NEVADA STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS

Interim Board Meeting
August 14, 2025
Virtual

1. Meeting Call to Order

2. Public Comment

3. NRS 625
Waiver Requests

WAIVER REQUESTS
Thursday, August 14, 2025

APPLICANTS REQUESTING WAIVER OF NRS 625.183(4)(B)			
NAME	**DISCIPLINE**	**TO:**	**GRANT?**
1. Mohammad Mehdi	FPE	Karen Purcell, PE	
NRS 625.183, ITEM 4, PART B, "TWO OF THE 4 YEARS OF ACTIVE EXPERIENCE MUST HAVE BEEN COMPLETED BY WORKING UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER WHO IS LICENSED IN THE DISCIPLINE IN WHICH THE APPLICANT IS APPLYING FOR LICENSURE, UNLESS THAT REQUIREMENT IS WAIVED BY THE BOARD."			

4. Non-Appearance Applications for Initial Licensure

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

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

Civil

MARY GRACE ALDAVE (20-080-13)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
07/28/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
4 years, 10 months

Total Engineering Experience
4 years, 10 months

Experience under licensed engineer
4 years, 10 months

Disciplinary Action
None reported

EDUCATION

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

EXAMS

Fundamentals of Engineering (FE)
Nevada
August 2019

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

LICENSES

Additional Licenses
None

MARY GRACE ALDAVE (20-080-13)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

WESTWOOD PROFESSIONAL SERVICES
Nevada (United States)
GRADUATE ENGINEER II
September 2020—July 2025

Verified by
Janegela Burge
janegela.burge@westwoodps.com

Experience Summary
Full-Time
Engineering: 4 years, 10 months
Post EAC degree: 4 years, 10 months
Experience under licensed engineer: 4 years, 10 months

TASKS

I've been part of the residential land development team, specializing in the Hillside Overlay District within the Lake Las Vegas community and the new Lakemoor master-planned community, both located in Henderson, Nevada. Over the past four years, I've worked as a Graduate Engineer, handling a variety of tasks.

My responsibilities have included preparing and revising improvement plans (IPs), updating tentative maps, and creating exhibits for clients. I've also addressed city comments on IPs, engaging in discussions with city reviewers to resolve any issues. Additionally, I've provided bid sets for clients and CAD files for surveyors for staking purposes.

I've reviewed Dry Utilities plans, coordinated with architectural firms regarding design changes, and worked closely with surveyors on preparing Horizontal Control Plans, Final Maps, and Separate Document Legal Descriptions.

REPRESENTATIVE PROJECTS

Rainbow Canyon in Lake Las Vegas Residential Projects: Parcel C-3 Phase 2, Parcel C-2A LID Projects, Parcel M-5A-1, Parcel C-2A-1 Phase 1, and Parcel C-2A-1 Phase 2 in Henderson, NV
2020 – 2022
I was responsible for designing the water and sanitary sewer utility mains, along with the service laterals that connect to individual lots. I also reviewed service laterals designed by my colleagues to ensure everything was designed up to standards. Additionally, I took care of annotating all the utilities and addressed any comments from the Agency following their review.

Lake Las Vegas Parkway Phase 5, Phase 6, and Phase 7 in Henderson, NV
2021 – 2023
I designed the water, sanitary sewer, and storm drain mains, and annotated all the utilities. Additionally, I reviewed traffic plans designed by my colleagues and addressed comments from the Agency after their review. I also coordinated with the surveyor to prepare Separate Document Legal Descriptions and Horizontal Control Plans. I prepared revisions to the Improvement Plans as well.

Lakemoor Development Area 1 Parcel 1, Roadways in Henderson, NV
2024 – Present
I designed the storm RCB mains, storm RCP laterals, and water and sanitary sewer utility mains. I graded the rockery and retaining walls next to the roads. Additionally, I designed the traffic striping and signage at intersections and reviewed the traffic plans and grading details created by my colleagues. After the Agency's review, I addressed their comments and prepared Bid Sets for clients to provide to contractors. I coordinated with surveyors for the linework to prepare the Final Map, dedicating the roads and common elements within the project, along with Horizontal Control Plans and Separate Document Legal Descriptions.

RAUF MICKO CALUAG (16-610-67)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
08/05/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree

Total Engineering Experience
6 years, 3 months

Experience under licensed engineer
6 years, 3 months

Other Experience

Disciplinary Action
None reported

EDUCATION

Meets NCEES Engineering Education Standard

Bachelors in Civil Engineering
University of the Philippines - Diliman
June 2010–June 2015

EXAMS

Fundamentals of Engineering (FE)
California
May 2016

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

LICENSES

Additional Licenses
None

WORK EXPERIENCE

PGA Engineers, Inc.
California (United States)
Design Engineer
December 2016—February 2020

Verified by
Pete Garcia Aguilar
pete.aguilar@pgaeng.com

Experience Summary
Full-Time
Engineering: 3 years, 2 months
Experience under licensed engineer: 3 years, 2 months

TASKS

I calculated, analyzed, and evaluated different loading combinations for reinforced concrete structures as detailed by American Concrete Institute (ACI). I performed hydrology study using the hydrology feature of Civil3D to come up with design grading or drainage plan and calculated earthwork volumes and designed finish grade profiles in Civil3D. I designed perimeter fencing considering load combinations and safety factors, terrain, existing site conditions, and local regulations and calculated allowable soil bearing pressure based from geotechnical recommendations in the soil report. I performed anchor bolt calculations by calculating shear strength, tension strength, and combination of both on bolts per American Institute of Steel Construction (AISC) and designed steel structures per AISC specifications.

REPRESENTATIVE PROJECTS

I worked (design) on different Southern California Edison (SCE) substation projects.

I worked under supervision of licensed Professional Engineers. I started with one simple project. My supervisor would brief me on the scope and would assign engineering tasks, which I would accomplish autonomously. I would ask some clarifications along the way and he would check my work after. As I progressed, I was given more responsibilities. I designed more projects with wider scopes of work. I performed more complex engineering calculations with less supervision. At the latter part of my employment, I handled projects with very little support from my supervisor.

Sample projects include:

-Blythe (2017). Blythe, CA. This project consists of fencing and installation of substation lights. I reviewed and analyzed survey reports to make sure fencing is in correct location. I designed the perimeter fencing for the substation. I also did structural details for some light they wanted installed in existing substation steel structures.

-Cardiff (2017), San Bernardino County, CA. This project consists of replacement of 33kV circuit breakers and design of foundation for them. I designed foundations for the circuit breakers. I calculated allowable soil bearing pressure based from geotechnical recommendations in the soil report. I analyzed the equipment data sheet to determine center of mass in all directions. I also performed anchor bolt analysis by calculating shear strength, tension strength, and combination of both on bolts per AISC specifications. I also did a bit of engineering economy analysis and recommended the most economical rebar size and spacing combination that can be used. for the project.

-Eisenhower (2018), Coachella Valley area, CA. This project consists of design and installation of foundation for a capacitor bank. Generally, I designed the foundation for this big substation equipment. I calculated allowable soil bearing pressure based from geotechnical recommendations in the soil report. I analyzed the equipment data sheet to determine center of mass in all directions. I also performed anchor bolt analysis by calculating shear strength, tension strength, and combination of both on bolts per AISC specifications. I also did a bit of engineering economy analysis and recommended the most economical rebar size and spacing combination that can be used. for the project.

-Valley (2018). Romoland, CA, USA. This project consists of design of foundations and steel structures for 115kV disconnect switch support, lightning arrester support, and potential transformer support. I designed both foundations and steel structures for this project. I calculated allowable soil bearing pressure based from geotechnical recommendations in the soil report. I also performed anchor bolt analysis by calculating shear strength, tension strength, and combination of both on bolts per AISC specifications. I also did a bit of engineering economy analysis and recommended the most economical rebar size and spacing combination that can be used. for the project. For the steel structure, based from structural calculations I performed, I recommended the most economical steel material to use that can support the loads with some factor of safety. I also analyzed the

constructability, based from field observations, of the proposed design.

These are just some of the many projects I worked on in my more than 3 years stay in this company.

WORK EXPERIENCE

Dreyfuss Construction
California (United States)
Project Engineer
February 2020—January 2022

Verified by

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

DESCRIPTION

WORK EXPERIENCE

Los Angeles Unified School District
California (United States)
Associate Engineer
January 2022—June 2022

Verified by

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

DESCRIPTION

WORK EXPERIENCE

Riverside County Flood Control and Water Conservation District
California (United States)
Associate Engineer
June 2022—July 2025

Verified by
Ryan Michael Gosliga
RGosliga@rivco.org

Experience Summary
Full-Time
Engineering: 3 years, 1 month
Experience under licensed engineer: 3 years, 1 month

TASKS

I performed hydrology calculations to determine peak runoff using Rational Method in CivilD software. I modeled existing and proposed project plans in Civil3D using record drawings, survey data, and field verification. I analyzed existing downstream drainage systems to calculate and design upstream storm drain facilities to tie into it considering storm and flow data and regulatory compliance and calculated street runoff capacity by using survey data and field observations. I analyzed, calculated, and planned pipe alignments and sizes considering runoff data, area limitations, and engineering economy. I calculated flow velocity and discharge of flow through the storm drain using WSPG software. I calculated and modelled hydraulic grade line using WSPG software making sure there will be no flooding. I do construction management of projects that include answering requests for information, checking submittals, reviewing and approving proposed solutions to some field challenges during construction, and reviewing some hydraulics in cases where plan changes have to be done.

REPRESENTATIVE PROJECTS

I started as Junior Engineer, the first level of the engineering series in the office. My supervisor would brief me on my tasks and what the goals are. I would then proceed on completing these engineering tasks by myself. My supervisor would review my work after. My level of responsibility increased as I became more knowledgeable with design and construction standards and methodologies.

I was promoted to Assistant Engineer. This time, I had to work with less supervision and do more tasks in terms of number and complexity. I was also asked to review and comment on other engineers' works.

