

**NEVADA STATE BOARD OF
PROFESSIONAL ENGINEERS
AND
LAND SURVEYORS**



**Interim Board Meeting
June 12, 2025
Virtual**

1. Meeting Call to Order

2. Public Comment

3. NRS 625

Waiver Requests

WAIVER REQUESTS
Thursday, June 12, 2025

APPLICANTS REQUESTING WAIVER OF NRS 625.193(1)(A)			
NAME	DISCIPLINE	TO:	GRANT?
1. Robert Thran	CE	Greg DeSart, PE	
<i>NRS 625.193(1)(A) WAIVER OF FE WITH 15 OR MORE YEARS OF EXPERIENCE.</i>			

4. Non-Appearence 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

NICOLE BROWER (21-142-83)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
05/29/2025

Citizenship
United States

SUMMARY



Engineering Experience after EAC degree
3 years, 3 months

Total Engineering Experience
3 years, 3 months

Experience under licensed engineer
3 years, 3 months

Disciplinary Action
None reported



EDUCATION



Bachelors in Civil Engineering (EAC)
University of Idaho
August 2015–May 2019

Masters in Civil Engineering
University of Idaho
August 2019–May 2021

EXAMS



Fundamentals of Engineering (FE)
Idaho
October 2020

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

LICENSES



Additional Licenses
None

NICOLE BROWER (21-142-83)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Carollo Engineers Inc.
Nevada (United States)
Staff Professional
February 2022—May 2025

Verified by
Richard Luis Gutierrez
rgutierrez@carollo.com

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



TASKS

I provide engineering assistance for planning and design projects for water and wastewater collection and treatment. This primarily consists of supporting senior engineers with project tasks and taking responsibility for smaller tasks such as piloting or modelling. My specific tasks include compiling historical flow and loading data and presenting the results to the client, developing near term future and buildout hydraulic flow projections, constructing and calibrating hydraulic water and wastewater models, master plan and basis of design report drafting and editing, creating GIS drawings and figures, feasibility studies on future conveyance of brine and advanced treatment byproducts, life cycle cost analysis of proposed treatment upgrades, alternatives development and analysis, presenting project progress and recommendations to clients, lift station improvement design and drawing, presenting project results at conferences, assessing the impact a new development will have on the existing water and wastewater systems, and piloting treatment upgrades to inform final design.



REPRESENTATIVE PROJECTS

One of the first projects that I worked on was the Hyperion Treatment Plant Expansion. This project is still ongoing, but the portion I assisted with lasted from February 2022 - August 2022. The overall project consisted of upgrading the existing wastewater treatment facility to allow for full water reuse by 2035, but my role was to support senior engineering staff with the construction planning and phasing for the secondary clarification upgrades. I was responsible for assisting with secondary clarification modelling using BioWin, verifying that the necessary capacity is maintained throughout construction phasing, and planning the footprint required for each phase of secondary sedimentation upgrades.

Another key project that I worked on was two phases of the LACSD Brine Conveyance Study. The first phase of this project consisted of evaluating existing industrial users and planned advanced treatment facilities for the quality of their brines with the purpose of assessing whether it would be possible to discharge brines defined as clean directly into the Pacific Ocean and bypass the current treatment facility. My role was to research and conduct the study under the supervision of a senior engineer. I researched the regulatory requirements for LA county, evaluating existing and future brine dischargers, selected the dischargers with clean brines, modelled several alternatives for collection and conveyance of the brines, and identified necessary operations and maintenance of the pipeline if it were to be constructed. I compiled the study, wrote a report, and presented the results to the client. The second phase of this project consisted of continuing the previous phase and assessing whether abandoned oil and gas pipelines could be used to convey the brine in place of constructing a new pipeline for brine conveyance. I was once again responsible for conducting the study under the supervision of a senior engineer. I contacted several agencies and compiled information on the known abandoned pipelines within LA county, evaluated the abandoned pipeline location and sizing against the clean brine dischargers identified in phase 1 of the study, mapped the abandoned pipelines against each known discharger, compiled the information into a report, and presented the results to the client.

I provided engineering support and led piloting efforts for multiple phases of the TMWRF Tertiary Treatment Improvements project. The pre-design portion of this project occurred from September 2022 through June 2023 and consisted of selecting and evaluating treatment alternatives for filtration and disinfection. My role in the pre-design project was to assist in the filtration evaluation. I supported senior engineers by evaluating historical filter performance data, operating a cloth media filter pilot, and assisting with the development of retrofitted alternatives. My primary role was the operating of a cloth media filter pilot, including sampling and maintaining instrumentation daily, as well as conducting day-long stress and nutrient testing with different coagulants. The design portion of this project began in May 2024, and is entering bidding and construction. My role in the design project was to operate a new pilot with multiple granular media alternatives. This pilot consisted of daily sampling and instrumentation maintenance, as well as solving operational issues and conducting further testing as needed.

I have also assisted with the development of several water and wastewater master plans. I have provided model development and assessment for the city of Barstow and the South Tahoe Public Utilities District in California, and the City of Avondale, Arizona. My tasks consisted of updating and calibrating the models with all existing pipelines, evaluating the existing system under current and

projected future conditions, recommending pipeline replacements and upgrades based on model results, compiling results in a formal master plan document, and presenting the recommended improvements to the client.

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Explanation
June 2021	January 2022	Relocating to Nevada from Idaho after completing graduate school and searching for environmental engineering positions.

MATHEW BUTCHER (21-854-53)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
06/03/2025

Citizenship
United States

SUMMARY



Engineering Experience after EAC degree

Total Engineering Experience
3 years

Experience under licensed engineer
3 years

Disciplinary Action
None reported



EDUCATION



Bachelors in Geology
California State University, Chico
January 2019–May 2021

Masters in Civil and Environmental Engineering
University of Nevada, Reno
August 2021–December 2022

EXAMS



Fundamentals of Engineering (FE)
Nevada
October 2022

Principles and Practice of Engineering (PE)
Civil
North Dakota
August 2024

LICENSES



Additional Licenses
None

MATHEW BUTCHER (21-854-53)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

NST Engineering
California (United States)
Lab Technician
March 2021—September 2021

Verified by
JEFFERY ALAN MORRISH
nst@frontiernet.net

Experience Summary
Full-Time
Engineering: (0%)
Experience under licensed engineer:
None



TASKS

100% Engineering

I was responsible for all engineering work related to material testing. I performed laboratory testing for soil, aggregate, and concrete samples. I performed field inspections of active construction sites and proposed developments. I was responsible for maintaining laboratory completeness and periodic laboratory calibration for AASHTO accreditation.

I functioned as the laboratory technician for large scale special inspection projects. Specific laboratory testing I was responsible for includes but is not limited to sieve analysis, specific gravity testing, soil density, and compaction testing. I conducted periodic field inspections, which included welding and turn of bolt testing. I drafted simple site plans and provided hand calculations for dead and live loads associated with house plans. I provided field percolation testing and leach field design.



REPRESENTATIVE PROJECTS

Commercial Development Dollar General Lassen County, California (3/1/2021 to 5/30/2021)

I provided quality control for ground improvement prior to foundation construction. I reviewed plan sets and assisted lead engineers in site development, and preliminary planning. I worked in a team group to develop project deadlines. I worked along field inspectors in turn of nut bolt testing for minimum pre load tension force specifications. I verified torque specifications and plate connections. I assisted field engineers in verifying weld connections and structural integrity of steel members. I provided laboratory testing for soil and concrete samples.

Septic Site Plan for 712 Clifford Drive Lassen County, California (4/15/2021 to 6/15/2021)

I assisted lead engineers in the development and drafting of a septic site plan. I worked with county health officials to determine setbacks, building zone requirements, and existing public utilities. I performed field percolation testing and gave recommendations for site layout and future design constraints for septic tank and leach field construction. I assisted lead engineers in design calculations and feasibility of the proposed private residence.

Foundation Inspection 459 Ponderosa Blvd, Lassen County, California (9/1/2021 to 9/15/2021)

I assisted the lead engineer in planning and performing a foundation inspection for an existing mobile home. I inspected masonry block for rebar alignment and noted footing embedment depth. I created a site sketch that detailed structural orientation of exiting beams, post, rafters, girders, and block piers. My documentation served as a reference for senior engineering staff to draft official site plans and make recommendations for future occupancy.

WORK EXPERIENCE

Nortech Geotechnical/Civil consultants
LTD
Nevada (United States)
Civil Engineer (Geotechnical
Department Manager)
May 2022—December 2022

Verified by
Nicholas Stephen Vestbie
Nickvestbie@gmail.com

Experience Summary
Full-Time
Engineering: 7 months
Experience under licensed engineer:
7 months

TASKS

100 % Engineering

I was responsible for technical engineering work including retaining wall design, septic and leach field design, geotechnical reports, field percolation and infiltration testing, seismic surveys, laboratory testing, and project scheduling. I served as a project engineer and provided bids, technical design, and labor estimates.

REPRESENTATIVE PROJECTS

Residential development 100 Appaloosa Circle, Red Rock, Nevada (5-1-22 to 7-1-22)

I planned the geotechnical investigation including soil sampling, logging, laboratory testing, and field percolation testing for a private residential development. I calculated the bearing capacity for the native soils and made recommendations for subgrade preparations and exterior flatwork. I designed and sized the leach field, following Washoe county guidelines for private residences. I monitored construction and provided quality assurance during construction of the septic system. I coordinated with architects, structural engineers, and county health officials on site plans and permit submittals to meet project deadlines.

Residential development 451 SR-28, Incline Village, Nevada (6-1-22 to 8-1-22)

I led the geotechnical exploration and geophysical analysis for a 4,000 SF mountain cabin over the shoreline edge of Lake Tahoe. I collected representative samples and obtained geophysical data on a steep hill to image bedrock, and shear wave velocity. I designed a cantilever retaining wall along with the temporary shoring needed to construct the retaining wall. I calculated factor of safety for the hillside and created a slope stability model for pseudo static and static field conditions. I calculated depth to bedrock and offered alternatives to anchor into granitic outcrops for foundation design recommendations. I reviewed laboratory testing and followed construction specifications according to the IBC and TRPA regulations. I provided recommendations for foundation preparation and concrete placement in cold temperatures.

Commercial development North Town Apartments, Reno, Nevada (6-1-22 to 12-1-22)

I assisted the lead engineer in planning and performing the geotechnical investigation for the design and construction of a new commercial apartment complex. I sampled and assessed conditions for constructability. I performed representative laboratory testing for cohesive soils on site. I designed and modeled suction profiles for moisture conditioned soils and accurately predicted swelling behavior. I provided recommendations for foundation design, lateral earth pressures, global stability for retaining walls, internal stability of mechanically stabilized earth, and induced bearing pressures from load distribution. I planned and oversaw the quality control program for ground improvement prior to foundation construction. I provided special inspections, analyzed results for building code and permit requirements.

Residential development Lot 211 Lahontan Community, Placer County, California (7-1-22 to 10-1-22)

I assisted the lead engineer in the planning and construction of a custom-built private residence. I planned the geotechnical investigation and identified site development data pertinent to the subsurface exploration and sampling. I categorized shallow ground water at the site and designed a sump pump to discharge any ground water collected below the crawl space. I made recommendations for water proofing and seepage control. I designed drainage pathways to have the least amount of impact on nearby structures. I provided quality assurance and technical knowledge for the project during construction. I assisted in the special inspection program for soil compaction, reinforced concrete, structural masonry, shotcrete, structural steel, high strength bolt testing, welding, and fireproofing. I reviewed field reports and transmitted them to a project team lead.

WORK EXPERIENCE

Westex Consulting Engineers
Nevada (United States)
Geotechnical Project Manager
December 2022—June 2024

Verified by
Blake Douglas Carter
Blake@westexconsulting.com

Experience Summary
Full-Time
Engineering: 1 year, 6 months
Experience under licensed engineer:
1 year, 6 months

TASKS

100% Engineering

I planned scientific and technical memos focused on geotechnical investigations and subsurface explorations for soil and rock classifications utilizing borings, test trenches, and geophysical modeling. I performed pseudo-static and static calculations for soil site response, which includes but is not limited to lateral pressures, bearing capacity, shallow and deep foundations, and settlement due to liquefaction. I analyzed in-situ soil properties. I recommend excavation and placement of engineered fills and aggregate base for new construction projects. I provided design recommendations for building foundations and structural engineers. I calculated soil strength properties and coordinate with project engineers regarding project traffic demands and project considerations. I provided visual and subsurface pavement conditions surveys.

I utilized software and design manuals to provide project managers with specifications for pavements management programs. I oversaw laboratory testing and calculated laboratory test results. I supported special inspections projects including but not limited to public works, private and commercial develops, industrial land, development, along with supporting State and Federal agencies. I monitored quality control and safety construction for trenching and stability. I analyzed earth structures and ground improvement projects for slope stability. I provided site specific grading and layout requirements for improving residential developments. I created and provided CAD drawings for site specific dewatering, and foundations improvement. I verified project information and plan specifications. I coordinated and participated in conference calls between project teams.

REPRESENTATIVE PROJECTS

Tract Land Development, 5 parcels, Storey County, Nevada (3-1- 2023 to 3-22-2025)

I was responsible for the Geotechnical team. I planned preliminary and design level geotechnical explorations, and provided investigation reports, and provided engineering analysis to determine feasibility of civil engineering plans and construction of 20,000 acres over five separate parcels. Grading cuts were in excess of 170 feet and the estimated earthwork volume was 50,000,000 cubic yards. Preliminary building design included 20,000,000 square feet data centers, composed of reinforced concrete shear walls, braced steel frames, and spread footings.

I planned and implemented the drilling and field exploration. Utilizing mud rotary, boreholes were drilled to a depth of 200 feet. I developed a laboratory schedule for collecting sampling and classifying soil and rock strength parameters. I analyzed laboratory results. I mapped and conducted refraction surveys to determine subsurface layering and soil stiffness. I designed open excavations. I delivered an Owner-Engineer-Contractor presentation regarding my findings and recommendations. My geotechnical recommendations were in adherence to the 2018 International Building Code with Northern Nevada Code Amendments. I provided slope stability models and calculated static and pseudo static loading scenarios for building pads. I modeled stratigraphy and identified seismic hazards to proposed facilities. I worked as part of team to provide civil demands, including retaining walls, slopes, pavement sections, foundation sizing, bearing capacity, fill placement, rock slopes, problematic soil and rock conditions, and temporary support of excavations, beams, and column elements. I reviewed structural plans and monitored compliance with project specifications. The geotechnical report, and designs for this project were on the order of hundreds of pages.

Minden-Tahoe Airport Reconstruction, Douglas County, Nevada (3-1-2023 to 3-22-2025)

I was responsible for the geotechnical investigation and subsurface drilling program for the airport runway reconstruction project. Following FAA standards circular AC150/530-6G I sampled through the asphalt using a truck mounted SPT drill rig. Soil sampling was done in accordance with ASTM 1586. I collected and classified soil and provided a laboratory schedule for capturing subsurface soil elasticity. I analyzed laboratory results and recommended pavement design thickness for the concrete runway and asphalt taxiway.

I developed a geotechnical report that incorporated FAA standards for minimum frequency and design loads for expected airport

traffic. I was the engineer in the field, handling project needs and client relations. I calculated soil young's modulus, density, and friction angle to make recommendations for sensitive and frost susceptible soils. I verified and monitored soil density for compaction and for the placement of construction materials.

Northern Nevada Homes, Washoe County, Nevada (4-1-24 to 9-1-24)

I planned the geotechnical exploration and preliminary design level engineering of 500-acre residential development. I provided geotechnical test trenching, monitored excavation, and determined the feasibility for future civil work projects. Grading design cuts were on the order of 60 feet, and preliminary building design includes apartment complex and future single-family homes.

I collected data from the field and compiled laboratory results for soil shear modulus parameters. I prepared a geotechnical report that included recommendations for pavement sections, and utility design. I valued engineered multiple retaining wall designs to best fit the grading and sit layout for the project. Additionally, I processed and modelled site stiffness rippability characteristics associated with mass grading. I performed factor of safety calculations for bearing capacity and future loading scenarios. I provided professional recommendations for geosynthetic applications, reinforced slopes, and ground improvement. I observed and monitored construction quality assurance and field testing, checking settlement and compaction.

Battle Mountain Solar, Lander County, Nevada (4-1-24 to 6-30-24)

I worked on a development team focused on the rural development of a 1000 Acre solar field. I lead the geotechnical exploration and provided engineering recommendations for shallow ground water and problematic soil conditions.

I collected undisturbed samples using Cal Mod samplers, and recorded blow counts. I designed deep foundations and calculated lateral earth pressures for the foundations design. I sized footings and made recommendations for in field construction and pull-out testing. I developed a dewatering plan. I modeled a seismic analysis for the foundation, incorporating liquefaction and various earthquake loads. I modeled ReMi surveys for Soil Site Classification.

WORK EXPERIENCE

United State Army Corps of Engineers
North Dakota (United States)
Civil/Environmental Engineer
June 2024—May 2025

Verified by
David Duane Beck
David.d.beck@usace.army.mil

Experience Summary
Full-Time
Engineering: 11 months
Experience under licensed engineer:
11 months



TASKS

I am responsible for technical engineering work along with collaborating in design teams including but not limited to, environmental reporting, laboratory analysis and testing, calculations, project environmental compliance, budgeting for projects, quality assurance, site layout and control, field inspections and verification, environmental permitting and assessments, and construction sequencing.

I perform field inspections and actively assist team members in monitoring and testing for seepage and settlement across the Garrison Dam. I monitor environmental sampling and collaborate with team members on new rules and regulations. I review project submittals and provide recommendations for general construction operations and methods, following all State and Federal laws.



REPRESENTATIVE PROJECTS

Commercial Pipeline Development Enbridge Line 84
Williams County, North Dakota. (6/1/24 to 9/15/25)

I planned and performed the environmental condition of property for the permitting and development of a new horizontally directional drilled gas pipeline. I provided on site construction observance and monitoring during the pilot hole, expansion, and pulling of the production pipe. I provided recommendations for drilling fluids, viscosity, and solutions for problematic and collapsible soil types such as lignite beds. I assisted lead engineers in determining borehole alignment and exit location of the borehole. I analyzed boring reports and provided recommendations for subsurface density and potential voids. I developed a site-specific contingency plan for inadvertent release and spills. I participated in weekly construction meetings and reviewing permit submittals.

The improvements included the addition of a new 8 inch buried steel pipeline 4200 feet and abandonment of an existing 8 inch buried steel pipeline 4300 feet. I provided recommendations for the abandonment, purging of combustibles, and sealing of the existing 8 pipeline. I provided design recommendations for grading the entry pit and restoring original grade after the drill hole had been abandoned. Recommendations for safe disconnection were done in accordance with CFR 195.59 and North Dakota Administrative code 43-02-03-29.1.

NPDES Permitting Garrison Dam McLean County, North Dakota (10/1/24 to 4/30/25)

I planned and implemented environmental testing and review of the wastewater discharge permit authorized to discharge from the Garrison Dam Power Plant to the Missouri River Class I Stream. I categorized outfalls and potential discharge points to test for effluents migrating to the Missouri River. I implemented an inspection sheet for electricians and mechanics to fill out if they observe any visible sheens from submerged outfalls in the powerhouse. I reviewed old plan sets for drainage pathways and developed the laboratory testing schedule for record retention and monitoring requirements needed for environmental compliance.

I monitored discharge periodically and made recommendations for collecting representative sampling for routine and non-routine discharges. I analyzed laboratory data and submitted bi-annual reports to the State. All reporting was done in compliance with Chapter 33.1-16-01 North Dakota Department of Health rules under Chapter 61-28 North Dakota Water Pollution Control Act.

Dam Safety Garrison Project, North Dakota Mclean County (3/1/25 to 5/1/25)

I performed an annual site evaluation on the Garrison Dam. The Garrison Dam is an earth embankment Dam constructed in the 50's and is used for flood control, hydro power, irrigation, and recreation. The Dam requires continuous upkeep replacements, and monitoring. I collected piezometer and inclinometer readings to construct a better understanding of the Dam seepage and settlement. I inspected manholes, seepage drains and collaborated in a design team to provide recommendations for controlling seepage. I assessed the quality of embankments and slopes around the Dam and provided recommendations for the design of a filter blanket and slope benching to increase slope stability.

I assisted lead engineers with a checklist and provided team members with signoffs to validate structural defects observed during inspections. I continue to work with design teams and provide technical data pertinent for Dam safety. I reviewed past and current engineering plans and made recommendations for new and existing improvements for Dam instrumentation, construction, and safety.

Spill Prevention and Countermeasures Plan Garrison Dam, North Dakota Mclean County (3/15/2015 to 5/15/2025)

I provided review and auditing of the existing SPCC plan for the Garrison Project. I assisted lead engineers in identifying spill response areas and identifying potential hazards. I provided spreadsheets to quantify oil storage and capacity for the existing turbines. I analyzed surface drainage and susceptible discharge points to the Missouri River. I categorized inventory from a spill response trailer and made recommendations for disposal and decontamination procedures.

The recommendations for improvements included a monthly and annual checklist for above ground storage tanks, continued training for spill response teams, and implementing active containment procedures. I provided quality assurance and made sure the facility plans and follows EPA Title 40 Code of Federal regulations Part 112.

MATHEW BUTCHER (21-854-53)

All work experience reviewed by two licensed professionals

ADDITIONAL INFORMATION



TIME GAPS

Start Date	End Date	Explanation
June 2016	December 2018	After graduating High School in June of 2016, I enrolled in summer class at a local community college. From 2016 to 2018 I lived at home with my parents and attended college as a full time student.

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
05/05/2025

Citizenship
Chile

SUMMARY



Engineering Experience
after EAC degree

Total Engineering
Experience
2 years, 7 months

Experience under licensed
engineer
2 years, 7 months

Disciplinary Action
None reported



EDUCATION



Meets NCEES Engineering Education Standard

Bachelors in Civil Engineering
Austral University of Chile - UACH
March 2007–December 2016

Doctorate in Civil Engineering
Auburn University
January 2019–August 2022



EXAMS



Fundamentals of Engineering (FE)
Alabama
February 2024

Principles and Practice of Engineering (PE)
Civil
Nevada
May 2024

LICENSES



Additional Licenses
None

PATRICIA CARCAMO (22-725-62)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Universidad Austral de Chile
Región de Los Ríos (Chile)
Project Engineer

January 2017 – December 2018

Verified by
Patricia Carcamo (Self)

Experience Summary

Full-Time

Engineering: (0%)

Experience under licensed engineer:
None



TASKS

As a Project Engineer and Project Manager in various roles across Chile, I oversaw the construction and expansion of key infrastructure projects, including an 1800 m² hotel expansion and a 3350 m² education center. I managed and analyzed technical contract details, collaborated with subcontractors, designers, and government agencies, and recommended design changes that led to measurable improvements in efficiency and performance. My role also involved ensuring compliance with national regulations, conducting site inspections, and resolving disputes, fostering collaborative relationships among stakeholders. Additionally, I designed structural elements such as elevator structures and evacuation stairs, certified quality control of structural elements, and contributed to rural water supply and sanitation projects, ensuring adherence to laws and standards. My work consistently maintained high standards and project integrity, resulting in successful project outcomes.



REPRESENTATIVE PROJECTS

Project: Expansion of Hotel Villa del Río, Valdivia, Chile

I oversaw the 1800 m² hotel expansion, ensuring timely completion and adherence to quality standards. I managed technical contract details with subcontractors, designers, and agencies, recommending design changes that enhanced efficiency and performance. My role included ensuring contract compliance through inspections, resolving disputes, and negotiating with stakeholders to foster collaborative relationships and maintain high standards throughout the project.

PATRICIA CARCAMO (22-725-62)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Geosyntec Consultants
Georgia (United States)
Senior Staff Professional
August 2022—September 2023

Verified by
Mehmet Iscimen
Mlscimen@Geosyntec.com

Experience Summary
Full-Time
Engineering: 1 year, 1 month
Experience under licensed engineer:
1 year, 1 month



TASKS

I coordinated office safety, ensuring compliance and promoting a secure work environment. I supported construction projects by managing schedules, budgets, and material testing, achieving project goals. I developed technical documents for CCR projects, including drawings, calculation packages, and reports. I conducted routine water sampling and testing, ensuring compliance with state regulations. I supervised Dewatering Pilot Study for ash ponds, optimizing field engineering processes.



REPRESENTATIVE PROJECTS

Project Name: Dewatering Pilot Study
Location: Confidential
Duration: December 2022 - February 2023

The project consisted in performing a pilot dewatering study on Coal Combustion Residual (CCR) Ash Pond site. The study included multiple Ash Ponds within the site to study the dewatering properties of the material.

I oversaw the construction of dewatering and observation wells as the field engineer on-site. I supervised drilling and jetting operations, ensuring that the wells were constructed according to design specifications. I developed daily field reports to document the progress and site conditions. Once data was acquired from the wells, I analyzed it and developed estimates of hydraulic conductivity for the CCR material.

PATRICIA CARCAMO (22-725-62)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Earth Wall Products
Georgia (United States)
Structural and Geotechnical Engineer
October 2023—August 2024

Verified by
Thomas Leonard Rainey
trainey@earthwallproducts.com

Experience Summary
Full-Time
Engineering: 10 months
Experience under licensed engineer: 10 months



TASKS

I conducted geotechnical and structural analysis for earth-retaining structures, ensuring stability and safety. I prepared detailed CAD sketches, calculation reports, and quantity estimates for project accuracy. I optimized designs considering cost, manufacturing capabilities, and site-specific conditions. I assisted with DOT submittals, addressing comments for timely project approvals. I supported the sales team in identifying optimal grade change solutions for complex projects.



REPRESENTATIVE PROJECTS

Project Name: Cumberland County SR-1015 Section Tap Retention Walls
Location: Cumberland County, PA
Duration: January 2024 - March 2024 and June 2024

The project involved developing the design of retaining walls for a pedestrian bridge to be constructed in Cumberland County, PA, for DOT construction approval.

I performed a contract drawing review, including an assessment of existing site conditions. Following this review, I drafted and developed a preliminary design using a gravity wall system for approval. I then developed the final design, including internal and external stability, as well as a back-to-back design using precast concrete units. Finally, I created the final design drawings for construction.

PATRICIA CARCAMO (22-725-62)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Engineering Systems
Georgia (United States)
Senior Staff Consultant
September 2024 – May 2025

Verified by
Noel Flores
nrflores@engsys.com

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



TASKS

I conducted root-cause failure analyses, performed site investigations, and analyzed soil-structure interaction for structures such as retaining walls and foundations. I reviewed construction documents, materials, and practices, provided expert consulting and testimony in my areas of expertise, and contributed to technical report writing and presentations. I worked closely with multidisciplinary teams on investigative projects and supported cross-functional engineering efforts.



REPRESENTATIVE PROJECTS

Project Name: Evaluation of Construction Defects in Property
Location: Georgia
Duration: December 2024 – March 2025

This project involved a site investigation to assess construction defects in a newly constructed residential property. I performed an on-site inspection using non-invasive tests to identify visible issues related to both the building structure and site drainage. The inspection focused on cracking observed in the interior finishes, cracking of the exterior concrete slab-on-grade, and stormwater ponding around the property. I analyzed the inspection findings and evaluated them for compliance with applicable building codes. Based on the assessment, I provided recommendations to address the identified construction defects and improve drainage performance.

BRANDON CHICO (21-793-70)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
05/13/2025

Citizenship
United States

SUMMARY



Engineering Experience after EAC degree
4 years

Total Engineering Experience
6 years

Experience under licensed engineer
6 years

Other Experience

Disciplinary Action
None reported



EDUCATION



Bachelors in Civil Engineering (EAC)
University of Nevada, Reno
January 2017–May 2021

EXAMS



Fundamentals of Engineering (FE)
Nevada
June 2021

Principles and Practice of Engineering (PE)
Civil
Nevada
February 2024



LICENSES



Additional Licenses
None

BRANDON CHICO (21-793-70)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Desert Engineering
Nevada (United States)
Construction Laborer
June 2016—September 2016

Verified by

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



DESCRIPTION

BRANDON CHICO (21-793-70)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

PJC & Associates
Nevada (United States)
Lab Intern
October 2017 — August 2020

Verified by
Pat James Conway
Pat@pjcgeotech.com

Experience Summary
Part-Time
Engineering: 1 year, 5 months (50%)
Experience under licensed engineer:
1 year, 5 months



TASKS

While employed by PJC & Associates I performed numerous soil and materials tests per ASTM standard in the testing lab as well as on site gathering of test specimens. When testing soils I was tasked with classifying the soil based on physical characteristics such as particle size, organic contents, color, and perceived plasticity. Once the characteristics were recorded I would perform tests on the samples. These tests included moisture content, moisture density, plasticity, expansiveness, cohesiveness, compaction optimization, and concrete strength testing.



REPRESENTATIVE PROJECTS

While at PJC I performed soils and materials testing on hundreds of projects, nearly every project consisted of the same tests to determine soil characteristics of the site.

5160 Warm Springs Rd. was a project given to me in July of 2018, the scope of my tasks consisted of assigning physical attributes to each soil sample based on USCS standards and performing tests per ASTM standards. I performed tests to measure the moisture content in each sample and calculated the final moisture percentage. My next task was to determine the moisture density of the given samples to measure the cohesiveness of the soil samples. Once the samples had been tested I calculated the results and they were later used for providing values in the geotech report.

406 Washington Ave. was another site given to me in March of 2020 for soils testing, on the project I performed the aforementioned moisture content and moisture density tests as well as Atterberg limits tests, the addition of this test provided information on the plastic limit and liquid limit of the soil in the samples provided. The Atterberg limits test was performed per ASTM standards, I then calculated the results of the data recorded during testing to determine that the soil was not plastic and measures did not have to be taken to condition the soil.

BRANDON CHICO (21-793-70)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Q&D Construction
Nevada (United States)
Structural Engineering Intern
August 2020—May 2021

Verified by
Fred Hatcher
fhatcher@qdconstruction.com

Experience Summary
Part-Time
Engineering: 7 months (75%)
Experience under licensed engineer:
7 months



TASKS

My duties as a structural engineering intern at Q&D construction were to design falsework and shoring structures to support the construction of structures such as road and highway bridges, design retaining walls for new roadways, create demolition plans for existing bridges, and oversee bridge construction. The main role of this position was the design of the aforementioned shoring structures, I designed the falsework for three bridges and assisted with the design of one more during my time at Q&D construction. One bridge shoring structure involved the demolition of the existing structure (if one was present), the review of new bridge design drawings (typically from 3rd party engineer), and then my design of the shoring structure, once design was completed construction would start. Once construction started I would be tasked with periodically checking on the construction to ensure progress was being made per code and per my design. My design of false work would start at the top of structure, typically the bridge deck, I would determine the loads the structure would incur during construction, I would then size the wood deck purlins based on the deck thickness, deck material, what equipment would be used during construction etc., Next I would size the wide flange steel girders would be sized based on spacing, cantilever length, overall span, and what girders were available in the stock yard at any given time. The support frame for the deck and girders came next, these would typically be large square timber posts with x-bracing to provide lateral stability. Lastly was the grade beams to give support to the entire structure, values from the geotech report would be used to determine what size pads were required under the grade beams.



REPRESENTATIVE PROJECTS

NDOT 3846 was a new project in Pershing County, NV that would demolish the existing bridge crossing a river and build a new bridge that was up to modern day code and traffic requirements. My involvement on the project was from early October 2020 to February 2021. I was given the new bridge design drawings after which I was handed the task of determining how the new bridge would be built. I design the falsework/shoring structure to support the construction of the new bridge. I performed the calculations for the vertical and lateral stability of the structure to support the construction of the new bridge. The design calculations I performed consisted of dead and live load determination for vertical as well as wind and seismic loads for lateral stability. Once loads were determined I designed wood purlins and wide flange girders to support the bridge deck, calculations were performed on these components to ensure they were not overstressed during any point of construction. I chose to support the girders with a pre-manufactured collar system that bolted to the bridge piers, since there was still water in the river below, I determined keeping the shoring out of the water was the best course of action. Once the bridge was fully built and the concrete had cured for the minimum amount of time set by the firm that designed the bridge, the shoring was successfully removed and the bridge was opened for public use.

My next project was NDOT 3849 Palisade Widening, the goal of this project was to widen an existing bridge on I-80W in Northern Nevada. I was involved on this project from February 2021 to May of 2021. I performed the design calculations for the shoring/falsework for project as well, very similar to NDOT 3846 with the exception of this being an addition to an existing bridge instead of a completely new structure. Again, I calculated the vertical and lateral loading for the addition and then calculated the required purlin and girder sizes to support the new structure based on the stresses incurred by the aforementioned loading. This structure was not in a waterway so I was able to use traditional falsework methods of timber frames with x-bracing to support the girders. Using traditional falsework meant I had to calculate and design ground supports for the framing. Using the geotech report provided by a third party engineer I had to ensure the ground supports did not go over the allowable bearing pressure of the soil, I calculated the required grade beam size to not overburden the soils. Once the falsework was complete the construction of the bridge began, once completed and the concrete had cured for the required amount of time, the falsework was removed and the bridge was ready to be reopened.

BRANDON CHICO (21-793-70)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Tectonics Design Group
Nevada (United States)
Structural Designer, EI
June 2021 – May 2025

Verified by
Edgar Gabriel
Edgar@TDG-inc.com

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



TASKS

My duties and tasks as a structural designer at Tectonics Design group are to analyze and design structures based on client requirements, this typically involves numerous steps to meet the client's goal while also designing a safe and within code standards. My design process starts with verifying what code the project will be designed for based on local jurisdiction. I will then review other engineering disciplines reports to obtain site specific info, an example of this would be the geotechnical engineering report to gather info regarding soil bearing values or potentially corrosive soil. Next, I will determine all the different loading criteria the structure is expected to have applied, this includes dead, live, snow, seismic, and wind, just to name a few. Once loading has been determined I will then perform different analysis based on building materials (concrete, masonry, wood, steel, etc.) and choose a design based on design stresses, deflections, constructability, and client cost. I design the global structure with applicable codes, such as ASCE 7-16 and IBC. The global design will typically encompass performing calculations on diaphragms, shear walls, braced frames, columns and foundations which will provide overall stability to the structure. Once the global design is near completion, I will analyze the local items such as fastener groups, baseplates, reinforcing, etc. After I have completed my full design, I will submit to a principal for review and revisions, after that the design is ready for client review to ensure I have met their needs requirements and lastly permit submittal. Another task that I perform is inspection and retrofits for existing structures. This will typically include a site visit, review of past as built drawings, (if any are available) and then I will perform calculations and analysis based on what is required.



