the gravity supporting system. During schematic design, I laid out and chose the necessary or efficient column, beam, and braced frame locations. I judged the locations based on code requirements and architectural limitations such as torsional irregularity limitations, diaphragm ratios, skylights, etc. Additionally, I created ETABS and RAM models, specified software criteria (deflection/stress limits, camber, size limitations, etc.), and compiled calculations for the jurisdiction to review. Other analyses I performed include retaining walls, cable site structures to support lights, and exterior metal studs for their given veneer weights and wind loading. During construction, I responded to RFIs, and reviewed submittals.

Woodbridge High School – Irvine, CA. Project engineer from 2018 – 2020.
Project Duration: 2.5 years through construction.
Structure: Special Reinforced CMU theater building
Jurisdiction: DSA-SD
Role: I reviewed submittals for conformance (accurate sizes, locations of members etc.), responded to RFIs, and sketched CCDs (construction change documents) for approval with DSA. I also generated calculations corresponding to those CCDs and responded to DSA review comments for them.

WORK EXPERIENCE

RTM Engineering Consultants
California (United States)
Project Manager
June 2023—December 2023

Verified by
Josh Randall
josh.randall@rtmec.com

Experience Summary
Full-Time
Engineering: 6 months
Post EAC degree: 6 months
Experience under licensed engineer: 6 months

TASKS

Project Manager – 2023 to Current: As a project manager, my responsibility includes reviewing and approving all aspects of the design for structural adequacy and compliance with the code. While some designs, analysis, and calculations are performed myself, I review and make corrections to the calculations and drawings produced by project engineers to ensure a constructable, safe solution. The management of these projects includes the design of buildings, non-building structures, mechanical equipment anchorage, and site structures as well as the assessment and rehabilitation of existing buildings. The types of buildings include Steel, CMU, and wood with multiple stories, irregular shapes, irregular load paths, and other complexities. I performed analyses of various complexity including linear static, linear dynamic (modal response spectrum analysis), P-Delta, biaxial (orthogonal) loaded moment frames, as well as rigid, semirigid, and flexible diaphragm analyses, along with ASCE 7 code checks such as horizontal and vertical structural irregularities, seismic separations, and stability. In my role, I have also performed assessments of existing structures through the review of As-Built drawings and site surveys in order to determine compliance with current code, deficiencies, or other in accordance with ASCE 41 Tier 1 analyses. Using this information, I have written reports and recommendations on structural rehabilitation, alterations, and other upgrades. My role also includes coordinating design between various disciplines and construction trades and identifying conflicts, or improvements in design for additional performance or cost efficiency in construction. My other tasks include preparing construction document deliverables, responding to plan check comments and RFIs, reviewing construction submittals, and writing site observation reports.

REPRESENTATIVE PROJECTS

Los Amigos High School – Fountain Valley, CA. Project manager from 2023 – Current (2023)
Project Duration: 0.5 years (In Progress)
Structure: Thirteen school buildings of various sizes and materials including Steel Ordinary Concentrically Braced Frames, Steel Special Moment Frames, Special Reinforced CMU Walls, Light Framed Wood, and Light Framed Metal Stud walls with Flat Strap Bracing.
Jurisdiction: DSA
Role: I performed calculations including development of load criteria for dead, live, and wind cases by judging building geometry, use and occupancy, and material weight and assembly. I created 3D structural models in RAM for the design of beams and braced frames using Equivalent Lateral Force Procedure and Modal Response Spectrum Analysis. I have made decisions on which types, sizes, and locations the beams, columns, and bearing walls need to be in order to resist required loads in compliance with ASCE 7-16 and the adopted material building codes. I have also directly provided input to architects on the development of constructible details and drawings by recommending specific framing connections, framing orientations, structurally feasible sizes, and more cost-effective design solutions. I also prepared deliverables including construction documents, statements of special inspection (DSA-103 forms), and specifications in which my revisions and input were to ensure compliance with the code, and a reasonable level of structural performance of the buildings. I have also read and interpreted geotechnical reports in order to make decisions on the most suitable type of foundation.