I was promoted again to Associate Engineer which is my current position. I work with very little to no supervision at all. I also now manage a number of construction projects.

Some projects I worked on include:

Little Lake MDP Line B, Stage 2 (2022-2025). The project is located in unincorporated community of Little Lake, adjacent the City of Hemet, in California, USA. It is an underground storm drain system (around 4000 ft) composed of reinforced concrete pipes and boxes, catch basins and connector pipes, and relocation of some utility lines. I performed hydrology calculations to determine peak runoff using Rational Method in CivilD software. I analyzed existing downstream drainage systems to calculate and design upstream storm drain facilities to tie into it considering storm and flow data and regulatory compliance. I calculated street runoff capacity by using survey data, field observations, and some engineering software. I analyzed, calculated, and planned pipe alignments and sizes considering runoff data, area limitations, and engineering economy. I calculated flow velocity and discharge of flow through the storm drain using WSPG software. I calculated and modelled hydraulic grade line using WSPG software making sure there will be no flooding. I modeled and drafted existing utilities and proposed project plans in Civil3D using record drawings, survey data, and field verification. I designed and drafted paving plans for the project. I also designed traffic handling plans for the project.

North Norco Channel, Stage 11. The project is located in the City of Norco, California, USA. It is a storm drain facility consists of underground boxes and pipes, open channels, and catch basins. I helped in cost estimates for this project.

Santa Ana River Levee Rehabilitation Project (2024-2025). Boundary of Riverside County and San Bernardino County in CA. This project consists of rehabilitation of the river levee. I was more on the managing and reviewing side as this is third-party designed. I reviewed proposed designs and hydraulic calculations that go with it.

Currently, some construction projects I manage include:

Wildomar MDP Lateral C, Stage 3 and Bundy Canyon Basin. Wildomar, CA - consists of concrete box storm drains and a detention basin. I answer RFIs. I check submittals. I review and approve proposed solutions to design changes.

Hemet-Whittier Ave Storm Drain. Hemet, CA - consists of underground reinforced concrete pipes (RCP). This project just started. I lead the preconstruction meeting. I check submittals. I answer RFIs. I inspect D-load testing of pipes.

Winchester Hills Line C, Stage 2. Winchester, CA - consists of underground RCP storm drains. I answer RFIs. I review and approve submittals.

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Explanation
July 2015	November 2016	July-November 2015: Preparing for licensure exam in the Philippines. December 2015-March 2016: Still in the Philippines, didn't apply coz I'm leaving soon. March-November 2016: Applying for jobs, but didn't get hired until December 2016.

JOSE DE LA SERNA (19-178-49)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
07/10/2025

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 Civil Engineering (EAC)
University of Nevada, Las Vegas
January 2015–December 2018

Masters in Engineering Management (EAC)
Air Force Institute of Technology
September 2023–March 2025

EXAMS

Fundamentals of Engineering (FE)
Nevada
July 2018

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

LICENSES

Additional Licenses
None

WORK EXPERIENCE

United States Air Force
New Mexico (United States)
Requirements and Optimization, Officer in Charge
February 2019—July 2023

Verified by
Debra Roberts Baumgardner
debra.baumgardner.1@spaceforce.mil

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

After passing the Fundamentals of Engineering (FE) exam and earning my B.S. in Civil Engineering from the University of Nevada, Las Vegas in early 2019, I commissioned into the Air Force and was assigned to Cannon Air Force Base (AFB), New Mexico. There, I served as a Project Programmer and Energy/Utilities Portfolio Manager and served as the Officer-in-Charge of the Requirements and Optimization.
- I validated scopes of work and integrated construction and maintenance requirements into an annual $4.8M installation-wide facilities portfolio
- I ensured compliance with DoD energy policies, NFPA 70, Unified Facilities Criteria, and New Mexico Environment Department (NMED) regulations. My work supported optimal performance of electrical systems, gas networks, and in-house water/wastewater treatment systems serving over 14,000 personnel
- I led interdisciplinary engineering teams (electrical, transportation, HVAC, soils, and structural) that validated over 5,600 facility maintenance and construction work orders

REPRESENTATIVE PROJECTS

Representative Projects (Cannon AFB, New Mexico and Prince Sultan AB, Saudi Arabia as a deployment)

Overhead-to-Underground Electrical Transmission Lines
Location: Cannon Air Force Base, NM | Dates: 2019–2020
I reviewed GIS data and as-built survey documentation to confirm alignment of proposed underground conduit routes for compliance with the design specifications. I cross-referenced utility trench profiles with electrical design drawings to ensure minimum cover and bend radius were maintained according to NFPA 70 and UFC 3-501-01. I also coordinated trenching permit submittals and clearances between the U.S. Air Force and the local municipal utility provider to ensure regulatory alignment and uninterrupted service during phased cutovers.

Energy Savings Performance Contract and Photovoltaic Installation
Location: Cannon Air Force Base, NM | Dates: 2020–2021
I reviewed and verified the structural suitability of soils for shallow foundations supporting a 1.9 MW photovoltaic (PV) solar array system. I coordinated and reviewed the siting layout and routing plans for underground electrical distribution, ensuring compliance with UFC 3-540-01 and anti-backfeed protection standards, including the installation of reverse power relays. I conducted a time-series analysis of natural gas consumption across 1,080 residential units, isolating abnormal use patterns and identifying the location of a previously undetected gas leak. My findings were used to justify system repairs and optimize base energy efficiency.

Base-Wide Facility Condition Assessment and LED Retrofit Validation
Location: Cannon Air Force Base, NM | Dates: 2020–2022
I performed quantitative assessments of facility condition across all installation real property assets, using RSMeans-based modeling to estimate deferred maintenance values and assign Facility Condition Index (FCI) scores. During this program, I identified an error in the projected lifecycle cost savings of an ongoing LED retrofit initiative. I recalculated the energy usage reduction and revised the Net Present Value (NPV) analysis, resulting in a documented savings adjustment of $1.2 million over 30 years. These calculations were submitted to and approved by the Defense Logistics Agency for contract modification.

Road Network Design for Expeditionary Base
Location: Prince Sultan Air Base, Saudi Arabia | Dates: 2021
I designed and planned a new road network to support rapid mobility and logistics at a newly activated forward-operating base. I calculated horizontal and vertical alignments for main and secondary roads using AutoCAD Civil 3D and applied UFC 3-250-01 for minimum geometric design criteria. I coordinated the layout with host nation engineers and aligned final drawings with U.S.

Central Command (CENTCOM) engineering requirements.

Magnesium Phosphate Cement (MPC) Pavement Field Evaluation
Location: Cannon Air Force Base, NM | Dates: 2022 – 2023
I served as the installation's engineering point of contact and project engineer liaison for the R&D field testing of high-temperature-resistant magnesium phosphate cement (MPC) pavement, developed by the U.S. Army Engineer Research and Development Center (ERDC). I reviewed the scope of work and provided technical feedback on proposed construction phasing, demolition plans, and pavement replacement strategies. I evaluated contractor submittals for both MPC and ordinary Portland cement placements to ensure compliance with UFC 3-250-01 and ETL 04-2 requirements. I planned multiple construction access and safety briefings with Airfield Management Operations, Air Traffic Control, and the Contracting Officer to ensure flightline safety and operational continuity. I verified that field-testing procedures, pavement curing conditions, and dowel bar placements were conducted in accordance with ERDC research protocols. I also assessed jet blast impact mitigation measures and recommended adjustments to site barricading and lighted markers based on FAA AC 70/7460-1 and airfield safety standards.

JOSE DE LA SERNA (19-178-49)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

United States Air Force
Adana Province (Turkey)
Deputy Squadron Commander
April 2025—June 2025

Verified by
William Christopher Berner
william.berner.3@us.af.mil

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

TASKS

Following graduate school, I began my current assignment supporting installation engineering operations at Incirlik Air Base, Türkiye. In this role, I perform engineering oversight for installation-wide infrastructure projects and base sustainment programs. I review design packages prepared by U.S. and host-nation contractors to ensure technical adequacy, regulatory compliance, and constructability, in accordance with Unified Facilities Criteria (UFC), Department of Defense (DoD) design standards, and host-nation agreements.

I analyze project scopes, technical drawings, and specification documents for utility upgrades, pavement repairs, building renovations, and airfield infrastructure to confirm they meet performance requirements and mission needs.

REPRESENTATIVE PROJECTS

I review facility maintenance and construction design packages for compliance with Unified Facilities Criteria (UFC), NATO STANAGs, and host-nation construction codes across a 3,300-acre installation. I analyze structural, civil, mechanical, and electrical drawings submitted by international contractors to ensure infrastructure functionality, code compliance, and constructability. I coordinate technical requirements between U.S. forces, NATO allies, and host-nation entities to ensure alignment with mission-critical operations. I conduct quality assurance reviews on ongoing infrastructure projects and recommend corrective actions to address deviations from design specifications. I also validate engineering test results, including concrete compressive strength tests and electrical grounding continuity checks, to certify construction acceptance.

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Explanation
June 2013	December 2014	From mid-2023 to early 2025, I attended the in-residence Master of Science in Engineering Management program at the Air Force Institute of Technology.