REPRESENTATIVE PROJECTS

One of the early sets projects I worked on at Tectonics Design group was the structural design of a popular west coast coffee shop. I performed the structural design for approximately 10 of these coffee shops between November 2021 to March of 2023. The timber structures were located in Nevada, Utah, and Texas which required me to design each one for the locations site specific parameters as well the local jurisdictions adopted code. With each structure I was required to determine applicable dead, live, snow, wind, and seismic loads per ASCE 7-16 and local factors. Once loading was determined I performed a global analysis of the structure in order to calculate the diaphragm and shear wall nailing and sheathing requirements. Once I had completed the overall lateral force resisting system design I analyzed the anchorage requirements for the shear walls and designed the anchors and foundations to accommodate the base shear reactions caused by the lateral force. I then designed the wall studs based on vertical loads from the roof and out of plane loading from wind, I made recommendations on what combinations of timber grade and stud sizes to use for the walls based on what could be procured in each area. Lastly I designed the connections for the truss's bearing on the walls, the ledger fastening to the walls, and the slabs which had to be designed to accommodate expansive soils by using grade beams.

One of my next design projects in May of 2023 was a large industrial warehouse in Storey County, Nevada within the Tahoe-Reno Industrial Center, 490 Pittsburg Ave. I was handed this project to complete a full top to bottom design. The structure was required to be a tilt-up concrete warehouse with a multi-bay buckling resistant braced frame (BRBF). To initiate the project I determined the required dead, live, snow, wind, and seismic loads that would act upon the building per ASCE 7-16 and local code requirements due to the area being in a special snow and wind region. I then began the design of the structure itself starting with the lateral load to the diaphragm, I performed an analysis to determine that the seismic loads would control over the wind loads for the lateral design, I then calculated the required diaphragm shear nailing as well as the required chord size, the result was not feasible without adding another lateral force resisting system. I recommended a BRBF be added to the center of the building in order to reduce the required diaphragm nailing and make the structure more stable overall. I designed the BRBF, including foundations, base plates, anchorage, columns, and beams based on AISC and ACI codes. After an iterative process of designing the BRBF I analyzed the structure globally again for story drift and determined that it was within allowable limits per ASCE 7-16. Once I had completed the global lateral force resisting system design, I moved on to the design of concrete tilt-up wall panels, I analyzed the panels for effects from out of plane wind and seismic loading along with P-Delta effects in order to determine reinforcing requirements that provided acceptable stress and deflection within the panels. Next, I performed overturning analysis on the wall

lines to ensure the diaphragm shear would not cause in plane instabilities at the end walls, once the analysis was complete, I determined some panels needed to be tied together and additional anchorage be provided to the footings to alleviate the overturning effects. Once the panels were complete, I designed the footings for the perimeter walls, I determined that with the high base shear and heavy concrete panels that continuous footings would provide the most stable design and reduce isolated settlement between panels in the future. With allowable soil bearing values provided by the geotechnical engineer I designed the footings and their reinforcement to ensure the soil could safely support the aforementioned vertical and overturning loads. Lastly, I designed the local items such as roof joist anchorage and their connections to the wall panels, the roof columns, column base plates, interior column footings, roof sub-purlins, and other ancillary items.

LAUREN FISSEL (15-704-18)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
05/26/2025

Citizenship
United States

SUMMARY



Engineering Experience after EAC degree

Total Engineering Experience
6 years, 2 months

Experience under licensed engineer
6 years, 2 months

Disciplinary Action
None reported



EDUCATION



Bachelors in Engineering Geology
University of Akron
August 2010–May 2014

Masters in Geological Engineering
University of Nevada, Reno
August 2014–August 2016

EXAMS



Fundamentals of Engineering (FE)
Nevada
July 2015

Principles and Practice of Engineering (PE)
Civil
Nevada
October 2017

LICENSES



Additional Licenses
None

LAUREN FISSEL (15-704-18)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Nevada Department of Transportation
Nevada (United States)
Staff II Associate Engineer
May 2017—October 2020

Verified by
Scott Benjamin Hein
shein@dot.nv.gov

Experience Summary
Full-Time
Engineering: 3 years, 5 months
Experience under licensed engineer:
3 years, 5 months



TASKS

I reviewed as-built contract plans to evaluate existing site conditions and to collect information needed for current projects, such as right-of-way and existing utility locations. I designed 2D and 3D models for highway and urban projects using Microstation and InRoads. With these models I calculated roadway quantities and volumes. I selected unit costs for project bid items using engineering judgement to evaluate historical bid item data. I then calculated roadway cost estimates. I was responsible for designing roadway contract plan sheets. My engineering designs, calculations and cost estimates complied with NDOT's Standard Specifications for Road and Bridge Construction and NDOT's Road Design Guide. I regularly coordinated with interdisciplinary engineers to evaluate project constructability, budget and timeline concerns. I was responsible for the roadway corridor design, creation of roadway plans, and cost estimates of increasingly complex roadway projects, beginning with a double chip seal project and progressing to highway and interchange improvements and urban roadway and ADA improvements. My first job title was Staff I Associate Engineer, and my final job title with this employer was Staff II Associate Engineer.



REPRESENTATIVE PROJECTS

1. Alternate/Old U.S. 395 Double chip seal and cattle guards
South of Mt. Rose Highway, Washoe Valley, Nevada
2017-2018

I reviewed as-built contract plans to evaluate the roadway centerline alignment necessary for calculating quantity estimates and to design contract plan sheets. I designed the installation of new guardrail. I calculated guardrail length of need and embankment quantities. I evaluated and selected new cattle guards that complied with NDOT's Standard Specifications for Road and Bridge Construction. I calculated quantities of pavement milling and replacement, sealant, and pavement markings for the double chip seal component of the project. I evaluated and selected bid item unit costs, and I calculated the roadway cost estimates. I designed the roadway contract plan sheets. I coordinated with NDOT's Maintenance Division to ensure that proposed cattle guards were appropriate in regards to the long-term maintenance and cleaning required for optimal cattle guard function.

2. USA Parkway I-80 Interchange Improvements, Nevada
2018-2019

I designed a roadway corridor in Microstation and InRoads to model roadway widening and interchange improvements; as part of the highway widening, I designed roadway section cut and fill slopes to remain within highway right-of-way while also complying with NDOT's Road Design Guide. With this model I calculated roadway quantities and volumes, including earthwork, pavement materials, and removal quantities. I evaluated and selected bid item unit costs, and I calculated roadway cost estimates. I designed the roadway contract plan sheets. This project had a tight deadline and high public profile. I frequently coordinated with interdisciplinary engineers to evaluate project timeline, budget and constructability. A design challenge of this project was creating a composite surface using InRoads of the roadway widening, interchange improvements and existing ground. I designed and evaluated a detailed composite finished surface to address this challenge and to ensure that resulting roadway quantities were accurate.

3. Jones Boulevard roadbed modification and ADA sidewalk improvements, Las Vegas, Nevada
2019-2020

I designed sidewalk and curb ramp improvements that complied with NDOT's ADA Design Guidelines. A challenge of this project was designing a roadway corridor to model both the sidewalk improvement and roadbed modification components while remaining within a narrow right-of-way. I used engineering judgement to design a roadway corridor with Microstation and InRoads to model both the roadbed modification and ADA compliant sidewalk improvements. I designed this model to tie into existing ground and ensure minimal change to the existing roadway profile. With this model I calculated roadway and sidewalk material quantities and

volumes. I evaluated and selected bid item unit costs, and I calculated roadway cost estimates. I designed the roadway contract plan sheets.

LAUREN FISSEL (15-704-18)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Washington Department of
Transportation
Washington (United States)
Designer, Transportation Engineer 2
February 2021 – December 2022

Verified by
Spencer Beier
spencer.beier@wsdot.wa.gov

Experience Summary
Full-Time
Engineering: 1 year, 10 months
Experience under licensed engineer:
1 year, 10 months



TASKS

I completed project scope documentation including the Basis of Design and the Stormwater Retrofit Assessment on Fish Barrier Projects. I conducted project site visits to evaluate existing utilities and structures to be impacted by fish passage projects. I designed 2D and 3D models with InRoads and Microstation to evaluate alternatives for stream re-alignment. I was responsible for calculating preliminary cost estimates for upcoming fish passage projects by evaluating historical bid item data and previous projects of similar scope. I provided guidance to colleagues for corridor modeling using InRoads.



REPRESENTATIVE PROJECTS

1. I-5 Freedom Creek – Fish Passage; Snohomish County, Washington
2021-2022

I completed project scope documentation. In the Basis of Design document, I outlined project information, needs, context and design controls. I selected best management practices for stormwater in the Stormwater Retrofit Assessment on Fish Barrier Projects documentation as required by WSDOT's Highway Runoff Manual. I made project site visits to review potential impacts to existing utilities, roadways and structures. One challenge of this project was evaluating multiple stream re-alignment options due to the inclusion of multiple fish barriers and the proximity of the existing stream to an interchange. I used my previous experience in roadway corridor modeling and cost estimate calculation to apply engineering judgement to the realm of fish barrier removal and stream corridor design. I designed 2D and 3D models with Microstation and InRoads to evaluate stream re-alignment alternatives. I used these models combined with my evaluation of historical bid item data and previous projects of similar scope to calculate preliminary cost estimates. I presented these documents, models and estimates to project team members to coordinate discussion about the optimal stream re-alignment alternative.

LAUREN FISSEL (15-704-18)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Osborn Consulting
Washington (United States)
CADD Technician
April 2024—March 2025

Verified by
Deepa Mungasavalli Prabhu
deepa@osbornconsulting.com

Experience Summary
Full-Time
Engineering: 11 months
Experience under licensed engineer: 11 months



TASKS

I evaluate and incorporate engineers' comments on plan sheets during QC reviews. I adjust InRoads drainage network data in coordination with project engineers. I design special project detail sheets in coordination with project engineers for transportation drainage and stream projects. I am responsible for evaluating and addressing Microstation, InRoads and C3D queries from technicians and engineers in the Transportation Drainage, Natural Resources and Alternative Delivery practices. I design plan sheets for stream design of fish passage projects. I am responsible for providing guidance for and modification to CADD design workflows as software is upgraded from Microstation and InRoads to OpenRoads Designer. I write and review documentation to provide guidance and training for CADD workflows in Microstation and InRoads.



REPRESENTATIVE PROJECTS

1. Gravelly-Thorne Connector & Shared-Use Path, Pierce County, Washington
2024-2025

I regularly communicated with the lead engineer to update the InRoads drainage network and profile sheet. I designed detail sheets in coordination with the lead engineer to convey project drainage designs.

2. SR 3, SR 104, SR 303 and SR 307, Kitsap County Remove Fish Barriers, Washington
2024-current

I designed the plan sheets for the stream design component of this fish barrier removal project. I planned the sheet design by reviewing and evaluating plan sheets of similar previous projects. I review and evaluate interdisciplinary plan sheets including those of structures, roadway and right-of-way to ensure that the stream design plan sheets accurately convey engineering information. I regularly coordinate with stream engineers to update plan sheets as stream designs evolve. I evaluate and incorporate engineers' QC comments on the plan sheets. I manage InRoads, Microstation and C3D design data to facilitate coordination between multiple consultant entities.

3. Klebeal Creek fish barrier removal project, SR 305 in Kitsap County, WA
March 2025 – current

I am responsible for drainage file and plan sheet setup in OpenRoads Designer. I reviewed and incorporated CADD and OpenRoads Designer standards as outlined in WSDOT's Electronic Engineering Data Standards manual to manage the project drainage CADD files. I will provide guidance for using OpenRoads Designer to facilitate CADD work throughout the course of this project.

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Explanation
September 2016	April 2017	This period followed my graduation from the University of Nevada, Reno. During this time, I focused on studying for the PE exam while actively searching for and applying to engineering jobs.
January 2023	March 2024	I temporarily stepped away from work to address health issues that were impacting my daily capabilities. I returned once my health had improved.

ANTHONY GUGLIUZZA (22-279-48)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
05/21/2025

Citizenship
United States

SUMMARY



Engineering Experience after EAC degree
3 years

Total Engineering Experience
3 years, 1 month

Experience under licensed engineer
2 years, 11 months

Disciplinary Action
None reported



EDUCATION



Bachelors in Civil Engineering (EAC)
University of Nevada, Reno
August 2018–May 2022

Masters in Civil and Environmental Engineering
University of Nevada, Reno
August 2022–May 2023

EXAMS



Fundamentals of Engineering (FE)
Nevada
April 2022

Principles and Practice of Engineering (PE)
Civil
Nevada
July 2024

LICENSES



Additional Licenses
None

WORK EXPERIENCE

Miyamoto International
Nevada (United States)
Staff Structural Engineer
April 2022—October 2023

Verified by
Veronica A Chauvel
veronicachauvel@gmail.com

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



TASKS

I performed as a staff structural engineer and would be responsible for the structural calculations of commercial projects including storefronts, warehouses, school buildings and hospitals in California, Nevada and other western states. I developed design criteria for these structures following applicable building codes, including International Building Code, California Building Code and American Society of Civil Engineers. I developed dead, live, wind and seismic loads for the design of structures, components and cladding, non-building structures and non-structural components. I designed the anchorage and supporting connections to resist wind and seismic loading for non-building structures and non-structural components as defined in the ASCE, especially mechanical components that were crucial for the safe and continuous operation of hospitals, schools, and other risk category III and IV structures. I developed schematic sketches, plans and details that were used by in-house drafters to create structural documents. I was responsible for the coordination of projects with architects, owners, contractors and other engineers of many sub-disciplines. I determined loads and adequate sizes for structural members subject to gravity and lateral loading, and worked with materials such as concrete, cold-formed steel, hot-rolled steel, masonry, wood, and other materials. I was involved in construction administration and was responsible for answering requests for information, reviewing shop drawings and submittals, and conducting site visits and inspections.



REPRESENTATIVE PROJECTS

St. Madeleine Sophie School Building, New School Building:
10/1/2022 to 4/1/2023

I was the design lead on a new school building in southern California. I developed loading criteria for gravity and lateral loads. I developed an optimal framing layout and calculated required member sizes for dead and live loading. I utilized the equivalent lateral force procedure to determine seismic and wind load distribution to the structure, and subsequently size wood shear walls and hold downs as the lateral force resisting system. I designed concrete stem walls and foundations. I worked with drafters to develop structural plans and details for a structural construction document set.

Valley Road Apartments, Multi-Family Housing:
4/1/2023 to 4/1/2024

I assisted in the design and construction administration of a new multi-family housing development in Reno, NV. I helped develop design loads for the structure, tracking loads down from multiple stories. I helped design the light wood frame shear walls and diaphragm framing based on bearing locations and loading requirements. I helped design the concrete podium located beneath the structure, including the layout, member sizing and reinforcement requirements of the concrete structural walls, beams, pilasters, columns and foundations. I conducted site visits and inspections on rebar spacing, concrete pours, framing layouts and connections. I assisted in the construction administration to answer requests for information and review shop drawings and submittals.

Kaiser Hospital Fall Protection, New Components
5/1/2023 to 5/1/2024

I was the design lead for a fall protection system to be installed on the side of an existing parking structure located at a Kaiser Hospital complex in San Jose, CA. The fall protection consisted of attaching new fall protection structure to existing concrete, and the design of the new attachments and structural members. I developed the required gravity and lateral loading, which included dead, seismic and wind loads, as well as service loads from human interaction with the structure. I had to analyze the existing plans for the structure to determine the adequate attachment of the new structure to the existing concrete parking garage columns and floors. I designed concrete anchorage in tension and shear, considering concrete strength and several failure modes.

WORK EXPERIENCE

CFBR Structural Group, LLC
Nevada (United States)
Structural Engineer
October 2023—May 2025

Verified by
Grayson Hallis
grayson@cfbrgroup.com

Experience Summary
Full-Time
Engineering: 1 year, 7 months
Post EAC degree: 1 year, 7 months
Experience under licensed engineer:
1 year, 5 months



TASKS

I perform as a project manager and lead structural engineer on various projects in Nevada and California. I am responsible for the development of design criteria, including dead, live, wind, seismic and snow loads, based on the geographic location, architectural design intent and structural performance of a project, as well as the conformance with all required building codes. I am responsible for the development of gravity and lateral loads to a structure based on geographic location, building code requirements and architectural intent. I am responsible for determining the optimal layout, sizes, grades, and orientations for structural framing members and connections, while adhering to architectural restraints such as height limits, cavity depths, and constructability. I am responsible for determining a lateral force resisting system for the structure such as wood or concrete shear walls or steel moment and braced frames, as well as the optimal layout and design for each system. I am responsible for the design of the lateral force resisting systems as well as their connections. I use computational modelling and design software to analyze lateral and gravity elements, connections and other related items. I coordinate with geotechnical engineers and their reports to determine required foundation types, sizes and reinforcement based on the soils and seismic activity at the project location. I model and draft structural documents and I am responsible for coordination with the owner of a project, the architect and the contractors throughout various stages of project and plan development including schematic design, design development and construction document phases. I am responsible for site visits and inspections including foundations, framing, connections and various other structural elements. I have decided on adequate and efficient solutions to problems that arise during construction due to unforeseen circumstances in the field. I am responsible for adhering to project schedules.



REPRESENTATIVE PROJECTS

Cole Residence, Custom Home:
10/26/2023 to 3/1/2024

I was the design lead on a small custom home in Soda Springs, CA. I developed a list of assemblies with respective dead, live and snow loading criteria. I modelled the structure in three dimensions in Revit, and drafted a structural plan with foundation plans, shear plans, framing plans, and details. I used the equivalent lateral force procedure to develop seismic loads to each story of the building, and subsequently designed diaphragms and wood shear walls with hold downs to be used as the lateral force resisting systems. I designed large glulam and laminated veneer lumber members to withstand the very large snow loads in the area, based on capacity and deflection requirements. I also corresponded with the owner directly to implement changes and provide cost-effective solutions to the design.

Nevada Historic Society Seismic Retrofit, State Public Works Project:
4/10/2024 to Current

I performed an ASCE Tier 1 Seismic Evaluation on an existing structure built in the year 1967, located at the University of Nevada, Reno in Reno, NV. I developed a performance objective for the building based on the type of building and owner requests. I developed the seismic design criteria for the building based on its geographic location. I utilized the seismic design criteria and the building's level of seismicity to determine the accurate ASCE procedure to follow regarding the retrofit of existing seismic deficiencies in the building. I determined that the existing structure had deficient wall anchorage and created a design utilizing sub-diaphragms and anchors to retrofit the connection of the diaphragm to its supporting concrete shear walls. I also drafted a structural plan which included concrete foundation work, framing plans and structural details. As the project got into construction, I have reviewed submittals for several aspects of the project and responded to requests for information from the contractor.

Rowan Residence, Custom Home:
1/5/2024 to Current

I was the design lead on a remodel and additional to an existing home in Incline Village, NV. I was directly responsible for site visits and inspections of the existing structure to coordinate existing framing and load path for gravity and lateral members. I designed the connections of the new structure to the existing structure, and designed steel moment frames to resist the added

seismic weight to the project. I coordinated directly with the architects and owners to change wall layouts, bearing lines, openings and cavity sizes for the existing structure based on architectural intent.

Mill Creek Residence, Custom Home:

1/5/2024 to Current

I am the design lead on a new custom home located in Pray, Montana. I developed design criteria for the gravity and lateral loading of the structure and developed optimal framing layout for gravity members such as columns and beams. I designed wood shear walls and steel moment frames using the equivalent lateral force procedure to determine appropriate loads to each force resisting element. I was responsible for the design of several large concrete retaining walls on the project. I utilized Enercalc, Risa and other software to help with the modelling and design of several structural elements on the project. I am in coordination meetings with the architects, owner and contractor to advise on cost-saving changes and efficiencies that can be made to the structure.

MICHAEL HADA (17-448-09)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
05/16/2025

Citizenship
United States

SUMMARY



Engineering Experience after EAC degree
9 years, 1 month

Total Engineering Experience
9 years, 1 month

Experience under licensed engineer
9 years, 1 month

Other Experience

Disciplinary Action
None reported



EDUCATION



Associates in Arts-General Studies
Palomar College
August 1996–May 2004

Associates in Arts-Engineering
Palomar College
August 1996–May 2008

Bachelors in Civil Engineering (EAC)
California State University, Northridge
January 2008–December 2009



EXAMS



Fundamentals of Engineering (FE)
California
October 2009

Principles and Practice of Engineering (PE)
Civil
California
April 2017

LICENSES



Additional Licenses
None

MICHAEL HADA (17-448-09)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

ADS Engineering, Inc.
California (United States)
Project Manager
June 1997—December 2003

Verified by

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



DESCRIPTION

MICHAEL HADA (17-448-09)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Turners Outdoorsman
California (United States)
Sales Associate
April 2004—May 2005

Verified by

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



DESCRIPTION

MICHAEL HADA (17-448-09)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Bill Hada Trucking
California (United States)
Truck driver/Operator
January 2006—January 2008

Verified by

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



DESCRIPTION

MICHAEL HADA (17-448-09)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

McCain Traffic Solution
California (United States)
Application Technician
December 2010—December 2011

Verified by

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



DESCRIPTION

MICHAEL HADA (17-448-09)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Advanced MRF
California (United States)
Operations Manager
January 2012—January 2014

Verified by

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



DESCRIPTION

MICHAEL HADA (17-448-09)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

The CP Group
California (United States)
Electrical Engineering Manager
January 2014—March 2016

Verified by

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



DESCRIPTION

MICHAEL HADA (17-448-09)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

SWS Engineering
California (United States)
Project Manager
April 2016—May 2025

Verified by
Michael David Schweitzer
michael@sws-engr.com

Experience Summary
Full-Time
Engineering: 9 years, 1 month
Post EAC degree: 9 years, 1 month
Experience under licensed engineer:
9 years, 1 month



TASKS

Working as a civil engineer at SWS I have provided civil engineering design for onsite and offsite infrastructure, grading and drainage improvements for commercial, educational, residential and mixed-use projects. Engineering includes site grading, stormwater treatment, accessibility, drainage and water quality, sanitary sewer and water systems, roadway design and erosion control design. At initial hire I was a project designer and worked under the direction of two licensed engineers. Within a year I became a project manager and remain in that role today. My daily tasks have been increasing less supervised during my tenure and currently my designs and calculations are completed independently by myself and reviewed periodically by the licensed engineers overseeing the projects.



REPRESENTATIVE PROJECTS

Fairway Business Park (phased development of a 17-acre brownfield site with the potential for approximately 20 commercial buildings) - Lake Elsinore, CA

October 2015 to Current (phased project development)

In this phased development I designed the underground water system that serves approximately one quarter of the developed site. I used hydraulic modeling software to calculate the pipe sizes of the public looped water mains based on building service demands of fire and domestic water. I also calculated the sizes of concrete thrust blocks (restraint blocks) required at angle points of the water system complying with California Fire Code given the allowable soil bearing capacities provided by the soils engineer.

Encanto Village Apartments (demo existing structures, consolidate lots, and develop two multi-story buildings with site amenities) - San Diego, CA

April 2017 to April 2018

I prepared a Drainage Study by determining existing and proposed drainage patterns of the pre and post project development. In accordance with the San Diego County Drainage Design Manual, I performed calculations to determine flow rates and volumes across site drainage basins. I also performed hydraulic calculation and analysis of flows at various locations in site to size storm drain inlets, pipes, and outlet structures.

Associated General Contractors Training Facility (green field development with one 30,000 sqft building, parking lot, stormwater treatment, and dirt training area) - Lakeside, CA

April 2018 to November 2019

I performed the initial rough grading analysis to determine the building finish floor elevation and performed earthwork calculations to achieve a balanced site with little to no import or export soils. I designed concrete and asphalt hardscape around the building and through the parking lot to drain to several bioretention stormwater basins. The hardscape was also ADA compliant per the California Building Code and provided path of travel access to the public right of way.

Innovations Academy Whole Site Modernization (renovation of existing 65,000 sqft building with new student drop off/fire lane, site amenities, and stormwater treatment facilities incorporated into landscaped student playground) - San Diego, CA

July 2019 to September 2020

I designed a student drop off driveway/road/cul-de-sac that doubled as a fire access lane. The road design adhered to state ADA requirements, School drop off requirements, and state Fire Code. At the front of the school, I designed and calculated student access from the public street via concrete ADA compliant stairs and ramps. My new civil grading designs had to match with existing building elevation and parking lot grades.

Little Lake Elementary School (addition of two Transitional Kinder classrooms) - Hemet, CA

November 2021 to December 2022

I designed rough grades for the two new building pads and new underground utilities (water, sewer, storm drain) that connected

the new buildings to the existing campus hardscape and utility systems. Hardscape included ADA compliant path of travel connections to the existing campus.

2322 Margaret Drive (New 5,500 sqft house with garage. Existing house demolished) – Newport Beach, CA
March 2022 to November 2022

I designed the grading and drainage around the new house complying with state and local building codes. I designed and calculated the drainage system that collected and conveyed site water to stormwater infiltrating treatment basins before it was conveyed offsite to the public right of way.

Carrillo Elementary School (replacement of 3.5 acres of existing hardcourt and grass sports field with new asphalt hardcourt and synthetic turf sport field) – Carlsbad, CA

April 2024 to March 2025

The project had an unknown underground aquifer that pushed up and destroyed the existing sports courts. I designed a layered drainage system separated by 18" of cement treated soil that drains underground perched water from the aquifer offsite, a storm drain system that collects runoff from both the hard court and synthetic turf surfaces and conveys it to a bioretention basin for storm water treatment prior to leaving the site, and a conveyance pipe system that collects runoff from existing campus areas that bypasses the treatment basin and comeslingles with both systems to discharge the site in the same predevelopment location. I calculated the size of inlets, pipes, and junction structures while maintaining pipe slopes necessary to avoid pipe clashes with the new storm system and existing underground utilities (wet and dry).

ADDITIONAL INFORMATION



TIME GAPS

Start Date	End Date	Explanation
January 2010	November 2010	2008 and 2009 I was at CSUN finishing my BS in Civil Engineering. I graduated during the Great Recession and could not find a job.

COLE HOFBERG (20-033-38)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
06/03/2025

Citizenship
United States

SUMMARY



Engineering Experience after EAC degree
4 years, 3 months

Total Engineering Experience
4 years, 3 months

Experience under licensed engineer
4 years, 3 months

Other Experience

Disciplinary Action
None reported



EDUCATION



Bachelors in Civil Engineering (EAC)
University of California, Davis
September 2014–June 2019

EXAMS



Fundamentals of Engineering (FE)
California
December 2020

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



LICENSES



Additional Licenses
None

COLE HOFBERG (20-033-38)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Yakitori Yuchan
California (United States)
Bartender/Waiter
February 2017—August 2020

Verified by

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



DESCRIPTION

WORK EXPERIENCE

ZT Consulting Group, Inc.
California (United States)
Project Manager
February 2021 – May 2025

Verified by
Farzad Tasbihgoo
farzad@ztcgrp.com

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

TASKS

I am a Civil Engineer specializing in Construction Management for highway and bridge projects, focusing on Quality Management and Quality Assurance (QA) of fabricated structural materials. I have worked for ZT Consulting Group (ZTC) since February 2021, progressing from Quality Engineer (2021–2024) to Project Manager (2025–Present).

As a Quality Engineer, I developed a deep understanding of the Caltrans Standard Specifications for Highway and Bridge Construction, which I reviewed and referenced when creating Source Inspection Quality Management Plans (SIQMPs) for dozens of bridge and highway projects. I performed thorough reviews of project plans and specifications to identify QA requirements for offsite fabricated materials. I created inspection plans for structural materials, including Precast Concrete Girders, Steel Girders, and Foundation Piles. I reviewed contractor submittals for compliance with specifications, identified discrepancies, and developed solutions. I directly managed the inspection process, performing on-site evaluations of fabrication practices, inspecting welds, coatings, and materials for conformance to specifications, and documenting inspection findings.

As a Project Manager, I directly resolved fabrication issues by analyzing root causes of material defects, such as non-compliant welding or coating processes. I conducted facility audits by inspecting production lines, verifying conformance to ASTM and Caltrans specifications, and analyzing sampling test data. I performed engineering analyses of test results, including strength calculations, to determine the structural impact of non-compliant materials. I determined if materials posed safety risks to the public and recommended engineering solutions, including repair procedures or design modifications, to ensure compliance and structural integrity. I consulted with the supervising Professional Engineer to finalize corrective actions that met all project requirements and safety standards.

REPRESENTATIVE PROJECTS

1. RCTC SR-71/91 Interchange Improvement, Riverside, CA (11/2022 – Ongoing)

I am the Quality Engineer for the SR-71/91 Interchange Improvement project, which involves replacing the existing single-lane loop connector and constructing new overcrossings, entrance ramps, and auxiliary lanes. I review contractor submittals for structural materials (e.g., Overhead Sign Structures, Reinforced Concrete Pipe, Electrical Poles, Soil Nails, and MSE Walls (Precast Concrete Panels)) and conduct source inspections at fabrication sites to ensure compliance with project specifications. I analyzed fabrication shop drawings of Anchor Bolt Assemblies used for the foundation of Overhead Sign Structures and Electrical Poles, Soil Nails, and MSE Walls, provided by contractors to verify conformance with design specifications and safety standards. I performed engineering reviews of proof loading test data for PTFE Spherical Bearings, a non-destructive test that verifies bearing durability and ensures compliance with project specifications. I personally verified test outcomes against design criteria to confirm that the bearings can withstand anticipated loads without compromising structural integrity. I reviewed and approved inspection documentation and identified discrepancies, developing corrective action recommendations as needed. I also developed and implemented the Source Inspection Quality Management Plan (SIQMP) for this project, outlining inspection procedures and ensuring consistent quality throughout the fabrication and installation processes.

2. City of Corona, McKinley Street Grade Separation, Corona, CA (05/2022 – Ongoing)

For the McKinley Street Grade Separation project, I am a Quality Engineer responsible for overseeing QA inspections of fabricated materials, including Electrical Poles, MSE Walls (Precast Concrete Panels), and Steel Girders. This project elevates McKinley Street over the BNSF Railway to improve traffic flow and safety.

I performed detailed inspections of the MSE Wall panels at fabrication facilities to verify compliance with project design specifications and structural integrity requirements. I conducted Hammer Testing on precast concrete panels, analyzing the results to determine the panels' compressive strength and ensure structural adequacy. I reviewed contractor submittals and fabrication records for conformance to ASTM and Caltrans standards, identified deviations, and developed engineering solutions to rectify non-compliance. I directly communicated my findings and recommendations to the design team and project stakeholders.

Additionally, I prepared and enforced the SIQMP for the project to ensure comprehensive quality assurance procedures were followed and documented throughout fabrication.

3. City of Irvine JOST/I-5 Bicycle & Pedestrian Bridge, Irvine, CA (02/2023 – Ongoing)

I am the Project Manager for the Quality Assurance (QA) source inspection scope of the JOST/I-5 Bicycle & Pedestrian Bridge project, which involves constructing a lighted off-street bicycle-pedestrian bridge along the Jeffrey Open Space Trail (JOST). This project connects communities and closes a critical gap in the regional trail system.

As Project Manager, I personally reviewed and approved contractor submittals for PTFE Spherical Bearings, Joint Seal Assemblies, Electrical Poles, and Truss Railing, ensuring they met project specifications and design criteria. I conducted engineering assessments of inspection data to verify compliance with ASTM and Caltrans requirements. I performed field inspections, including detailed measurements and calculations, to assess the structural adequacy of fabricated components and ensure they met load requirements. I also developed and implemented the SIQMP for this project, ensuring all inspection procedures were clearly defined and strictly adhered to. I communicated directly with city representatives, ensuring that Quality Assurance efforts were aligned with project goals and maintained technical integrity.

JOSHUA HORLACHER (17-631-21)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
06/28/2024

Citizenship
United States

SUMMARY



Engineering Experience after EAC degree
1 year, 10 months

Total Engineering Experience
9 years, 4 months

Experience under licensed engineer
9 years, 4 months

Disciplinary Action
None reported



EDUCATION



Non-degree
University of Nevada Las Vegas
June 2010–December 2016

Bachelors in Civil Engineering (EAC)
Southern Utah University
January 2022–April 2023

REFERENCES



SPECIAL CONSIDERATION: Request to accept experience prior and concurrent with education.

EXAMS



Fundamentals of Engineering (FE)
Nevada
March 2023

Principles and Practice of Engineering (PE)
Civil
Nevada
February 2024

LICENSES



Additional Licenses
None

JOSHUA HORLACHER (17-631-21)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

PBS&J
Nevada (United States)
Engineering Intern
June 2005—January 2008

Verified by
Morris Lee Jacoby Jr.
leej@horrocks.com

Experience Summary
Part-Time
Engineering: 1 year, 4 months (50%)
Experience under licensed engineer:
1 year, 4 months



TASKS

I was employed at PBS&J (now AtkinsRealis) as an intern during my senior year of high school and freshman year of college. I worked with the transportation design team where we worked on projects for the local municipalities and NDOT. I gathered preliminary project data by doing field surveys of surface utility features, taking site photos, and obtaining as-built plans and tiles from utilities and government agencies. I helped with sheet production in AutoCAD and Microstation by creating and annotating sheets and addressing redline comments by the project engineers.