Carpenter Elementary School – Downey, CA. Project manager from 2023 – Current (2023)
Project Duration: 0.5 years (In Progress)
Structure: Multiple kindergarten classrooms, and a combined two-story administration and classroom building consisting of Steel Special Moment Frames.
Jurisdiction: DSA
Role: I developed initial framing layouts during schematic design by specifying where columns are required, where beams and girders will be necessary to support floors and roofs, and where Moment Frames are necessary to resist lateral loads. I have also performed preliminary calculations to determine approximate beam, column, and grade beam sizes will be based on their tributary mass, and gravity loads in order to meet stress and drift limits. I suggested alternate designs that are more cost effective and would meet architectural intent, while not interrupting the design of mechanical or other disciplines. I reviewed the existing

structures to be modernized to provide input on available capacity in adding windows and made recommendations on other alterations that can be performed without triggering a full seismic rehabilitation as required by the California Administrative Code.

Cook Auditorium – Anaheim, CA. Project manager from 2023 – Current (2023)
Project Duration: 0.25 years
Structure: Concrete shear wall auditorium building constructed in 1933
Jurisdiction: DSA
Role: I performed an in-depth assessment of the structure through the review of As-Built structural drawings to determine the feasibility of rehabilitating the building to meet current code. I reviewed each portion of the building using an ASCE 41 Tier 1 analysis to identify what deficiencies the building has, and the severity of those deficiencies. I wrote an assessment report on the recommended retrofit solutions for each deficiency that would be compliant with the current code, and made suggestions on whether those solutions are economically feasible. I also made suggestions on structural modifications for access compliance (ADA requirements for ramps, stairs, bathrooms, and elevators). The elements of the building reviewed and analyzed include concrete shear walls, wall ties, steel roof trusses, and pile foundations.

ANDREW WAHR (15-370-26)

All work experience reviewed by two licensed professionals

DISCIPLINE: STRUCTURAL

GENERAL

Applying To
Nevada

Application Type
Comity - PE

Application Date
01/30/2024

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
11 years, 6 months

Total Engineering Experience
11 years, 6 months

Experience under licensed engineer
11 years, 6 months

Disciplinary Action
None reported

MLE · ABET EAC · PE EXAM · FE EXAM · SE16 EXAM · 4+

EDUCATION

Bachelors in Civil Engineering (EAC)
Purdue University, West Lafayette
August 2003–December 2008

Masters in Civil Engineering
University of Texas, Austin
January 2009–August 2010

NOTE: First discipline specific structural license.

EXAMS

Principles and Practice of Engineering (PE)
Civil
Wisconsin
October 2014

Fundamentals of Engineering (FE)
Indiana PE
October 2008

NCEES 16HR Structural (SE)
Washington
April 2023

LICENSES

Initial License
Wisconsin
Issued: January 2015
Expires: July 2024

Initial License
Washington
Issued: June 2022
Expires: June 2024

Additional Licenses
CO, TX, WA, WY

ANDREW WAHR (15-370-26)

All work experience reviewed by two licensed professionals

489 S Youngfield Cir
Lakewood, CO 80228

WORK EXPERIENCE

CH2M Hill
Wisconsin (United States)
Structural Engineer 3
October 2011—January 2019

Verified by
John G Rohner
John.Rohner@jacobs.com

Experience Summary
Full-Time
Engineering: 7 years, 3 months
Post EAC degree: 7 years, 3 months
Experience under licensed engineer: 7 years, 3 months

TASKS

Design of bridges, walls, sign structures and other miscellaneous structures. Primarily design of transportation structures and includes calculations, analysis design, plan production and construction inspection. All time has spent in engineering related projects.

REPRESENTATIVE PROJECTS

Designs of tens of bridges, walls and other structures. Including complete design of simpler, prestressed girder bridges (completing design, analysis and plan production either personally or directing others) as well as serving a part of a larger project for more complicated structures. Prestressed girder bridges, flyover bridges of various types, buried structures and tunnels, and complicated, unique steel structures such as architecturally significant pedestrian structures.