SCOTT DE LANGE BOOM (25-344-63)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
07/30/2025

Citizenship
Canada

SUMMARY

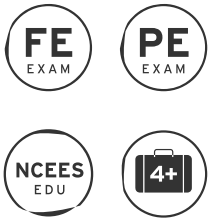
Engineering Experience after EAC degree

Total Engineering Experience
9 years

Experience under licensed engineer
7 years, 4 months

Other Experience

Disciplinary Action
None reported



EDUCATION

Meets NCEES Engineering Education Standard

Non-degree
College Militaire Royale de St Jean
August 2008–May 2009

Bachelors in Civil Engineering
Royal Military College of Canada
September 2009–May 2012

EXAMS

Fundamentals of Engineering (FE)
Nevada
March 2025

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

LICENSES

Additional Licenses
None

SCOTT DE LANGE BOOM (25-344-63)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Canadian Armed Forces
New Brunswick (Canada)
Engineering Officer - 2LT
May 2012—August 2014

Verified by

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

DESCRIPTION

SCOTT DE LANGE BOOM (25-344-63)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Indigo Books
British Columbia (Canada)
Customer Experience representative
September 2015—December 2015

Verified by

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

DESCRIPTION

WORK EXPERIENCE

Diamond Precast & Predl Systems
British Columbia (Canada)
Project Manager & Estimator
January 2016—August 2022

Verified by
Bener Yerebasmaz
benyerebasmaz@gmail.com

Experience Summary
Full-Time
Engineering: 6 years, 7 months
Experience under licensed engineer: 4 years, 11 months

TASKS

I worked at Diamond Precast, a precast concrete company and Predl Systems, a concrete protective liner company. These companies while operating under names, they shared an ownership structure and staff and effectively operated as a single firm. In practice I worked for both companies concurrently, hence a single work experience entry covering the same period of time.

My responsibilities at this job were to provide engineering (65% of time), project management (25% of time) and estimating (10% of time) for precast reinforced concrete products produced by the company and for concrete protective liners. The primary types of precast structures I design are buried sanitary and stormwater utility structures, with the occasional dry utility structure. The concrete protective liner systems I designed were for sanitary utility structures.

As part of my responsibilities I review project documents, including plans, specifications and geotechnical reports, for pertinent design parameters. I perform structural calculations, including loading, structural response and reinforced concrete sectional strength calculations, in accordance with CSA A23.3 Design of Concrete Structures and occasionally CSA S6, Canadian Highway Bridge Design Code, equivalent to ACI 318 and AASHTO LRFD Bridge Design Specifications, respectively. I designed, detailed and specified concrete protective liners, components thereof, including methods of installation and sealing. My work was reviewed and sealed by a Professional Engineer (P.Eng.) registered in British Columbia.

I drafted the engineering drawings in AutoCAD for all of the projects I worked on. I conducted formwork and reinforcing inspections for custom precast products.

REPRESENTATIVE PROJECTS

Beedie Sump, Burnaby, BC, Canada
2017
I designed a 3m (10’) x 1.5m (5’) x 2.4m(8’) precast concrete monolithic sump and valve chamber, which was required to be cast as a single unit. I designed the formwork and performed formwork calculations. I drafted the engineering drawings, conducted inspections of the rebar and formwork. The structural calculations were handled by another engineer.

Whistler Lift Station Rehabs, Whistler, BC, Canada
2018-2019
A 3m (10’) x 2.4m (8’) x 6.4m (21’) and a 5.6m (18’-4”) x 5m (16’-5”) x 6.6m (21’-8”) sanitary wetwells requires rehabilitation due to H2S induced concrete deterioration. I designed a system of fiberglass panels to rehabilitate the structure. I designed the panels to anchor to the existing structure using post-installed anchors, offset from the wall with the void space grouted. I designed the panels to be able to resist grouting pressure, removing the need for formwork.
I designed and performed the calculations for a new precast wetwell flat top for the 3m x 2.4m wet well, in accordance with CSA A23.3 Design of Concrete Structures, the governing code equivalent to ACI 318. I drafted the structural drawings and the precast shop drawings for the top slab. Additionally, the wetwell top slab required a cast in HDPE concrete protective liner. I designed and detailed the liner for each segment of the wet well to ensure a gas tight interior liner that fully protected the concrete, including detailing termination at the access hatch and closure welds between segments. I calculated and detailed the lifting and handling anchors for the precast top slab. I performed pre-pour inspections of the formwork, reinforcing and cast-in components of the precast slab to ensure conformity with engineering drawings and project specifications.

Annacis Island Waste Water Treatment Plant Expansion, Delta, BC, Canada

2018-2020
The Annacis Island WWTP was undergoing a plant expansion to add capacity. The firm's scope of work was to design and supply the HDPE concrete protective liners and precast concrete chase cover panels.
I designed and detailed the liner for each segment of the cast-in-place structure to ensure a gas tight liner that fully protected the concrete, including detailing for pipe and other equipment penetrations, termination at access hatches and closure welds between segments. I drafted the submittal and shop drawings. I performed thermal expansion calculations for the HDPE material to determine fabrication sizes and account for temperature differences between the shop and field conditions. Segments were up to 14.33m (47') along the longest dimension, therefore even small temperature changes produced meaningful changes to the dimensions given HDPE's high coefficient of thermal expansion.
I prepared shop drawings for a portion of the precast chase panels. I conducted inspections of reinforcing, formwork and embedded components for the chase panels,

North Shore Conveyance - North Vancouver, BC, Canada
2020-2022
I designed and performed the structural calculations for a 3m (10') x 2.4m (8') x7.7m (25'-3") sanitary conveyance structure. The structure had a channeled base, typical of a sanitary manhole and also had a 0.8m (31.5") x 0.8m (31.5") elevated flow channel located 2.9m (9'-6") above the lower channel.
I calculated the lateral and vertical loads, structural response, sectional strength and lifting anchor of the reinforced concrete structure in accordance with CSA A23.3. The structure had a fiberglass grate walkway for access, inspections and maintenance part way up the structure. I calculated, designed and detailed the steel support beam, in accordance with CSA S16 Design of Steel Structures, the governing code equivalent to ANSI/AISC 360. The fiberglass grates were selected based on the manufacturer's design tables.
Additionally, the structure required a cast in HDPE & FRP concrete protective liner, in order to protect the concrete against H2S induced deterioration. I designed and detailed the liner for each segment of the conveyance structure to ensure a gas tight interior liner that fully protected the concrete, including detailing for pipe penetrations, termination at access hatches and closure welds between segments.
I conducted pre-pour inspections of all formwork, reinforcing and cast-in components of the precast elements.

SCOTT DE LANGE BOOM (25-344-63)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Jensen Infrastructure
Nevada (United States)
Engineering Product Developer
February 2023—July 2025

Verified by
Michael Brett Evans
bevans@jensenprecast.com

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

TASKS

My primary responsibilities at Jensen Infrastructure (formerly Jensen Precast) are to provide engineering for precast reinforced concrete products produced by the company. I work at the corporate engineering office, which provides engineering services for the company's precast plants located throughout the western United States. The primary types of precast structures I design are buried wet and dry utility structures, and precast box culverts.

As part of my primary responsibilities I review project documents, including plans, specifications and geotechnical reports, for pertinent design parameters. I perform structural calculations, including loading, structural response and reinforced concrete sectional strength calculations, in accordance with ACI 318, AASHTO LRFD Bridge Design Specifications and occasionally ACI 350, as applicable to the project.

Depending on the project I will draft the engineering drawings myself in AutoDesk Inventor, a CAD program, or will work with a drafter. In the latter case, I provide directions to the drafter and review the drafter's work for conformance with drafting standards, code requirements and project requirements.

In April of 2024 I was promoted to team lead and given responsibility for managing 1-3 engineers and drafters, coordinating team project work. I reviewed the calculations and drawings prepared by the engineers and drafters prior to final review and seal by a PE in the department.

My job responsibilities are entirely engineering; I do not have non-engineering tasks and duties.

REPRESENTATIVE PROJECTS

IPP Renewal– Delta, Utah (Structural)
June 2023 - November 2023
I designed and performed calculations for 10 precast reinforced concrete electrical utility vault structures. The vaults were a combination of 6'x6' and 8'x8' vaults, with rim to floor heights between 8.5' and 15.5'.
I calculated the lateral and vertical loads, structural response and sectional strength of the reinforced concrete vaults in accordance with ACI 318. Each vault had a unique specified electrical conduit terminator pattern, which required, which required unique calculations and detailing for each structure, accounting for large areas of one or more walls being interrupted by conduit connection openings. I calculated and detailed the lifting and handling anchors for the precast vault components.
This work was done under the supervision of, with the drawings and calculations sealed by a licensed engineer.

Runways & Taxiways Shoulder Rehab - Daniel K. Inouye International Airport – Honolulu, Hawaii (Structural)
January 2024-September 2024
I designed and performed calculations for eight aircraft rated, precast drop inlet and manhole drainage structures for drainage improvements for the taxiways at Daniel K. Inouye International Airport in Honolulu, Hawaii. I calculated the lateral earth pressure surcharge loading on the structures using the Boussinesq equation, based on the specified design aircraft, a Boeing 777-300ER, modeled with each wheel in the gear assembly as a point load, arranged per the aircraft gear configuration obtained from the FAA FAARFIELD software.
I calculated the load effects and reinforced concrete sectional strengths in accordance with AASHTO LRFD Bridge Design Specifications, the governing code the FAA specifies. I drafted the structural drawings for the drainage structures. I calculated and detailed the lifting and handling anchors for the precast components.

This work was done under the supervision of, with the drawings and calculations sealed by a licensed engineer.

Coachella Valley Water District Lift Station Capacity Upgrades 55-11 - Coachella Valley, California (Structural)
February 2024 to October 2024
I designed and preformed the calculations for a 16’ diameter x 32’ deep wet well manhole. I calculated the lateral and vertical loads, structural response and sectional strength of the reinforced concrete manhole in accordance with ACI 350. I calculated and detailed the lifting and handling anchors for the precast manhole components.
Due to production and transportation limitations, the 16’ diameter manhole had to be designed and fabricated as a series of semi-circular segments, which were connected in the field with a cast-in-place closure pour. I designed and detailed the field cast connection for the segments.
I drafted the structural drawings and the precast shop drawings for the box culvert. Additionally, the wet well required a cast in HDPE concrete protective liner. I designed and detailed the liner for each segment of the wet well to ensure a gas tight interior liner that fully protected the concrete, including detailing for pipe penetrations, termination at access hatches and closure welds between segments.
This work was done under the supervision of, with the drawings and calculations sealed by a licensed engineer.