REPRESENTATIVE PROJECTS

Galleria Interchange (2006 to 2008)

This interchange provided an additional exit from the 515 at Galleria Drive. The project required routing traffic around a nearby interchange necessitating five total bridges. I worked primarily with the traffic group and helped create sheets and addressed redline comments from the traffic engineers.

Losee Road Improvements - Lake Mead to 215 (2006 to 2008)

This project included pavement rehab and roadway widening for approximately seven miles between Lake Mead and the 215. This project was still in progress when I left PBS&J. I verified the surface utility features for the project by conducting site visits. During these site visits, I also took photographs of drainage features that needed to be incorporated into the finished design.

JOSHUA HORLACHER (17-631-21)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Horrocks
Nevada (United States)
Engineering Intern
November 2015—December 2017

Verified by
Byron James Colton
byronc@horrocks.com

Experience Summary
Part-Time
Engineering: 1 year, 7 months (75%)
Experience under licensed engineer:
1 year, 7 months



TASKS

I began work at Horrocks as an Engineering Intern. In my role as an intern, I worked with the roadway design team and the subsurface utility engineering (SUE) team. I gathered preliminary project data by doing field surveys of surface utility features, taking site photos, and obtaining as-built plans and tiles from utilities and government agencies. I used AutoCAD to create design alternative exhibits, roll plots, and create and annotate sheets. I helped with utility coordination and submittals and worked in the field with the SUE team to verify utility as-builts for both Horrocks projects and third-party contracts won by the SUE team.



REPRESENTATIVE PROJECTS

Valle Verde Rehabilitation and Parkway Landscape (Dec 2015 to Dec 2017)

This project included pavement rehab, full-depth removal and replacement, ADA improvements, and beautification of the pedestrian areas within the City of Henderson right of way. I helped with the creation of the plan set for the rehabilitation section of the project and coordinated the utility submittals. I assessed the sidewalk ramps in the project area and created an inventory of the ramps that needed improvements to meet ADA standards. I did the preliminary design of the narrowing of the roadway that provided the space for the new landscape areas in the public right of way. I calculated and compiled the cost estimate for both sections of the project.

I-15/Starr Avenue Interchange (Mar 2016 to Dec 2017)

This project was a new interchange on I-15 in which Horrocks provided support to NDOT during the design phase. I created right of way exhibits that helped coordinate the relocation of utilities and billboards affected by the design improvements. I coordinated with utilities and fire stations in the relocation and abandonment of dry and wet utilities.

JOSHUA HORLACHER (17-631-21)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Horrocks
Nevada (United States)
Roadway Designer
January 2018—January 2022

Verified by
Ben Sprague
ben.sprague@horrocks.com

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



TASKS

I transitioned to full-time work at Horrocks as a designer for the civil streets group. The civil streets group focuses on municipal roadway projects for Clark County and the cities in the Vegas Valley. In my role as a designer, I gathered utility as-builts and tiles and created utility files in CAD. I created utility conflict matrices, coordinated submittals with utility companies and agencies, and resolved their comments.

I created roll plots and preliminary design alternative exhibits in CAD. I designed roadway elements under the guidance of the project engineer and assisted them in the creation of plan sets. I created roadway corridors including detailed grading for sidewalk ramps. I designed pipe systems for water, sewer, and storm drain networks. I tallied quantities, compiled cost estimates, and prepared special provisions.

I attended internal meetings to monitor the progress of projects to ensure proper quality control and client meetings to address their comments. I helped to deliver quality plans efficiently and on time.



REPRESENTATIVE PROJECTS

8th Street - Stewart to Bridger (Sep 2020 to Oct 2021)

The project was scoped to provide 30% plans for 8th Street in downtown Las Vegas. The project includes the removal and replacement of all pavement, sidewalk, and landscaping between Stewart and Bridger except at Fremont Street. I conducted an inventory of utilities and signage based on as-builts, tiles, and site visits. The site visits included verifying the reflectivity of the existing signs. Under the supervision of the project manager, I set the new horizontal and vertical alignments for the length of the project. I designed the geometry of the new sidewalk, landscaping, and roadway, focusing on pedestrian and ADA accessibility. I produced the plans and compiled the cost estimate.

Boulder Avenue Improvements (Feb 2019 to Nov 2020)

This project was in the Arts District of Las Vegas and had the goal of improving accessibility of the area used for the First Friday Festival. The project included the removal and replacement of pavement, sidewalk, and landscaping. I designed the horizontal and vertical profiles for the project area. I laid out the geometry of the improvements and then graded the site, which included multiple ramps to building entrances, sidewalk ramps, stairs, and driveways. I created the storm drain network for the site and tied it into the regional system. I produced the sheet set and helped with the design of the signing and striping as well as the lighting plans.

Nevada State Drive - Paradise Hills to Compassion (Aug 2019 to May 2021)

This project was in Henderson, Nevada near Nevada State College. The project included designing a roundabout intersection and creating a new drainage channel to serve the area. I conducted an inventory of utilities and signage based on as-builts, tiles, and site visits. I designed the horizontal and vertical alignments and created the geometry of the roadway and sidewalks. I graded the roundabout and the pedestrian amenities. I calculated the earthwork and compiled the cost estimate. I assisted in the creation of the storm drain system and channel.

JOSHUA HORLACHER (17-631-21)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Horrocks
Nevada (United States)
Civil Streets Engineer-in-Training
January 2022—June 2023

Verified by
Ben Sprague
ben.sprague@horrocks.com

Experience Summary
Part-Time
Engineering: 9 months (50%)
Post EAC degree: 1 month (50%)
Experience under licensed engineer:
9 months



TASKS

I returned to part-time work at Horrocks in order to finish my schooling. I continued in my role with the civil streets group with the same responsibilities as before but with a reduced workload due to my limited availability.

I created roll plots and preliminary design alternative exhibits in CAD. I designed roadway elements under the guidance of the project engineer and assisted them in the creation of plan sets. I created roadway corridors including detailed grading for sidewalk ramps. I designed pipe systems for water, sewer, and storm drain networks. I tallied quantities, compiled cost estimates, and prepared special provisions.

I attended internal meetings to monitor the progress of projects to ensure proper quality control and client meetings to address their comments. I helped to deliver quality plans efficiently and on time.



REPRESENTATIVE PROJECTS

Nevada State Drive - Compassion to 215 (Nov 2021 to Dec 2023)

This project is a continuation of the previous Nevada State Drive project and connects the roundabout at NSC to the nearby 215. The project included the removal and replacement of pavement, sidewalk, and landscaping. I designed the horizontal and vertical alignments and laid out the geometry using the City of Henderson Master Transportation Plan typical sections. I graded the roadway, the sidewalks, sidewalk ramps, and drainage channels. The project included a railroad crossing and a bike trail connection. I produced the sheet sets and calculated the cost estimate.

Maule and Badura Avenue (Apr 2022 to May 2022)

This project is in unincorporated Clark County in the southwest region of the Vegas Valley. This project is a roadway widening adding additional lanes and pedestrian amenities. I worked in a support role on this project. I helped with the design of the storm drain improvements, produced the storm drain sheets, and started the details for drop inlets that needed to be designed specifically for the project.

WORK EXPERIENCE

Horrocks
Nevada (United States)
Civil Streets Engineer-in-Training
July 2023—June 2024

Verified by
Ben Sprague
ben.sprague@horrocks.com

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



TASKS

Upon completion of my civil engineering degree I returned to full-time work at Horrocks as an Engineer-In-Training. In my role as an EIT, I continue completing my previous tasks and responsibilities as a designer. In addition to finishing projects for the civil streets group, I have begun working with the heavy highway group and their NDOT projects.

In my role working with the heavy highways group, I use InRoads modeler and grading tools to create surfaces and calculate earthwork. I perform value engineering for the selection of wall types based on technical and financial analysis. I create grading details for non typical sections.

I create roll plots and preliminary design alternative exhibits in CAD. I design roadway elements under the guidance of the project engineer and assisted them in the creation of plan sets. I create roadway corridors including detailed grading for sidewalk ramps. I design pipe systems for water, sewer, and storm drain networks. I tally quantities, compile cost estimates, and prepare special provisions.

I attend internal meetings to monitor the progress of projects to ensure proper quality control and client meetings to address their comments. I help to deliver quality plans efficiently and on time.



REPRESENTATIVE PROJECTS

I-80 West Reno - Bridge Replacements (Jan 2024 to May 2024)

This project will replace 7 bridges along I-80 and widen approximately two miles of freeway. I provided support with the grading of the roadway, drainage channels, and bridge abutments. I used the InRoads corridor modeler where applicable to provide appropriate grades for clear zones while maintaining sufficient drainage characteristics. I used grading tools to grade sidewalk ramps and abutment slopes that tie back into the existing surface. I created details for the grading areas that do not fit within the typical sections of the roadway plans.

JOSHUA HORLACHER (17-631-21)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Bush & Gudgell
Utah (United States)
Project Manager
July 2024—May 2025

Verified by
William F Meyer, Jr
RMeyer@bushandgudgell.com

Experience Summary
Full-Time
Engineering: 10 months
Post EAC degree: 10 months
Experience under licensed engineer:
10 months



TASKS

I moved to Bush and Gudgell Inc in July of 2024. Bush and Gudgell's primary focus as a firm is land development. Initially my duties were much the same as at Horrocks with the primary difference being that I work more independently. I created roll plots and preliminary design alternative exhibits in CAD. I designed roadway elements using local and national standards and created preliminary plan sets. I created roadway corridors including detailed grading for sidewalk ramps. I designed pipe systems for water, sewer, and storm drain networks. I tallied quantities, compiled cost estimates, and prepared special provisions. I attended internal meetings to monitor the progress of projects to ensure proper quality control and client meetings to address their comments. I helped to deliver quality plans efficiently and on time. I also learned how to do hydrologic analysis of project sites to design the needed hydraulic systems on the site using primarily Autodesk SSA but also HEC-HMS.



REPRESENTATIVE PROJECTS

Warner Valley Road Extension (July 2024 - present)
This project is located at exit 13 of Southern Parkway in the St George area. The initial need of this project was to design a multilane road that widens the current well graded dirt road that connects St George to the undeveloped Warner Valley. The road will be the primary access of a future development of more than 30,000 units. I designed the horizontal and vertical alignments and created the geometry of the roadway and sidewalks. I graded the roadway using the alignments and corridor tools. I created preliminary plan sets for three separate government entities with jurisdiction of the area. I also assisted in generating conceptual layouts for housing tracts within Warner Valley itself and began learning hydrology and hydraulics while doing preliminary analysis for said concepts. The project is ongoing as the developer explore options to acquire more land in the Warner Valley area.

Falcon Crossing Technical Drainage Study (February 2025 - March 2025)
This project is a future hotel site in Mesquite, NV near exit 120 of the I-15. I learned how to do the hydrology following the Clark County Regional Flood Control District Hydrologic Criteria and Drainage Design Manual. I did the analysis and complied the report independently and make site design recommendation based on the CCRFCD manual's suggested best management practices (BMPs) for low impact development (LID) before having my efforts reviewed by the project engineer.

JOSHUA HORLACHER (17-631-21)

All work experience reviewed by two licensed professionals

ADDITIONAL INFORMATION



TIME GAPS

Start Date	End Date	Explanation
February 2008	May 2010	Served a full-time LDS mission in Rancagua, Chile from February 2008 to February 2010. I returned to school in the summer of 2010.

RICHARD LARA (16-360-88)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
05/07/2025

Citizenship
United States

SUMMARY



Engineering Experience after EAC degree
8 years, 11 months

Total Engineering Experience
8 years, 11 months

Experience under licensed engineer
6 years, 10 months

Other Experience

Disciplinary Action
None reported



EDUCATION



Bachelors in Civil Engineering (EAC)
University of Texas, Arlington
August 2012–May 2016

EXAMS



Fundamentals of Engineering (FE)
Texas
November 2020

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



LICENSES



Additional Licenses
None

RICHARD LARA (16-360-88)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Lufkin Industries
Texas (United States)
Warehouse Storekeeper
January 1995—April 1998

Verified by

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



DESCRIPTION

RICHARD LARA (16-360-88)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

United States Marines
Texas (United States)
Heavy Equipment Engineer
April 1998—April 2002

Verified by

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



DESCRIPTION

RICHARD LARA (16-360-88)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

AT Systems Armored Transport
California (United States)
Messenger
April 2002—June 2005

Verified by

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



DESCRIPTION

RICHARD LARA (16-360-88)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

FEDEX Office
California (United States)
Printing Specialist
June 2005—June 2007

Verified by

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



DESCRIPTION

RICHARD LARA (16-360-88)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Knight Transportation
Oregon (United States)
Driver
June 2007—September 2009

Verified by

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



DESCRIPTION

RICHARD LARA (16-360-88)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Marten Transportation
Texas (United States)
Driver
September 2009—October 2015

Verified by

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



DESCRIPTION

RICHARD LARA (16-360-88)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

HVJ and Associates
Texas (United States)
Engineering Intern
October 2015—May 2016

Verified by
Richard Lara (Self)

Experience Summary
Part-Time
Engineering: (0%)
Experience under licensed engineer:
None



TASKS

Responsible for observing drilling operations and logging borings. Conducted kickoff meetings before drilling to review the daily work plan, testing, and sampling methods with the drilling and traffic control crews. Performed laboratory testing according to ASTM standards on soil and rock samples. Conducted field density testing and earthwork observations. ACI certified technician and nuclear density testing certified. Prepared final boring logs, drafted geotechnical reports, and performed data entry.



REPRESENTATIVE PROJECTS

Geotech Engineer Intern
Fort Worth 121 / 820 Highway Project
10/2015 -4/20/2016

Instrumental in observing, testing, and sampling drilling operations for a geotechnical study aimed at future improvements. Observed and logged 100 ft deep borings until reaching competent rock according to TXDOT specifications. Utilized rotary drilling and slurry methods to core into limestone rock and recorded blow counts at each interval. Prepared final boring logs using WINCORE software for the geotechnical report. Documented rock quality and prepared samples for transportation and testing. Performed laboratory testing of soil and rock samples, including sieve analysis, maximum density of soil (Proctor), compression strength tests of rock, and unconfined compressive (UC) tests of soil. Finally, prepared a geotechnical report detailing project findings, soil information, laboratory testing results, and soil and rock bearing capacity calculations.

WORK EXPERIENCE

Alpha Testing
Texas (United States)
Geotechnical Project Manager
May 2016—April 2019

Verified by
Mahsa Hedayati
mahsa.h@gmail.com

Experience Summary
Full-Time
Engineering: 2 years, 11 months
Post EAC degree: 2 years, 11 months
Experience under licensed engineer:
2 years, 11 months

TASKS

Prepared proposals for various projects, including commercial, residential subdivisions, government, and state highway projects. As Geotechnical Project Manager, responsible for reviewing project plans and specifications, overseeing field operations of geotechnical drilling, and reviewing specimen samples for soil classification according to ASTM standards. Performed geotechnical analysis and calculations for soil strength and bearing capacity. Assigned laboratory tests on collected samples to further understand the properties of onsite soils. Prepared final boring logs to report onsite soil conditions. Prepared final geotechnical reports describing site soil conditions and providing recommendations for earthwork preparation for new construction projects.

REPRESENTATIVE PROJECTS

Geotechnical Engineering
Semi-Truck Tire Shop
October 19, 2016

I was part of the geotechnical engineering group focused on commercial and subdivision projects. I reviewed soil samples collected from the field, assigned laboratory tests, classified the soil, and used the information to perform analysis and calculations of soil strength parameters. I wrote the geotechnical report and provided recommendations for earthwork preparation.

Geotechnical Engineering
Brakes Plus, INC.
October 8, 2017

As part of the commercial geotechnical group tasked with small commercial development projects, I performed site visits to assess existing conditions and potential issues for new construction and earthwork preparation. I took photographs, created site overlays, and reviewed historical data. I reviewed soil samples collected from the field, assigned laboratory tests, classified the soil, and used the information to perform analysis and calculations of soil strength parameters. I wrote the geotechnical report and provided recommendations for earthwork preparation.

Geotechnical Engineering
Northstar Dermatology New Medical Office Building
August 30, 2018

As this project was located on a fully developed site, my role was to gather all available historical data, including maps and groundwater information, to assess the feasibility of new construction. Once my assessment was complete, I informed the client and provided my recommendations. After the project plan was accepted, I created a boring/drilling plan and collected samples for testing. I reviewed the full depth of soil samples collected from the field, assigned laboratory tests, classified the soil, and used the information to perform analysis and calculations of soil strength parameters. I wrote the geotechnical report and provided recommendations for earthwork preparation.

Geotechnical Engineering
Hampton Apartments
April 12, 2018

Reviewed project plans and specifications for acceptable movement and foundation design requirements. Prepared a boring/drilling plan and collected samples for laboratory testing. Classified soil based on observations and laboratory tests. Performed analysis to provide recommendations for earthwork preparation to meet project specifications and reduce soil movement. Additionally, provided guidelines for earthwork preparation of highly expansive soil.

RICHARD LARA (16-360-88)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Falkofske Engineering
Texas (United States)
Design Engineer Level 1
April 2019—May 2021

Verified by
erik garcia
erikgarcia214@gmail.com

Experience Summary
Full-Time
Engineering: 2 years, 1 month
Post EAC degree: 2 years, 1 month
Experience under licensed engineer:
None



TASKS

Reviewed project plans and geotechnical reports to create 2D profiles and sections of onsite conditions for new development projects. Provided proposals for the design of retaining walls and conducted field inspections during construction. Performed analysis and engineering calculations for earth retaining structures. Prepared plans, drawings, and details for the construction of retaining walls based on civil grading plans. Conducted site visits during construction to ensure compliance with plans.



REPRESENTATIVE PROJECTS

Retaining Wall Design
Travis Ranch South
04/20/2019

I served as part of the design team for subdivision new development. As part of the design team I marked up plans, created profiles and details of sections for retaining wall construction.

Retaining Wall Design
Oak Creek Apartments
05/15/2019

I designed the retaining wall sections required for the project based on site conditions and provided grading plans. I performed analysis and calculations to ensure the stability of the retaining walls, considering soil conditions and the type of wall being constructed. Using design software, I prepared detailed plans, profiles, and specifications for construction.

Retaining Wall Observations
Bridgewater Place
6/15/2019

Provided field observations of existing earth retaining structures to assess performance and offer maintenance recommendations. Collected information and data on the performance of in-place retaining walls to develop a long-term maintenance program for the client, aimed at reducing damage and extending the longevity of existing structures.

WORK EXPERIENCE

Terracon Consultants
California (United States)
Project Manager
June 2021 – May 2025

Verified by
Tamara Iida
tamara.hashimoto@terracon.com

Experience Summary
Full-Time
Engineering: 3 years, 11 months
Post EAC degree: 3 years, 11 months
Experience under licensed engineer:
3 years, 11 months

TASKS

Prepared proposals and fee estimates for geotechnical and material testing projects. Coordinated field work operations across both geotechnical and material testing. Provided accountability and frequent budget reporting to clients, and prepared change orders. Reviewed material testing inspection reports for accuracy and timely delivery. Analyzed laboratory data and tested soil, concrete, and masonry parameters according to ASTM standards. Prepared geotechnical reports with findings on strength design and seismic parameters. Compiled final compaction reports according to municipal standards. Reviewed plans and specifications, and set up projects with necessary testing information.

REPRESENTATIVE PROJECTS

Geotechnical Engineering
Athens Materials Recovery Facility
9/13/2021 - 5/1/2025

As part of the geotechnical team, I wrote the proposal for the geotechnical study and material testing for the project. I reviewed the plans and specifications, assessed site conditions, observed drilling operations, collected soil samples, logged borings, and performed infiltration testing. I assigned laboratory testing, prepared final boring logs, and wrote the geotechnical report and earthwork recommendations. I oversaw daily earthwork operations, including rough grading, overexcavation, and moisture conditioning of the soil through field density testing. Additionally, I reviewed daily material testing reports for inspections of concrete, welding, post-installed anchors, masonry, and concrete pavement, ensuring work was performed according to project specifications.

Geotechnical Engineering
Raising Cane Poway
5/12/2022 - 4/20/2025

As part of the geotechnical team, I wrote the proposal for the geotechnical study and material testing for the project. I reviewed the plans and specifications, assessed site conditions, observed drilling operations, collected soil samples, logged borings, and performed infiltration testing. I assigned laboratory testing, prepared final boring logs, and wrote the geotechnical report and earthwork recommendations. I oversaw daily earthwork operations, including rough grading, overexcavation, and moisture conditioning of the soil through field density testing. Additionally, I reviewed daily material testing reports for inspections of concrete, welding, post-installed anchors, masonry, and concrete pavement, ensuring work was performed according to project specifications.

Geotechnical Engineering
CARMAX San Diego
5/26/2022 - 4/20/2025

As part of the geotechnical team, I wrote the proposal for material testing for the project. I reviewed the plans and specifications, assessed site conditions, and reviewed the geotechnical report. I oversaw daily earthwork operations, including rough grading, overexcavation, and moisture conditioning of the soil through field density testing. Additionally, I reviewed daily material testing reports for inspections of concrete, welding, post-installed anchors, masonry, and concrete pavement, ensuring work was performed according to project specifications.

LAUNIE MCROBERTS (21-397-19)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
05/28/2025

Citizenship
United States

SUMMARY



Engineering Experience after EAC degree
4 years

Total Engineering Experience
4 years

Experience under licensed engineer
4 years

Other Experience

Disciplinary Action
None reported



EDUCATION



Bachelors in Geological Engineering (EAC)
University of Nevada, Reno
June 2018–May 2021

Non-degree
University of Nevada, Reno (Nevada, United States)
August 2023–May 2025



EXAMS



Fundamentals of Engineering (FE)
Nevada
February 2021

Principles and Practice of Engineering (PE)
Civil
Nevada
January 2025

LICENSES



Additional Licenses
None

LAUNIE MCROBERTS (21-397-19)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Franco French Baking Co.
Nevada (United States)
Baker
June 2012—December 2012

Verified by

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



DESCRIPTION

LAUNIE MCROBERTS (21-397-19)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Vail Resorts
Nevada (United States)
Assistant Store Manager
December 2012—June 2017

Verified by

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



DESCRIPTION

LAUNIE MCROBERTS (21-397-19)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Dominos Pizza
Nevada (United States)
Delivery Driver
June 2017—January 2018

Verified by

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



DESCRIPTION

LAUNIE MCROBERTS (21-397-19)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Claim Jumper
Nevada (United States)
Server
January 2018—May 2020

Verified by

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



DESCRIPTION

WORK EXPERIENCE

Black Eagle Consulting, Inc.
Nevada (United States)
Geotechnical Engineering Technician
May 2021 – June 2022

Verified by
Scott Kelly
sjk6bc@yahoo.com

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



TASKS

Geotechnical engineering technician with Black Eagle Consulting, Inc. (BEC) for one year, 1 month under the supervision of licensed Professional Engineers.

As a geotechnical engineering technician, my tasks and duties included performing geotechnical field investigations, soil profile logging using the Unified Soil Classification System per ASTM D2488, and documentation of field exploration. Types of field investigations I performed included:

- Vertical exploratory drilling (including auger, mud rotary, rock coring, and sonic drilling)
- Test pit excavations
- Cone Penetrometer Testing (CPT)
- Dynamic Cone Penetrometer Testing (DCP)
- Geophysical testing including refraction, refraction microtremor (ReMi), and electrical resistivity
- Percolation and infiltration testing which included correction calculations for wetted perimeter, hole volume, gravel void space, and conversion of percolation rates to infiltration using the Porchet Method.



REPRESENTATIVE PROJECTS

Aspen Creek Subdivision Project

Scope: Single-Family home subdivision in Dayton, Nevada. Up to 1,400 acres of development with parcels ranging from 0.5 acres to 10 acres. Scope of recommendations included mass grading, retaining walls, and material reuse.

Project Dates: March 2022 to May 2022

Role: For this project, I assisted with the writing of the proposal, hiring and coordinating of the excavation subcontractor, and performing field exploration. The field exploration consisted of a combination of geophysical testing and geotechnical test pit excavations. I prepared test pit logs, assisted in the selection of laboratory testing, and assisted with the writing of the geotechnical investigation report.

Switch Data Center Substation Expansion

Scope: Expansion of an existing data center substation at the Switch campus including shallow foundations, drilled shafts, and grounding grid

Project Dates: March 2022 to May 2022

Role: For this project, I performed a field investigation at the site which included exploratory drilling and electrical resistivity testing. I prepared exploration logs, assisted with the selection of laboratory testing, and assisted with the writing of the geotechnical investigation report. I performed engineering calculations to assist with bearing capacity recommendations.

Moana Nursery Gardnerville

Scope: Construction of a new nursery, storage, and shipping facility supporting the Moana Nursery. The project encompassed an area of approximately 10 acres and was proposed to consist of concrete tilt-up warehouse construction.

Project Dates: May 2022 to June 2022

Role: For this project, I assisted with the writing of the proposal, hiring and coordinating of the excavation subcontractor, coordinating field exploration, and writing the geotechnical investigation report. This project required significant test pits and a combination of percolation and infiltration testing to support a detention basin. Following exploration, I assisted with the selection of laboratory testing, engineering analyses, and report writing, including recommendations for bearing capacity, lateral earth pressures for retaining walls, mass grading recommendations, material reuse, percolation and infiltration rates, and a preliminary pavement structural section.

WORK EXPERIENCE

Construction Materials Engineers, Inc.
Nevada (United States)
Project Engineer
June 2022—May 2025

Verified by
Nicholas Ryan Anderson
nanderson@cmenv.com

Experience Summary
Full-Time
Engineering: 2 years, 11 months
Post EAC degree: 2 years, 11 months
Experience under licensed engineer:
2 years, 11 months



TASKS

Project Engineer with Construction Materials Engineers, Inc. (CME) for 3 years under the supervision of licensed Professional Engineers.

As a Project Engineer, my tasks and duties include performing geotechnical analyses and modeling and preparation of geotechnical recommendations for design and earthwork. Geotechnical analyses I performed included:

- Static and pseudo-static lateral earth pressure analysis for retaining wall and foundation stem wall design
- Bearing capacity and allowable bearing pressure analysis for shallow foundations
- Flexible pavement structural section design
- Rippability assessment using geophysical data
- Expansive soil analysis and mitigation
- Slope stability analyses for slopes and embankments utilizing Slide
- Settlement analyses utilizing Settle3D
- Liquefaction triggering and consequence analyses from SPT and CPT data
- Drilled shaft analyses utilizing Shaft



REPRESENTATIVE PROJECTS

NV Energy Goldfield substation

Scope: Construction of a new NV Energy substation to support the town of Goldfield, Nevada. Project included grading, shallow foundations, drilled shafts, grounding grid, and other engineering recommendations.

Project Dates: August 2023 to September 2023

Role: For this project, I assisted with the writing of the proposal. I coordinated the hiring of the drilling subcontractor and performing of field exploration. I performed drilling logging and performed electrical resistivity testing. Upon completion of exploration, I generated the exploration logs and assisted with the selection of laboratory testing. Following completion of laboratory testing, I performed engineering analyses including MFAD parameters to assist with transmission line tower design, drilled shaft analyses using SHAFT, and other various engineering analyses including bearing capacity, material reuse, etc. I wrote the draft geotechnical investigation report, to be reviewed by my supervisor.

5 Ridges Master Planned Community

Scope: Large-scale single-family home subdivision project including mass grading, open cut and fill slopes, large fills in excess of 150+ feet, bedrock rippability, consolidation-prone clay soils, etc.

Project Dates: June 2022 to Ongoing

Role: For this project, I have performed various tasks including performing a rippability assessment via the use of existing rock outcrop classification using the Rock Mass Rating and Geological Strength Index classification systems and performing refraction geophysical testing. Assist with the installation and monitoring (ongoing) of surcharging of consolidation-prone clay deposits including the installation of Vibrating Wire Piezometers and performing ongoing settlement calculations. Throughout the timeline of the project, assisted with the writing of geotechnical recommendation reports for various phases and tasks within the project site including engineering analyses in the form of mass grading, material reuse, bearing capacities, lateral earth pressures, etc.

TMWA Quilici Water Tank

Scope: Design and construction of a 300,000-gallon, steel water tank with cut and fill slopes, mass grading, and gravel-surfaced access road.

Project Dates: August 2024 to Jan 2025

Role: For this project, I performed field investigations in the form of test pits, auger drilling and rock coring, and geophysical testing including refraction microtremor (ReMi) and refraction. I provided the client with recommendations including bearing capacity, settlement calculations using Settle 3D based on the proposed fills and water tank loading, slope stability assessments performed using Slide, rock rippability assessments, and other various geotechnical recommendations. I assisted with the writing of the geotechnical investigation report.

ALEXANDER MORGAN (21-513-55)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
06/03/2025

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, Reno
January 2018–May 2021

EXAMS



Fundamentals of Engineering (FE)
Nevada
February 2021

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



LICENSES



Additional Licenses
None

ALEXANDER MORGAN (21-513-55)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Odyssey Engineering Inc
Nevada (United States)
Engineering Intern
June 2021 – June 2025

Verified by
Frank Bidart Allen Bidart
frank@odysseyreno.com

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



TASKS

I have had the privilege to work on nearly every phase a typical project may go through. Initial proposals, preliminary design, overall site development, design options, roadway design & grading, parking design & grading, pedestrian and ADA compliant design & grading, landscape and LID focused grading, swale and storm water infrastructure design & grading, hydrology and hydrologic analysis, sanitary sewer and pump infrastructure design, mechanical electrical and plumbing coordination, utility crossing exhibits and construction details development, signage and stripping displays, fire hydrant displays, civil site improvement plan set creation, water plan development, conditional use permitting, submittal review and approval, and on-site coordination meetings.



REPRESENTATIVE PROJECTS

Vintage at Spanish Springs Apartment Complex – Washoe County, NV (June 2021 – March 2022)

I planned the parking area and sidewalk connectivity. I designed the storm drain infrastructure and ensured proper connectivity and flow to the concrete lined ditch on site. I verified utility crossing clearances and coordinated with the electrical contractor on placement of transformers. I performed over excavation quantity take off calculations.

580 South Industrial Park – Reno, NV (April 2022 – October 2022)

I produced phasing plans and civil site improvement plan sets for the first four proposed buildings on the property. I developed Truckee Meadows Water Authority plans for each building. I created a site specific detail for a private fire line interaction with a proposed rockery wall.

Ascente by Toll Brothers Luxury Home Community – Reno, NV (November 2022 – October 2023)

I crafted plan and profile drawings for each of the three clusters of homes as well as Truckee Meadows Water Authority access roads. I designed three differently configured pressure reduction stations and assisted with the project's water tank design. I created construction details for high pressure thrust block applications.

Stonebrook Panera Bread + Multi-Tenant Building – Sparks, NV (November 2023 – July 2024)

I assembled and submitted plan sets and supporting documents for approval through Accela. I answered and relayed department comments to members of the design team. I demonstrated compliance of our design with an administrative review conditions of approval letter.

12 Ohm NV Energy Warehouse – Reno, NV (August 2024 – June 2025)

I worked with the owner and architect on overall site layout and design option configurations. I analyzed existing and proposed drainage basins and generated a hydrologic and hydraulic report. I sized storm drain pump systems and calculated the required expansion of an existing retention pond.

ALEXANDER MORGAN (21-513-55)

All work experience reviewed by two licensed professionals

ADDITIONAL INFORMATION



TIME GAPS

Start Date	End Date	Explanation
June 2011	December 2017	US Army - 35P Cryptologic Linguist, Honorably Discharged at the rank of Specialist

BEN RAWLINS (21-662-80)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
05/06/2025

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, Reno
August 2015–May 2021

EXAMS



Fundamentals of Engineering (FE)
Nevada
March 2021

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



LICENSES



Additional Licenses
None

BEN RAWLINS (21-662-80)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

CA Group
Nevada (United States)
Staff Engineer
May 2021 – August 2022

Verified by
Chad Dean Anson
chad.anson@c-agroup.com

Experience Summary
Full-Time
Engineering: 1 year, 3 months
Post EAC degree: 1 year, 3 months
Experience under licensed engineer:
1 year, 3 months



TASKS

Worked as a Staff Engineer on transportation design projects for the Nevada Department of Transportation (NDOT). Responsibilities included preparing and annotating roadway design plans in MicroStation for horizontal and vertical alignments, performing calculations related to roadway geometry, and producing Right-of-Way (ROW), utility, lighting, and signage plans. Gained experience reviewing MUTCD and FHWA standards for signage layout and compliance, especially for urban interchanges. Collaborated with multi-disciplinary teams and external utility providers to incorporate coordination needs and technical standards into the design process. Regularly communicated with NDOT project managers, participated in design review meetings, and supported the production of stamped final design packages under the supervision of a licensed PE. Participated in the full design-build cycle until project handoff to construction contractor (Kiewit).



REPRESENTATIVE PROJECTS

Major Project Example – Tropicana/I-15 Interchange Design

Role: ROW Designer and Utility Coordination Support

What you did: Created detailed ROW plans for a major system-to-system interchange project. Coordinated with external utility companies such as NV Energy and AT&T to resolve conflicts between proposed designs and existing infrastructure. Prepared design adjustments to meet both NDOT and utility company standards, including layout changes and clearance analysis.

Engineering skills applied: Plan development, utility conflict analysis, CAD drafting, ROW documentation, and design revisions based on client and third-party feedback.

Software/tools used: MicroStation, Microsoft Excel

WORK EXPERIENCE

Rawlins Infra Consult
Nevada (United States)
Staff Engineer
August 2022—May 2025

Verified by
Paul Joseph Steinman
paul@rawlinsic.com

Experience Summary
Full-Time
Engineering: 2 years, 9 months
Post EAC degree: 2 years, 9 months
Experience under licensed engineer:
2 years, 9 months



TASKS

I performed engineering tasks for multi-agency transportation programs, focusing on workforce modernization, program delivery, and design-build support. I developed technical documentation for DOT engineering classifications, analyzed staffing needs based on projected workloads, and conducted lifecycle cost assessments for engineering functions. I contributed to predictive maintenance strategies and compiled training and proficiency materials for bridge inspection teams. I supported engineering managers in evaluating core functions and preparing implementation plans to optimize project delivery.