My roles have included supervisory of complete projects, supervising smaller sections of large projects, and serving on a team designing significant structures. I have also spent time overseeing construction from an inspection role: ensuring bridges and walls are completed as per plan and specification.

On Greenfield avenue in West Allis, Wi: I worked with roadway engineers to determine the exact location and size of the bridge. Then, using data provided by the geotechnical engineer, I sized and designed the bridge foundations and designed the piers, girder, deck and all associated structural elements. I analyzed the design for sufficiency, and completed a plan set that was sent out for bid and construction.

For multiple "flyover" bridges in the Zoo Interchange in Milwaukee, WI, I worked as part of a larger team. I helped size and locate the bridges during a preliminary engineering effort. I then performed final design for the superstructure, working with other to analyze and design large diameter drilled shafts as well as the columns and pier caps holding up the bridge. This included second order analysis of structural systems and working with drilling companies to ensure constructability.

For a pedestrian bridge being build in Dubai, I served as a checker to look at that bridges compatibility with AASHTO codes. The bridge was a twisted, vierendeel truss structure that rotated through 180°. I built a complete, 3D finite element model and analyzed its behavior. I used that model to check the demands again AASHTO determined capacity and advise the primary design team as to their member and connections.

ANDREW WAHR (15-370-26)

All work experience reviewed by two licensed professionals

489 S Youngfield Cir
Lakewood, CO 80228

WORK EXPERIENCE

Jacobs
Colorado (United States)
Career Engineer
April 2019—March 2021

Verified by
Nyssa Jo Beach
Nyssa.Beach@jacobs.com

Experience Summary
Full-Time
Engineering: 1 year, 11 months
Post EAC degree: 1 year, 11 months
Experience under licensed engineer: 1 year, 11 months

TASKS

Design of transportation structures. Including engineer of record on bridges and walls as well as assisting on other bridges and walls. Also performed task lead duties where required.

REPRESENTATIVE PROJECTS

Engineer of Record on balanced cantilever, CIP segmental bridge. Design of all elements of the bridge including post tensioning, staging and substructure. This included preliminary design with bridge type selection through final design.

Design of the substructure for a high speed rail bridge in a high seismic area in California. Included seismic modeling and all relevant detailing of foundation and column elements as well as independent checks of the superstructure.

Design of 150' tall, irregular substructure in Yellowstone for seismic conditions using isolation bearings.

Preliminary design of a stress-ribbon bridge in a seismic zone.

ANDREW WAHR (15-370-26)

All work experience reviewed by two licensed professionals

489 S Youngfield Cir
Lakewood, CO 80228

WORK EXPERIENCE

Jacobs Engineering
Colorado (United States)
Bridge Engineering
April 2021—August 2023

Verified by
Matthew Nork
Matthew.Nork@jacobs.com

Experience Summary
Full-Time
Engineering: 2 years, 4 months
Post EAC degree: 2 years, 4 months
Experience under licensed engineer: 2 years, 4 months

TASKS

Design bridges and other infrastructure related structures for multiple clients. I was in charge of multiple projects and structures, completed design calculations and plan production and coordinated internally and with external subconsultants and clients to complete the successful design of infrastructure structures: primarily bridges.

100% engineering. Structural support or task lead depending on projects' needs. Specialize in highly complicated structural design and analysis.

REPRESENTATIVE PROJECTS

I designed the substructure for the Yellowstone River Bridge. This included designing 150'+ tall piers, carrying the loads form 400' spans in seismic conditions using base isolation. The piers were post-tensioned segmental construction.

I designed a single span, heavily flared, steel girder infill bridge with a transfer girder in the middle. Complete finite element modeling including interaction with bridges on either side and long term behavior based on inelastic material properties.

Coordinated the creation of soil mitigation for unusual "collapsible soils" that threatened multiple pieces of improvement on a project.

Deputy lead on the Polychrome Pass bridge project requiring cable stayed and launched mechanism for construction of a 475' steel truss. I lead the substructure effort as well, including post-tensioned abutments with micropiles, ground anchors, soil nails, and thermosiphons.

6. Public Comment

7. Adjournment