Honolulu Rail Transit Project - City Center Utilities and Roadway Utilities Relocation - Box Culvert Divert – Honolulu, Hawaii (Structural)
March 2024 – July 2024

I designed and performed the calculations for a 105LF 4’x3’-6” precast reinforced concrete box culvert for the utilities relocation for the Honolulu Rail Transit Project.
I calculated the lateral and vertical loads, structural response and sectional strength of the reinforced concrete box culvert in accordance with AASHTO LRFD Bridge Design Specifications. I calculated and detailed the lifting and handling anchors for the precast box culvert components. Additionally, the box culvert changed direction in multiple locations, I designed and detailed the custom angled and skewed segments.
I drafted the structural drawings and the precast shop drawings for the box culvert.
I worked with the contractor and project managers to coordinate the tie in details to the existing box culvert. I worked with them to expeditiously resolve design changes required when the excavated existing utilities did not match recorded as built drawings. I coordinated with the precast plant production team to ensure constructability and resolve production issues related to the custom skewed box culvert segments.
This work was done under the supervision of, with the drawings and calculations sealed by, a licensed engineer.

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Explanation
September 2014	August 2015	Unemployed while searching for work in my field after being honourably released from the Canadian Armed Forces. The engineering job market in Canada, where I was living, in 2014 to 2016 was weak and it was hard to find entry level work as an EIT.

ERIC ENGLAND (15-706-07)

All work experience reviewed by two licensed professionals

DISCIPLINE:CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
07/13/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
10 years, 2 months

Total Engineering Experience
10 years, 2 months

Experience under licensed engineer
10 years, 2 months

Other Experience

Disciplinary Action
None reported

ABET EAC

FE EXAM

PE EXAM

4+

EDUCATION

Bachelors in General Engineering (EAC)
US Naval Academy
June 2011–May 2015

Masters in Engineering Management
University of Colorado, Boulder
August 2022–August 2023

EXAMS

Fundamentals of Engineering (FE)
Maryland PE
February 2015

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

LICENSES

Additional Licenses
None

ERIC ENGLAND (15-706-07)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

United States Navy
Maryland (United States)
Petty Officer Third Class (CTI)
July 2008—July 2011

Verified by

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

DESCRIPTION

ERIC ENGLAND (15-706-07)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

United States Navy
Maryland (United States)
Midshipman (Student)
July 2011—May 2015

Verified by

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

DESCRIPTION

WORK EXPERIENCE

United States Navy
Maryland (United States)
Civil Engineer Officer
May 2015—July 2025

Verified by
Lawrence D Hall
hall.lawrence@gmail.com

Experience Summary
Full-Time
Engineering: 10 years, 2 months
Post EAC degree: 10 years, 2 months
Experience under licensed engineer: 10 years, 2 months

TASKS

I evaluated civil and structural design submittals for conformance with Unified Facilities Criteria, contract specifications, and applicable engineering codes. I performed quantity takeoffs for concrete, utility piping, and earthwork to validate contractor estimates and support cost evaluations. I reviewed RFIs and issued written technical responses, referencing ACI, ASTM, UFC, and project drawings to resolve design conflicts. I analyzed concrete break test reports and geotechnical boring logs to assess material suitability and verify compliance with design assumptions. I assessed field conditions in response to unforeseen site conditions and developed comparative cost analyses to support equitable contract modifications. I conducted field inspections to verify rebar placement, formwork dimensions, and trench bedding met design intent, documenting findings through annotated photographs and engineering reports.

REPRESENTATIVE PROJECTS

I have worked on the following projects in order of most recent:

2023-2025 SURF Pool, United States Naval Academy, Annapolis, MD. The SURF Pool is a 182,000 gal research laboratory located at the United State Naval Academy. Improper coatings and maintenance have rendered the pool inoperable since 2019. This project is to renovate the pool by grinding down the outer walls and reapplying proper coatings. I reviewed and approved the project design and specification. I also reviewed the construction schedule for any sequencing and logic errors.

2019-2023 KC-46A 3-Bay Hangar, Travis Air Base, CA: $160M. I managed the construction a 175,000sqft airplane hangar and maintenance facility. The hangar consisted of three separate bays with one main rolling door and two rolling doors on either side to accommodate aircraft wings. I reviewed and approved the construction drawings and specifications to ensure compliance with UFC and DoD criteria and contract specifications. I reviewed and evaluated submittals to ensure conformance with specifications for HVAC, concrete, utilities, and fire suppression systems. I drafted proposals for change orders and conducted field analysis to address contaminated soil concerns that arose during construction. I developed engineered field solutions for the underground utility system when differing site conditions and obstructions were discovered to ensure drainage lines and electrical clearances. I also addressed environmental remediation concerns to relocate a bio-reactor and monitoring wells and subsequently evaluated all boring logs and remediation actions. I also evaluated contractor proposals for technical accuracy, quantity takeoffs, and impact analysis.

2019-2022 TACAMO Travis Air Force Base, CA: $65M. I managed the construction of a multi-facility complex for a Naval flight Squadron. This project consisted of multiple structures including a living quarter, maintenance facility, warehouse storage, guard house, offices, and a parking apron. I conducted a detail review and approved the construction design drawings and project specifications for this project to ensure compliance with UFC and DoD criteria. I reviewed and approved submittals to ensure compliance with project specifications. I proposed a redesign to the foundation when a structure that had been abandoned in place was discovered. I also evaluated contractor proposals for technical accuracy, quantity takeoffs, and impact analysis.

2016-2019 Clean and Repair Fuel Tanks Project, New Orleans, LA. I oversaw the de-fueling, cleaning, and repair of three 500,000 gallon jet fuel tanks. This project repaired foundational cracking as well as clean and reinforce the existing tank structures. I approved the project design package and evaluated the non-destructive testing reports to identify areas of repair that were needed. I reviewed and approved submittals for tank coating and epoxy injections to address cracks. I developed sequencing plans to maintain flight operations concurrent to the project and reviewed safety procedures with regards to confined space entry procedures.

2016-2017 Barracks Renovation Project, New Orleans, LA. I managed the renovation of a military reservist barracks that had been affected by Hurricane Isaac. Significant mold and asbestos abatement activities were required to complete this project. As

part of this project, I evaluated the initial mold and asbestos testing reports. I performed reviews of the design and approved final design and specifications. I reviewed and approved contractor submittals for material selection and monitored moisture testing post-remediation to ensure livability.

2015-2016 Pool Renovation, New Orleans, LA. $2.8M. I oversaw the renovation of the 26,000 gal recreational pool facility on Naval Base Belle Chasse. I conducted field inspections of completed work for code compliance. I reviewed schedules and submittals for technical accuracy. I reviewed and approved construction drawings and specifications.

MILES HAWKINS (21-531-81)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
08/07/2025

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

Disciplinary Action
None reported

ABET EAC · FE EXAM · PE EXAM · 4+

EDUCATION

Bachelors in Environmental Engineering (EAC)
University of Southern California
August 2017–May 2021

EXAMS

Fundamentals of Engineering (FE)
California
October 2021

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

LICENSES

Additional Licenses
None

WORK EXPERIENCE

ENGEO
California (United States)
Staff Engineer
May 2021—August 2025

Verified by
Annamarie Rose Usher
ausher@engeo.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 developed work plans for sites to provide services including but not limited to phase I and phase II environmental site assessments (ESAs), stormwater pollution prevention plans (SWPPP), import fill assessment, and environmental testing and observation during construction.

For environmental projects, I assessed recognized environmental conditions and potential environmental concerns, and provided recommendations for sampling and testing. I determined appropriate locations to perform surficial and subsurface explorations and identified contaminants of concern based on site conditions and known impacts. I assessed soil in the field, logged soil borings, and collected soil samples for analysis. I calculated purge times for soil vapor wells based on well construction and soil conditions. I reviewed analytical data for soil, soil vapor, and groundwater and compared results to regulatory screening levels. I referenced multiple lines of evidence to assess risk and provide environmental recommendations based on site conditions, analytical data, and proposed site developments. I coordinated with equipment operators for the removal of impacted material at sites undergoing cleanup, and collected and analyzed confirmation samples from excavations to ensure cleanup goals had been met.

For SWPPP projects, I coordinated with site superintendents for the installation of erosion and sediment control systems. I performed weekly inspections of sites to ensure erosion and sediment controls were adequate. I collected runoff samples during rain events to ensure discharged water was within regulatory limits. I prepared inspection reports, site sampling logs, exceedance letters, and annual reports for submittal and approval from County and State regulatory agencies.

I provided quality control geotechnical observation and testing services supporting wharf redevelopment. I performed pile driving analysis in the field during H-pile and pipe pile installation, and tension testing to certify strength of installed H-piles. I reviewed field reports and plan specifications to confirm field activities were in general conformance with the plans.

REPRESENTATIVE PROJECTS

Confidential Oil Lease in Los Angeles County, California (2021-2022)
I observed the excavation and disposal of impacted soil on an oil lease to be redeveloped for residential use in the future. During excavation, I screened soil for volatile organic compounds using field equipment and collected confirmation samples from the base and sidewalls of excavations. I reviewed data in comparison to cleanup goals and coordinated with on-site contractors to continue excavations as needed until goals were met.

Mission Village (2022-Aug 2025 [Present, continuing])
I perform environmental and SWPPP services for this project. I have performed soil vapor and soil sampling on site. I made field determinations for the installation of vapor wells based on soil conditions, and subsequently performed calculations for purging of the wells prior to sampling. I analyzed soil vapor results and compared them to regulatory levels. During rain events, I collected runoff water samples to ensure discharged water was within regulatory limits, and prepared exceedance letters when results were beyond the limits, providing recommendations for additional erosion and sediment controls. Since 2024, I have performed weekly inspections for the maintenance of site erosion and sediment controls, and recommended improvements and repairs for deficient controls.

1354 N G Street (2023)
Following a desktop study, I determined a proposed housing shelter site would be impacted by an offsite groundwater plume. I developed a subsurface soil and soil vapor sampling plan, and determined appropriate sand pack filter thickness for the temporary vapor wells. I evaluated soil and soil vapor data to be slightly above regulatory levels. I recommended including limited engineering controls in the form of a passive vapor intrusion system, but cited the temporary nature of housing and natural

bioattenuation of the compounds of concern as factors lowering the risk of development.