I reviewed MicroStation-based design plans for multiple DOT clients during design-build pursuits. These short-term reviews included redlining geometric layouts, cross-checking against technical provisions, and confirming compliance with NDOT and FHWA standards. I attended design review sessions and submitted markups as part of Red Team review cycles on behalf of our design-build partners.

I supported the creation of engineering task sheets and workflow documents for field teams, aligning each with FHWA guidelines and internal DOT SOPs. I frequently reviewed plan submittals and draft specifications prior to PE sign-off, ensuring content accuracy and engineering consistency.

I regularly participated in client presentations, stakeholder workshops, and DOT-led working groups. I synthesized feedback from internal and external stakeholders and incorporated revisions to engineering documentation. I utilized project management platforms including Smartsheet and Microsoft Project to track submittals, log QA/QC activity, and maintain version control. I also managed internal document reviews through SharePoint and coordinated deliverable deadlines. I contributed to the review of construction phasing strategies and proposal content for large-scale interchange projects. All tasks were performed under the direction and review of licensed PEs, and the final products were formally incorporated into DOT planning systems, staffing implementations, and design-build proposal submittals.



REPRESENTATIVE PROJECTS

TDOT EPIC Program – Statewide Engineering Organizational Redesign (2022–2023, Tennessee)

I evaluated engineering staffing levels and organizational structures for the Tennessee Department of Transportation. I calculated workforce needs using TDOT's five-year work program and created over 60 technical job descriptions. I mapped job duties to engineering classifications, identified required proficiencies, and aligned recommendations with the state's pay-grade structure. I developed draft org charts, implementation matrices, and evaluation rubrics. These documents were reviewed and approved by licensed PEs. My work resulted in revised position descriptions, increased salary alignment, and new onboarding paths for DOT engineers statewide.

TDOT Bridge Inspection Proficiency Program (2023–2024, Tennessee)

I supported the design of a multi-level training and evaluation program for engineers performing bridge inspections. I reviewed FHWA and NBIS standards to define engineering competencies required for entry-level and advanced bridge inspectors. I developed task sheets and proficiency checklists covering visual inspection, hands-on inspection, and drone-assisted workflows. I incorporated national best practices and compiled documentation to guide DOT technical trainers. These deliverables were adopted by TDOT's Structural Division and integrated into internal training databases. I also helped evaluate current bridge inspection crew practices and compiled recommendations on inspection method selection.

TDOT Maintenance Operations – Region 3 PBMC Readiness and MQA Analysis (2023–2024, Tennessee)

I analyzed Maintenance Quality Assessment (MQA) data to evaluate readiness for launching performance-based maintenance contracts. I reviewed inspection results across districts, flagged outlier performance areas, and helped define service-level thresholds. I produced data summaries and visualizations used in executive presentations to inform decision-making on resource

planning, equipment allocation, and regional contracting approaches. My engineering analysis led to updates in TDOT's PBMC contract monitoring procedures and created a model for performance tracking in future rollouts. I also reviewed historic performance trend data and analyzed patterns related to equipment uptime and snow/ice service delivery.

NDOT Strategic Action Planning – 2025–2029 Plan Support (2023–2024, Nevada)

I supported NDOT's action planning process by identifying and documenting engineering functions across the organization. I collected input from division leadership and converted this feedback into technical deliverables that aligned engineering responsibilities with agency-wide strategic goals. I contributed to SharePoint-based action plan tracking systems and documented inter-division workflows. My work supported NDOT's ability to evaluate the effectiveness of its engineering programs and track performance measures throughout the five-year planning horizon. I also helped refine the agency's strategic improvement loop for plan revision and supported internal reporting templates.

LaDOTD Bridge & Maintenance Peer-State Review (2023–2024, Louisiana)

I conducted technical comparisons of maintenance and bridge inspection procedures used by LaDOTD and peer states. I analyzed performance outcomes, documentation standards, and funding strategies, and compiled my findings into deliverables used to update LaDOTD's bridge program manuals. I provided engineering insights into preservation bundling practices and prioritized strategies for maintenance coordination between districts. These recommendations were approved by DOT leadership and are now in the implementation phase. I also provided analysis of training and onboarding gaps in field-level bridge inspection positions and evaluated how other DOTs addressed similar staffing constraints.

Kiewit Henderson Spaghetti Bowl – NDOT Design-Build Review Support (2023–2024, Nevada)

I performed engineering reviews during the RFP and Red Team phases of NDOT's Henderson Spaghetti Bowl interchange design-build project. I reviewed Kiewit and NDOT-prepared roll plots, technical provisions, traffic alternatives, and proposal documentation. I evaluated horizontal and vertical geometry for compliance, provided redlines through Ideagen and Smartsheet, and participated in coordination calls with roadway designers. I reviewed alternatives proposed by Kiewit using traffic data, documented risks associated with clearance and constructability, and compiled summary notes used to refine the submittal package. My comments were incorporated into Kiewit's final proposal and directly contributed to a more competitive and technically sound design package. I also participated in technical coordination meetings with Kiewit, reviewed RFP addenda, and reviewed staging and sequencing strategies to ensure constructability and safety.

DEREK RIZO (14-688-79)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
05/01/2025

Citizenship
United States

SUMMARY



Engineering Experience after EAC degree
8 years, 9 months

Total Engineering Experience
8 years, 9 months

Experience under licensed engineer
8 years, 9 months

Other Experience

Disciplinary Action
None reported



EDUCATION



Bachelors in Civil Engineering (EAC)
University of Nevada, Reno
August 2008–December 2014

EXAMS



Fundamentals of Engineering (FE)
Nevada
February 2016

Principles and Practice of Engineering (PE)
Civil
Nevada
April 2025



LICENSES



Additional Licenses
None

DEREK RIZO (14-688-79)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Ben's Fine Wine and Spirits
Nevada (United States)
Assistant Manager
July 2013—June 2015

Verified by

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



DESCRIPTION

DEREK RIZO (14-688-79)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Big 5 Sporting Goods
Nevada (United States)
Assistant Manager
June 2015—August 2016

Verified by

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



DESCRIPTION

WORK EXPERIENCE

Nevada Division of Environmental
Protection - Bureau of Air Pollution
Control
Nevada (United States)
Staff 2, Associate Engineer
August 2016—May 2025

Verified by
Ashley Taylor
ashley.taylor@ndep.nv.gov

Experience Summary
Full-Time
Engineering: 8 years, 9 months
Post EAC degree: 8 years, 9 months
Experience under licensed engineer:
8 years, 9 months

TASKS

I have worked exclusively for the Bureau of Air Pollution Control in the Permitting Branch. I work on Class I major source permitting also known as Title V permitting and Class II sources. My position requires me to understand various types of stationary air pollution sources and air pollution control devices. This position also requires me to be familiar with the Administrative Code and Revised Statutes and the U.S. Title 40 Code of Federal Regulations (40 CFR). My tasks include reviewing applications submitted by facilities that have the potential to emit regulated air pollutants. Following the application review process, I produce an emissions inventory spreadsheet that calculates the facilities potential to emit any regulated air pollutants. The final tasks include drafting and issuing air quality operating permits and technical support documents for each permitting action.

REPRESENTATIVE PROJECTS

I have been with the Bureau of Air Pollution Control since August 2016. I have been assigned various types of projects associated with facilities located within the State of Nevada. Facilities include gold mines, limestone quarry and manufacturing facilities, geothermal power plants, landfills, lithium battery production facility and other facilities throughout the State of Nevada.

From 2016 - 2021 I processed applications that had a potential to emit criteria pollutants below 100 tons per year. These sources are considered Class II source in Nevada.

For example, I processed the Class II renewal and revision for EP Minerals LLC- Fernley Operations. The regulatory time frame allocates 10 working days to determine if the application provided is complete. During those 10 working days, I reviewed the submitted application to ensure all the applicable information was provided. Once I determined that the application can be deemed complete, I had 60 calendar days to review and issue the Class II Air Quality Operating Permit. To review the application, I utilized an emissions spreadsheet to calculate emission data from each emission unit that the facility operates. For example, this facility operated loading, unloading, conveyor transports, crushing operations, a rotatory kiln and a gasoline storage tank. The emissions spreadsheet incorporates all of the facility's requested revisions and calculates the potential to emit for all federally regulated air pollutants. In order to move forward, the calculated emissions must not result in a violation of the Nevada Ambient Air Quality Standards (NAAQS). I utilized an atmospheric air dispersion-modeling program called AERMOD, to simulate the dispersion of air pollution sources within the facilities boundaries. After I determined that the potential emissions will not violate any state standards, I drafted the air quality operating permit and prepare it for issuance. Because this particular project involved a revision that exceeded thresholds established in the Nevada Administrative Code (NAC), public notice was required. For public notice I prepared documents and a presentation that was held to the public for comment on the proposed permitting action. Afterwards, I drafted a technical support document for the proposed permitting action that detailed the facility, their proposed action and any federal regulations the facility is subject to. Following the technical support document, I recommended the permit for issuance.

Since 2021 I have been processing applications primarily that had a potential to emit criteria pollutants greater than 100 tons per year. These sources are considered Class I source in Nevada and Title V sources federally. Some of the projects I am currently working on include Tesla, Inc., Nevada Gold Mines, LLC - Twin Creeks Mine, City of Fallon Landfill, among various other facilities throughout the State of Nevada.

These Title V sources are larger than the Class II sources and have longer regulatory timelines. For example, I am working on processing the renewal and revision of Graymont Western US Inc. - Pilot Peak Plant. The regulatory time frame allocates 60 days to determine if the application provided is complete. Once I determine that the application can be deemed complete, I have 365 days to review and issue the Class I Air Quality Operating Permit. The application review and permit issuance are similar to the process described above but these larger facilities require additional EPA review. I prepare documents along with the permit and application and submit them to EPA for a 45-day review. Because this is a renewal of a Class I operating permit, I will prepare

public notice. Following the EPA review and public notice, I can recommend the permit for issuance.

I was also involved in developing a brand-new application for Class I Title V Air Quality Operating Permits which helped streamline the application process.

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
05/01/2025

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, Reno
August 2017–May 2021

EXAMS



Fundamentals of Engineering (FE)
Nevada
June 2021

Principles and Practice of Engineering (PE)
Civil
Nevada
May 2024



LICENSES



Additional Licenses
None

WORK EXPERIENCE

Lumos & Associates
Nevada (United States)
Engineering Technician
May 2021 — October 2021

Verified by
Steven Gerald Moon
smoon@lumosinc.com

Experience Summary
Full-Time
Engineering: 5 months
Post EAC degree: 5 months
Experience under licensed engineer: 5 months



TASKS

The job entailed following construction plans in the field to verify the construction materials were being placed correctly and the quality of the materials were to city standards. I would test the concrete for the air and slump in the concrete mix being placed to ensure that concrete being placed met the city requirements. I calculated the compaction of the dirt that asphalt/concrete were being placed on. I would also calculate slurry spread rate over the road that it was being placed to ensure spread rates met city standards. These tasks were 100% of my job.



REPRESENTATIVE PROJECTS

I was on the first phase of the Kings Row street rehabilitation in Reno, Nevada. This job was from when I started in May of 2021 until I left in October of 2021. My job on that was to test concrete and asphalt compaction. I calculated the compaction of the dirt the asphalt and concrete being placed. I would recommend if the construction crew needed to add water or if they needed to compact it more to make sure the base material was in the appropriate moisture and maximum dry density range. I also reviewed that the materials placed in field matched what the engineering plans had called out. I would help recommend what to do when an issue in the field arose. I reviewed all the materials submittals ensuring that they matched the plans, and the materials were up to the City of Reno specifications.

WORK EXPERIENCE

Tectonics Design Group
Nevada (United States)
Civil Engineer
October 2021 — May 2025

Verified by
Matt K Rasmussen
matt@tdg-inc.com

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



TASKS

I am in charge of site design for projects across the country. I design the stormwater infrastructure for every site and ensure that all calculations and design parameters meet local code. I am in charge of designing the grading for the site which includes ADA paths and site configuration. I ensure that all project design principals meet local jurisdiction requirements and code.



REPRESENTATIVE PROJECTS

The first project that I want to highlight my involvement in, was the ground-up development of a Dutch Bros Coffee building and related infrastructure located in St. George, Utah. The project started in October of 2022 and was completed in May of 2023. I was responsible for calculating the stormwater water quality for the site along with the calculation of showing that existing storm drainage system was designed to adequately handle the proposed site's flow. I also designed the grading for the site and how the site would tie into the existing public infrastructure. I designed the new water line and the required offsets and restraints that it needed.

My second project was the design a new ADA compliant access ramp within the historic Stewart Colony located in Carson City, Nevada. This project involved the removal and replacement of an existing ADA ramp, stairway, and concrete slab. The project began in October of 2023 and reached completion in June of 2024. I designed grading of the ramp to meet ADA slope regulations. I designed stairway concrete slab to ensure full ADA compliance along with how it would tie into the existing historical columns that could not be altered. I reviewed all the material submittals that the contractor sent over to ensure they would meet the requirements of the city and would work as proposed.

JOSEPH ONYLLE SALVA (15-811-61)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
05/03/2025

Citizenship
Philippines

SUMMARY



Engineering Experience after EAC degree
4 years, 2 months

Total Engineering Experience
4 years, 2 months

Experience under licensed engineer
4 years, 2 months

Other Experience

Disciplinary Action
None reported



EDUCATION



Bachelors in Civil Engineering (EAC)
University of Nevada, Reno
September 2010–May 2015

EXAMS



Fundamentals of Engineering (FE)
Nevada
April 2015

Principles and Practice of Engineering (PE)
Civil
Nevada
May 2024



LICENSES



Additional Licenses
None

JOSEPH ONYLLE SALVA (15-811-61)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Starbucks (Nevada and California)
California (United States)
Lead Supervisor
August 2011—February 2017

Verified by

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



DESCRIPTION

JOSEPH ONYLLE SALVA (15-811-61)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

First American Home Warranty
California (United States)
Equipment Research Specialist
January 2016—April 2019

Verified by

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



DESCRIPTION

JOSEPH ONYLLE SALVA (15-811-61)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Reno Housing Authority
Nevada (United States)
Development Specialist
May 2019—February 2021

Verified by

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



DESCRIPTION

WORK EXPERIENCE

City of Reno
Nevada (United States)
Project Coordinator
March 2021—May 2025

Verified by
Alisha Auch
aucha@reno.gov

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



TASKS

I reviewed plans and specs for projects affecting the City Right-of-way including streets, parking lots, sewer and storm drain systems, traffic signals / light poles, and other city facilities to be in accordance with current local and federal codes and standards.

I performed inspections of construction work encroaching in the Right-of-way for compliance with local, state, and federal codes, standards, and ordinances. This included private and public projects such as excavation and underground work for the water, gas, electricity, communications, sewer and storm drain systems, permanent pavement patching, replacement of concrete flatwork and structures, traffic signal / light pole and traffic equipment replacement, and small cell technology installation.

I analyzed roadway characteristics, traffic patterns, sewer and storm drain systems, and storm runoff and created exhibits for traffic studies, accessibility pathways, micromobility pathways, and drainage studies to be presented to City Council and to be used for street rehabilitation project design.

I designed plans and specifications for parking lot replacement projects for fire stations and parks, pedestrian ramp improvement projects, and street rehabilitation projects. I develop plans using Civil 3D software, performing re-grading of existing streets for drainage and driveability, analyzing existing traffic controls and improving vehicle and pedestrian safety. I develop cost estimates for feasibility studies for future projects and current projects that are about to go to bid.

I perform field construction management for on-going street construction projects, and ensure work is within compliance of plans, specifications and standards. I review submittals for materials and schedule material testing for installed products. I conduct punch list inspections and facilitate project close outs, including the development of project as-builts.

I started as a Senior Engineer Technician I in 2021, worked in the Encroachment and Excavation team, then became a Project Coordinator for the Streets team in July 2022.



REPRESENTATIVE PROJECTS

Small Cell Technology Installations on Light Poles and Traffic Signals, Reno NV, 2021-2023.

I reviewed the plans and specifications required for the installation of small cell technology on light poles / traffic signals per most recent FCC guidelines. I recommended light poles / traffic signals that were at the end of their life and are great candidates for replacement. I recommended locations that will maximize coverage of the small cell technology. I recommended acceptable types of light poles and traffic signals, as well as traffic signal equipment including cabinets / pedestrian heads and signal heads, for installation in the City of Reno Right-Of-Way. I reviewed traffic control plans, traffic signal phasing plans, electrical wiring and conduit diagrams, traffic rated roadside design features, light pole/traffic pole loading and base designs, concrete flatwork and asphalt pavement designs for recommendation of approval. I performed inspections of on-going small cell installations for compliance with plans, specifications and local and federal codes and standards.

Street Rehabilitation Projects, Reno NV, 2023-2025.

I have been part of the team that design and construct the Street Rehabilitation Projects that the City of Reno issue every year. These projects range from 2 million to 11 million dollars per project. Each project consists of the removal and replacement of concrete structures, asphalt roadway, and the upgrade of some storm drain and sewer systems. I have been a part of the project from conception to completion of each project since 2023 including Talus Way (2023), Akard Dr and Van Ness Dr (2023-2024), Yori North (2024), Yori South (2024), California Ave (2025), and University East (2025). I analyzed existing pavement and site conditions to build a scope for the street rehabilitation. I established right-of-way needs and coordinated utility relocations. I recommended traffic calming measures for identified streets with excessive speeding. I designed the plans using Civil 3D software, established alignments, slopes, lane and sidewalk widths and configuration, pavement elevations. I computed quantities and prepared estimates for construction costs. I reviewed plans, specifications, and geotechnical reports from consultant engineers. I identified deficiencies in constructability of the plans and provided recommendations. I reviewed material submittals, permit applications, and traffic control plans to kick start the project. I performed inspections during construction to ensure compliance with the design. I confirmed field quantities and established a cost schedule for remaining work. I provided field

revisions and recommendations to problems relating to drainage, design and material deficiencies, traffic control measures, and safety issues.

Flood Response Action Map Project, Reno NV, Jan 2023 – April 2023.

The Public Works / Utility Services team responded to the flooding caused by the big storm events in the beginning of 2023. The scope of this project was to respond accordingly to flooding events around the city, observe, record and map the incidents, and provide future resolutions. My role was to identify the cause of the inundation, whether it was caused by a clog, an undersized pipe, old catch basin configuration, a ditch breach, etc. and provide a solution to every incident I encountered. I created storm runoff drainage reports and recommended improvements to undersized pipes and storm drain system configurations. I created exhibits of the encountered issues and appropriate recommendations to be presented to City Council.

Pedestrian Ramp Improvement Project, Reno NV, 2022-2025.

I selected, reviewed, recommended, designed, and constructed pedestrian ramps to be improved or to be installed on City Right-of-way based on an established list of prioritized locations. I selected existing ramps that are not within current PROWAG standards, and selected intersections that currently lack a safe crossing and developed plans and specifications to improve / install pedestrian ramps at different locations of the city. I performed analysis of impacts to vehicular and pedestrian traffic and pedestrian connectivity, drainage reviews, and impacts to neighborhoods, businesses and schools. I performed cost estimates to maximize the number of pedestrian ramps that can be constructed. I performed construction inspections to ensure compliance with current PROWAG standards, ensure traffic safety and proper street drainage.

MATTHEW SHIMABUKURO (19-645-91)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
06/02/2025

Citizenship
United States

SUMMARY



Engineering Experience after EAC degree
6 years, 1 month

Total Engineering Experience
6 years, 1 month

Experience under licensed engineer
6 years, 1 month

Disciplinary Action
None reported



EDUCATION



Bachelors in Civil Engineering (EAC)
University of Nevada, Las Vegas
August 2013–December 2018

EXAMS



Fundamentals of Engineering (FE)
Nevada
June 2024

Principles and Practice of Engineering (PE)
Civil
Nevada
May 2025



LICENSES



Additional Licenses
None

MATTHEW SHIMABUKURO (19-645-91)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

CA Group
Nevada (United States)
Assistant Construction Manager
April 2019—May 2025

Verified by
Melvin Jack Sjostrom
jack.sjostrom@c-agroup.com

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



TASKS

I assist with the planning, design, and preparation of civil engineering plan sets. My responsibilities include assembling roadway, drainage, and utility sheets based on site investigations, engineering standards, and design criteria. I contribute to the engineering analysis and evaluation of field conditions, performing preliminary layout checks, and verify that plans adhere to ADA, municipal, and agency standards. This involved supporting the preparation and internal review of engineering documents to ensure accuracy and constructability prior to submittal.

My responsibilities also include engineering oversight of construction activities, ensuring contractor compliance with approved plans and technical specifications through on-site inspections and field verification. I perform quantity takeoffs and cost estimating, which involve applying engineering calculations to track materials and verify payment quantities. I am also responsible for reviewing and managing engineering documentation, such as RFIs, submittals, plan revisions, and change orders – coordinating with engineers of record and contractors to resolve discrepancies and clarify design intent.

Throughout this role, I have applied engineering principles to support construction progress, ensure public safety, and help deliver projects according to scope, schedule, and budget. My experience includes coordination with clients, project managers, and inspectors to resolve field conflicts, implement design changes, and maintain comprehensive and compliant project records. This work demonstrates the application of professional engineering practices through both design support and responsible construction oversight.



REPRESENTATIVE PROJECTS

NDOT Truck Climbing Lanes (Three Simultaneous Projects), Moapa, NV (\$25M); July 2023 – December 2024

This heavy highway project included truck climbing lanes, over 6 miles of tortoise fencing, storm drain and RCB extensions, asphalt paving, and roadway safety enhancements. I provided construction oversight by inspecting critical infrastructure such as drainage culverts and RCBs and verified contractor work for conformance with engineering plans and specifications. I performed engineering analysis through quantity tracking and auditing for pay estimates and utilized Bluebeam Revu to conduct quantity take-offs, supporting cost control and scheduling across three concurrent contracts.

NDOT I-15 Tropicana Interchange Design-Build, Las Vegas, NV (\$305M); January 2022 – June 2023

This major freeway project involved reconstructing the Tropicana Interchange with I-15 widening, new flyover structures, HOV connections, and ITS improvements. I supported project planning and construction oversight by reviewing/coordinating engineering submittals, RFIs, and plan revisions. I participated in value-engineering meetings for all transportation disciplines such as roadway, bridge/wall structures, drainage, and electrical. I also performed engineering analysis to validate quantities for contractor payment processing and ensure alignment with technical requirements.

CCPW Russell Road (Cimarron to Rainbow), Las Vegas, NV (\$15M); October 2021 – December 2021

This project reconstructed a roadway segment with new medians, UTACS, utility relocations, drainage infrastructure, ADA-compliant ramps, traffic signals, and pavement improvements. I oversaw construction activities, verifying field work against contract documents. I reviewed QC monthly testing submittals and daily inspection reports for compliance and issued non-compliance reports (NCRs) when needed. I performed engineering analysis during quantity tracking and reviewed monthly estimate reviews, ensuring design and specification adherence.

CCPW Fort Apache Road (Alexander to CC-215), Las Vegas, NV (\$14M); December 2020 – September 2021

This rural-to-urban roadway upgrade transformed Fort Apache into a Complete Street with added lanes, left-turn pockets, utility relocations, ITS, and ADA enhancements. I provided engineering oversight for all field activities, ensuring compliance with design standards, specifications, and ADA guidelines. I reviewed daily inspection reports and QC checklists for conformance,

documented construction progress, and issued NCRs when required. I supported quality assurance through engineering analysis and verification of design implementation.

RTC Las Vegas Boulevard MAX Transit Stations, North Las Vegas, NV; April 2019 – November 2020

This 7.5-mile Bus Rapid Transit corridor featured 22 stations and dedicated lanes to improve transit operations and infrastructure. I contributed to engineering design by conducting field investigations and incorporating site data into roadway and utility plans. I supported the preparation and review of engineering drawings and related documents, ensuring design accuracy and conformance with project requirements.

CCPW Russell Road (Paradise to Mountain Vista) and Eastern Avenue (Sunset to Tompkins), Las Vegas, NV; April 2019 – November 2020

This pedestrian accessibility improvement project upgraded sidewalk ramps and crossings to meet ADA standards. I performed site evaluations and ADA compliance checks, applying PROWAG and conducting engineering analysis to confirm conformance. I supported the preparation and review of engineering plans, integrating field data and assisting with design documentation to ensure accuracy and compliance with technical specifications.

NDOT I-15 Tropicana Preliminary Design and EA, Las Vegas, NV; April 2019 – November 2020

This preliminary design and Environmental Assessment project focused on reconstructing the I-15/Tropicana Avenue interchange to improve traffic flow and regional connectivity. I supported engineering design by preparing cost estimates, developing project schedules, drafting maintenance of traffic specifications, and calculating quantities. My work contributed to the planning and documentation needed to advance the project through environmental clearance and preliminary design.

VIVEK SHRESTHA (24-462-07)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
04/30/2025

Citizenship
Nepal

SUMMARY



Engineering Experience after EAC degree

Total Engineering Experience
6 years, 11 months

Experience under licensed engineer
None

Disciplinary Action
None reported



EDUCATION



Meets NCEES Engineering Education Standard

Bachelors in Civil Engineering
Tribhuvan University
January 2013–November 2016

EXAMS



Fundamentals of Engineering (FE)
Nevada
May 2024

Principles and Practice of Engineering (PE)
Civil
Nevada
September 2024

LICENSES



Additional Licenses
None

WORK EXPERIENCE

Lumanti Support Group for Shelter
Bāgmatī (Nepal)
Civil Engineer
December 2016—April 2018

Verified by
Rajib Maharjan
RajibMaharjan77@gmail.com

Experience Summary
Full-Time
Engineering: 1 year, 4 months
Experience under licensed engineer:
None



TASKS

Civil Engineer – Lumanti Support Group for Shelter
Project: Post-Earthquake Reconstruction, Siddhipur, Lalitpur, Nepal

I worked as a Civil Engineer with Lumanti Support Group for Shelter on the reconstruction of traditional Newari community houses damaged during the 2015 Gorkha earthquake. My major branch of engineering is Civil Engineering, with a specialty in structural design and residential building construction in seismically active regions.

My work primarily focused on the structural design and preparation of detailed construction drawings for 114 Newari-style houses, using both Reinforced Cement Concrete (RCC) and brick masonry. These designs had to respect the traditional architectural style of the Newari community while ensuring modern earthquake-resilient standards.

My responsibilities included site assessments, structural calculations, preparing design documentation, and coordinating with stakeholders for approvals and implementation. I also conducted on-site technical supervision during construction phases to ensure compliance with the designs and safety standards.

The full duration of my involvement with Lumanti was focused on this post-earthquake reconstruction effort. My role remained consistent throughout, though I gradually took on more responsibilities such as guiding junior engineers and managing communication between technical and community teams.

Over 90% of my responsibilities were directly related to engineering, including structural analysis, material selection, drawing preparation, and construction supervision. The remaining 10% involved community engagement, documentation, and administrative coordination.



REPRESENTATIVE PROJECTS

1. Post-Earthquake Reconstruction of Newari Community Housing – Siddhipur, Lalitpur (Lumanti Support Group for Shelter)

I was involved in this project from its initial planning to its final implementation, progressing from an entry-level Civil Engineer (Engineer 1) to a mid-level Civil Engineer (Engineer 2). The project focused on reconstructing 114 traditional Newari houses damaged during the 2015 Gorkha earthquake. These houses were designed using both RCC and brick masonry, with careful attention to traditional architectural elements and seismic resilience.

As Engineer 1, my responsibilities included conducting site assessments, structural layout preparation, and assisting with structural design calculations. I developed structural drawings based on architectural inputs and national building codes, especially considering seismic safety. I supported the coordination of material specifications and verified on-site construction activities for quality and compliance. I worked closely with senior engineers and local craftsmen to understand the integration of traditional styles into modern structural practices.

After gaining experience and demonstrating technical and communication skills, I was promoted to Engineer 2, where my role expanded to leading the structural design process and overseeing junior engineers. I made independent decisions on structural systems and materials, ensured adherence to safety standards, and handled technical challenges during construction. I was also responsible for reviewing and approving final drawings, coordinating with stakeholders, and managing technical discussions with community members to balance safety and cultural preservation.

WORK EXPERIENCE

Nepal Telecom
Bāgmatī (Nepal)
Senior Civil Engineer
May 2018—December 2023

Verified by
Sushmita Sharma
sharmasushmita0@gmail.com

Experience Summary
Full-Time
Engineering: 5 years, 7 months
Experience under licensed engineer:
None

TASKS

I specialized in Civil Engineering with a focus on structural, geotechnical, and hydraulic design works which was 100% engineering works, throughout my time at Nepal Telecom from May 2018 to Dec 2023.

From May 2018 to January 2020, I analyzed and design structural components of RCC telecom buildings including exchange centers, regional offices, and staff quarters located in regional headquarters throughout Nepal (Attariya, Tripureswor, Bhairahawa, Surkhet, Janakpur, Biratnagar, Pokhara). I used STAAD Pro for structural modeling, which was followed by conducting seismic, wind, and gravity load calculations in accordance with Nepal Building Code, as well as, International Building Code (IBC), ACI 318, and ASCE 7. This led to economic and safe telecom buildings.

From February 2020 to January 2022, I designed for structural members based on geotechnical investigation reports of telecom towers as part of the nationwide 4G Expansion Project. I modelled and designed monopole and lattice towers using STAAD Pro, applied loads per TIA-222, which is also the standard used in U.S. telecom tower design. For substructure, I analyzed soil investigation reports to determine suitable foundation types as per site requirement. The referencing practices aligned with ACI 336 and AASHTO LRFD for geotechnical and foundation design. I also assisted in preparation of Single line diagrams and other drawings as reference for shop drawings.

From February 2022 to December 2023, I designed the hydraulic components of roadside drainage systems along the Mid-Hill Roadway corridor in Eastern Nepal (Hile, Basantapur, Okhaldhunga, Katari). For the hydraulic design, I used EPA SWMM, a U.S.-developed hydrologic modeling tool, to simulate stormwater flows and designed culverts and surface drains per principles consistent with FHWA and AASHTO guidelines.

All of this experience was gained under the supervision of a registered engineer in Nepal.

REPRESENTATIVE PROJECTS

Over five years at Nepal Telecom, I progressed from a civil engineer to a senior civil engineering role, working on diverse projects involving structural, geotechnical, and hydraulic systems. My work aligned with Nepalese codes and practices, which are closely modeled on or inspired by U.S. standards such as IBC, ACI, ASCE, and AASHTO. Below are three representative projects that demonstrate my progressively responsible engineering experience.

1. Structural Design of Regional Telecom Buildings

Role: Civil Engineer

Dates: May 2018 – January 2020

Locations: Attariya (Sudur Paschim), Tripureswor (Bagmati), Bhairahawa (Lumbini), Surkhet (Karnali), Janakpur (Madhesh), Biratnagar (Koshi), Pokhara (Gandaki)

As a civil engineer, I designed structural members of telecom exchange buildings, regional offices, and staff quarters across Nepal's regional headquarters. I conducted structural analysis and design of reinforced concrete elements—beams, slabs, columns, and foundations—using STAAD Pro and hand calculations based on the Nepal Building Code (NBC), as well as International Building Code (IBC) and ACI 318 for concrete structures. I applied seismic provisions derived from ASCE 7 standards, as Nepal lies in a high seismic zone. I developed structural drawings and design reports under the supervision of a registered engineer. This experience established my foundation in structural engineering and international code-based design.

2. 4G Telecom Tower Design – Nationwide Expansion Project

Role: Civil Engineer

Dates: February 2020 – January 2022

Locations: Multiple sites across all seven provinces of Nepal

As a civil engineer, I designed the structural and geotechnical components of monopole and lattice telecom towers across Nepal for the nationwide 4G expansion initiative, a Project of National Pride. I used STAAD Pro to model towers and performed analysis under wind, seismic, and antenna loads, adhering to TIA-222 (widely used in the U.S. for tower structures) and national safety standards. I reviewed soil investigation reports, interpreted standard penetration test data, and selected foundation systems (isolated or pile) based on soil bearing capacity and settlement analysis—practices consistent with ACI 336 and AASHTO LRFD Bridge Design Specifications for geotechnical and foundation design. I prepared detailed engineering packages, including structural drawings, design basis documents, and review reports. I also participated in internal review of third-party tower design submissions for code compliance. This role sharpened my ability to independently execute and evaluate structural and geotechnical designs aligned with U.S.-recognized engineering codes.

3. Hydraulic Design for Mid-Hill Roadway Telecom Project – Rural Telecom Development Fund

Role: Civil Engineer and Senior Civil Engineer

Dates: February 2022 – December 2023

Locations: Hile, Basantapur, Okhaldhunga, Katari (Eastern Nepal)

As a senior engineer, I designed hydraulic components of roadside drainage systems reinstated along the Mid-Hill Roadway corridor following underground fiber optic cable installation. The project, funded under the Rural Telecom Development Fund and governed by the Nepal Telecommunications Authority, required stormwater management in steep, high-rainfall areas. I performed hydrologic and hydraulic calculations to determine peak runoff and used EPA SWMM, a modeling tool developed by the U.S. Environmental Protection Agency and widely accepted in U.S. drainage design practices. I applied design principles consistent with FHWA and AASHTO drainage guidelines, sizing culverts, side drains, and conveyance systems to meet capacity and scour protection requirements. I prepared drainage layout drawings, hydraulic profiles, and technical reports for review and implementation. This role enhanced my technical leadership and application of U.S.-aligned hydraulic modeling and infrastructure design methods.

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Explanation
July 2012	December 2012	No work experience. I was still to be admitted into my Under Graduate Program.
January 2024	April 2025	I am on an academic leave from Nepal Telecom for my higher study in USA. However, I am still supporting in design works and leading design teams for project in Nepal.

ROBERT THRAN (13-135-16)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL		SUMMARY	
	Applying To Nevada Application Type Initial - PE Application Date 06/02/2025 Citizenship United States	Engineering Experience after EAC degree 8 years, 11 months Total Engineering Experience 26 years, 11 months Experience under licensed engineer 17 years Surveying Experience after EAC degree Total Surveying Experience 3 months Experience under licensed surveyor None Other Experience Disciplinary Action None reported	 
EDUCATION			
	Associates in Arts Harford Community College August 2001–May 2002 Bachelors in Civil Engineering (EAC) University of Nevada, Reno January 2013–May 2016		WAIVER REQUEST: NRS 625.193(1)(A) WAIVER OF FE WITH 15 OR MORE YEARS OF EXPERIENCE.
EXAMS		LICENSES	
	Waived Fundamentals of Engineering (FE) Nevada December 2023 Principles and Practice of Engineering (PE) Civil Nevada May 2025		Additional Licenses None

ROBERT THRAN (13-135-16)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Nevada Air National Guard
Nevada (United States)
Airman
June 1991 — October 1991

Verified by

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



DESCRIPTION

ROBERT THRAN (13-135-16)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Carson Building Supply
Nevada (United States)
Yard Worker
October 1991 — February 1992

Verified by

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



DESCRIPTION

WORK EXPERIENCE

Silver State Fram and Truss
Nevada (United States)
Drafter
February 1992—June 1993

Verified by

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



DESCRIPTION

ROBERT THRAN (13-135-16)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Nevada Department of Transportation
Nevada (United States)
Highway Construction Aid
June 1993—November 1993

Verified by
Steven James Hill
grizzly1nv@yahoo.com

Experience Summary
Full-Time
Engineering: 5 months
Experience under licensed engineer:
None



TASKS

I worked for the Nevada Department of Transportation, Materials Division, Bituminous Mixtures Laboratory. I split samples as required for the AASHTO Materials Reference Laboratory for testing. I performed daily testing of hot-mix asphalt to determine the optimum bitumen ratio, HVEEM Stability, and percent air voids to meet the project specifications and design criteria. I performed and determined the theoretical maximum void less density and tensile strength. I logged production samples of hot-mix asphalt as set forth in the standard operating procedures, split samples in accordance with AASHTO and NV test methods. I followed the AASHTO and NV test procedures to determine the percent air voids and HVEEM Stability.



REPRESENTATIVE PROJECTS

As a Highway Construction Aide I worked in the Bituminous Mixtures laboratory. Project material from projects around the state of Nevada would be delivered to the lab where I split and obtained representative portions. I logged the production samples of hot-mix asphalt as set forth in the Nevada Department of Transportation standard operating procedures. I split samples in accordance with AASHTO and Nevada test methods. For each sample I determined accurate proportions of aggregate and asphalt cement to develop plant mix bituminous mix designs. I performed daily testing of hot-mix asphalt to determine the optimum bitumen ratio, HVEEM Stability, and percent air voids to meet the project specifications and design criteria. I performed and determined the theoretical maximum voidless density and tensile strength. I provided the sample results on standard report forms that were distributed to the respective Resident Engineer on each project.

ROBERT THRAN (13-135-16)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Nevada Department of Transportation
Nevada (United States)
Engineering Technician III
November 1993—October 1998

Verified by
Ken Oates
koates@dcsnv.com

Experience Summary
Full-Time
Engineering: 4 years, 11 months
Experience under licensed engineer:
None



TASKS

My role as an Engineering Technician reported directly to the Resident Engineer and the Assistant Resident Engineer in his absence. I was active and inspected the hot-mix asphalt at the hot-plant. While on the Survey Crew, I staked horizontal and vertical alignments, established benchmarks for elevation control, staked curb and gutter flowline elevations, laid out permanent striping, and identified lighting and hydraulic features. Daily, I inspected traffic control devices to ensure compliance with the project's traffic control plan and the Manual on Unified Traffic Control Devices (MUTCD). I set up the field lab to be able to obtain accuracy and repeatability of test results, ensuring the testing was performed in accordance with the AASHTO and NV test methods. Labs and material testing were also set up to be consistent with the NDOTs quality control program and documentation manual. My duties as a hot-plant inspector included, daily documentation of plant operations, temperature monitoring, sample collection of the asphalt cement, inspection of aggregate piles, and communication to the project site of tonnage delivered. I performed quality control testing of hot-mix asphalt, fresh concrete, aggregates, soils, and base aggregates relative to the material submittals and mix designs. I ensured the minimum number of tests were achieved, while maintaining the appropriate supply stock in the lab. I calculated and reviewed test results with regard to specifications, alerting the RE of passing or any concerns with the materials tested.



REPRESENTATIVE PROJECTS

NDOT Contract 2562, SR 427, US95A in Lyon County, NV. Construct mill and fill, curb and gutter and sidewalk.
11/93 – 11/94

My duties on this contract were the hot-plant inspector and included, daily documentation of plant operations, temperature monitoring, sample collection of the asphalt cement, inspection of aggregate piles, and communication to the project site of tonnage delivered. I performed quality control testing of hot-mix asphalt, fresh concrete, aggregates, soils, and base aggregates. In the field laboratory, I ensured the minimum number of tests were achieved, facilitated supplies, and set-up and tore-down the lab. I collected samples and transmitted them the Materials Division for testing as required. I communicated test results to the Resident Engineer, Assistant Resident Engineer, construction field office, and field inspectors.

NDOT Contract 2631, MT Rose Hwy from summit to Galena Creek, Washoe County, NV. Construct Mill and Fill
03/95 – 10/95

My duties on this contract as a materials tester were to perform quality control testing of hot-mix asphalt, fresh concrete, concrete aggregates, soils, and base aggregates. I properly documented and calculated the results for each respective test. I collected samples and transmitted them the Materials Division for testing as required. I communicated test results to the Resident Engineer, Assistant Resident Engineer, construction field office, and field inspectors. My additional duties on this contract were to ensure proper compaction of the plant mix bituminous surface using a Troxler 3440 density gauge. I calculated the test sections as required for proper representation of the paving area and obtained hot mix asphalt cores as required in case of dispute and/or gauge correlation. I ensured the testing was performed in accordance with the AASHTO and NV test methods and was consistent with the NDOTs quality control program and documentation manual.

NDOT Contract 2715, US 50 from Stagecoach to Silver Springs, Lyon County, NV. Realignment of US50, roadbed modification, paving
4/96 – 10/96

My duties on this contract as a materials tester were to perform a variety of tests on hot-mix asphalt, fresh concrete, concrete aggregates, and soils. I also tested and verified the proper amount of cement in the roadbed modification. I communicated test results to the Resident Engineer, Assistant Resident Engineer, construction field office, and field inspectors. My additional duties on this contract were to ensure proper compaction of the plant mix bituminous surface using a Troxler 3440 density gauge. I calculated the test sections as required for proper representation of the paving area and obtained hot mix asphalt cores as required in case of dispute and/or gauge correlation. I ensured the testing was performed in accordance with the AASHTO and NV test methods and was consistent with the NDOTs quality control program and documentation manual. While on the Survey Crew, I

staked horizontal and vertical alignments, established benchmarks for elevation control, staked curb and gutter flowline elevations, laid out permanent striping, and identified lighting and hydraulic features.

NDOT Contract 2814, I80 Structures, Lovelock, Pershing County, NV. Place methacrylate membrane on structures, repair eastbound structure

3/97 – 10/98

My duties on this contract as a materials tester were to perform a variety of tests on hot-mix asphalt, fresh concrete, concrete aggregates, and soils. I communicated test results to the Resident Engineer, Assistant Resident Engineer, construction field office, and field inspectors. I set-up the laboratory to ensure the accuracy and repeatability of test results. I ensured the testing was performed in accordance with the AASHTO and NV test methods and was consistent with the NDOTs quality control program and documentation manual. I inspected the application of methacrylate membrane to seal the bridge decks and observed the heating and application of loads to reduce the camber in the east bound structure. I organized and facilitated the concrete bridge deck pour to ensure proper temperature, testing of fresh concrete, verifications of batch weights and water-cement ratio to the mix design and fabrications of compressive strength specimens. I inspected daily traffic control devices to ensure compliance with the project's traffic control plan and the Manual on Unified Traffic Control Devices (MUTCD).

ROBERT THRAN (13-135-16)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Nevada Department of Transportation
Nevada (United States)
Engineering Technician IV
October 1998—May 2000

Verified by
Gary D Selmi
gary.selmi@charter.net

Experience Summary
Full-Time
Engineering: 1 year, 7 months
Experience under licensed engineer:
1 year, 7 months



TASKS

My role as an Independent Assurance (IA) Tester was to perform periodic audits of our quality control program by obtaining representative sample splits for testing of materials. I reported directly to the Quality Assurance Engineer. The materials tested consisted of: hot-mix asphalt, concrete, concrete aggregates, aggregates, and soils. Tests included: bitumen ratio, maximum theoretical void less density, compaction using both the sand-cone method, sieve analysis, Atterberg limits, sand equivalent, cleanness value, slump, unit weight, and fabrication and curing of compressive strength specimens relative to material submittals and mix designs. I sampled materials for auditing purpose to verify quality control testers are following the respective AASHTO and NV test methods and verification for accuracy and repeatability. Audits performed also verified proper use and function of materials testing apparatuses. I communicated audit results to respective Resident Engineer and obtained additional audits if there was a non-conformity identified. I performed audits to meet the requirements set forth by the Federal Highway Administration (FHWA). I instructed new materials testers, both NDOT and Consultant staff, an 8-week course in the proper sampling and testing of materials in accordance with the NV test methods.



REPRESENTATIVE PROJECTS

I worked with many construction crews on a variety of NDOT projects in Washoe, Douglas, Lyon, Storey, Churchill, and Pershing counties instructing and guiding new and season materials testers in the proper use of equipment and test methods. I sampled, tested, and audited other NDOT Materials Testers and Consultant Testers to ensure compliance with the NV test methods and application of engineering principles on a variety of highway projects ranging from new construction of bridge structures and the extension of US 395 (I580) in Washoe County to plantmix overlays throughout NDOT's District 2.

ROBERT THRAN (13-135-16)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Nevada Department of Transportation
Nevada (United States)
Engineering Technician III
May 2000—May 2001

Verified by
Ken Oates
koates@dcsnv.com

Experience Summary
Full-Time
Engineering: 1 year
Experience under licensed engineer:
None



TASKS

My role as an Engineering Technician reported directly to the Resident Engineer and the Assistant Resident Engineer in his absence. While on the Survey Crew, I staked horizontal and vertical alignments, established benchmarks for elevation control, staked curb and gutter flowline elevations, laid out permanent striping, fence, and identified lighting and hydraulic features. Daily, I inspected traffic control devices to ensure compliance with the project's traffic control plan and the Manual on Unified Traffic Control Devices (MUTCD). I set up the field lab to be able to obtain accuracy and repeatability of test results, ensuring the testing was performed in accordance with the AASHTO and NV test methods. I performed quality control testing of hot-mix asphalt, fresh concrete, aggregates, soils, and base aggregates relative to the material submittals and mix designs. I ensured the minimum number of tests were achieved, while maintaining the appropriate supply stock in the lab. I performed a variety of tests on hot-mix asphalt, concrete and soils to include but not limited to, bitumen ratio, maximum theoretical void less density, compaction, sieve analysis, Atterberg limits, sand equivalent, cleanness value, slump, unit weight, fabrication and curing of compressive strength specimens. I calculated and reviewed test results with regard to specifications, alerting the RE of passing or any concerns with the materials tested.



REPRESENTATIVE PROJECTS

NDOT Contract 3049, McCarren Blvd, Washoe County, NV. Widen McCarren Blvd and widen structure over the railway
5/2000 – 5/2001

My duties on this contract were to perform quality control testing of hot-mix asphalt, fresh concrete, aggregates, soils, and base aggregates. I ran the field laboratory and ensured the minimum number of tests were achieved, supplies, set-up and tear-down of the lab. I performed a variety of tests on hot-mix asphalt, fresh concrete, concrete aggregates, and soils to include, bitumen ratio, maximum theoretical void less density, compaction, sieve analysis, Atterberg limits, sand equivalent, cleanness value, slump, unit weight, fabrication and curing of compressive strength specimens. I communicated test results to the Resident Engineer, Assistant Resident Engineer, construction field office, and field inspectors. On the Survey Crew I staked horizontal and vertical alignments, established benchmark elevations, staked curb and gutter flowline elevations, base grade "red head" elevations, permanent striping layout, lighting and hydraulic features. I inspected bridge deck removal over the Union Pacific Railroad ensuring safety compliance, in conjunction with railway expectations.

ROBERT THRAN (13-135-16)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Engineering Consulting Services
Maryland (United States)
Engineering Technician / Inspector
October 2001 — February 2004

Verified by
Robert Thran (Self)

Experience Summary
Part-Time
Engineering: (0%)
Experience under licensed engineer:
None



TASKS

My role as an Engineering technician were to perform soils, aggregate, and fresh concrete testing. I read and interpreted plans and contract documents to ensure the performance of proper materials testing for accurate placement of materials. I tested soils for moisture and maximum density by either the standard proctor or modified proctor. I also performed grain-size analysis, Atterberg limits, and compaction using a sand-cone device or a nuclear density gauge. Fresh concrete was tested for slump, unit weight, air content, and fabrication of 28-day compressive strength cylinder specimens. I inventoried soils equipment for proper use in accordance with the ASTM test methods. I properly cured concrete specimens in accordance with the ASTM and I tested the specimens for compressive strength. I ensured proper field curing and laboratory curing prior to testing. I prepared specimens for testing by measuring surface planeness and the surfaces were capped either with neoprene caps or sulfur caps. Cylinders were tested and the type of fracture was documented, and the result was recorded. I classified soils based on the grain-size analysis and Atterberg limits. I accurately calculated and reported the test results and the soil classification to the Engineering Manager and Professional Geologist. I read and interpreted contract plans and provide field recommendations to the Engineering Manager based on field observations. I verified structural steel inspections for “turn-of-the-nut” specifications and vertical plumbness of steel columns and placement of reinforcing steel. I verified and tested for bearing capacity using a dynamic cone penetrometer. I communicated the results to the Engineering Manager and wrote detailed inspection reports. I organized and scheduled junior technician assignments, and I trained other technicians.



REPRESENTATIVE PROJECTS

During my tenure as an Engineering Technician, I sampled and tested materials and inspected various projects throughout northern Maryland.

ROBERT THRAN (13-135-16)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Geo-Technology Associates, Inc.
Maryland (United States)
Laboratory Manager
February 2004—June 2006

Verified by
Thomas Wirth
twirth@gtaeng.com

Experience Summary
Full-Time
Engineering: 2 years, 4 months
Experience under licensed engineer:
None



TASKS

My role as Laboratory Manager, I reported directly to the Vice President over Geotechnical Engineering and Construction Services. I managed the AASHTO Materials Reference Laboratory (AMRL) Accreditation Program and the Cement and Concrete Reference Laboratory (CCRL) accreditation program. I performed testing on proficiency samples and demonstrated my skills and abilities during and on-site assessment. I presented equipment, calibration records, training records, and addressed any non-conformities to maintain accreditation. As the Radiation Safety Officer, I maintained compliance with the Maryland Department of the Environment, provided technician training, and facilitated the Radiological Health Program for portable nuclear gauges. I read and interpreted plans and contract documents to ensure proper adequate materials testing was performed to accurately represent the materials placed. I tested soils for moisture, maximum density of aggregates and soils by either the standard or modified proctor, grain-size analysis, Atterberg limits, R-value, and permeability. I inventoried soils equipment for proper use in accordance with the ASTM test methods. I properly cured concrete specimens in accordance with the ASTM and I tested the specimens for compressive strength. I ensured proper field curing and laboratory curing prior to testing. I prepared specimens for testing by measuring surface planeness and the surfaces were capped either with neoprene caps or sulfur caps. Cylinders were tested and the type of fracture was documented, and the result was recorded. I classified soils based on the grain-size analysis and Atterberg limits. Materials tested used engineering principles to evaluate test data in the development of mitigation measures with the design lead and contractors. I organized and scheduled junior laboratory technician assignments, and I trained other technicians.



REPRESENTATIVE PROJECTS

During my tenure as a Laboratory Manager, I sampled, classified, and tested both insitu soils and aggregate materials in Maryland. Samples were obtained and brought into the laboratory. Representative projects range from local streets and highways, housing developments, commercial developments, and recreational developments throughout central and northern Maryland. Materials tested used engineering principles to evaluate test data in the development of mitigation measures with the design lead and contractors. Materials testing assignments ranged from basic grain-size analysis to more extensive testing depending on the project, the project design and the insitu materials to meet the design intent.

ROBERT THRAN (13-135-16)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Lumos and Associates
Nevada (United States)
Laboratory Manager / Construction
Services Supervisor
June 2006—December 2012

Verified by
Michael Carl Brown Sr
mike.brownsr@trideks.com

Experience Summary
Full-Time
Engineering: 6 years, 6 months
Experience under licensed engineer:
6 years, 6 months



TASKS

My role as Laboratory Manager/Construction Services Supervisor, I reported directory to the Construction Services Manager, Construction Services Engineer, and Geotechnical Engineer. I managed the AASHTO Materials Reference Laboratory (AMRL) and the Cement and Concrete Reference Laboratory (CCRL) accreditation programs. As the Radiation Safety Officer, I maintained compliance with the Nevada Department of Environmental Protection (NDEP), provided technician training, and facilitated the Radiological Health Program for portable nuclear gauges. I read and interpreted plans and contract documents to ensure proper adequate materials testing was performed to accurately represent the materials placed. I tested soils for moisture, maximum density of aggregates and soils, grain-size analysis, sieve analysis, aggregate testing, Atterberg limits. I inventoried laboratory equipment for proper use in accordance with the ASTM test methods. I properly cured concrete specimens in accordance with the ASTM and I tested the specimens for compressive strength. I ensured proper field curing and laboratory curing prior to testing. I prepared specimens for testing by measuring surface planeness and the surfaces were capped either with neoprene caps or sulfur caps. Cylinders were tested and the type of fracture was documented, and the result was recorded. I classified soils based on the grain-size analysis and Atterberg limits. I accurately calculated and reported the test results and the soil classification to the Construction Services Manager and Engineers. I organized and scheduled junior laboratory technician assignments. I trained technicians and completed performance evaluations. I performed concrete mix design trial batches to ensure compliance with the project needs and the ASTM procedures. I calculated the mass and volumes of constituents and prepared and tested aggregates for quality and physical properties. I prepared cost estimates for competitive bidding of various projects. Materials tested used engineering principles to evaluate test data in the development of mitigation measures with the design lead and contractors.



REPRESENTATIVE PROJECTS

NDOT Contract 3292, I-580, Galena Creek, Washoe County, NV. Construct I-580 including the Galena Creek Bridge and several additional structures
8/2007 – 11/2009

My role on this contract was to design and develop concrete mix designs with the Construction Services Engineer for Portland Cement Concrete Pavement (PCCP), concrete barrier rail and bridge decks. I sampled and tested aggregate stockpiles to ensure compliance with the NV test methods and ASTM test methods. I performed trial batching on various design options. I tested fresh concrete trial batches from a revolving drum mixer on site. I facilitated the quality control testing of earth embankment fill and tested materials for compliance with NV test methods and the placement and testing of Shotcrete for the temporary arch structure over Galena Creek. I submitted concrete mix designs to the Construction Services Engineer for review and approval.

NDOT Contract 3419, I80, from 0.92 MW of Scenic Overlook to Painted Rock Washoe County, NV. This project scope was a mill and fill with guardrail
5/2010 – 10/2010

My duties on this contract as a material tester were to perform quality control testing of hot-mix asphalt, fresh concrete, aggregates, soils, and base aggregates. I ensured proper operations of the field laboratory to ensure minimum number of tests were obtained and supplies were stocked and, set-up and tear-down of the lab. I properly documented and calculated the results for each respective test. I communicated test results to the Resident Engineer, Assistant Resident Engineer, construction field office, and field inspectors. I set up the field lab to be able to obtain accuracy and repeatability of test results, ensuring the testing was performed in accordance with the AASHTO and NV test methods. Labs and material testing were also set up to be consistent with the NDOTs quality control program and documentation manual.

NDOT Contract 3450, I80, at Hunter Interchange, Elko County, NV. Construct mill and fill from beginning of pavement to Exit 29, drainage improvements (Simultaneous with NDOT Contract 3459)
9/2011 – 11/2011

My duties on this contract as a material tester were to perform quality control testing of hot-mix asphalt, fresh concrete,

aggregates, soils, and base aggregates. I ensured proper operations of the field laboratory to ensure minimum number of tests were obtained and supplies were stocked. I properly documented and calculated the results for each respective test. I communicated test results to the Resident Engineer, Assistant Resident Engineer, construction field office, and field inspectors. I set up the field lab to be able to obtain accuracy and repeatability of test results, ensuring the testing was performed in accordance with the AASHTO and NV test methods. Labs and material testing were also set up to be consistent with the NDOTs quality control program and documentation manual. I was the Lead for other consultant staff assigned to the project, reporting directly to both the NDOT Resident Engineer and the Lumos Construction Engineer. I coached and mentored staff in NDOT methods of inspection, documentation, and materials testing procedures.

NDOT Contract 3468, I80, West Carlin Interchange and SR 766, Elko County, NV. Widen the Central Carlin Bridge, cement treated base, lighting, concrete barrier rail, sidewalk, and paving
1/2012 – 11/2012

My duties on this contract as a material tester were to perform quality control testing of hot-mix asphalt, fresh concrete, aggregates, soils, and base aggregates. I ensured proper operations of the field laboratory to ensure minimum number of tests were obtained and supplies were stocked. I communicated test results to the Resident Engineer, Assistant Resident Engineer, construction field office, and field inspectors. I set up the field lab to be able to obtain accuracy and repeatability of test results, ensuring the testing was performed in accordance with the AASHTO and NV test methods. Labs and material testing were also set up to be consistent with the NDOTs quality control program and documentation manual. I was the Lead for other consultant staff assigned to the project, reporting directly to both the NDOT Resident Engineer and the Lumos Construction Services Engineer. I coached and mentored staff in NDOT methods of inspection, documentation, and materials testing procedures.

ROBERT THRAN (13-135-16)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Lumos and Associates, Inc
Nevada (United States)
Engineering Technician
December 2012—May 2015

Verified by
Robert Christopher Schricker
rschricker@cityofsparks.us

Experience Summary
Part-Time
Engineering: 1 year, 3 months (50%)
Experience under licensed engineer:
None



TASKS

My role with Lumos changed as I returned to school to complete my Bachelor of Science-Civil Engineering Degree. During this time, I opted to be a part-time Laboratory Technician / Engineering Technician. I reported directory to the Construction Services Manager. I read and interpreted plans and contract documents to ensure proper adequate materials testing was performed to accurately represent the materials placed. I tested soils for moisture, maximum density of aggregates and soils by either the standard or modified proctor, grain-size analysis, sieve analysis, aggregate testing, Atterberg limits. I inventoried laboratory equipment for proper use in accordance with the ASTM test methods. I properly cured concrete specimens in accordance with the ASTM and I tested the specimens for compressive strength. I ensured proper field curing and laboratory curing prior to testing. Prior to testing, the cylinders were measured for planeness and capped either with neoprene caps or sulfur caps. Cylinders were tested and the type of fracture was documented, and the result was recorded. I classified soils based on the grain-size analysis and Atterberg limits. I accurately calculated and reported the test results and the soil classification to the Construction Services Manager and Engineers. Materials tested used engineering principles to evaluate test data in the development of mitigation measures with the design lead and contractors. I was assigned to the Engineering Division as an Engineering Technician to draft and assist in the design of various project using Autocad Civil 3D.



REPRESENTATIVE PROJECTS

During my tenure as an Engineering Technician/ Laboratory Technician, I sampled and tested materials and provided drafting support with Autocad Civil 3D on several projects in Washoe County, Nevada and the surrounding areas. Materials tested used engineering principles to evaluate test data in the development of mitigation measures with other professionals, the design lead, and contractors.

ROBERT THRAN (13-135-16)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Nevada Department of Transportation
Nevada (United States)
Public Service Intern
May 2015—August 2015

Verified by
Brad Francis Durski
brad.durski@hdrinc.com

Experience Summary
Full-Time
Surveying: 3 months
Experience under licensed surveyor:
None



TASKS

As a Public Service Intern, I worked with the survey crew to perform construction staking. I utilized Trimble survey instruments to establish horizontal and vertical alignments and control for staking of various construction features such as permanent signs, permanent pavement markings, and guardrail end sections.



REPRESENTATIVE PROJECTS

NDOT Contract 3588, 5 off system schools, Washoe County, NV

I utilized Trimble survey instruments to establish horizontal and vertical alignments and control and geometric layouts of 5 off system schools in Washoe county.

NDOT Contract 3598, I-580 from Carson Street Interchange to Bowers Mansion, Washoe County, NV

I performed construction staking consistent with roadway design and contract plans. I utilized Trimble survey instruments to establish horizontal and vertical alignments and control for staking of various construction features such as permanent signs, permanent pavement markings, and guardrail end sections. I performed a 3-wire level travers to establish elevations-vertical control for the Bellevue Structure in Washoe Valley.

ROBERT THRAN (13-135-16)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Nevada Department of Transportation
Nevada (United States)
Engineering Technician IV
June 2016—February 2017

Verified by
Boyd Ratliff
bratliff@tierragroupintl.com

Experience Summary
Full-Time
Engineering: 8 months
Post EAC degree: 8 months
Experience under licensed engineer: 8 months



TASKS

My role as an Engineering Technician reported directly to the Resident Engineer and the Assistant Resident Engineer in his absence. I inspected the hot-mix asphalt at the hot-plant. As a member of the Survey Crew I staked horizontal and vertical alignments and established benchmark elevations. I set up the field lab to be able to obtain accuracy and repeatability of test results, ensuring the testing was performed in accordance with the AASHTO and NV test methods. My duties as a hot-plant inspector included, daily documentation of plant operations, temperature monitoring, sample collection of the asphalt cement, inspection of aggregate piles, and communication to the project site of tonnage delivered. I performed quality control testing of hot-mix asphalt, fresh concrete, aggregates, soils, and base aggregates relative to the material submittals and mix designs. I inspected 52 miles of surface treatment application on SR 318 near Lund, NV. I facilitated sampling and testing of the surface treatment aggregates and emulsified asphalt. I monitored and tracked daily quantities for accurate payments. I made recommendations to the Resident Engineer on substandard materials and/or workmanship. I enforced specifications for the application of the surface treatment emulsion and aggregate. I made recommendations on the implementation of traffic control devices in accordance with the submitted traffic control plan and the MUTCD. I communicated daily with the Resident Engineer and Contractor on pay quantities and documented daily reports of construction activities.



REPRESENTATIVE PROJECTS

NDOT Contract 3621, On US 93, North of McGill, White Pine County, NV – Cold Milling and placing bituminous plantmix surface with open graded surface, signs and striping
6/2016 – 8/2016

My duties as a hot-plant inspector and materials tester included, daily documentation of plant operations, temperature monitoring, sample collection of the asphalt cement, inspection of aggregate piles, communication to the project site of tonnage delivered. I enforced the requirements of plant operation in accordance with the dust control permit. I performed quality control testing of hot-mix asphalt, soils, and base aggregates relative to the material submittals and mix designs.

NDOT Contract 3633, On SR 318, Lund, Chip Seal and striping
8/2016 – 10/2016

My duties on this project as the lead inspector included the inspection of 52 miles of surface treatment application on SR 318 near Lund, NV. I facilitated sampling and testing of the surface treatment aggregates and emulsified asphalt. I monitored and track daily quantities for accurate payments. I implemented the design and identified areas of avoidance for cultural and/or biological concerns. I made engineering judgments on substandard materials and/or workmanship to be incorporated into the work. I made recommendations to the Resident Engineer on substandard materials and/or workmanship. I enforced specifications for the application of the surface treatment emulsion and aggregate. I made recommendations on the field placement and implementation of traffic control devices in accordance with the submitted traffic control plan and the MUTCD. I communicated daily with the Resident Engineer and Contractor on pay quantities and documented daily reports of construction activities.

ROBERT THRAN (13-135-16)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Nevada Department of Transportation
Nevada (United States)
Supervisor I, Associate Engineer
February 2017—July 2017

Verified by
Boyd Ratliff
bratliff@tierragroupintl.com

Experience Summary
Full-Time
Engineering: 5 months
Post EAC degree: 5 months
Experience under licensed engineer:
5 months



TASKS

I reported directly to the Resident Engineer or the Assistant Resident Engineer. I served as the first line supervisor for Crew 912 with oversight of field operations and field technicians. I organized and facilitated staff assignments to cover construction operations. In the absence of the Resident Engineer I performed as an Assistant Resident Engineer, completing performance evaluations and progressive discipline on subordinate staff (less than 5% of my time). I drafted Job-Mix Formulas (JMFs) for plantmix bituminous surface for review and acceptance by the Assistant Resident Engineer. As a surveyor (40% of my time), I completed construction staking and I organized and scheduled work to align and stay ahead of the contractor operations. I conducted initial topographic surveys of the existing surface. I utilized CAD tools to build the proposed plan with widenings and slope flattening areas. In CAD, I built finished surfaces and identified any potential conflicts prior to me performing the correlating construction staking in the field. I surveyed areas of avoidance for cultural and biological concerns. I performed survey calculations to properly implement the design for staking of construction features. I calculated and surveyed alignments, slope stakes, and hydraulic features such as pipe extensions and new installations. I calculated earthwork volumes and reported my calculations to the construction field office for proper and accurate payment (engineering work 55%). I calculated slope of existing drainage pipe, and I calculated the required pipe extension lengths to be constructed in the proposed earth embankment. I communicated any design changes to the Resident Engineer and Roadway Designer. I enforced traffic control and reported any deficiencies to the Contractor and Resident Engineer.



REPRESENTATIVE PROJECTS

NDOT Contract 3661, On US 6 from the junction of SR 318 to 0.3 miles east of Murray Summit, White Pine County, NV. Construct 3-inch Cold in-place recycle, 2-inch plantmix with open graded surface, slope flattening, signs and striping.

3/2017 – 7/2017

My role on this project was the first line supervisor for junior staff and field operations. I organized and coordinated staff assignments to cover the construction operations. I also served as Assistant Resident Engineer and performed performance evaluations and progressive discipline on subordinate staff (5% of my time). I completed construction staking and I organized and scheduled work to align with the contractor schedules. I conducted initial topographic surveys of the existing surface. I utilized CAD tools to build the proposed plan with widenings, pipe extensions, and slope flattening areas. In CAD, I built finished surfaces and identified any potential conflicts prior to me performing the correlating construction staking in the field. I staked areas of avoidance for cultural and biological concerns. I performed survey calculations to properly implement the design for staking of construction features. I calculated and surveyed alignments, slope stakes, and hydraulic features such as pipe extensions and new installations. I calculated earthwork volumes and reported my calculations to the construction field office for proper and accurate payment. I documented as-built plans for any field changes to design, quantities, and field adjustments. I communicated any design changes to the Resident Engineer and Roadway Designer. I monitored traffic control and reported any deficiencies to the Contractor and Resident Engineer.

ROBERT THRAN (13-135-16)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Nevada Department of Transportation
Nevada (United States)
Supervisor III, Associate Engineer
July 2017 – December 2021

Verified by
Boyd Ratliff
bratliff@tierragroupintl.com

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



TASKS

As a Supervisor III, Associate Engineer, I report directly to the Resident Engineer. I perform contract administration of the NDOT contracts. I performed weekly schedule reviews and daily tracking of contract working days. I coached and guided technicians on calculations, testing frequencies, and proper implementation of testing methods. I review plans and specifications to gain knowledge and familiarity with upcoming projects. I organize and attend weekly project and safety meetings. As needed, I perform interviews and work with Human Resources to hire engineering technicians. Daily, monitor performance and annually conduct performance evaluations. During the pre-construction phase, I make recommendations during preliminary design and specifications review meetings. I review the contract documents for constructability and provide recommendations during constructability reviews. I review project submittals for compliance before the item is to be incorporated into the work. I review and implement contractor submitted traffic control plans and ensure compliance with the Manual on Uniform Traffic Control Devices (MUTCD). I communicate any design omissions and errors to the designer and propose solutions consistent with the design intentions and specifications. I request and complete contract change orders, independent cost analysis, write detailed descriptions of the contract changes and justification for the change. I review and make decisions consistent with pertinent cultural and biological environmental requirements and when working in the waters of the US and the Migratory Bird Act. I approve daily documentation and payment postings for bi-weekly progress payments. I approve materials test reports for accuracy and completeness. I make decisions and determinations on substandard materials and poor workmanship. I engage in weekly partnering meetings, communicate any areas of concern to the respective design teams or divisions, communicate with stakeholders, local agencies, and third-party engineering firms. I monitor the progress, performance, and budgets of consultant staff.



REPRESENTATIVE PROJECTS

NDOT Contract 3701, On I80 in Carlin, Elko County, NV. Coldmill, plantmix bituminous surface with open graded surface, slope erosion and bridge improvements, signs and striping.

4/2018 – 11/2018

My role on this contract was to monitor the construction progress and serve as the assistant to the Resident Engineer, communicate with the contractor and review weekly progress schedules. I assign daily activities to subordinate staff. I attended design meetings and provided comments on design issues and/or constructability issues in the field. I created and reviewed biweekly progress payments. I reviewed and accepted materials test reports and communicated results to the contractor. I created, negotiated, reviewed, and processed contract change orders for implementation into the contract. I provided guidance to technical staff on inspections and testing duties.

NDOT Contract 3760, On US 50 near Ruth and on US 6 at the Intersection of US 6 and US 93, White Pine County, NV. Coldmill, plantmix bituminous surface with open graded surface, ITS improvements, signs and striping.

4/2019 – 9/2019

My role on this contract was to monitor the construction progress and serve as the assistant to the Resident Engineer, communicate with the contractor, and review weekly progress schedules. I assign daily activities to subordinate staff. I attended design meetings and provided comments on design issues and/or constructability issues in the field. I created and reviewed biweekly progress payments. I reviewed and accepted materials test reports and communicated results to the contractor. I created, negotiated, reviewed, and processed contract change orders for implementation into the contract. I provided guidance to technical staff on inspections and testing duties.