Naval Base Guam (2024)
I performed quality control observations of the drilling and installation of stone columns, H-piles, and pipe piles. I verified the stone columns were installed in accordance with plan specifications. I performed pile driving analysis in the field during H-pile and pipe pile installation, and tension testing to certify strength of installed H-piles, and calculated if loading criteria was met during testing. I reviewed field reports and plan specifications to confirm field activities were in general conformance with the plans.

North Vineyard Greens (2024-2025)
I reviewed multiple potential sources of soil import material from an environmental and geotechnical perspective, and developed sampling plans for both in-situ and stockpiled material. I verified the soil was suitable for reuse from an environmental and geotechnical perspective. I reviewed compaction test results during the placement of fill material, comparing the results to design specifications and confirming field results were compared to representative laboratory samples.

Valencia Commerce Center (2024-Aug 2025 [Present, continuing])
Prior to construction activities, I performed soil vapor sampling and analyzed the data to determine if the site was impacted by a nearby landfill. I developed a SWPPP plan for the project and provided recommendations for erosion and sediment controls during implementation. I perform weekly inspections for the maintenance of the controls, and provide recommendations for additional controls and repairs as needed. The site requires extensive import fill material, and I review environmental and geotechnical data provided for various potential sources and determine if the material is suitable, or if more information is required to make a determination. I maintain records for total cut and fill quantities on the site.

SAGEN JOHNSON (18-394-15)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
08/04/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
7 years, 3 months

Total Engineering Experience
8 years, 3 months

Experience under licensed engineer
8 years, 3 months

Other Experience

Disciplinary Action
None reported

ABET EAC

FE EXAM

PE EXAM

4+

EDUCATION

Associates in Arts
Truckee Meadows Community College
August 2012–May 2015

Bachelors in Geological Engineering (EAC)
University of Nevada, Reno
August 2015–May 2018

EXAMS

Fundamentals of Engineering (FE)
Nevada
April 2018

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

LICENSES

Additional Licenses
None

WORK EXPERIENCE

Century Theatres
Nevada (United States)
Food clerk
June 2006—August 2008

Verified by

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

DESCRIPTION

WORK EXPERIENCE

7-Eleven
Nevada (United States)
Clerk
September 2008—July 2009

Verified by

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

DESCRIPTION

WORK EXPERIENCE

Safeway
Nevada (United States)
Deli Department Manager
August 2009—May 2012

Verified by

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

DESCRIPTION

WORK EXPERIENCE

Guitar Center
Nevada (United States)
Sales Associate
January 2015—May 2017

Verified by

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

DESCRIPTION

WORK EXPERIENCE

Lumos & Associates, Inc.
Nevada (United States)
Engineering Technician II
May 2017—October 2020

Verified by
Alex Jeffrey Greenblat
agreenblat@lumosinc.com

Experience Summary
Full-Time
Engineering: 3 years, 5 months
Post EAC degree: 2 years, 5 months
Experience under licensed engineer: 3 years, 5 months

TASKS

• Developed AutoCAD Civil 3D skills including but not limited to alignments, profiles, corridors, assemblies/subassemblies, surfaces, pipe networks, drafting, dynamic blocks, sheet set manager, fields, view frame groups, and database connectivity.
• Coordinated with clients, Project Managers, inspectors and contractors to reach construction deadlines in an efficient and professional manner while ensuring strict adherence to job specifications.
• Assisted in the design, plan production, engineer's estimate, contract documents, inspection and technical specifications for various projects.
• Sampled native soil, aggregates, asphalt concrete, Portland Cement Concrete, and emulsified asphalt per applicable ASTM standards. Conducted associated lab testing on sampled materials including: Proctor Analysis, Grain Size Distribution (Sieve Analysis), Atterberg Limits Tests, R-Value, Direct Shear, Maximum Theoretical Specific Gravity (RICE), Marshall Compaction, Axial Compression Tests, and many others.
• Classified soils in the field and laboratory using the Unified Soils Classification System and the AASHTO Soil Classification System.
• Compiled the City of Fernley's "Self-Evaluation" portion of an ADA Transition Plan with an associated ESRI shape file containing field measurements for 1,286 pedestrian ramps and 630 street sections.
• Created and maintained Pavement Network Databases in Pavement Management Systems including PAVER and Street Saver for Nye County, City of Fernley, Indian Hills General Improvement District and the Gardnerville Ranchos General Improvement District. Created pavement maintenance projects and pavement deterioration projections for agencies.

REPRESENTATIVE PROJECTS

As a Engineering Technician I in Lumos & Associate's soils laboratory, I have gained experience in both field and laboratory testing, crucial for ensuring the quality and compliance of materials used in major construction projects. My field responsibilities have encompassed critical on-site quality control for asphalt, concrete, and soils. This included conducting density tests for compacted soils and asphalt using nuclear gauges, performing slump and air content tests for fresh concrete, and preparing concrete cylinders for laboratory strength testing. For example, on the "Jacks Valley Road Reconstruction Project" I was responsible for daily field inspections and testing of subgrade compaction, cement treated soil, sampling asphalt, and asphalt lift densities, directly contributing to the structural integrity and longevity of the new roadway. My meticulous approach in the field ensured that construction activities adhered strictly to project specifications and industry standards.

In the laboratory, I developed expertise in a wide array of geotechnical and materials tests, providing essential data for design validation and construction quality assurance. My laboratory duties include performing sieve analyses to determine particle size distribution, conducting Atterberg limits tests (Liquid Limit, Plastic Limit, Shrinkage Limit) to classify fine-grained soils, and determining R-Values and expansion indices to assess pavement subgrade stability and potential for swell. I am also proficient in performing Proctor compaction tests (Standard and Modified) to establish maximum dry density and optimum moisture content for earthwork.
Furthermore, my laboratory experience extends to various asphalt lab tests, such as asphalt content determination, aggregate gradation from asphalt mixtures, and theoretical maximum specific gravity (Rice) tests. I am also skilled in the careful sampling of materials from both field and stockpile sources, ensuring representative samples for accurate testing. My role in project implementation involves providing timely and accurate test results to project engineers and contractors, enabling informed decisions regarding material acceptance and construction adjustments. This direct involvement ensures that all materials meet the specified engineering requirements, thereby contributing to the overall success and durability of infrastructure projects.

As a Engineering Technician II on roadway reconstruction projects, I was instrumental in various phases, from initial conceptualization through to construction support. My responsibilities included contributing significantly to the Project Initiation and Scoping phase by assisting with data collection, existing conditions assessments, and utility mapping. For instance, on the

"Golden Valley Reconstruction Project", I supported the surveyors in dipping manholes, gathering slope data on existing pedestrian access ramps, assessing a railroad crossing for ADA Compliance, and gathered coordinate data on existing striping.

In the Preliminary Design phase, I was responsible for performing initial geometric design calculations, developing conceptual horizontal and vertical alignments, and preparing preliminary cost estimates. I actively participated in design review meetings, contributing to the evaluation of various alternatives and ensuring adherence to design standards and project goals. A notable example includes my work on the "Kings Row Rehabilitation Project", where I contributed to the development of dynamic corridor modelling techniques that allowed us to grade pedestrian access ramps directly using horizontal and vertical profiles. My involvement ensured that preliminary designs were both technically sound and aligned with project vision and budget.

During the Final Design and Permitting phase, my role intensified, focusing on the production of detailed construction-ready plans and specifications using AutoCAD Civil 3D software and corridor modelling. I developed precise grading and drainage plans, engineered cost savings into existing driveway apron tie-ins, and assisted with utility location strategies. Furthermore, I played a key role in assisting with permit applications by preparing technical documentation and responding to agency comments, ensuring all regulatory requirements were met. During project implementation, I provided critical construction oversight, responded to Requests for Information (RFIs) from contractors, reviewed shop drawings, and ensured strict adherence to design specifications, effectively bridging the gap between design intent and successful on-site execution.

SAGEN JOHNSON (18-394-15)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Robison Engineering Company, Inc.
Nevada (United States)
Vice President, Senior Professional
October 2020—August 2025

Verified by
Nathan Earl Robison
nathan@robisoneng.com

Experience Summary
Full-Time
Engineering: 4 years, 10 months
Post EAC degree: 4 years, 10 months
Experience under licensed engineer: 4 years, 10 months

TASKS

As a Senior Professional and Vice President at a Robison Engineering Company, Inc., I am responsible for the development and delivery of diverse projects, from concept to construction support. These projects range from small sheds to large 100 acre solar fields. My office duties primarily involve, property research, map research, coordination with Agencies Having Jurisdiction for their permitting, construction, and design requirements, detailed design and analysis using AutoCAD and HydroCAD software. This includes performing calculations for grading, drainage, utility systems, and roadway geometry, ensuring designs comply with relevant codes, standards, and client specifications. I leverage CAD to produce engineering plans, profiles, and cross-sections, and prepare comprehensive technical specifications and cost estimates. Furthermore, I actively participate in design review meetings, collaborating with senior engineers, architects, and other disciplines to optimize designs for constructability, cost-efficiency, and long-term performance. My role also extends to preparing technical drainage reports, feasibility studies, and stormwater pollution prevention plans, providing critical documentation for project approvals and stakeholder communication.

My field responsibilities are integral to bridging the gap between design and implementation, ensuring that theoretical designs translate effectively into real-world applications. I conduct site investigations to gather existing conditions data, assess site constraints, and collect and verify survey information, which directly informs the design process. During construction, I perform site visits to monitor progress, verify compaction, setbacks, grading and drainage, and address design-related queries from contractors, and review construction methods for adherence to plans and specifications. This often involves responding to Requests for Information (RFIs), reviewing shop drawings, and assisting with change order evaluations. For example, on a recent Battery Energy Storage Project, my field observations identified unforeseen utility conflicts, allowing for proactive design adjustments that prevented significant construction delays. This blend of rigorous office design and practical field engagement ensures the successful and compliant execution of projects.