NDOT Contract 3817, On US 50 in Austin, Lander County, NV. Pulverization, roadbed modification, plantmix bituminous surface, curb, gutter sidewalk, lighting, ADA, drainage, sewer and water improvements, signs and striping.

4/2020 – 12/2020

My role on this contract was to serve as the Assistant to the Resident Engineer. The Resident Engineer was assigned to another

project and my role was to monitor the construction progress, communicate with the contractor, and review weekly progress schedules. I assign daily activities to subordinate staff. I attended design meetings and provided comments on design issues and/or constructability issues in the field. As public concerns arose, I met and facilitated conversations to resolve identified needs and concerns. I created and reviewed biweekly progress payments. I reviewed and accepted materials test reports and communicated results to the contractor. I resolved design issues with the placement of curb and gutter and sidewalk to meet ADA requirements. I made recommendations when the design did not fit field conditions. I effectively communicated and coordinated construction activities with the contractor and third-party inspectors. I created, negotiated, reviewed, and processed contract change orders for implementation into the contract. I provided guidance to technical staff on inspections and testing duties. I made decisions when materials or workmanship did not meet the project specifications.

NDOT Contract 3824, On US 50 in Ely, White Pine County, NV. Pulverization, roadbed modification, plantmix bituminous surface, curb, gutter sidewalk, lighting, ITS, ADA, drainage, sewer and water improvements, signs and striping
2/2021 – 10/2021

My role on this contract was to serve as the Assistant to the Resident Engineer. The Resident Engineer was assigned to another project and my role was to monitor the construction progress, communicate with the contractor and review weekly progress schedules. I assign daily activities to subordinate staff. I attended design meetings and provided comments on design issues and/or constructability issues in the field. I created and reviewed biweekly progress payments. I reviewed and accepted materials test reports and communicated results to the contractor. I resolved design issues with the placement of curb and gutter and sidewalk to meet ADA requirements. I made recommendations when the design did not fit field conditions. I effectively communicated and coordinated construction activities with the contractor and third-party inspectors. I created, negotiated, reviewed, and processed contract change orders for implementation into the contract. I provided guidance to technical staff on inspections and testing duties. I made decisions when materials or workmanship did not meet the project specifications.

ROBERT THRAN (13-135-16)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Nevada Department of Transportation
Nevada (United States)
Supervisor III, Associate Engineer
December 2021 – October 2023

Verified by
Y Yousuf
samiy003@gmail.com

Experience Summary
Full-Time
Engineering: 1 year, 10 months
Post EAC degree: 1 year, 10 months
Experience under licensed engineer:
1 year, 10 months



TASKS

As a Supervisor III, Associate Engineer, I report directly to the Resident Engineer. I perform contract administration of the NDOT contracts. I performed weekly schedule reviews and daily tracking of contract working days. I coached and guided technicians on calculations, testing frequencies, and proper implementation of testing methods. I review plans and specifications to gain knowledge and familiarity with upcoming projects. I organize and attend weekly project and safety meetings. As needed, I perform interviews and work with Human Resources to hire engineering technicians. Daily, monitor performance and annually conduct performance evaluations. During the pre-construction phase, I make recommendations during preliminary design and specifications review meetings. I review the contract documents for constructability and provide recommendations during constructability reviews. I review project submittals for compliance before the item is to be incorporated into the work. I review and implement contractor submitted traffic control plans and ensure compliance with the Manual on Uniform Traffic Control Devices (MUTCD). I communicate any design omissions and errors to the designer and propose solutions consistent with the design intentions and specifications. I request and complete contract change orders, independent cost analysis, write detailed descriptions of the contract changes and justification for the change. I review and make decisions consistent with pertinent cultural and biological environmental requirements and when working in the waters of the US and the Migratory Bird Act. I approve daily documentation and payment postings for bi-weekly progress payments. I approve materials test reports for accuracy and completeness. I make decisions and determinations on substandard materials and poor workmanship. I engage in weekly partnering meetings, communicate any areas of concern to the respective design teams or divisions, communicate with stakeholders, local agencies, and third-party engineering firms. I monitor the progress, performance, and budgets of consultant staff.



REPRESENTATIVE PROJECTS

NDOT Contract 3849, On I 80 at Emigrant Pass, Eureka County, NV. Construct Truck climbing lanes eastbound and westbound, replace existing structure, construct new structure.

1/2022 – 9/2022

My role on this contract was the Acting Resident Engineer. My role was to monitor the construction progress, communicate with the contractor and review weekly progress schedules. I implemented the public relations outreach plan as the local point of contact for the demolition of structure I-889 to close I80. I attended and presented information pertaining to the closure of I80 to surrounding community leaders. I was the spokesperson in informative videos and social media posts regarding the timing and planning of the I-80 closure. I had constant and consistent communication with NDOT, neighboring DOTs, FHWA, and key stakeholders across the state. I assign daily activities to subordinate staff. I created and reviewed biweekly progress payments. I accepted materials test reports and communicated results to the contractor. I made recommendations when the design did not fit field conditions. I review and make decisions consistent with pertinent environmental requirements when working in the waters of the US and the Migratory Bird Act. I effectively communicated and coordinated construction activities with the contractor. I created, negotiated, reviewed, and processed contract change orders for implementation into the contract. I provided guidance to technical staff on inspections and testing duties. I made decisions when materials or workmanship did not meet the project specifications.

NDOT Contract 3924, On I 80, Elko County, NV. Protect bridge with riprap scour revetment and remove bridge and replace with box culvert.

10/2022 – 10/2023

My role on this contract was the Acting Resident Engineer. My role was to monitor the construction progress, communicate with the contractor and review weekly progress schedules. I assign daily activities to subordinate staff. I attended design meetings and provided comments on design issues and/or constructability issues in the field. I reviewed and monitored sensitive permit requirements when working in the Waters of the US as they pertain the 401/404, US Army Corp of Engineers and NDEP permitting, the Working in Waterways permit, and other sensitive environmental requirements to ensure compliance with the

regulatory agencies. Due to unprecedented flooding, I consistently communicated and updated schedule to meet real-time constructability windows. I created and reviewed biweekly progress payments. I reviewed and accepted materials test reports and communicated results to the contractor. I made recommendations when the design did not fit field conditions. I effectively communicated and coordinated construction activities with the contractor. I created, negotiated, reviewed, and processed contract change orders for implementation into the contract. I made decisions to cease work when working in waterways operations failed to meet the respective permit requirements. I negotiated the progress schedule and working days as charged consistent with the contract documents. I provided guidance to technical staff on inspections and testing duties. I made decisions when materials or workmanship did not meet the project specifications.

NDOT Contract 3936, On I80 at the Beowawe Interchange, Eureka County, NV. Construct Truck Climbing Lane
2/2023 – 10/2023

My role on this contract was the Acting Resident Engineer. My role was to monitor the construction progress, communicate with the contractor and review weekly progress schedules. I coordinated the public relations outreach for the closure of the eastbound on ramp at the Beowawe interchange. I had constant and consistent communication with NDOT, and key stakeholders. I attended quarterly carrier meetings to provide project updates with the key stakeholder, Nevada Gold Mines. I assign daily activities to subordinate staff. I attended design meetings and provided comments on design issues and/or constructability issues in the field. I created and reviewed biweekly progress payments. I reviewed and accepted materials test reports and communicated results to the contractor. I made recommendations when the design did not fit field conditions. I effectively communicated and scheduled construction activities with the contractor. I review and make decisions consistent with pertinent environmental requirements when working in the waters of the US and the Migratory Bird Act. I created, negotiated, reviewed, and processed contract change orders for implementation into the contract. I provided guidance to technical staff on inspections and testing duties. I made decisions when materials or workmanship did not meet the project specifications.

WORK EXPERIENCE

Nevada Department of Transportation
Nevada (United States)
Supervisor III, Associate Engineer
October 2023—January 2025

Verified by
Sami A Yousuf
samiy003@gmail.com

Experience Summary
Full-Time
Engineering: 1 year, 3 months
Post EAC degree: 1 year, 3 months
Experience under licensed engineer:
1 year, 3 months



TASKS

As the Supervisor III, Associate Engineer, I reported directly to the Resident Engineer (Manager II). I drafted scopes of work, engineering cost estimates, and performed quantity take-offs for various projects throughout District 3. I wrote project specifications to be included in the contract. I recommended and implemented design considerations. I provided recommendations during constructability reviews and made recommendations on contract time. I also advertised the project, and I assembled the bid package. I solicited bids, reviewed bids, issued notice to bidders. I provided award notifications. I compiled project bids and distributed unofficial bid results. I worked directly with NDOTs Agreement Services Team to ensure proper documentation of 3-quote projects and that the agreement was reviewed by the Attorney General. I managed the field laboratory for proper operations, documentation, and calibrations. I wrote funding approval memos and organized pre-bid meetings. I addressed all request for information (RFIs). I inspected and monitored the work progress. I recommended projects throughout District 3 and prioritized the projects and project requests from other agencies relative to budget constraints. I organized and assigned the workload to other professionals and technical staff. I attended workshops with neighboring counties and prioritized their requests. I attend bimonthly status meetings and provide updates on current projects, upcoming projects, and future projects.



REPRESENTATIVE PROJECTS

NDOT Agreement P3-616-23-304, Winnemucca Heater Replacement.
12/2023 – 4/2024

My role on this agreement was to assemble the bid package and monitor the progress and compliance of the agreement. I addressed any requests for information (RFIs). I justified any extra work per the agreement and monitored the working days. I ensured compliance with the contract compliance and prevailing wage determinations. I monitored certified payrolls and approved invoice for payment upon completion of work.

NDOT Agreement P3-624-23-304, Winnemucca Entry Doors.
12/2023 – 5/2024

My role on this agreement was to assemble the bid package and monitor the progress and compliance of the agreement. I addressed any requests for information (RFIs). I justified any extra work per the agreement and monitored the working days.

NDOT Agreement P3-067-24-304, Winnemucca Roll-up Door Replacement.
3/2024 – 12/2024

My role on this agreement was to assemble the bid package and monitor the progress and compliance of the agreement. I addressed any requests for information (RFIs). I justified any extra work per the agreement and monitored the working days. I ensured compliance with the contract compliance and prevailing wage determinations. I monitored certified payrolls and approved invoice for payment upon completion of work.

NDOT Contract 3849, On Interstate-80 at Emigrant Pass, Eureka County, NV. Construct truck climbing lanes eastbound and westbound, replace existing structure, construct new structure.
12/2024 – 1/2025

During this project, my title was Supervisor III and I reported directly to the District Engineer, for this project. During this time the active construction phase was finished, and my attention was focused on contract closeout. I performed analysis and tracking of quantities to confirm paid quantities. I applied engineering judgement and engineering principles to resolve the aggregate base quantity issue. I estimated project quantities of aggregate base by calculating planned volumes and converted to a tonnage item by applying engineering material properties. I also, interpreted neat line calculations from the contract plans. I presented my findings to the Assistant District Engineer and the prime contractor.

ROBERT THRAN (13-135-16)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Nevada Department of Transportation
Nevada (United States)
Supervisor III, Associate Engineer
(Manager I, Underfill)
January 2025—May 2025

Verified by
Darren William Dyk
ddyk@dot.nv.gov

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



TASKS

As a Supervisor III, Associate Engineer, I report directly to the Resident Engineer. I perform contract administration of the NDOT contracts. I performed weekly schedule reviews and daily tracking of contract working days. I coached and guided technicians on calculations, testing frequencies, and proper implementation of testing methods. I review plans and specifications to gain knowledge and familiarity with upcoming projects. I organize and attend weekly project and safety meetings. During the pre-construction phase, I make recommendations during preliminary design and specifications review meetings. I review the contract documents for constructability and provide recommendations during constructability reviews. I review project submittals for compliance before the item is to be incorporated into the work. I review and implement contractor submitted traffic control plans and ensure compliance with the Manual on Uniform Traffic Control Devices (MUTCD). I communicate any design omissions and errors to the designer and propose solutions consistent with the design intentions and specifications. I request and complete contract change orders, independent cost analysis, write detailed descriptions of the contract changes and justification for the change. I review and make decisions consistent with pertinent cultural and biological environmental requirements and when working in the waters of the US and the Migratory Bird Act. I approve daily documentation and payment postings for bi-weekly progress payments. I approve materials test reports for accuracy and completeness. I make decisions and determinations on substandard materials and poor workmanship. I engage in weekly partnering meetings, communicate any areas of concern to the respective design teams or divisions, communicate with stakeholders, local agencies, and third-party engineering firms. I monitor the progress, performance, and budgets of consultant staff.



REPRESENTATIVE PROJECTS

NDOT Contract 3849, On Interstate-80 at Emigrant Pass, Eureka County, NV. Construct truck climbing lanes eastbound and westbound, replace existing structure, construct new structure.
1/2025 – 5/2025

During this project, my title was Supervisor III, but my role was as the Resident Engineer (underfill) and I reported directly to the Assistant District Engineer. During this time the active construction phase was finished, and my attention was focused on contract closeout. I performed analysis and tracking of quantities to confirm paid quantities. I applied engineering judgement and engineering principles to resolve the aggregate base quantity issue. I estimated project quantities of aggregate base by calculating planned volumes and converted to a tonnage item by applying engineering material properties. I also, interpreted neat line calculations from the contract plans. I presented my findings to the Assistant District Engineer and the prime contractor.

NDOT 4538, Mill and Fill, Austin, NV, Lander County

During this project, my title was Supervisor III, but my role on was as the Resident Engineer (underfill) and I reported directly to the Assistant District Engineer. I provided recommendations during the preliminary design and constructability reviews. This project is awaiting award and is planned to go to construction in July 2025.

ROBERT THRAN (13-135-16)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Nevada Department of Transportation
Nevada (United States)
Supervisor III, Associate Engineer
May 2025—May 2025

Verified by
Robert Thran (Self)

Experience Summary
Full-Time
Engineering: (0%)
Experience under licensed engineer:
None



TASKS

As the Supervisor III, Associate Engineer, I reported directly to the Resident Engineer (Manager II). I drafted scopes of work, engineering cost estimates, and performed quantity take-offs for various projects throughout District 3. I wrote project specifications to be included in the contract. I recommended and implemented design considerations. I provided recommendations during constructability reviews and made recommendations on contract time. I also advertised the project, and I assembled the bid package. I solicited bids, reviewed bids, issued notice to bidders. I provided award notifications. I compiled project bids and distributed unofficial bid results. I worked directly with NDOTs Agreement Services Team to ensure proper documentation of 3-quote projects and that the agreement was reviewed by the Attorney General. I managed the field laboratory for proper operations, documentation, and calibrations. I wrote funding approval memos and organized pre-bid meetings. I addressed all request for information (RFIs). I inspected and monitored the work progress. I recommended projects throughout District 3 and prioritized the projects and project requests from other agencies relative to budget constraints. I organized and assigned the workload to other professionals and technical staff. I attended workshops with neighboring counties and prioritized their requests. I attend bimonthly status meetings and provide updates on current projects, upcoming projects, and future projects.



REPRESENTATIVE PROJECTS

NDOT Contract 3849, On Interstate-80 at Emigrant Pass, Eureka County, NV. Construct truck climbing lanes eastbound and westbound, replace existing structure, construct new structure.

5/2025 - ongoing

During this project, my title was Supervisor III and I reported directly to the Assistant District Engineer, for this project. This project continues to be in the close out phase, therefore the work performed is still focused on contract closeout. I performed analysis and tracking of quantities to confirm paid quantities. I applied engineering judgement and engineering principles to resolve the aggregate base quantity issue. I estimated project quantities of aggregate base by calculating planned volumes and converted to a tonnage item by applying engineering material properties. I also, interpreted neat line calculations from the contract plans. I presented my findings to the Assistant District Engineer and the prime contractor.

I was transferred back to this position on May 12, 2025. I do not have any progressive work and/or projects that can be verified.

SOPHIA WAITE (21-551-04)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
05/30/2025

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, Reno
August 2017–May 2021

Masters in Business Administration
University of Nevada, Reno
August 2021–May 2022

EXAMS



Fundamentals of Engineering (FE)
Nevada
April 2021

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

LICENSES



Additional Licenses
None

WORK EXPERIENCE

Lumos & Associates
Nevada (United States)
Project Coordinator
May 2021 – May 2025

Verified by
Mara Quiroga
mquiroga@lumosinc.com

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



TASKS

As an engineering technician I assisted in the creation of various design calculations, sorting and inferring from various data sources that ultimately lead to reports that guide planning documents or basis of design for engineering facilities. During my time as a project designer, I utilized various software's like InfoWater, water CAD, and Civil 3D to create water model reports and plan sets. As a senior project designer, I began to review plan sets and reports, engaging in various design discussion with staff and clients. Within my project coordinator role, I relay cumbersome project issues with upper staff to create efficient solutions. Doing this requires me to send emails and engage in various client interactions. I spend part of my day attending meetings with clients, contractors, and other peers to coordinate projects, design, and construction. Currently, I am managing various construction projects and relaying project issues to higher staff to ensure solution in the field is accurate. I am also managing interns and lower-level staff to create reports, plan sets, and data sets. I prepare 100% engineering deliverables including plan sets, technical specifications, and contract documents. With assistance I am also leading projects through the bidding process and construction. All of tasks I have performed at Lumos & Associates were within a 100% engineering scope.



REPRESENTATIVE PROJECTS

Dermody & North Dakota Lift Stations (Scope: Rehab Project, Location: Reno, NV Structure: Buried utilities Dates: Jan 2023 -> Current): I spearheaded the design for the Dermody Lift Station Rehabilitation which required an understanding of lift station design, mechanical piping, grading, and site conditions. I utilized existing topographic survey, photos and geotechnical report to create a design that ultimately fit in the small site area while still satisfying requirements such as proper emergency backup power, controls, drainage and operational access. When the project went to bid, I aided in construction submittals and provided support to construction managers. I also made various visits to the site to engage in construction management, relaying project difficulties, requests for information (RFI) to the stamping engineer.

Long Valley Booster Pump Station (Scope: Rehab Project & New Additions, Location: Gardnerville, NV Structure: Buried utilities & a CMU pump house Dates: Dec 2021 -> Current): I lead the design and drafting as a young engineer, where I learned the basics of site design, grading, and mechanical plans. While doing this I learned about pumping design and water system management including pressure zones and hydraulic modeling, leading to decisions that were made in mechanical piping and proper valving to isolate the system. I developed contract documents which included opinions of probable cost, technical specifications, contract documents – specifically construction manager at risk (CMAR) as well as Guaranteed Max Price (GMP) articulated contracts. This project was federally, and state funded and therefore required American Iron and Steel (AIS) provisions, which led me to make decisions of requiring additional information, building complex spreadsheets to manage the data. I reviewed construction submittals based on our developed plans and specifications and later verified these products in the field. I managed this project in the field including daily site inspection to ensure the integrity of construction, quantity and product installation, tracking time and materials, and coordinating design changes with the contractor (foreman, superintendent) as well as our internal construction manager, engineers, subconsultants and ultimately the client.

Mark IV Lift Stations (Scope: New Industrial Subdivision Utilities, Location: Fernley, NV Structure: Buried utilities & above ground utility access locations Dates: Sept 2023 -> Current): This project entailed three major lift stations for a large subdivision which initially required master planning to identify the number of lift station, locations, and phasing. During master planning efforts, I developed various spreadsheets to document planning and recommended these projections and solutions in various water and sewer reports. The first lift station I lead the design through building the basis of design report and lead and assisted staff in plan production. I drove the conversation for pump sizing, coordinated with project managers, lead internal coordination meetings to deliver the project on-time, within budget and with an exemplary product. I also coordinated with the sub consultant electrical engineer to ensure timeline and revisions were communicated to get the corresponding electrical sheets incorporated into the design. I assisted in the permitting process through both City of Fernley as well as NDEP, while managing client desires and drivers making recommendations of various equipment and construction phasing. On the following lift station, I lead and assisted the team in developing their own basis of design report – reviewed calculations, reports, and design drawings to ensure project was following intended standards, accurate design methods, and took into consideration construction related issues. I managed

the delivery and coordination between various design teams, a host of staff, and relaying relevant and important information to the various project managers.

Electrical

MATTHEW STUART (21-272-92)

All work experience reviewed by two licensed professionals

DISCIPLINE: ELECTRICAL

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
05/01/2025

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 Electrical Engineering (EAC)
University of Nevada, Reno
August 2014–May 2021

EXAMS



Fundamentals of Engineering (FE)
Nevada
March 2021

Principles and Practice of Engineering (PE)
Electrical & Computer
Nevada
January 2025



LICENSES



Additional Licenses
None

WORK EXPERIENCE

PK Electrical
Nevada (United States)
Electrical Designer
May 2021 – May 2025

Verified by
Joseph Ganser
jganser@pkelectrical.com

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



TASKS

I have been working at PK Electrical for six years. Two as an intern and four as an electrical designer. As an Electrical Designer, I oversaw the design and construction administration process for many projects, ensuring compliance with codes, standards, and client requirements. My responsibilities since becoming a designer have included conducting site visits to assess existing conditions, performing electrical load calculations, arc-flash studies, lighting analyses, power distribution, lighting, fire alarm, and emergency backup systems. I coordinated closely with architects, engineers, and contractors to integrate electrical systems seamlessly into each project. Throughout all projects I have led, I played a role in construction administration—attending meetings, reviewing submittals, and addressing contractor questions to ensure accurate implementation of the design intent. 100% of my listed task and duties are engineering related and focused.



REPRESENTATIVE PROJECTS

In each of the following projects, I served as the Lead Electrical Designer, with Joey Ganser, PE, reviewing and stamping my final work. My responsibilities included coordinating with multidisciplinary design teams to achieve project scope, conducting site visits to assess existing conditions, and developing modifications to meet project objectives. I performed electrical calculations—including load studies, arc-flash analysis, lighting levels, generator sizing, lighting controls, and battery backup systems—in compliance with applicable codes, standards, and owner requirements. Additionally, I supported construction administration by assisting electrical contractors in executing the design intent for the end user.

Northern Nevada Mental Health Center Electrical Upgrade - Replace the main service entrance, panelboards, conductors, conduit, switches, receptacles, lighting, mechanical equipment connections, fire alarm systems, and telephone/data systems in Building 1 at the Northern Nevada Adult Mental Health Services campus. March 2022 - March 2025. I conducted multiple site visits to document and verify existing conditions. Developed new lighting and power distribution systems for the building in compliance with Nevada State Public Works Division (SPWD) standards and owner specifications. Provided construction administration support, attending weekly meetings to address contractor questions and resolve in-field issues.

Nevada Army National Guard Storage Hangar - A 16,355 square foot Aircraft Storage Hangar for the AASF at the Harry Reid Training Center. The facility is designed to provide covered floor space to accommodate three UH-60 Black Hawk helicopters. February 2022 - February 2025. I performed a site assessment to determine the required power source from an adjacent facility. Designed electrical systems to meet stringent military requirements, ensuring compliance with Unified Facilities Criteria (UFC) standards such as; interior and exterior lighting, power, telecommunication, and specialized grounding and fire protection system. Supported construction phase by attending meetings as needed to clarify design intent and resolve field coordination issues.

Storey County Community Center - A new 9,000-10,000 square foot community center facility replacing the existing one located in Lockwood, Nevada. September 2022 - current. I designed interior/exterior lighting and power distribution systems. Coordinated with kitchen equipment vendors to validate power requirements and ensure proper functionality. Developed a backup power system for the Canyon General Improvement District, housed within the new facility. Currently providing construction phase support, attending meetings as needed to address electrical-related inquiries.

CHASE TERRY (21-422-45)

All work experience reviewed by two licensed professionals

DISCIPLINE: ELECTRICAL

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
05/28/2025

Citizenship
United States

SUMMARY



Engineering Experience after EAC degree
4 years

Total Engineering Experience
4 years

Experience under licensed engineer
3 years, 11 months

Disciplinary Action
None reported



EDUCATION



Bachelors in Electrical Engineering (EAC)
University of Nevada, Reno
August 2018–May 2021

EXAMS



Fundamentals of Engineering (FE)
Nevada
January 2021

Principles and Practice of Engineering (PE)
Electrical & Computer
California
January 2025



LICENSES



Additional Licenses
None

WORK EXPERIENCE

Liberty Utilities
California (United States)
Engineer III
May 2021 – May 2025

Verified by
Matthew Wetzell
matthew.wetzell@libertyutilities.com

Experience Summary
Full-Time
Engineering: 4 years
Post EAC degree: 4 years
Experience under licensed engineer:
3 years, 11 months



TASKS

Preformed coordination studies and developed relay settings for distribution systems, substations and transmission lines
Assisted in developing and reviewing protection and control substation prints for various substation projects and troubleshooting
Analyzed protective relay operations to ensure proper performance
Assisted in distribution field recloser communications and controls for SCADA system
Updating and maintaining system asset models in order to conduct accurate protection coordination
Assistance in high/medium voltage substation rebuilds
Tasked with design to replace high and medium voltage substation equipment
Calculation and bookkeeping of entire system reliability metrics
Assisted in specifications of new substation transformers and breakers



REPRESENTATIVE PROJECTS

HLT relay implementation

Hot Line Tag is a sensitive relay setting that is meant to trip the relays and help protect against faults while linemen are working on energized lines. The scope of the project was to verify all HLT settings were operating properly and to implement new relay settings if the existing setting were found to be inadequate. Project location was throughout Liberty Utilities CalPeco territory in lake Tahoe California through the entire year of 2024. I designed all the relay logic as well as the designated pickup values that were implemented in the relays themselves. In addition I assisted in field testing these relays alongside relay technicians.

Tahoe City Breaker Replacement

This project involved replacing an old 14.4kV distribution breaker supplied by an outdated standard control voltage of 48V. By replacing this breaker with one that accepted a control voltage of 125V, like the rest of the breakers in the yard, we were able to remove the old 48V battery system entirely. This project took place at Tahoe City Substation in Tahoe City California in Q3 of 2023. As the engineer assigned to the project, I designed all protection and control drawings associated with the breaker. This included all circuit wiring diagrams, AC, DC schematics, cable schedules, and termination and protection panel schematics. In addition I assisted with developing a test plan and field commissioning the breaker.

SRP - Sensitive Relay Profile

In the efforts to reduce wildfire risks on distribution circuits, utilities have been implementing relay settings to trip substation breakers and field reclosers in an appropriate time. Protective relaying is one of the most effective ways utilities have found to reduce wildfire ignitions across their service territory. This project has been an multiple year effort ranging from 2023 to present. As the engineer I was responsible to programming relays as well as all RTAC's across Liberty Utilities service territory to provide proper protection and controll. This required studying line loading data and short circuit analysis to appropriately set pickup values low enough. Pickup values were implemented following a fuse saving scheme and must see end of line faults on all main lines and laterals while being just high enough to not pickup on peak load values.

CHASE TERRY (21-422-45)

All work experience reviewed by two licensed professionals

ADDITIONAL INFORMATION



TIME GAPS

Start Date	End Date	Explanation
May 2013	July 2018	Attending University of Nevada, Reno

Fire Protection

PRINCE RON CARLOS (19-848-41)

All work experience reviewed by two licensed professionals

DISCIPLINE: FIRE PROTECTION

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
05/12/2025

Citizenship
United States

SUMMARY



Engineering Experience after EAC degree
5 years, 2 months

Total Engineering Experience
5 years, 2 months

Experience under licensed engineer
5 years, 2 months

Other Experience

Disciplinary Action
None reported



EDUCATION



Bachelors in Mechanical Engineering (EAC)
University of Nevada, Las Vegas
August 2014–May 2019

EXAMS



Fundamentals of Engineering (FE)
Nevada
August 2024

Principles and Practice of Engineering (PE)
Fire Protection
Nevada
April 2025



LICENSES



Additional Licenses
None

PRINCE RON CARLOS (19-848-41)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Bureau Veritas North America
Nevada (United States)
Project Manager II
July 2019—April 2022

Verified by
Joshua Timothy Hogan
hogan.jt11@gmail.com

Experience Summary
Full-Time
Engineering: 2 years, 9 months
Post EAC degree: 2 years, 9 months
Experience under licensed engineer:
2 years, 9 months



TASKS

I started as Project Manager-in-Training. I was part of the team, and I was responsible for providing accurate documentation of MEPF conditions based on visual inspections, documentations, and plans.

I was promoted directly to Project Manager II. I started performing facility condition assessment from small to medium buildings. Further, I also prepared facility condition reports that provides the overall condition of the building.



REPRESENTATIVE PROJECTS

Sacramento City Unified School District, Facility Condition Assessment
July 2019 - June 2021

I was part of a team that prepared a facility condition assessment report for a campus style buildings project. I performed onsite inventory of building's components such as doors, toilet partitions, and sinks. I calculated the maintenance and budgetary cost of based on component's deficiencies and remaining life cycle.

Santa Rosa City's Schools
June 2020 - July 2021

I prepared a comprehensive facility condition assessment report which included analyzing building's envelope, HVAC components, and fire protection systems. I determined the visual deficiencies and provided approximately remaining life-cycle of the components. I performed on-site inventory collection to populate maintenance databases and generated planned maintenance schedules.

PRINCE RON CARLOS (19-848-41)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Siemens
Nevada (United States)
Associate Project Management
April 2022—October 2022

Verified by

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



DESCRIPTION

PRINCE RON CARLOS (19-848-41)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Advanced Consulting Solutions Group
Nevada (United States)
Fire Protection Associate
November 2022—July 2024

Verified by
James Taylor
jtaylor@acsgroupllc.com

Experience Summary
Full-Time
Engineering: 1 year, 8 months
Post EAC degree: 1 year, 8 months
Experience under licensed engineer:
1 year, 8 months



TASKS

My position was Fire Protection Associate, and I was responsible for preparing fire protection reports for small to medium size tenant improvement projects, I designed life safety/egress plans including occupant load calculation, I prepared high-piled storage reports in accordance with applicable codes, I identified chemical hazard characteristic using SDS/MSDS for Hazard Material Inventory Statement (HMIS).



REPRESENTATIVE PROJECTS

Founder's Academy, Fire Protection Report Tenant Improvement
January 2023 - December 2023

I prepared fire protection report for tenant improvement. My responsibilities included verifying the compliance of fire protection systems for the adopted codes and its local amendments. I provided update occupant load calculation for the area of scope of work, and ensure adequate number of egress within the space. Further, I determined key issues specific to the project and provided solutions based on code compliance approach.

HUKL - Skyline, Life Safety Design
November 2023 - June 2024

I designed egress life safety using AutoCAD and Revit software. I calculated each space/room for occupant load, identified egress limiting factors, provide adequate exits, and identified maximum travel distance and common path of egress travel.d

PRINCE RON CARLOS (19-848-41)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

City of Henderson
Nevada (United States)
Fire Protection Engineering I (EIT)
August 2024—May 2025

Verified by
Lynn Nielson
lynn.nielson@cityofhenderson.com

Experience Summary
Full-Time
Engineering: 9 months
Post EAC degree: 9 months
Experience under licensed engineer: 9 months



TASKS

I started as a Combination Fire Plans Examiner. I reviewed fire alarms which includes shop drawings, equipment submittals, and application.
My current position is Fire Protection Engineer I (EIT). In addition of reviewing fire alarm shop drawings, I also review high-piled storage, code modification, request for alternate methods, smoke control test plans, and fire protection reports.



REPRESENTATIVE PROJECTS

Atwell Suite Hotel, Fire Alarm System Shop Drawings Plans Review
October 2024 - February 2025
I have reviewed fire alarm plans for compliance on the current adopted codes and local amendments. My role was to ensure the notification devices have adequate coverages, battery and voltage calculations followed the NFPA 72 and local amendment for initial values and acceptable use of equations. Further, I had to ensure that the plans followed the minimum requirements per NFPA 72 and local amendment fire alarm checklist.

Aristocrat Gaming
January 2025 - March 2025
I have reviewed the high piled storage plans in compliance with International Fire Code (IFC) and local amendments. My was to ensure the items listed on the construction document for new structures designed to accommodate high-piled storage was accurate and sounds. I ensure that the commodities being submitted were accurate to the sprinkler design being provided in accordance with IFC and NFPA 13.

PRINCE RON CARLOS (19-848-41)

All work experience reviewed by two licensed professionals

ADDITIONAL INFORMATION



TIME GAPS

Start Date	End Date	Explanation
June 2011	July 2014	I was attending community college before transferring to an EAC accredited university.

MATTHEW DOLAN (13-265-33)

All work experience reviewed by two licensed professionals

DISCIPLINE: FIRE PROTECTION

GENERAL



Applying To
Nevada

Application Type
Comity - PE

Application Date
05/22/2025

Citizenship
United States

SUMMARY



Engineering Experience after EAC degree
18 years, 6 months

Total Engineering Experience
18 years, 6 months

Experience under licensed engineer
18 years, 6 months

Disciplinary Action
None reported



EDUCATION



Bachelors in Mechanical Engineering (EAC)
University of California, Davis
September 2001–June 2006

NOTE: First Fire Protection license, licensed as a Mechanical in Nevada.

EXAMS



Principles and Practice of Engineering (PE)
Mechanical
Nevada
October 2011

Fundamentals of Engineering (FE)
California
April 2008

Principles and Practice of Engineering (PE)
Fire Protection
Nevada
April 2025

LICENSES



Initial License
Nevada
Issued: January 2012
Expires: December 2026

Additional Licenses
LA, UT

WORK EXPERIENCE

JBA Consulting Engineers
Nevada (United States)
Mechanical Designer
September 2006—October 2010

Verified by
Brad R Geinzer
brgeinzer@gmail.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

Cooling/Heating load calculations for spaces using both hand calculations and Trace 700 software, equipment selections and scheduling for fan coils, air handling units, diffusers, grilles, CAD drawing production for mechanical and plumbing design, Plumbing design for domestic water, vent, sanitary and grease waste, and storm drain systems following the Uniform Plumbing Code, ventilation compliance for interior spaces, HVAC design for ductwork and piping systems including VAV air handling units and chilled/heating water systems.