REPRESENTATIVE PROJECTS

Tungsten Solar Expansion and Tungsten Geothermal Expansion Project (2020-2021)
Location: Tungsten Mountain, NV
From October 2020 to October 2021, I designed civil infrastructure for a 3.5 MW solar expansion and 20 MW geothermal facility across 150 acres, complying with Nevada Department of Environmental Protection (NDEP), Bureau of Land Management (BLM), and local zoning codes. I calculated grading for 5 acres, ensuring slopes for drainage and stability and using cut material, I designed a stormwater protection berm upslope from the project that allowed me to balance approximately 50,000 CY of earthwork. Using AutoCAD Civil 3D, I designed 20-foot-wide access roads with a 8% maximum grade for heavy machinery. I recommended native revegetation and rock brush filters to reduce environmental impact and project costs.

Steamboat Solar 1 Phase 1 (2021-2022)
Location: Reno, NV
From June 2021 to July 2022, I designed the civil layout for a 4 MW solar facility on 23 acres, adhering to Washoe County and City of Reno regulations. I calculated earthwork volumes, balancing cut and fill to lower costs. Using AutoCAD Civil 3D, I designed access roads with 6-inch aggregate base for solar panel installation. I prepared a stormwater pollution prevention plan (SWPPP), designing silt fences, protecting existing stormwater infrastructure, and reducing affects to native vegetation.

Steamboat Solar 1 Phase 2 (2022-2023)
Location: Reno, NV
From November 2022 to September 2023, I designed civil infrastructure for an expansion to the Steamboat Solar Phase 1 Project. Phase 2 consisted of an additional 4 MW solar field on 23 acres, meeting Washoe County and City of Reno regulations. Using HydroCAD, I calculated drainage for 50 and 100-year storm events, designing six-foot-wide by one-foot-deep swales and three 18 inch diameter corrugated high-density polyethylene culverts. During construction, I calculated northings, eastings, and elevations

for the pile foundations related to the axis trackers by developing a spread sheet that used existing ground data pulled from COGO in AutoCAD. Using this data and the axis tracker's maximum distance between piles, I analyzed survey data from a third party, identifying pile locations that exceeded the manufacturer's specifications, and isolated more than six hundred piles that needed to be adjusted using slope distance. This saved the Client tens of thousands of dollars by avoiding the need to re-stake the entire project and contributed to maintaining project schedules.

Bottleneck Battery Energy Storage System (BESS) Project (2022-2024)
Location: Richgrove, CA
From October 2022 to May 2024, I designed civil infrastructure for an 80 MW/320 MWh BESS facility on 12 acres, complying with California Environmental Quality Act (CEQA) and local standards. I balanced grading for a 2% slope across the side which allowed for surface drainage, designing a detention pond using HydroCAD for stormwater. I designed 0.8 miles of access roads and a 10-foot-wide fire lane per local fire code. I prepared erosion control plans. I recommended foundation adjustments based on geotechnical reports for stability in expansive soils.

Shirk Battery Energy Storage System (BESS) Project (2023-2025)
Location: Visalia, CA
From October 2023 to July 2025, I designed civil infrastructure for an 80 MW/240 MWh BESS facility on 3.5 acres, meeting California Energy Commission and local zoning requirements. I prepared and compiled permitting documentation for entitlement, and five other associated permits including three Site Improvement Permits (Grading, electrical facilities, and an electrical equipment building), a 66 kV Generation Tie-Line, an encroachment permit, and coordinated with the utility agency to install domestic and landscaping water meters. I prepared a drainage report, designing a retention basin for a 100-year storm. I recommended utility rerouting after identifying conflicts, preventing construction delays.

JENNA KEITH (20-831-39)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Comity - PE

Application Date
08/05/2025

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

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

EDUCATION

Bachelors in Environmental Engineering (EAC)
California Polytechnic State University, San Luis Obispo
September 2016–June 2020

Masters in Civil and Environmental Engineering
California Polytechnic State University, San Luis Obispo
September 2020–June 2021

EXAMS

Fundamentals of Engineering (FE)
California
February 2020

Principles and Practice of Engineering (PE)
Civil
California
April 2022

LICENSES

Initial License
California
Issued: July 2024
Expires: December 2026

Additional Licenses
None

WORK EXPERIENCE

ENGEO Incorporated
California (United States)
Project Engineer
August 2021—August 2025

Verified by
Todd Bradford
tbradford@engeo.com

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

TASKS

My discipline is primarily environmental engineering with some geotechnical engineering field experience. I was employed as a Staff Engineer from August 2021 to April 2024, and have been employed as a Project Engineer since then. As a Staff Engineer, my responsibilities on the environmental team included preparing proposals for Phase I and Phase II environmental site assessments; coordinating drilling and utility locating subcontractors; conducting subsurface investigations, including soil, groundwater, and soil gas assessments; logging soil borings; overseeing installation of permanent monitoring wells; collecting groundwater level measurements to determine flow direction; collecting groundwater, soil, and soil gas samples; and preparing Phase II environmental reports, including tables, figures, and boring logs, to summarize the results of the investigations and provide recommendations. My responsibilities on geotechnical projects included providing observation and testing services during construction of temporary shoring, including observing the drilling and installation of soldier piles, soil nails, and tiebacks; testing tiebacks and soil nails to confirm bond strengths; reviewing grout strengths; preparing weekly transmittals; verifying compliance of soldier pile installation with plan specifications; evaluating test results against loading and movement criteria; determining grout sample strength performance; coordinating with the contractor to address beam twisting during testing and retesting as needed; and preparing a final shoring summary letter to summarize conformance with project plans and recommendations. As a Project Engineer, I have similar responsibilities, with the addition of managing larger projects such as cleanup sites with regulatory agency oversight and those with geotechnical testing and observation services during construction; training and mentoring newer staff; performing environmental peer reviews of other consultants' reports; providing consultation to clients in real estate transactions on active remediation sites; and developing reference documents and tools to improve internal processes.

REPRESENTATIVE PROJECTS

(1) 40871 High Street, Fremont, CA (May 2022 to Present) - this project involved site investigations and removal of shallow soil at a residential redevelopment site (3-story multi-unit residences, parking, and other improvements) contaminated with lead and pesticides. As a Staff Engineer, I determined the frequency of samples needed and performed soil sampling to delineate the lateral and vertical extent of contaminated soil; determined the soil classification for disposal; and prepared a Removal Action Workplan, which evaluated two alternatives: excavation and on-site encapsulation vs. excavation and disposal according to effectiveness, cost, and implementability. I calculated human health risks; evaluated the economics of soil for use onsite and/or disposal; evaluated the feasibility of encapsulating soil based on building and utility plans; and chose the removal action alternative (excavation and off-site disposal) using cost-benefit analysis, including considerations such as permitting and construction phasing timeline. I oversaw the excavation; soil stockpiling; and offhaul to ensure that soil was directed to the appropriate disposal facility. I prepared a Removal Action Completion Report to document the soil excavation and removal activities. I recommended that no further environmental investigations or remediation would be necessary for the proposed development.

(2) 900 El Camino Real, Belmont, CA (June 2022 to Present) - this project involved the redevelopment of a former gasoline and automotive service station with four underground storage tanks into a five-story residential building. As a Staff Engineer, I assisted with soil gas sampling at the site which identified the presence of the chlorinated solvent PCE, and developed recommendations for future additional sampling. As a Project Engineer, I coordinated field activities with the tank removal contractor; oversaw the removal of underground storage tanks, product piping, and a hydraulic lift; performed confirmation soil and groundwater sampling; characterized the excavated soil and debris/materials for offsite disposal; and scheduled my company's field representatives to performed compaction testing on the tank pit backfill soil for geotechnical purposes. Following the tank removal, I performed soil gas sampling and prepared reports documenting the tank removal and soil gas sampling activities which were submitted to and approved by the County Environmental Health Department. I recommended that residual petroleum at the bottom of the tank pit should be allowed to remain due to the infeasibility of further excavation and based on incomplete exposure pathways for future occupants/workers to encounter the contamination. I also recommended that vapor intrusion mitigation systems would not be necessary for the proposed development given the spatial and historical trends in the soil gas data and based on my calculation of

human health risks using vapor intrusion attenuation factor modeling software. I've been managing the project as it moves into construction, which has included overseeing a potholing investigation to observe the foundations of adjacent buildings bordering the site; recommending the use of slotted excavations for foundation and earthwork construction activities around the perimeter of the site; and verifying through our testing and observation services that building pad preparation and utility installation are in conformance with our geotechnical recommendations.

(3) YouTube Campus Phase I, San Bruno, CA (April - November 2022) - this project involved the construction of a new company headquarters - two buildings, four stories above grade with four levels of below-grade parking. I provided full-time geotechnical observation and testing services during construction of temporary shoring supporting a 50-foot excavation, which included observing the drilling and installation of soldier piles, soil nails, and tiebacks; testing tiebacks and soil nail tests to confirm bond strengths; reviewing grout strengths; and preparing weekly transmittals detailing the results of grout strength tests. I prepared a final shoring summary letter detailing that the temporary shoring, and the results of all tieback and soil nail tests, were in general conformance with the plans and our recommendations. My decisions included verifying that soldier piles were drilled and installed in accordance with plan specifications; determining whether tieback and soil nail tests met loading criteria based on 80% theoretical elongation of unbonded length and exhibiting less than 0.04" of movement during creep holds; working with the contractor to assess whether beam twisting during testing required support from a welded strap and retesting; and determining whether grout samples met 7-day, 14-day, and 28-day strength specifications.