REPRESENTATIVE PROJECTS

Caesars Palace Octavius Tower, Las Vegas, NV. (2006-2007)

I designed the Sovent waste/vent system, and domestic water distribution system for the hotel tower including guestrooms, back of house spaces, and Villas. This included waste/vent piping, and domestic hot, cold, and hot water return piping. My designs were made in compliance with the Uniform Plumbing Code (UPC).

I produced calculations for domestic water pipe sizing based upon fixture units, friction losses, and velocity.

I drafted this work using AutoCAD.

Caesars Palace Convention Center Expansion, Las Vegas, NV. (2006-2007)

I designed the sanitary and grease waste/vent system per the UPC, and domestic water distribution system for the spaces including kitchens, toilet room groups, back of house spaces, and the pool deck. This included waste/vent piping, and domestic hot, cold, and hot water return piping.

I produced calculations for domestic water pipe sizing based upon fixture units, friction losses, and velocity.

I drafted this work using AutoCAD.

Echelon Resort and Casino, Las Vegas, NV (2007-2008)

I completed HVAC cooling/heating load calculations for guestroom tower spaces using hand calculations and Trace 700. These included guestrooms, indoor pool areas, restaurant spaces, and back of house support spaces.

I sized and routed ductwork for medium pressure and low pressure systems and selected diffusers to match the interior design. I sized, selected, and scheduled air conditioning equipment including fan coils and air handling units connecting to the central chilled and heating water plant for the site.

I drafted this work using AutoCAD and provided redline markups of the designs for drafters.

Zayed University, Abu Dhabi, UAE. (2009-2010)

I completed HVAC cooling/heating load calculations for five buildings at the university campus. These included a library, convention building, dining halls, performance theater, and classrooms. I sized, selected, and scheduled air handling units utilizing total enthalpy heat wheels for the Abu Dhabi climate and coordinated space constraints and mechanical room sizing with the Architect. I designed HVAC systems for electrical rooms utilizing local code requirements. I designed underfloor air and displacement systems for the theater including diffusers, ductwork, and air handling units to zone the different spaces and provide occupant comfort and low noise levels. I designed chilled and heating water piping systems for the buildings and drafted this work using AutoCAD and provided redline markups for drafters.

MATTHEW DOLAN (13-265-33)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

JBA Consulting Engineers
Nevada (United States)
Mechanical Engineer
November 2010—May 2012

Verified by
Brad R Geinzer
brgeinzer@gmail.com

Experience Summary
Full-Time
Engineering: 1 year, 6 months
Post EAC degree: 1 year, 6 months
Experience under licensed engineer:
1 year, 6 months



TASKS

Cooling/Heating load calculations for spaces using both hand calculations and Trace 700 software. Equipment selections and scheduling for fan coils, air handling units, smoke exhaust fans, boilers, pumps, diffusers, grilles. CAD drawing production for mechanical and plumbing design. Plumbing design for domestic water, vent, sanitary and grease waste, and storm drain systems following the Uniform Plumbing Code. Ventilation compliance for interior spaces. HVAC design for ductwork and piping systems including VAV air handling units and chilled/heating water systems. Calculations for smoke control systems using pressurization method. Design for steam systems including pressure reducing stations and steam to water heat exchangers.



REPRESENTATIVE PROJECTS

Mountain View Hospital MOB Hospice and Rehab, Las Vegas, NV. (2010-2011)

I sized and routed ductwork for medium pressure and low pressure systems and selected diffusers to match the interior design. I sized, selected, and scheduled air conditioning equipment including fan coils and an air handling unit connecting to the central chilled water plant. I sized, selected, and scheduled a new boiler plant for each project including gas fired boilers, pumps, and an expansion tank to server the new air handling unit and hot water VAV boxes. I sized and routed chilled and heating water piping based upon friction factors and water velocity.

I calculated the pressurization method smoke control system and sized/scheduled smoke exhaust fans for each project to meet the pressure requirements at the zone boundary.

I drafted this work using AutoCAD and provided redline markups of the designs for drafters.

VA Medical Center Administration Building, Las Vegas, NV. (2011-2012)

I sized and routed ductwork for medium pressure and low pressure systems and selected diffusers to match the interior design. I sized, selected, and scheduled air conditioning equipment including fan coils and air handling units connecting to the central chilled water plant. I sized, selected, and scheduled a new steam to water system for this project including steam pressure reducing station, steam to water heat exchangers, pumps, and an expansion tank to server the new air handling unit and hot water VAV boxes. I sized and routed chilled and heating water piping based upon friction factors and water velocity.

I provided redline markups of the designs for drafters to incorporate into Revit for BIM modeling of the project.

I was the engineer of record for this project.

WORK EXPERIENCE

JBA Consulting Engineers
Macau (Macao)
Senior Mechanical Engineer
June 2012—September 2017

Verified by
Brad R Geinzer
brgeinzer@gmail.com

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



TASKS

Cooling/Heating load calculations for spaces using both excel calculations and Trace 700 software. Equipment selections and scheduling for fan coils, air handling units, smoke exhaust fans, heat exchangers, pumps, diffusers, grilles. CAD drawing production for mechanical design. Ventilation compliance for interior spaces using ASHRAE 62.1. HVAC design for ductwork and piping systems including VAV air handling units and chilled/heating water systems. Calculations for smoke control systems using pressurization method. Calculations for stair pressurization systems. Analytical and CFD analysis and review for tobacco smoke contaminant dilution.



REPRESENTATIVE PROJECTS

Wynn Palace Tower, Macau, SAR (2012-2015)

I designed guestroom fan coil, ductwork, and piping systems including the following: Fan coil selection, sizing, and scheduling with chilled water and electric heating, chilled water and heating water pipe sizing and routing for tower guestroom levels and main mechanical level, ventilation and toilet exhaust duct riser sizing and routing with low pressure sizing methods for each guestroom in the 1700 guestroom tower. I coordinated diffuser types and locations with the interior designer and integrated these into their design drawings. I sized access panels and completed cooling/heating load calculations using Trace 700.

I sized, selected, and scheduled air handling units with total enthalpy heat wheels for the guestroom ventilation/exhaust systems and VAV systems on the Villa and Sky Casino level.

I reviewed shop drawings and submittals and coordinated with the general and sub contractors on site to resolve site condition issues found during construction.

I calculated and selected smoke exhaust and stair pressurization fans for all of the tower levels using the pressurization method of smoke control, stack effect, and expected envelop leakage for various construction types. I wrote reports for smoke control systems and completed the smoke control matrix for the site to meet the requirements of the Fire Protection Report.

I completed calculations for the expected cigarette smoking contaminants within the smoking casino areas using a fully mixed system and specific occupancy of smoking and non-smoking patrons.

I provided redline markups for drafters to complete the drawings using AutoCAD.

MGM Cotai, Macau, SAR (2015-2017)

I designed the mansion guestroom fan coil, ductwork, and piping systems including the following: Fan coil selection, sizing, and scheduling with chilled water and electric heating, chilled water and heating water pipe sizing and routing for the four (4) mansion guestroom levels and upper mechanical level, ventilation and toilet exhaust duct riser sizing and routing with low pressure sizing methods. I coordinated diffuser types and locations with the interior designer and integrated these into their design drawings. I sized access panels and completed cooling/heating load calculations using Trace 700.

I sized, selected, and scheduled air handling units with total enthalpy heat wheels for the theater venue to accommodate both people heat gain as well as heat from the large LED screens and theatrical lighting.

I reviewed shop drawings and submittals and coordinated with the general and sub contractors on site to resolve site condition issues found during construction.

I calculated and selected smoke exhaust and stair pressurization fans for the two (2) guestroom towers using the pressurization method of smoke control, stack effect, and expected envelop leakage for various construction types. I wrote reports for smoke control systems and completed the smoke control matrix for the towers, mansions, and theater to meet the requirements of the Fire Protection Report.

I provided redline markups for drafters to complete the drawings using AutoCAD.

MATTHEW DOLAN (13-265-33)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Southland Industries
Nevada (United States)
Principal Engineer
September 2017—May 2025

Verified by
Steven L. Pay
SPay@southlandind.com

Experience Summary
Full-Time
Engineering: 7 years, 8 months
Post EAC degree: 7 years, 8 months
Experience under licensed engineer: 7 years, 8 months

TASKS

I spend approximately 60% of my time completing engineering tasks as part of my current role. These include preparing Cooling/Heating load calculations for spaces using both hand calculations and Trace 700 software. Equipment selections and scheduling for fan coils, air handling units, smoke exhaust fans, pumps, water heaters, diffusers, grilles. Plumbing design for domestic water, vent, sanitary and grease waste, and storm drain systems following the Uniform Plumbing Code. Ventilation compliance for interior spaces using ASHRAE 62.1. HVAC design for ductwork and piping systems including VAV air handling units and chilled/heating water systems. Calculations for smoke control systems using pressurization method and stack effect.

I spend approximately 40% of my time completing supervisory tasks. These include mentoring younger engineers in the department and working to improve drawing production and technical content. Preparing proposals for engineering projects and determining design fees to complete the work. Producing concept engineering designs for construction estimating of future projects.

REPRESENTATIVE PROJECTS

Resorts World Las Vegas, Las Vegas, NV (2018)

I calculated the expected heat loss from both exterior fire sprinkler piping and an uninsulated concrete fire sprinkler storage tank for compliance with NFPA 13 and 22 to prevent the systems from freezing. I determined the amount of insulation required based upon the radial thickness, k-factor, and ambient temperature of the surrounding air to maintain the water at or above the code required values. I submitted these calculations and insulation requirements as part of the fire sprinkler design drawings with my mechanical engineering stamp for approval by the authority having jurisdiction.

Din Tai Fung Restaurant, Las Vegas, NV (2019-2020)

I designed the sanitary and grease waste/vent system per the UPC, and domestic water distribution system for the kitchen remodel. This included waste/vent piping, natural gas piping, and domestic hot, cold, and hot water return piping.

I produced calculations for domestic water pipe sizing based upon fixture units, friction losses, and velocity.

I produced calculations for natural gas pipe sizing of both low pressure and medium pressure in compliance with the UPC.

I designed the HVAC system for the kitchen remodel including type 1 grease exhaust from hoods, type 2 vapor exhaust from dish washing appliances, low pressure ductwork to diffusers, and a kitchen air balance to verify the exhaust and makeup air flow rates per UMC requirement

I provided redline markups that was input into Revit to create the design drawing package.

Circa Resort and Casino (2019)

I reviewed the engineer's design drawings and calculated the central plant capacity for both the chilled and heating water systems with diversities for each system (guestroom tower fan coils, tower ventilation air handling units, podium air handling units, domestic water to water heat exchangers, pool water to water heat exchangers) and verified the required chiller and boiler capacities to reduce the boiler capacity and reduce the project costs.

I completed calculations and design for the guestroom tower fan coils from a one pipe chilled water system to a conventional supply/return chilled water system and reduced the pumping requirements and heat exchanger sizing for the pressure brake at the base of the tower. I provided chilled water pipe riser sizing for each guestroom riser with both single and back to back conditions for review and approval by the engineer. This was to reduce pipe, pump, and heat exchanger sizing and reduce overall project costs for the design assist construction.

Henderson Event Center (2020-2022)

I designed the HVAC systems for the 6,000 seat event center and hockey arena, including DX air handling units and VAV systems for equipment spaces. This included medium and low pressure ductwork sizing for supply, return, and exhaust along with

diffuser/grille selections and smoke exhaust fans and life safety dampers. I also designed the HVAC systems for the food service kitchen and restaurant including type 1 grease exhaust from hoods, type 2 vapor exhaust from dish washing appliances, low pressure ductwork to diffusers.

I produced calculations for the cooling/heating loads for the building and building/kitchen air balance to verify the exhaust and makeup air flow rates per UMC requirements.

I provided redline markups that was input into Revit to create the design drawing package.

Green Valley Ranch Resort Spa and Casino - Spa Upgrade (2023-2025)

I calculated the designed the HVAC systems for the spa and salon spaces including calculating the cooling/heating loads and water evaporation and latent load produced by the spa/pool within the space. This included chilled/heating water equipment sizing, piping, and low pressure ductwork sizing for supply, return, and exhaust along with diffuser/grille selections.

I provided redline markups that was input into Revit to create the design drawing package.

CARLOS LUEVANO-ESCOTO (20-589-45)

All work experience reviewed by two licensed professionals

DISCIPLINE: FIRE PROTECTION

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
05/11/2025

Citizenship
United States

SUMMARY



Engineering Experience after EAC degree
4 years, 7 months

Total Engineering Experience
4 years, 7 months

Experience under licensed engineer
4 years, 7 months

Disciplinary Action
None reported



EDUCATION



Bachelors in Mechanical Engineering (EAC)
University of Nevada, Las Vegas
August 2014–May 2020

EXAMS



Fundamentals of Engineering (FE)
Nevada
August 2020

Principles and Practice of Engineering (PE)
Fire Protection
Nevada
April 2025



LICENSES



Additional Licenses
None

CARLOS LUEVANO-ESCOTO (20-589-45)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Jensen Hughes, Inc.
Nevada (United States)
Fire Protection Engineering Associate
September 2020—July 2024

Verified by
Kevin Eugene Murphy
kmurphy@jensenhughes.com

Experience Summary
Full-Time
Engineering: 3 years, 10 months
Post EAC degree: 3 years, 10 months
Experience under licensed engineer:
3 years, 10 months



TASKS

Design and develop a variety of fire and life safety reports and documents including smoke control rational analysis reports, smoke control test plans, condition risk assessment reports, egress drawings, fire alarm drawings, fire sprinkler drawings, fire master plans, Alternate Means and Methods Request (AMMR) letters, Hazardous Material Inventory Statements, Fire Sprinkler and Fire Alarm Narrative Reports, Fire Protection Reports (FPRs) and Fire and Life Safety Reports and CONTAM Models. Conduct inspections of fire and life safety systems for a variety of building including, but not limited to, casinos, hotel high-rise buildings, high-rise office buildings, storage warehouses, industrial facilities, Air Traffic Control Towers, stadiums, restaurants, and parking garages. The majority of inspections were related to smoke control, fire rated construction and life safety condition assessments. Conduct submittal reviews for fire and life safety plans including fire alarm and fire sprinkler shop drawings. Oversee the project development of buildings and consult on the life safety requirements for various code standards including ICC, NFPA and FM for various types of building such as those listed above. Conduct presentations to architects, consultants, and AHJ's regarding code requirements.



REPRESENTATIVE PROJECTS

RESORTS WORLD LAS VEGAS, LAS VEGAS, NV

September 2020 - June 2021

Provided integrated building and fire code consulting and smoke control inspection services for the property during the design and construction of the building as well as for smaller-scale tenant improvement projects after the casino opening. As a project consultant, I assisted in the following:

- Conducted smoke control inspections. This included witnessing testing of the smoke control system and CO system for proper functionality and performance in accordance with the approved documents. I provided daily inspection reports documenting discovered and resolved deficiencies, daily activities, progress, etc.
- I answered Request For Information (RFIs) regarding the fire and life safety requirements.
- I generated Alternate Means and Methods Requests (AMMRs). Various AMMR were generated for this project in relation to fire rated construction, ventilation, and other fire and life safety topics. These reports are kept in the company internal data base and are not longer accessible to my person.
- For the smaller-scale Tenant Improvement Projects I generated Fire Protection Reports, Alternate Means and Methods Requests, answered RFI's and conducted smoke control inspections to a smaller degree.

This project carried ICC, FM and NFPA requirements.

LEE'S FAMILY FORUM (FORMOERLY DOLLAR LOAN CENTER ARENA) – HENDERSON, NV

2021-2022

Provided smoke control special inspection services for this 200,000 square-foot 5,500-seat arena. As the Project Manager, I generated the proposal, the smoke control test plan and carried out the inspection until AHJ approval. This included witnessing testing of the smoke control system and CO system for proper functionality and performance in accordance with the approved documents. I provided daily inspection reports documenting discovered and resolved deficiencies, daily activities, progress, etc. This project carried NFPA and ICC requirements.

IKONIC – SCOTTSDALE, AZ

2023

I provided fire and life safety consulting services for this 600,000-square-foot residential project consisting of two levels of below-grade parking and a 14-story residential tower. The project includes below and above-grade parking and a high-rise apartment tower. As the Project Manager, I developed the fire and life safety report, answered RFIs and generated AMMRs. This project carried ICC and NFPA requirements.

39 E. JACKSON – THE BLUE, PHOENIX, AZ
2023

I provided fire and life safety and smoke control design services for this 400,000-square-foot mixed-use project consisting of three levels of below-grade parking, a common podium, a 23-story residential tower. The project includes retail, restaurants, below and above-grade parking, assembly spaces and a high-rise hotel and condominium tower. As the Project Manager, I generated the proposal, managed the smoke control rational analysis and fire and life safety report and answered RFIs. This project carried ICC and NFPA requirements.

THE OSBORN – PHOENIX, AZ
2023-2024

I provided fire and life safety services for this 600,000-square-foot residential project consisting of two levels of below-grade parking and a 14-story residential tower. As the Project Manager, I generated the proposal, code analysis and consulted the design team on the fire and life safety requirements for this building which included both residential and healthcare standards. This project carried ICC and NFPA requirements.

CONFIDENTIAL DUST HAZARD ANALYSIS PROJECT – MEXICO
December 2021 - September 2023

I provided hazardous materials and conducted a dust hazard analysis on a manufacturing plant that produced a variety of motor vehicle and aerospace parts. As the Project Manager, I generated the proposal, conducted the site inspection and was the main point of contact for the development of the DHA Report. I conducted the DHA inspection. I was part of the team that determined which of the materials needed testing based on code requirements, collection of samples, logistics, and conducted reviews on the reports. This project carried NFPA and ICC requirements.

KOHLER FACILITY - ARIZONA
2022-2023

I provided fire life safety and hazardous materials consulting services for this appliance manufacturing facility. The facility included storage of combustible, flammable and other hazardous materials. As the Project Manager, I was the main point of contact for the development of the Hazardous Materials Inventory Sheet, Management Plan and Analysis Report, the Fire Alarm and Fire Sprinkler Specifications, and I personally authored the Fire Alarm and Fire Sprinkler Narrative Reports. This project carried ICC, NFPA and FM requirements

CARLOS LUEVANO-ESCOTO (20-589-45)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Coffman Engineers, Inc.
Nevada (United States)
Fire Protection Engineer II
August 2024 – May 2025

Verified by
Jeffrey S Grove
jeff.grove@coffman.com

Experience Summary
Full-Time
Engineering: 9 months
Post EAC degree: 9 months
Experience under licensed engineer:
9 months



TASKS

Design and develop a variety of fire and life safety reports and documents including smoke control rational analysis reports, smoke control test plans, condition risk assessment reports, egress drawings, fire alarm drawings, fire sprinkler drawings, fire master plans, Alternate Means and Methods Request (AMMR) letters, Hazardous Material Inventory Statements, Fire Sprinkler and Fire Alarm Narrative Reports, Fire Protection Reports (FPRs) and Fire and Life Safety Reports and CONTAM Models. Conduct inspections of fire and life safety systems for a variety of building including, but not limited to, casinos, hotel high-rise buildings, high-rise office buildings, storage warehouses, industrial facilities, Air Traffic Control Towers, stadiums, restaurants, and parking garages. The majority of inspections were related to smoke control, fire rated construction and life safety condition assessments. Conduct submittal reviews for fire and life safety plans including fire alarm and fire sprinkler shop drawings. Oversee the project development of buildings and consult on the life safety requirements for various code standards including ICC, NFPA and FM for various types of building such as those listed above. Conduct presentations to architects, consultants, and AHJ's regarding code requirements.



REPRESENTATIVE PROJECTS

OGX, LAS VEGAS, NV
August 2024 - Current
On this project, I have developed the Fire Protection Report (FPR) for multiple phases of this project in addition to answering Request for Information (RFI's) and consulting the design team on the applicable fire and life safety requirements for the project.

Tower 180, SAN DIEGO, CA
September 2024 - Current
On this project, I developed the CONTAM model for a high-rise residential tower. The tower included three separate structures, each with varying floor elevations conjoined with transfer stairs. The building also included a parking garage.

(Confidential) esVolta Battery Storage Project
October 2024 - Current
On this project, I generated the Fire Master Plan detailing important fire and life safety information such as fire department access roads, fire alarm system component locations, fire suppression component locations. I also designed the thermal coverage system layouts for the battery cabinets.

DANIEL VAUGHN (22-009-03)

All work experience reviewed by two licensed professionals

DISCIPLINE: FIRE PROTECTION

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
05/09/2025

Citizenship
United States

SUMMARY



Engineering Experience after EAC degree
1 year, 4 months

Total Engineering Experience
9 years, 9 months

Experience under licensed engineer
9 years, 9 months

Other Experience

Disciplinary Action
None reported



EDUCATION



Bachelors in Mechanical Engineering (EAC)
University of Nevada, Las Vegas
August 2002–December 2023

SPECIAL CONSIDERATION: Request to accept experience concurrent with education.

EXAMS



Fundamentals of Engineering (FE)
Nevada
June 2024

Principles and Practice of Engineering (PE)
Fire Protection
Nevada
April 2025

LICENSES



Additional Licenses
None

DANIEL VAUGHN (22-009-03)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Venetian Casino Resort
Nevada (United States)
Document Control Associate
May 2002—August 2004

Verified by

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



DESCRIPTION

DANIEL VAUGHN (22-009-03)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Silver Ridge Healthcare Center
Nevada (United States)
Cook
August 2012—September 2013

Verified by

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



DESCRIPTION

DANIEL VAUGHN (22-009-03)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Settlebello Pizzeria Napoletana
Nevada (United States)
Pizzaiolo
August 2013—May 2014

Verified by

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



DESCRIPTION

WORK EXPERIENCE

JBA Consulting Engineers/NV5
Nevada (United States)
Fire Protection Drafter/Designer
September 2014—September 2020

Verified by
Nicholas Andre Moriarty
nick.moriarty@divergentce.com

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



TASKS

Fire Protection Engineering: Fire Alarm, Fire Sprinkler, Smoke Control and Life Safety conceptual design and development of drawings. Fire Alarm design included creation of drawings, layout of notification appliances and initiating devices, creation and design of sequence of operations to interface with building Life Safety features. Fire Sprinkler design included creation of drawings, layout of piping and sprinkler locations, assignment of hazard classifications, and hydraulic calculations with the assistance of AutoSprink. Smoke Control included creation of drawings, layout of Smoke Control required devices for interface with the HVAC system, and sequence of operations. Life Safety design included creation of drawings, occupancy and exiting calculations, assistance with editing of Fire Protection Reports written by PEs of record.



REPRESENTATIVE PROJECTS

2014-2015: MGM Cotai, Macau, China - Fire Sprinkler Design in accordance with IBC, IFC and NFPA 13 codes and standards. I updated the design of the fire sprinkler portion of the podium of the Casino, Spectacle, and Theater.

2015-2017: NOV Program for Las Vegas Strip Properties (Includes Mirage, Bellagio, MGM, and Luxor Casinos) - Primary Life Safety and Exiting Drawing designer for design updates for all properties listed in accordance with the NOV program by Clark County. Analysis was done in accordance with International Building Codes and local Southern Nevada Amendments. I designed and updated the design of the master egress of each of the properties listed.

2016-2019: Los Angeles Valley Community College Gymnasium Complex Renovation Phase 2, Los Angeles, CA - Primary Fire Sprinkler designer for design, seismic calculations and hydraulic calculations for Gymnasium and Fitness Area. Design was done in accordance with NPFA 13, International Building Code, OSHPD requirements and DSA requirements. I designed the fire sprinkler system, performed hydraulic and seismic calculations for the areas listed above.

2015-2017: SLS/Sahara Las Vegas Renovation, Las Vegas, NV: Primary Life Safety and Exiting designer for drawings and calculations for The W expansion, meeting room expansion, and night club renovation. Master Egress design and drawing updates. Design was done in accordance with International Building Code and Southern Nevada Amendments. I designed and updated the design of the master egress drawings for all areas of The W expansion including podium updates, meeting rooms, night club, and pool deck.

2015-2017: Graton Resort and Casino Phase II Expansion, Rohnert Park, CA: Primary Life Safety/Exiting designer for drawings and calculations for Phase II hotel tower and podium expansion. Design was done in accordance with California Building Code, California Fire Code. I designed the podium, tower, and pool deck expansion life safety drawings and updates to the master egress for the entire podium of the property.

2017-2020: Yaamava Resort and Casino, Highland, CA: Primary Life Safety, Fire Alarm and Fire Sprinkler designer for drawings and calculations of the Resort Expansions. Included the pool expansion, theater expansion and existing building renovations. Design was done in accordance with California Building Code, California Fire Code, NFPA 13, and NFPA 72. I designed the fire sprinkler and standpipe layout, fire alarm device layout, and master egress for the Yaamava Expansion, tenant improvements within the existing podium, and master egress throughout.

DANIEL VAUGHN (22-009-03)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

On Guard Fire Protection
Nevada (United States)
Fire Sprinkler Designer
September 2020—July 2021

Verified by

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



DESCRIPTION

WORK EXPERIENCE

Code Unlimited/Jensen Hughes
Nevada (United States)
Fire Protection Analyst III
July 2021 – September 2024

Verified by
Nicholas Andre Moriarty
nick.moriarty@divergentce.com

Experience Summary
Full-Time
Engineering: 3 years, 2 months
Post EAC degree: 9 months
Experience under licensed engineer:
3 years, 2 months



TASKS

Fire Protection Engineering: Fire Alarm, Fire Sprinkler, Smoke Control and Life Safety conceptual design and development of drawings. Fire Alarm design included creation of drawings, layout of notification appliances and initiating devices, creation and design of sequence of operations to interface with building Life Safety features. Fire Sprinkler design included creation of drawings, layout of piping and sprinkler locations, assignment of hazard classifications, and hydraulic calculations with the assistance of AutoSprink. Smoke Control included creation of drawings, layout of Smoke Control required devices for interface with the HVAC system, and sequence of operations. Life Safety design included creation of drawings, occupancy and exiting calculations, assistance with editing of Fire Protection Reports written by PEs of record.



REPRESENTATIVE PROJECTS

2021: Korean Women's Association Tahoma Place Apartments, Tacoma, WA: Primary designer for code compliance and life safety for project. Included 4 stories of low income apartments and amenities on the ground floor. Design was done in accordance with the Washington State Building Code and Washington State Fire Code. I designed the master egress and code compliance documents for this project as well as reviewed architectural design elements for life safety compliance and made recommendations to the architect for compliance.

2024: Snoqualmie Resort and Casino, Snoqualmie, WA: 3rd party working plans reviewer for Fire Alarm, and Fire Sprinkler drawings for the tower and podium expansion. Review was performed in accordance with Washington State Building Code, Washington State Fire Code, NFPA 10, NFPA 13, NFPA 70, and NFPA 72. I reviewed the Fire Alarm and Fire Sprinkler shop drawings submitted for compliance with the above named codes and standards.

2022: Nike Headquarters Jerry Rice Building Renovation, Beaverton, OR: Developed smoke model and timed egress model for atrium design modifications. Design was done in accordance with the Oregon Structural Specialty Code Section 909.4 and all applicable sections within Chapter 9. I designed both the smoke model and timed egress model and wrote the draft rational analysis for the above named project.

2022-2024: Samsung and Hyundai Jafurah Natural Gas Field Extraction Plant Expansions, Saudi Arabia: Primary 3rd party review of all fire alarm, fire protection, life safety and architectural drawings for all buildings on sites. Assisted foreign design teams with code compliance and building design to meet the requirements of the International Building and Fire Codes, all applicable Saudi ARAMCO standards (SAES-M-100 as base code) and Kingdom of Saudi Arabia codes (SBC 201 and SBC 801). I reviewed and provided recommendations to the design team for life safety and fire protection compliance for all buildings submitted at the Jafurah site from 2022-2024.

2022-2023: Harborview Medical Center Ninth and Jefferson Building and Norm Maleng Building Renovation, Seattle, WA: Primary designer of life safety and code compliance documents and drawings for renovation of both buildings. Included analysis of smoke compartment design, life safety/exiting drawings, and development of code compliance plans. Design was performed in accordance with the Seattle Building Code, Seattle Fire Code and NFPA 101 for CMS certification. I designed the master egress and code compliance documents for this project as well as reviewed architectural design elements for life safety and smoke control compliance and made recommendations to the architect for compliance.

2023: Stanford Multi-Specialty Outpatient Clinics and Parking Structure in Redwood City, Redwood City, CA: Primary designer of life safety and code compliance documents and drawings. Included fire department access, life safety requirements, fire alarm requirements, fire sprinkler requirements and analysis of OSHA permit-controlled confined water collection tank under parking structure. Design was performed in accordance with the California Building Code, California Fire Code, NPFA 13, NFPA 70, NFPA 72, NFPA 101 and OSHA standards. I designed the master egress and code compliance documents for this project as well

as reviewed architectural design elements for life safety and smoke control compliance and made recommendations to the architect for compliance.

2022-2024: Graton Resort and Casino Phase III and IV, Rohnert Park, CA: Primary designer of master egress and fire sprinkler design for Phase IV parking structure. Development of master egress design and smoke control rational analysis for Casino Expansion for showing timed egress from existing podium through new Phase III casino expansion. Design was performed in accordance with California Building Code, California Fire Code, NFPA 13, and modeling performed using Pyrosim FDS software and Pathfinder timed egress software. I designed the master egress drawings and created the timed egress model for this project, provided updates to the draft smoke control rational analysis for RSET vs ASET calculations and provided base parameters.

Minor Projects include: I designed the Oregon State University Reeser Stadium Mass Notification timed egress model, wrote and provided recommendations for high-piled storage reports for Portland Bolt and Manufacturing, Versacart, Nike Headquarters Lebron James Building, and several others, designed and wrote PDX Alaska Lounge Life Safety code compliance documents, designed and updated SEA-TAC Terminal Realignment Life Safety plans and code compliance documents, and reviewed and provided Facebook Building X hazardous materials inventory statement.

WORK EXPERIENCE

Code Unlimited/Jensen Hughes
Nevada (United States)
Fire Protection Analyst III
July 2021 – October 2024

Verified by
Amedeo Gallucci
amedeo.gallucci@gmail.com

Experience Summary
Full-Time
Engineering: 3 years, 3 months
Post EAC degree: 10 months
Experience under licensed engineer:
3 years, 1 month



TASKS

Fire Protection Engineering: Fire Alarm, Fire Sprinkler, Smoke Control and Life Safety conceptual design, modeling, 3rd party plan review and reports. Fire Alarm design included creation of drawings, layout of notification appliances and initiating devices, creation and design of sequence of operations to interface with building Life Safety features, and appeals/AMMRs. Fire Sprinkler design included creation of drawings, layout of piping and sprinkler locations, assignment of hazard classifications, hydraulic calculations, development of high-piled combustible storage reports, and 3rd party review of shop drawings. Smoke Control included creation of rational analysis reports, smoke modeling using FDS, and comparing to timed egress analyses. Life Safety design included creation of drawings, development of code compliance documents, occupancy and exiting calculations, writing of engineering judgments for passive building construction, hazardous materials identification and inventory statements, and development of appeals/AMMR documents for specific conditions based on project needs.



REPRESENTATIVE PROJECTS

- 2021: Korean Women's Association Tahoma Place Apartments, Tacoma, WA: Primary designer for code compliance and life safety for project. Included 4 stories of low income apartments and amenities on the ground floor. Design was done in accordance with the Washington State Building Code and Washington State Fire Code.
- 2024: Snoqualmie Resort and Casino, Snoqualmie, WA: 3rd party working plans reviewer for Fire Alarm, and Fire Sprinkler drawings for the tower and podium expansion. Review was performed in accordance with Washington State Building Code, Washington State Fire Code, NFPA 10, NFPA 13, NFPA 70, and NFPA 72.
- 2022: Nike Headquarters Jerry Rice Building Renovation, Beaverton, OR: developed smoke model and timed egress model for atrium design modifications. Design was done in accordance with the Oregon Structural Specialty Code Section 909.4 and all applicable sections within Chapter 9.
- 2022-2024: Samsung and Hyundai Jafurah Natural Gas Field Extraction Plant Expansions, Saudi Arabia: Primary 3rd party review of all fire alarm, fire protection, life safety and architectural drawings for all buildings on sites. Assisted foreign design teams with code compliance and building design to meet the requirements of the International Building and Fire Codes, all applicable Saudi ARAMCO standards (SAES-M-100 as base code) and Kingdom of Saudi Arabia codes (SBC 201 and SBC 801).
- 2023-2024: Lime/Neutron Holdings Charging Warehouse, Seattle, WA: Developed risk hazard analysis of warehouse building to be used for charging and storage of rentable scooters. Included passive and active fire protection design and analysis of batteries and charging stations. Design and analysis performed in accordance with Seattle Building Code and Seattle Fire Code (Section 1206).
- 2022-2023: Harborview Medical Center Ninth and Jefferson Building and Norm Maleng Building Renovation, Seattle, WA: Primary designer of life safety and code compliance documents and drawings for renovation of both buildings. Included analysis of smoke compartment design, life safety/exiting drawings, and development of code compliance plans. Design was performed in accordance with the Seattle Building Code, Seattle Fire Code and NFPA 101 for CMS certification.
- 2023: Stanford Multi-Specialty Outpatient Clinics and Parking Structure in Redwood City, Redwood City, CA: Primary designer of life safety and code compliance documents and drawings. Included fire department access, life safety requirements, fire alarm requirements, fire sprinkler requirements and analysis of OSHA permit-controlled confined water collection tank under parking structure. Design was performed in accordance with the California Building Code, California Fire Code, NPFA 13, NFPA 70, NFPA 72, NFPA 101 and OSHA standards.