KELLY KWOK (15-873-88)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
07/23/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree

Total Engineering Experience
8 years, 4 months

Experience under licensed engineer
6 years, 1 month

Disciplinary Action
None reported

FE EXAM

PE EXAM

4+

EDUCATION

Bachelors in Environmental Engineering
University of California, San Diego
September 2011–June 2016

EXAMS

Fundamentals of Engineering (FE)
California
May 2016

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

LICENSES

Additional Licenses
None

KELLY KWOK (15-873-88)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

KMEA
California (United States)
Environmental Engineer
March 2017—April 2020

Verified by
Chris G Norman
cgnormaniii@gmail.com

Experience Summary
Full-Time
Engineering: 3 years, 1 month
Experience under licensed engineer: 3 years, 1 month

TASKS

As an Environmental Engineer, I designed sampling protocols for contaminants including PFAS, petroleum hydrocarbons, and metals in groundwater, wastewater, and stormwater at military installations. I performed engineering calculations including well purge volumes, landfill gas migration rates, contaminant transport pathways, and pollutant loading rates to support remediation design and regulatory compliance. I analyzed environmental data to evaluate bioremediation effectiveness, determine compliance with regulatory standards, and recommend site-specific engineering solutions for contamination issues. I developed technical specifications for hazardous materials management, authored standard operating procedures for environmental monitoring, and prepared regulatory submissions including EPCRA Tier II reports based on my calculations of reportable quantities. My work was approximately 90% engineering activities with 10% devoted to administrative and project management duties.

REPRESENTATIVE PROJECTS

2018-2020: Per- and Polyflouroalkyl Substances (PFAS) at Marine Corps Air Station (MCAS) Tustin, Tustin, CA
I designed the sampling protocol to prevent cross-contamination between monitoring locations. I calculated appropriate purge volumes for each well based on well construction details and groundwater conditions.

2018-2020: Bioremediation Treatability Study at Former Naval Air Station Alameda Gas Station, Alameda, CA
The objective of this treatability study was to evaluate the efficacy of enhanced aerobic in situ bioremediation (EISB-a) at CAA 7 to treat elevated concentrations of fuel-related petroleum hydrocarbon compounds in groundwater. I analyzed groundwater flow patterns and contaminant concentration trends to determine remediation progress.

2019-2020: Naval Air Station Lemoore PFAS Preliminary Assessment, Lemoore, CA
I designed the preliminary assessment approach to identify potential PFAS source areas. I analyzed historical records and conducted interviews with key personnel to identify 9 areas of concern. I calculated potential contaminant migration pathways based on site hydrogeology and historical activities. I recommended specific sampling locations and analytical parameters for the subsequent site inspection phase based on my assessment findings.

2018-2020: Naval Air Station Lemoore Groundwater and Landfill Gas Monitoring, Lemoore, CA
I calculated landfill gas migration rates based on pressure readings and soil conditions. I analyzed groundwater quality data for VOCs, Total Dissolved Solids (TDS), anions, and hexavalent chromium to determine compliance with applicable standards.

2017-2020: Marine Corps Air Station Miramar Industrial Wastewater Monitoring, San Diego, CA
This 3-year environmental compliance project involved bi-monthly wastewater monitoring at 8 industrial discharge points under Clean Water Act and local POTW regulations. I designed an autosampler program to collect flow-proportional composite samples. I calculated pollutant loading rates for oil and grease, total suspended solids, and chemical oxygen demand. I authored a Standard Operating Procedure for the sampling program that was adopted as the facility-wide protocol. I analyzed monitoring data against permit limits and recommended process modifications to reduce contaminant concentrations when exceedances occurred.

2017-2020: Lead and Asbestos Management Projects, Multiple Naval Installations, CA
These hazardous materials management projects involved assessment and management planning for asbestos and lead in buildings ranging from 5,000 to 50,000 square feet under OSHA, EPA, and Navy regulations. I calculated the extent of hazardous materials based on field sampling and XRF analysis results. I developed cost estimates ranging from $50,000 to $500,000.

2017-2019: Emergency Planning and Community Right-to-Know Act (EPCRA) Compliance, Multiple Naval and Marine Corps Installations, CA and AZ
This regulatory compliance project involved annual hazardous materials inventories at 5 military installations under EPA EPCRA

regulations. I designed inventory collection protocols to ensure accurate chemical identification and quantification. I calculated reportable quantities for various chemical categories. I analyzed historical inventory trends to recommend improvements in hazardous materials management. I prepared Tier II reports for submission to state and local emergency planning authorities.

2017-2018: Marine Corps Air Station Yuma Stormwater and Industrial Wastewater Monitoring, Yuma, AZ
I designed inspection protocols for evaluating stormwater best management practices (BMPs). I calculated pollutant loading rates for metals, TPH, oil and grease, cyanide, and phosphorus in industrial wastewater. I analyzed monitoring data against permit limits and recommended facility improvements to address deficiencies I identified during inspections.

WORK EXPERIENCE

Naval Facilities Engineering Systems Command Southwest
California (United States)
Environmental Engineer
April 2020—July 2025

Verified by
Nicholas Allen Popaditch
nicholas.a.popaditch2.civ@us.navy.mil

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

TASKS

I manage environmental compliance and engineering projects related to fuel systems, industrial/oily wastewater treatment, and air quality at multiple Navy installations. I analyze engineering reports, identify critical system deficiencies, and develop technical solutions that ensure regulatory compliance with California SB445, Clean Water Act, SPCC regulations, and local air quality requirements. I calculate project costs, equipment specifications, and system capacities to develop detailed scopes of work, construction plans, and permit applications for underground storage tank replacements, treatment system upgrades, and air pollution control equipment. I perform technical reviews of design packages, recommend critical modifications to improve system reliability, and develop engineering solutions to address construction conflicts with existing infrastructure while maintaining essential operations during system outages or replacements.

REPRESENTATIVE PROJECTS

Jun 2025 - July 2025: Industrial Waste/Oily Waste Treatment System Contract Management, San Diego, CA
This ongoing project involves oversight of industrial and oily waste treatment systems processing approximately 34 million gallons annually across multiple Navy installations in compliance with Clean Water Act and local discharge permits. I analyzed PE certification reports to prioritize repair projects based on risk assessment and regulatory compliance requirements. I calculated cost estimates and developed detailed scopes of work for system repairs ranging from $20,000 to $500,000. I engineered outage plans to maintain essential treatment capabilities during maintenance activities, coordinating with plant operators to implement temporary process modifications that ensured continuous regulatory compliance.

2023-2025: Naval Medical Center (NMC) Single-Walled Underground Storage Tank (UST) Replacement, San Diego, CA
This multimillion dollar regulatory compliance project involved replacing 3 single-walled underground storage tanks (USTs) totaling 144,000 gallons with double-walled systems to meet California SB445 requirements. I evaluated design concept drawings and recommended critical modifications to improve system reliability and maintenance access. I recommended redesigning portions of the fuel delivery piping system to relocate sections aboveground, eliminating underground monitoring requirements and reducing monitoring sensor cable runs by approximately 400 feet. I calculated temporary fuel storage requirements to maintain emergency generator capabilities during construction.

2024-2025: Government Gas Station Single-Walled Underground Storage Tank (UST) Replacement, San Diego, CA
This multimillion dollar regulatory compliance project involved replacing the existing UST system (56,000 gallons total) with a vapor pressure hydrostatic (VPH) double-walled system. I analyzed traffic flow patterns and site constraints to determine optimal temporary system placement that would maintain fueling operations during construction. I calculated temporary tank capacity requirements based on historical fuel consumption data and developed a phased implementation plan to ensure continuous fueling operations.

2022-2024: Naval Medical Center Emergency Life Critical Generator Replacement, San Diego, CA
This critical infrastructure project involved replacing end-of-life emergency generators supporting life-critical hospital functions. I discovered a potential design flaw where the proposed switchgear concrete pad would have compromised the UST secondary containment liner and cathodic protection system. I researched historical drawings to determine exact locations of underground infrastructure not visible during site assessment.

2023: Motor Rewind Shop Upgrade Project, San Diego, CA
This facility upgrade project involved installing new equipment including 2 burn-off ovens and a dip tank in compliance with San Diego Air Pollution Control District (SDAPCD) regulations. I analyzed equipment specifications against SDAPCD Rule requirements to ensure compliance before permit application submission. I calculated expected emissions based on operational parameters.

2020-2025: Spill Prevention Control and Countermeasure (SPCC) Plans, Multiple Naval Installations, CA
This ongoing regulatory compliance project involves implementation and maintenance of SPCC Plans for facilities with combined petroleum storage exceeding 10,000 gallons under EPA regulations. I followed STI-SP001 inspection protocols for tank systems, monitoring sensors, and spill response equipment. I authored technical amendments to two SPCC Plans, calculating revised containment requirements based on storage capacity changes and developing new facility diagrams.

2021-2023: Indoor Gun Range Lead Contamination Violation and Ventilation System Replacement, San Diego, CA
This environmental compliance project addressed a Class I CUPA violation for lead contamination at an indoor firing range. I worked with Expeditionary Warfare Center (EXWC) to evaluate the ventilation system performance, including pitot tube traverses, smoke testing, and air velocity measurements. I engineered interim control measures while developing specifications for a complete system replacement. I reviewed and approved a sampling plan to characterize the extent of lead contamination and calculated exposure risks based on analytical results. I developed a corrective action plan that successfully resolved the regulatory violation.

2021-2022: Navy Exchange Mariner's Park Gas Station Construction, San Diego, CA
This multimillion dollar new construction project involved building a 56-nozzle fueling facility with 72,000 gallons of underground storage. I designed monitoring plot plans documenting sensor locations and alarm parameters for regulatory compliance. I developed testing protocols to verify system integrity before commissioning.

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Explanation
July 2016	February 2017	I was an intern at the San Diego Air Pollution Control District from January 2014 - September 2016. Then, it took me several months to find a full time job.