2022-2024: Graton Resort and Casino Phase III and IV, Rohnert Park, CA: Primary designer of master egress and fire sprinkler design for Phase IV parking structure. Development of master egress design and smoke control rational analysis for Casino Expansion for showing timed egress from existing podium through new Phase III casino expansion. Design was performed in accordance with California Building Code, California Fire Code, NFPA 13, and modeling performed using Pyrosim FDS software and Pathfinder timed egress software.

Minor Projects include: Oregon State University Reeser Stadium Mass Notification timed egress analysis, high-piled storage reports for Portland Bolt and Manufacturing, Versacart, Nike Headquarters LeBron James Building, and several others, PDX Alaska Lounge Life Safety analysis, SEA-TAC Terminal Realignment Life Safety Analysis, and Facebook Building X hazardous materials inventory statement.

WORK EXPERIENCE

Michael Baker International
Nevada (United States)
Fire Protection Associate II
November 2024 – May 2025

Verified by
Kathryn Ann Brinton
kathryn.brinton@mbakerintl.com

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



TASKS

Fire Protection Engineering: Fire Alarm, Fire Sprinkler and Life Safety conceptual design and development of drawings. Fire Alarm design includes creation of drawings, layout of notification appliances and initiating devices, and development of contract documents. Fire Sprinkler design includes creation of drawings, layout of piping and sprinkler locations, assignment of hazard classifications, and hydraulic calculations. Life Safety design includes creation of drawings, occupancy and exiting calculations, and development of contract documents.



REPRESENTATIVE PROJECTS

2024: Creech Air Force Base, Indian Springs, NV: I developed fire protection design-build documents in accordance with Unified Facilities Criteria for the new Central Plant for the Disaster Resiliency Program. This included life safety drawings, fire alarm drawings and fire sprinkler drawings. Design was also in accordance with applicable NFPA standards.

2024-2025: MCAS Miramar Hangar C and Pilot Fit Facility Preliminary Design Authority, Miramar, CA: Primary designer for the development of fire protection design-build documents for the Preliminary Design Authority in accordance with the Unified Facilities Criteria for the new Maintenance Hangar C project. Included life safety code compliance documents and basis of design for Life Safety, Fire Alarm/Mass Notification and Fire Sprinkler. Design was also in accordance with applicable NFPA standards. I was the primary designer and for all above named aspects of design and provided recommendations for the design with respect to hydrant layouts, exit locations and sizing, and wrote the basis of design for life safety, fire sprinkler and fire alarm/mass notification for all buildings included.

2025: MCAS Camp Pendleton Area 52 Communications Center, Oceanside, CA: Primary designer for the development of fire protection design-build documents for the Request for Proposal in accordance with the Unified Facilities Criteria for the communications building project in Area 52. I designed the life safety code compliance documents, inert gas clean agent calculations and rough design, fire alarm layout and design, basis of design for life safety, fire alarm, and clean agent, and contract documents and specifications. Design was also in accordance with NFPA 10, NFPA 76, NFPA 101, and NFPA 2001. Design utilized Inergen (IG-541) inert gas for a total flooding system of approximately 2,600 square feet.

2025: NASJRB (Naval Air Station Joint Reserve Base) New Orleans Communications Facility Renovation, New Orleans, LA: Primary designer for the development of Life Safety, Fire Sprinkler and Fire Alarm/Mass Notification drawings and analyses for the expansion of the existing communications building. Design was performed in accordance with the Unified Facilities Criteria, NFPA 13, NFPA 70, NFPA 72, and NFPA 101. I reviewed the existing systems and provided designs for the expansion with respect to required fire sprinkler locations and criteria, fire alarm/mass notification appliances and initiation devices, and life safety code compliance criteria. Also designed and updated the specification sections 21 13 13 and 28 31 76.

Mechanical

KYLE BURNS (14-345-74)

All work experience reviewed by two licensed professionals

DISCIPLINE: MECHANICAL

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
05/29/2025

Citizenship
United States

SUMMARY



Engineering Experience after EAC degree
11 years, 4 months

Total Engineering Experience
12 years, 9 months

Experience under licensed engineer
3 years

Disciplinary Action
None reported



EDUCATION



Bachelors in Mechanical Engineering (EAC)
University of San Diego
September 2009–January 2014

EXAMS



Fundamentals of Engineering (FE)
California
April 2013

Principles and Practice of Engineering (PE)
Mechanical
Nevada
April 2025



LICENSES



Additional Licenses
None

WORK EXPERIENCE

General Atomics Aeronautical
California (United States)
Manufacturing Engineer
August 2012 – May 2015

Verified by
Anthony Edmund Lewis
tony.lewis@ga-asi.com

Experience Summary
Full-Time
Engineering: 2 years, 9 months
Post EAC degree: 1 year, 4 months
Experience under licensed engineer:
None

TASKS

I worked as a Manufacturing Engineer for the machine shop and sheet metal fabrication shops at General Atomics Aeronautical. I began as an Engineering Aide while enrolled in my engineering university program.

I was responsible for creating flat sheet metal inspection files for conformance to design drawings. This was to ensure hole locations were in the correct spots and dimensions matched drawings before parts were folded and/or welded into the final product. I designed storage fixtures for machine shop tooling in CAD and produced associated drawings for these fixtures. These fixtures were required to allow tooling storage into new automatic shelving units and allow for easy retrieval of tool holders. I investigated design drawing inspection standards for dimensioning final inspection. I reviewed drawing packages for traceability of tolerances to inspection standards and recommended drawing notes to reference appropriate standards. I was responsible for documenting and creating standardized work instructions for welded components while adhering to ITAR regulations. This included photographing and detailing part and equipment setup for various welding and assembly procedures and review with the fabrication staff before final document release.

REPRESENTATIVE PROJECTS

-Flat Pattern Sheet Metal Inspection Programs

I was responsible for creating the flat pattern sheet metal inspection programs to evaluate raw sheet metal components via a laser inspection machine, prior to their folding or welding. I created multiple inspection files to ensure that components were correctly manufactured from the punch press or waterjet machines, and inspected to drawing dimensions. I investigated nonconformities and I revised inspection files as necessary for drawing revisions.

-Standardized Work Instructions

I created multiple standardized work instructions for complex welded components and assemblies in the sheet metal fabrication shop. This included photographing various jig and assembly fixtures for components and describing these setups with referenced fixtures and text. The purpose of this project was to document the correct usage of assembly fixtures and equipment settings so the complex components could be manufactured to meet drawings, without prior experience working on the component. I was responsible for creating the multi-page instructions by observing and questioning an experienced fabricator and revising instructions/photos based on feedback from the fabrication shop.

-Machine Shop Storage Fixtures – Stationary and Rotary

I was tasked with maximizing BT40 tool holder storage in new automatic vertical lift storage units for the machine shop. I was responsible for creating a storage solution for the tool holders, from concept through manufacturing (internal). I designed a stationary BT40 tool holder in linear design and a rotary, wheel-based tool holder that mounted on a turntable bearing, for easy retrieval. This reduced extended reach for ergonomic purposes. I designed both fixtures and their subcomponents out of sheet metal and created both the raw design files and finished, dimensioned drawings. I worked with the fabrication shop to incorporate design feedback and delivered two successful designs, after iteration and revision, that met the storage need and were robust enough to adequately support the tool holders.

-Multi-Drawing Package ISO Standard

One of my responsibilities as a manufacturing engineer for a defense contractor was to ensure machine and fabricated components met design drawings and could be inspected to these drawings. I investigated the ability to inspect, to design drawing standards, a complex, multi-component assembly and its subcomponents (specifics withheld due to ITAR sensitive nature) that was recently brought in house for manufacturing. I discovered that the ISO-standard and metric-dimensioned drawings that were acquired from another manufacturer did not adequately list the relevant and necessary ISO dimensioning and tolerancing standards, to meet government inspection requirements. I was responsible for investigating the correct ISO standards, both directly and indirectly-referenced on the drawings, to determine all the correct standards to append to the mechanical drawing notes. I was responsible for communicating with the design engineering department regarding these drawing note changes. I researched and determined the correct ISO standards to encompass all drawing dimensions, and I initiated the drawing revisions

to incorporate the appended standard references. The end result was a drawing package that could be inspected to the appropriate ISO standards and the final assembly, with sub-components, that was bought off by the government.

KYLE BURNS (14-345-74)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

CaptiveAire
Nevada (United States)
District Manager
May 2015—May 2025

Verified by
Thomas Boeckermann
thomas.boeckermann@captiveaire.com

Experience Summary
Full-Time
Engineering: 10 years
Post EAC degree: 10 years
Experience under licensed engineer:
3 years



TASKS

I am responsible for selecting mechanical HVAC equipment for commercial and industrial applications and recommending design airflows and approaches to mechanical contractors and engineers, to meet code, efficiency, and comfort requirements. CaptiveAire manufactures a variety of HVAC units, exhaust fans, and exhaust/supply duct products. I research code-required (IMC-2024, UMC-2024, IECC-2024, NFPA96) airflow and ventilation rates for customers (mechanical contractor, mechanical engineers, and owners) and design airflow ventilation systems that meets these codes, as well as selecting HVAC equipment that we manufacture, to meet these needs. This includes balancing space pressure with fully-conditioned outside air from DOAS units, exhaust systems with ventilation hoods and associated exhaust duct (grease, non-grease, CAT I, II, III, IV), and calculating space heating/cooling loads and subsequently selecting equipment to meet space conditioning and ventilation needs. I am also responsible for designing airflow distribution systems with CaptiveAire-manufactured high-induction supply air duct, selecting duct sizes and configurations for noise, pressure loss, and throw criteria. I design operation sequences to meet code safety requirements and ASHRAE 90.1 and California Title 24 efficiency standards. I select controls packages and combine multiple products, such as HVLS fans, exhaust fans, and HVAC units to deliver highly-effective air distribution and space comfort. I am responsible for designing systems exceeding ASHRAE 62.1 ventilation and clean air standards while meeting customer space design needs.



REPRESENTATIVE PROJECTS

Yoga Pod Reno – Reno, NV 2016-2017
I designed the hot yoga heating system for Yoga Pod. I selected an indirect-fired heater and sequence of operation to achieve hot yoga temperatures of 105 degrees. I selected and sized equipment to accomplish the requested heating up and cooling off of hot yoga studio spaces, in the requested timeframe. I recommended the supply airflow distribution and return air strategy to reduce temperature stratification and meet low-noise criteria for hot yoga comfort. I designed the room airflow purge strategy for both studios. I recommended a steam wand humidifier to meet customer hot yoga humidity requirements.

NV Green – Sparks, NV 2018-2019
I was contacted by a mechanical contractor to design a ventilation system for a post-extraction hemp processing room. I investigated city and county requirements for ventilating post-processing ovens containing explosive-risk product. I selected a ventilation exhaust hood, airflow rate, explosion-rated exhaust fan, controls, and fire suppression system. I recommended a makeup air strategy, dampers, and interlocking method to the mechanical contractor. I selected a sequence of operations, and I provided installation support to the mechanical and electrical contractors for implementation of the system.

NV Cares Campus – Reno, NV 2020-2021
I researched and recommended a high air-exchange rate, during the COVID pandemic, for the a homeless shelter sprung structure, to reduce COVID transmission likelihood and meet minimum space comfort. I selected 9 indirect-fired heaters with evaporative coolers and exhaust fans to provide my design air change rate, and condition the incoming air to meet space loads. I recommended the pad-mounting method, equipment, and plumbing design for the ground-mounted equipment to serve the space. I also recommended the airflow distribution strategy and equipment placement to provide a uniform air exchange.

The Kitchen Table – Reno, NV 2021-2022
A mechanical contractor contacted me to design the complete space conditioning and ventilation system for a small tenant space, for commercial cooking. I selected two kitchen ventilation hoods, wet-chemical fire suppression, controls, exhaust duct, and exhaust fan to ventilate the cooking area. I selected a DOAS HVAC unit to meet the full space heating and cooling loads, while also serving 100% of the kitchen hood and bathroom makeup air, while fully-conditioning the delivered air to the space. I designed the space sequence of operations, and I recommended the space supply and return airflow distribution. I provided design support to the engineer of record, and I provided controls and integration support to the mechanical contractor.

Reno Public Market – Reno, NV 2021-2023
I redesigned the complete ventilation and space conditioning system for Reno Public Market to reduce initial and operating costs, while increasing efficiency and space comfort. I selected 12 kitchen ventilation hoods, controls packages, grease exhaust duct,

exhaust fans, wet-chemical fire suppression systems, 6 DOAS units, and 4 HVLS fans to serve the complete ventilation and space-conditioning needs of 12 restaurants in a common food hall. I recommended hood accessories to reduce building airflow rates for energy efficiency. I investigated a solution for hood cabinet placement to meet NEC, and I recommended design changes to the engineer of record and contractors, to accommodate this change. I recommended the total space sequence of operations for occupied/unoccupied periods, and I recommended the airflow distribution strategy to the engineer of record, to achieve optimal performance.

Reno Bar and Grill – Reno, NV 2024-2025

A restaurant owner contacted me to design the commercial cooking ventilation system for a new restaurant. I determined that, due to space constraints and roof height, it made the most sense to design a ventilation system in unison with the space-conditioning system. I selected two commercial kitchen ventilation hoods, wet-chemical fire suppression, controls, exhaust duct, and exhaust fans to ventilate the kitchen area. I selected a DOAS HVAC unit to meet the full space heating and cooling loads, while serving 100% of the kitchen hood makeup air and fully-conditioning the delivered air to the space. I determined, with a cost analysis, that this was the most cost-effective design approach. I designed the space sequence of operations, and I recommended the space supply and return airflow distribution to the engineer of record. I provided installation support to the installing contractor and equipment troubleshooting support after project completion.

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
06/02/2025

Citizenship
United States

SUMMARY



Engineering Experience after EAC degree
5 years, 9 months

Total Engineering Experience
5 years, 9 months

Experience under licensed engineer
5 years, 9 months

Other Experience

Disciplinary Action
None reported



EDUCATION



Non-degree
University of Nevada, Las Vegas
August 2003–May 2007

Bachelors in Mechanical Engineering (EAC)
University of Nevada, Las Vegas
January 2011–May 2019

EXAMS



Fundamentals of Engineering (FE)
Nevada
May 2019

Principles and Practice of Engineering (PE)
Mechanical
Nevada
May 2025

LICENSES



Additional Licenses
None

JAMES KOHL (19-085-07)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

City of Henderson Parks & Recreation -
Youth Sports Division
Nevada (United States)
Recreation Leader
July 2002—July 2006

Verified by

Experience Summary

Full-Time

Other: (0%)

Experience under licensed surveyor:
None



DESCRIPTION

JAMES KOHL (19-085-07)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

China Grill Restaurant
Nevada (United States)
Lead Server
July 2006—June 2008

Verified by

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



DESCRIPTION

JAMES KOHL (19-085-07)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Social House Restaurant (Hakkasan Group)
Nevada (United States)
Front Server
June 2008—October 2008

Verified by

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



DESCRIPTION

JAMES KOHL (19-085-07)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Champion Jets Aviation
California (United States)
Chief Financial Officer & Senior Vice
President of Information Technology
October 2008—June 2009

Verified by

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



DESCRIPTION

WORK EXPERIENCE

Eiffel Tower Restaurant (Lettuce
Entertain You Restaurants)
Nevada (United States)
Dinner Captain
August 2014—December 2020

Verified by

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



DESCRIPTION

WORK EXPERIENCE

NV5 Consulting Engineers
Nevada (United States)
Mechanical Design Engineer (Engineer
In Training)
September 2019—June 2025

Verified by
Manuel Flores Galvez
Manny.Galvez@NV5.com

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

TASKS

- I draft 2D & 3D commercial building construction documents from field measurements & site photos taken by me & others
- I create energy models using software & construction documents to verify maximum building heating & cooling loads, & teach/verify other coworkers' energy models
- I select mechanical equipment (water & air-cooled chillers, direct & indirect evaporative cooling towers, air handlers, DOAS, VRF, split systems, fan coils, heat pumps, hydronic boilers, valves/sensors/switches, expansion tanks, pumps/motors, exhaust fans, kitchen hood grease exhaust fans, pollution control units, duct grease sumps, air terminals, energy recovery devices, refrigerant monitors), I discuss & justify cost/benefit of every system on my projects with the Engineer Of Record (EOR), & I provide oversight & recommendations on coworkers' projects
- I field-verify buildings & campuses for existing mechanical equipment system operability & estimate remaining service life of equipment in scope, ranging from central plant to tenant improvement for my & coworkers' projects
- I independently investigate, reply, & confirm or deny Requests For Information (RFI) & mechanical equipment submittals
- I modify designed systems in conjunction with contractors when field conditions require & accommodate changes in owner requirements
- I research city, county, & state mechanical codes & write plans check comments response letters/narratives/code compliance interpretation/verification
- I solely redesign existing systems with electrical capacity constraints and limited physical allowances (i.e. evaporative cooling towers & chillers to air-cooled chillers, 3x 700hp end-suction horizontal-discharge pumps to 6x 250hp inline vertical discharge pumps for high-rise Las Vegas Strip hotels)
- Field-verify electrical & mechanical equipment & building dimensions/materials to calculate 100MW+ data center electrical equipment heat gain (switchgear, Uninterruptible Power Supplies (UPS), Automatic Transfer Stations (ATS), high-energy density server racks using air/liquid Direct-To-Chip (DTC) cooling, Computer Room Air Conditioning/Handling (CRAC/CRAH) units)
- Calculate/analyze data center qualification (Uptime Institute Tier Standard analysis of mechanical equipment capacities & layout redundancy)

REPRESENTATIVE PROJECTS

- 1) Flamingo Hotel & Casino Food Hall (Buffet-Style w/ 6 Restaurants), Las Vegas, NV
 - a) September 2019-February 2020
 - b) I quantified/calculated/sized all hot/cold domestic water, grease/sanitary waste & vent, hydronic heating & chilled water piping for the site. I calculated/selected new demand-control ventilation grease exhaust fans and refurbished existing air handlers to balance the space, entirely open to the casino floor.
- 2) 3M Tepid Water Exterior/Interior Loop for Eyewash Stations, Tonawanda, NY
 - a) January 2021-March 2021
 - b) I calculated/sized the new eyewash water piping, calculated/sized heat trace wiring for exterior portions of eyewash piping, selected eyewash stations for multiple application requirements.
- 3) Fontainebleau Hotel & Casino Revival, Las Vegas, NV
 - a) June 2021-February 2024
 - b) Performed site visits to document existing conditions after the original construction was halted 12 years prior & developed due diligence reports for this tallest building in Nevada. Calculated required outside air for the podium & tower. Revised original hot & cold energy recovery systems for casino exhaust air from incorrect system layout & sequence of operations. Calculated & verified all spaces requiring fan coils & heat pumps due to others' previous attempts undersized equipment throughout site electrical rooms, IDF rooms, & other technology-driven rooms. Sized & specified outside air louver free area required for the entire tower. Sized, routed, & selected fans and ductwork for all stair pressurization systems in the podium & tower. Sized, routed, & specified

all grease exhaust ductwork in the podium to minimize long horizontal runs that require grease exhaust duct sumps. I performed an analysis on all expansion tanks with extensive calculations to verify original equipment used was within current system design performance envelope.

4) Clark County Department of Family Services Building, Las Vegas, NV

a) July 2022-March 2024

b) I researched many existing building documents (built in 1952) to provide accurate existing equipment service. I developed a building energy model and sized/selected new rooftop air handlers, split system heat pumps, outside supply air fans, and exhaust fans for the entire 70,000+ square foot building.

5) College of Southern Nevada (CSN) Green Valley Technology Annex Chiller Study & Conversion Analysis, Henderson, NV

a) October 2023-April 2024

b) I quantified the cost/benefit of evaporative cooling towers w/ water-cooled chillers compared to air-cooled chillers (increased electrical power against continuing to pay for cooling tower evaporated water, drift losses, and blowdown waste, & determined savings from an equipment conversion grant for annual water waste savings) & compared the performance/efficiency of each system in an optimal configuration for the application. I provided an extensive analysis report for the client.

6) Southwest Gas Complex Mechanical Equipment Analysis, Las Vegas, NV

a) October 2023-December 2023

b) I researched typical equipment service life expectations & particular equipment conditions for the three-building complex originally constructed in 1972. I calculated expected returns on existing equipment service life against the cost of replacement equipment & developed an extensive report that was provided to the client to inform them on the viability of purchasing the campus for future use.

7) Las Vegas Metropolitan Police Department (LVMPD) 6 Stations/Buildings Equipment Replacement, Las Vegas, NV

a) March 2024-August 2024

b) I performed site visits on all buildings, researched existing design documents, sized/selected new replacement equipment utilizing new refrigerants as required by federal law, and modified equipment, ducting, and piping size & routing, while maintaining physical constraints of space & weight and using only equipment that would not require any new electrical breaker size increases.

8) CSN Green Valley Technology Annex Chiller Conversion, Henderson, NV

a) April 2024-October 2024

b) I developed a detailed building energy model to verify site cooling requirement. I downsized the 140 tons of water-cooled capacity over 2 compressors, to 100 air-cooled tons over 10 compressors, enabling greater efficiency by increasing cooling 'steps', as each compressor may be bypassed during system operation. Electrical capacity was limiting, and physical constraints required detailed verification to avoid demolishing a wall.

9) LVPMD Headquarters Hydronic Boilers/Pumps Replacement, Las Vegas, NV

a) November 2024-April 2025

b) I researched recently-updated boiler requirements for clearances and successfully argued the Nevada Administrative Code (NAC) & Nevada Revised Statutes (NRS) requirements to allow for replacement boilers to fit within the small existing rooftop doghouse while maintaining safe clearances.

ADDITIONAL INFORMATION



TIME GAPS

Start Date	End Date	Explanation
July 2009	December 2010	Unemployed after severe car accident, physical therapy and rehabilitation ensued, moved from Corona, California to Las Vegas, Nevada, spent months applying & appealing for UNLV admission to college of engineering

TIEN PHAM (21-483-16)

All work experience reviewed by two licensed professionals

DISCIPLINE: MECHANICAL

GENERAL



Applying To
Nevada

Application Type
Initial - PE

Application Date
05/10/2025

Citizenship
United States

SUMMARY



Engineering Experience after EAC degree
6 years, 5 months

Total Engineering Experience
6 years, 5 months

Experience under licensed engineer
6 years, 5 months

Disciplinary Action
None reported



EDUCATION



Bachelors in Chemical Engineering (EAC)
University of California, San Diego
August 2014–June 2018

EXAMS



Fundamentals of Engineering (FE)
Nevada
April 2022

Principles and Practice of Engineering (PE)
Mechanical
Nevada
March 2024



LICENSES



Additional Licenses
None

WORK EXPERIENCE

Southwest Gas Corporation
Nevada (United States)
Engineering Supervisor
December 2018—May 2025

Verified by
Craig S Sisco
Craig.Sisco@swgas.com

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



TASKS

December 2018 – December 2020: Engineer I – Distribution Replacement

I designed over 51 polyethylene distribution pipeline replacement projects. I designed, coordinated and served as main engineering design contact for replacement gas infrastructure projects which replace Adyl A and PVC pipes with polyethylene pipe to prevent leaks within the Southern Nevada service territory. I designed replacement projects, using polyethylene pipe to replace nonconforming drisco pipe, which are high density polyethylene (HDPE) pipe that exhibits any anomaly or defect. I designed projects to either abandon or replace polyethylene services lines that have been inactive for 5 years or more throughout its history.

December 2020 – January 2024: Engineer II – New infrastructure

I designed new gas infrastructure projects to provide services to new customers within the Southern Nevada service territory. These designs range from subdivisions homes, multifamily/condos, to large commercials buildings. I designed, coordinated, served as the main engineering contact for new meter set assemblies designs. I trained other engineers on designs, project management, cost estimation, part orderings for new meter set assemblies designs.

I worked with construction during emergency situations to perform pipe flow calculations using nodal analysis software (Synergi) to determine the correct bypass pipe sizes to maintain pressures and prevent customer outages.

January 2024 - Present: Engineering Supervisor – Franchise – Entity

I lead a team of engineers, who design relocation projects to avoid conflicts with proposed civil improvement work. I provide trainings to my team, who review civil improvement plans submitted by local entities to ensure these plans mapped our existing gas lines per standards and the proposed civil improvement work will not affect the integrity of the existing pipelines. I review all of my team's designs for accuracy, code compliance and cost estimation.



REPRESENTATIVE PROJECTS

December 2018 – December 2020: Engineer I

I designed an extensive project that replaced over 4 miles of nonconforming driscopipe with polyethylene 8100 pipe for the town Ehrenberg, AZ. Previously, the town's gas distribution system was segmented into two operating pressure systems—one at 25 PSI and the other at 30 PSI. I designed to connect the two systems and coordinated with construction personnel to begin a transition plan for raising the 25 PSI system to 30 PSI while ensuring system compatibility, pressure regulation, and operational safety.

I designed 3627 feet of 2-inch and 1-inch polyethylene pipe to replace 1456 ft of PVC pipe near the intersection of Smoke Ranch and Decatur Blvd, while ensuring that the pressure is maintained throughout the area with the new system, coordinating with construction, and implementing appropriate cathodic protection measures such as designing 5-point terminals cathodic protection test station to protect the isolated steel segments in the surrounding area.

December 2020 – January 2024: Engineer II

I was the main engineering contact for all meter set assembly designs, which include meters, regulators, filters and piping. I created an analytical tool to size meters and regulators based on the inlet system pressure and the requested customer pressure and load.

I designed a 6" FLOWSIC ANSI 600 meter set to replace the broken turbine meter at the Las Vegas Cogen plant for NV Energy. For this project, I reviewed the design for compliance with safety standard, selected materials and coordinated with field personnel. I created test data sheet which dictated test pressure and pressure ratings for parts such as flanges, gasket, elbows, pipe, and tee and information for the hydrotest.

I designed 1.9 miles of 6-inch, 4-inch and 1-inch of distribution polyethylene pipe to serve a community of single family residential homes while ensuring that the requested load and pressure for all 109 homes were met. I coordinated with field personnel for the installation and ensure the design adhere to safety standards.

I designed a 16M meter set with appropriate regulator, filter, and piping to serve the Grand Pix for Formula One at their desire 5PSI pressure and 17 800 CFH. I designed a 2" polyethylene pipeline system to accompany this new meter set. I verified the internal plumbing plan with the uniform plumbing code to ensure that the internal piping within the building was appropriately sized.

I designed a 16M meter set with appropriate regulator, fitting, filter and piping for the MSG Sphere 4D effect to serve the customer at the requested 5PSI pressure and 21 800 CFH. I designed about 1000 ft of 4" and 2" polyethylene pipe system to serve this meter set.

January 2024 - Present: Engineering Supervisor - Franchise - Entity

As a supervisor, I oversee the relocation projects of distribution pipelines to accommodate roadway improvements projects initiated by jurisdiction entities. I lead a team of engineers, providing technical guidance, approving relocation designs, and coordinating with construction.

A key responsibility of my team is to review civil improvement plans submitted by entities across Las Vegas to ensure compliance with safety standards and to identify any potential conflicts with the proposed infrastructure. For the past year, my team has reviewed approximately 600 civil improvement plans. My role is to train team members on reviewing these plans and detecting conflicts between existing gas lines and proposed improvement.

One of the major ongoing roadway improvements projects is the Maryland Bus Rapid Transit (BRT) project. This project includes widening Maryland Parkway and relocating existing electric and storm drain. My team created designs to relocate approximately 2080 feet of existing 4-in and 2-in polyethylene and steel gas lines to avoid the conflict with proposed utilities. For these designs, my role was to review the designs for compliance with safety standard and the cost estimate. I also respond to unforeseen conflicts and answered technical questions such as calculating the pressure loads on gas lines to ensure integrity of the pipeline under roadway traffic conditions.

In addition to the Maryland BRT project, my team has completed ten relocation designs to relocate 4175 feet of pipe for the past year, estimated cost of \$1,388,691. My role was to review these designs for compliance with safety standards and coordinate with construction.

Land Surveyor

JUSTIN GEZELIN (20-851-46)

All work experience reviewed by two licensed professionals

DISCIPLINE: LAND SURVEYING

GENERAL



Applying To
Nevada

Application Type
Initial - PS

Application Date
06/02/2025

Citizenship
United States

SUMMARY



Surveying Experience after EAC degree
4 years

Total Surveying Experience
4 years

Experience under licensed surveyor
2 years, 3 months

Disciplinary Action
None reported



EDUCATION



Bachelors in Mechanical Engineering (EAC)
University of Nevada, Reno
August 2014–December 2020

Masters in Business Administration
University of Nevada, Reno
August 2022–August 2024

Non-degree
Great Basin College
January 2023–May 2025



EXAMS



Fundamentals of Surveying (FS)
Nevada
April 2022

Principles and Practice of Surveying (PS)
Nevada
October 2022

LICENSES



Additional Licenses
None

WORK EXPERIENCE

U.S. Geomatics
Nevada (United States)
Land Surveyor in Training
June 2021—September 2023

Verified by
Glen Armstrong
garmstrong@usgeomatics.com

Experience Summary
Full-Time
Surveying: 2 years, 3 months
Post EAC degree: 2 years, 3 months
Experience under licensed surveyor:
2 years, 3 months



TASKS

At US Geomatics my tasks and duties changed over the time that I worked there.

June 2021-December 2021

I was learning the ropes of surveying. I started out pounding nails, learning how to work the controller, set up the gps units, using the total stations, and how to read civil engineering plans. I travelled around the state of Nevada and completed field work for construction staking. This included mass grading staking, curb layout, foundation layout, finding boundary and setting control.

December 2021-October 2023

My duties changed significantly around December of 2021. I started to leave the state to work on mining claims. I was tasked with setting mining claims for various companies all over the western United States. This included finding boundary and then setting the corners for mining claims along with the claim post with the paper claim. I was running my own truck and was in charge of construction layouts as well as collecting data for Topographic and ALTA surveys.

During this time I was also working around 50% of the time in the office. My jobs included mapping out boundaries from record information, setting up jobs for ALTA and Topographic, and drafting said ALTA and Topographic Surveys. I was also tasked with creating construction calcs for staking out, along with the accompanying plot plans. By the end of my time at US Geomatics I was tasked with setting up jobs from record information, going out and finding boundary, setting control, staking out construction sites, and performing ALTA/NSPS Land Surveys.



REPRESENTATIVE PROJECTS

2021

A project that I worked on was the construction of the Swan Lake Industrial Park in Stead Nevada. I worked mainly as the field crew during this time. During the project I found boundary and set control for the construction project. I then laid out the project. I started with the pad and checked to make sure that the pad was level and had the right elevation to in before they dug the footings for the property. I then staked out the underground utilities for the property. This included storm drain, sewer, and water. I then set grid lines for the building pad. Finally I laid out the point for curb and gutter. When construction was complete for the project I then went back and conducted an as built ALTA for the project.

2023

A project that I worked on at US Geomatics was the construction of a new Gas Pipeline north of Winnemucca, Nevada for Pauite Pipeline. During this project I coordinated with the environmental engineers and contractors to make sure that we were within our scope of work environmentally. I laid out the temporary right of way with stationing for over 22 miles of pipeline, I then went back staked where the pipeline needed to be placed along with cut and fills for the project. I was responsible for staying ahead of the welding crews and well as making sure that the field crews had enough supplies to continue doing their jobs effectively. Over the course of this project I was responsible for avoiding burrowing owl habitats, making sure the stationing was correct, and keeping all of the equipment for the project in working order.

WORK EXPERIENCE

Odyssey Engineering Inc.
Nevada (United States)
Land Surveyor in Training
September 2023—June 2025

Verified by
Frank Bidart Allen Bidart
frank@odysseyreno.com

Experience Summary
Full-Time
Surveying: 1 year, 9 months
Post EAC degree: 1 year, 9 months
Experience under licensed surveyor:
None

TASKS

September 2023- April 2024

I started at Odyssey Engineering to move primarily into an office role. When moving from US Geomatics, who used Carlson Software, to Odyssey who uses Civil3d it took a period of time to adjust. I was working under two PLS's and my duties were to first learn the ropes on Civil 3d, then to the PLSs in our office draft and to support the engineers in what they do. I learned how to write easements, deeds, and effectively draft ALTAs and Topographic surveys from start to finish in Civil 3D using surface models.

April 2024-August 2024

During this time at Odyssey I was given more autonomy based on my performances and continued to help the PLS's with ALTAs, topographic surveys, elevation certificates, as well as beginning to put together maps to be recorded. It was during this time that I became very comfortable with the best practices and procedures for most of the tasks around the office. I became very proficient in all types of mapping and was starting to take a leadership role within the department.

August 2024-Present Day

For the better part of the past year at Odyssey I have been a pivotal piece in the survey department. I manage clients, coordinate field crews, and put have an integral role of helping put together deliverables for all survey related projects across our company. I am heavily involved in bidding projects, as well as creating timelines for turn around and communicating these with clients.

REPRESENTATIVE PROJECTS

2024

A project that I worked on was the mapping for the 580 South Project in South Reno. For this project I was working mainly in the office. I contacted NDOT for Right of Way plans and resolved boundary that was provided by my field crews. After the boundary resolution I drafted the breaking up of the indivual parcels into multiple parcel maps containing both buildable space and common areas. I worked with local and county officials to get the project submitted and approved. After the project was submitted and approved I worked with utility companies, title companies, and the clients to gather the signatures needed for recordation.

2025

The project that I am currently working on is the subdivision map for Highland Ranch in Sun Valley, Nevada. This project is a 3 phase subdivision map. During this project I used the found section corners, property corners, and Washoe county monuments to resolve the boundary. I then worked with the civil engineers and the client to create a layout for how they wanted the subdivision to look. From there I drafted the subdivision map. I went through the tract map check reports and title reports to make sure that all encumbrances and issues had been addressed on the map. I then have worked closely with the county to get the maps ready for recordation. I am currently in the process of working with the local agencies and civil engineers to gather the required signatures needed for the recordation of the subdivision maps.

5. 83rd Legislative Session Update

6. Public Comment

7. Adjournment