DILLON MAGUIN (21-551-10)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
07/27/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
4 years, 2 months

Total Engineering Experience
10 years

Experience under licensed engineer
2 years, 6 months

Disciplinary Action
None reported

ABET EAC

FE EXAM

PE EXAM

4+

EDUCATION

Associates in Science
Truckee Meadows Community College
August 2015–August 2018

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

EXAMS

Fundamentals of Engineering (FE)
Nevada
March 2021

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

LICENSES

Additional Licenses
None

DILLON MAGUIN (21-551-10)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Piedmont Truss & Lumber
Nevada (United States)
Lead Truss Designer
July 2015—January 2023

Verified by
Ron Galloway
rong@ptlnv.com

Experience Summary
Full-Time
Engineering: 7 years, 6 months
Post EAC degree: 1 year, 8 months
Experience under licensed engineer: None

TASKS

At Piedmont Truss & Lumber, my work is based in structural engineering, with a specialization in wood truss components. I have worked for Piedmont for 7.5 years, 6 of which I served as the Lead Truss Designer under the supervision of Ron Galloway. I was responsible for designing roof and floor trusses, developing full truss layout plans, and analyzing structural load paths to ensure code compliance and system stability. I also designed truss repairs for field-modified or damaged members, ensuring structural integrity. I coordinated closely with contractors, engineers, and architects to resolve complex framing and loading challenges, particularly in custom homes, multi-family apartments, and light commercial buildings. I was also responsible for reviewing design work completed by other team members to ensure accuracy, code compliance, and adherence to both industry and company standards. When necessary, I provided design corrections and propose alternative solutions to improve performance and/or efficiency.
I made independent engineering judgments within the scope of my responsibilities, including assessing load distribution, selecting appropriate truss configurations, evaluating repair viability, and verifying lateral and vertical load paths. I used truss design software, and applied structural engineering principles to create efficient, safe, and cost-effective truss systems tailored to each project's architectural and structural requirements.

REPRESENTATIVE PROJECTS

B3576 Bonomo Residence, Reno, NV
May 13th 2020 - May 14th 2021

I developed an initial truss layout for the engineer of record to start their structural layout and gave solutions to increase structural performance at girder truss locations. I designed roof trusses to meet design criteria given by the engineer of record and local building codes. I calculated the required truss hangers at girder trusses, and I designed the girder trusses to properly attached truss hangers per the hardware manufacturer requirements. I designed repairs for skylight head outs that were added to the project after truss installation.

D3917 Dickson Residence Roof and Floor Trusses, Placer County, CA
February 15th 2022 - March 30th 2022

I designed roof and floor trusses to meet design criteria given by the engineer of record and local building codes. I calculated the required truss hangers at girder trusses, and I designed the girder trusses to provide a proper connection per hardware manufacturer requirements. I designed head outs for attic access locations as required due to reduced truss spacing. Additional truss loads were calculated and designed for structural fascia and large gable end rakes.

D3992 Biscay Residence Roof and Floor Trusses, Reno, NV
June 3rd 2022 – January 20th 2023
I designed roof and floor trusses to meet design criteria given by the engineer of record and local building codes. I calculated the required truss hangers at girder trusses and, I designed girder trusses to allow proper connection per hardware manufacturer requirements. I calculated additional dead and live loads where required to carry additional tributary widths.

DILLON MAGUIN (21-551-10)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Nevada Department of Transportation
Nevada (United States)
Load Rater
January 2023—July 2024

Verified by
Michael FRANCIS PREMO
laxman1977z@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

At the Nevada Department of Transportation (NDOT), I worked in the Structures Division for 1.5 years, focusing in both structural and transportation engineering. My work fell within the Inspection and Inventory section, under the direct supervision of Assistant Chief Michael Premo, and in coordination with the inspection crews managed by Brandon Henning. As a Staff 2 Engineer I held the position of load rater, with growing levels of responsibility and independent engineering judgment.
In structural engineering, my primary focus was on bridge analysis and inspection. I was responsible for calculating Bridge Load Ratings for a wide variety of bridges across the state using AASHTO and FHWA resources. I was also responsible for managing load ratings in the inventory for all new and existing bridges. My work involved interpreting as-built plans and conducting structural modeling and analysis to assess the safe carrying capacity of bridges. I made recommendations for bridge postings where load restrictions were necessary based on my findings. I also participated in field inspections of new and existing bridges to evaluate structural conditions.
Under transportation engineering, I evaluated super load and overweight/over dimensional permit applications. I performed structural checks to verify whether proposed vehicle configurations can safely cross individual bridges without compromising structural integrity. This required assessing vehicle axle configurations, gross weights. Based on my evaluations, I made technical decisions regarding the structural adequacy of proposed routes and recommended restrictions or detours to ensure infrastructure safety.

REPRESENTATIVE PROJECTS

Timber Bridge Load Rating for B3332
A new timber bridge was found in Northeast Nevada, and needed to be analyzed and added to the bridge catalog.
August 8th 2023 – September 14th 2023
I created a calculation sheet using excel, along with the NDOT Load Rating Manual, and The Manual for Bridge Evaluation. Using material dimensions provided by the inspection sketch, I used engineering judgement to determine wood species based on the site area. Dead and Live load calculations were made using AASHTO Standard Specifications. I then used these parameters to use a load rating program (AASTHOWare BrR) to create a load rating. Following the load rating, I checked it against my calculation sheet for accuracy. The load rating was then checked and stamped by a licensed engineer.

Routine Inspection of Bridge B3117N, Sparks, NV
April 29th – April 30th 2024
I was a part of an inspection team to perform a routine inspection as required for the National Bridge Inspection Standards (NBIS). I performed a hands-on inspection of steel girders, diaphragms, columns, and pier caps. I reviewed the previous inspection report to identify critical items to inspect.

Reinforced Concrete Slab Bridge Load Rating for B2085, Las Vegas, NV
December 11th 2023 – January 2nd 2024
I calculated the dead and live loads for this bridge using AASHTO Standard Specifications. Using the as-built plans, I modeled the bridge parameters into AASHTOWare BrR to complete the load rating. The load rating was then checked and stamped by a licensed engineer.

DILLON MAGUIN (21-551-10)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Piedmont Truss and Lumber
Nevada (United States)
Lead Truss Designer
July 2024—July 2025

Verified by
Ron Galloway
rong@ptlnv.com

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

TASKS

At Piedmont Truss & Lumber, my work is based in structural engineering, with a specialization in wood truss components. I work as the Lead Truss Designer under the supervision of Ron Galloway. I was responsible for designing roof and floor trusses, developing full truss layout plans, and analyzing structural load paths to ensure code compliance and system stability. I also designed truss repairs for field-modified or damaged members, ensuring structural integrity. I coordinated closely with contractors, engineers, and architects to resolve complex framing and loading challenges, particularly in custom homes, multi-family apartments, and light commercial buildings. I was also responsible for reviewing design work completed by other team members to ensure accuracy, code compliance, and adherence to both industry and company standards. When necessary, I provided design corrections and propose alternative solutions to improve performance and/or efficiency.
I made independent engineering judgments within the scope of my responsibilities, including assessing load distribution, selecting appropriate truss configurations, evaluating repair viability, and verifying lateral and vertical load paths. I used truss design software, and applied structural engineering principles to create efficient, safe, and cost-effective truss systems tailored to each project's architectural and structural requirements.

REPRESENTATIVE PROJECTS

F4414 Hert Trusses, Fallon, NV
July 23rd 2024 – September 16th 2024
I designed roof trusses to meet design requirements for the site location. I calculated the dead and live loads from the existing roof framing to be carried by new truss girders.

Panera Bread Parapet Trusses, Reno, NV
November 11th 2024 – January 27th 2025
I calculated dead and live loads from tower trusses I designed to transfer to roof trusses below. I designed roof trusses to meet design criteria given by the engineer of record and local building codes. Following the installation of the trusses, there were issues with HVAC equipment that required repairs. I designed openings and repairs to address the issues. This included reviewing existing trusses, designing new girder trusses and designing truss frames to adequately handle the revised load paths. Upon completion of the repairs, I inspected the trusses for accuracy in connections detailed in the repair.

E4283G Garage Roof Trusses; Carson City, NV
March 11th 2025 – May 9th 2025
I designed roof trusses to meet design criteria given by the engineer of record, and local building codes. I calculated floor dead and live loads required to be carried by roof truss girders. I calculated required hangers and design girder trusses to properly connect hangers. Working alongside the project engineer, I gave suggestions to adjust load paths and roof framing to provide more feasible connections at girder trusses.

KELSEY MCCARTNEY (21-731-72)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
07/23/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
4 years, 6 months

Total Engineering Experience
4 years, 6 months

Experience under licensed engineer
4 years, 6 months

Disciplinary Action
None reported

EDUCATION

Non-degree
University of Alaska Anchorage
August 2014–June 2015

Non-degree
Cabrillo College
August 2015–May 2016

Non-degree
Las Positas College
August 2016–May 2017

Bachelors in Civil Engineering (EAC)
University of Nevada, Reno
August 2017–December 2020

EXAMS

Fundamentals of Engineering (FE)
Nevada
April 2021

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

LICENSES

Additional Licenses
None

KELSEY MCCARTNEY (21-731-72)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Christy Corporation
Nevada (United States)
Staff Engineer
January 2021—July 2025

Verified by
scott christy
Scott@christynv.com

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

TASKS

I have experience developing conceptual layouts for residential and mixed-use developments. My work as a staff engineer, under the direction of a Project Manager, includes the design of road networks, building lots, public spaces, and essential infrastructure such as drainage, sanitary sewer, and potable water systems. I ensure that all design elements comply with applicable local, state, and federal regulations, zoning ordinances, environmental requirements, and building codes.
I perform hydrologic analyses for storm drain systems by interpreting rainfall data from meteorological records using the Rational Method and HEC-HMS. I calculate peak runoff rates for various storm events to perform the design of storm drains, inlets, culverts, and detention basins. I integrated hydrologic data into system design, such as StormCAD and FlowMaster, to ensure effective stormwater conveyance and flood prevention.
I design residential sewer systems by estimating average daily flow based on occupancy and applying peak factors to account for high-usage periods, while considering infiltration and inflow. I develop gravity-based layouts with main lines, lateral connections, and strategically placed manholes, optimizing pipe routing to maintain slope and avoid utility conflicts.
By utilizing AutoCAD Civil 3D and reviewing the survey and geotechnical data, I model grading designs for roads, sidewalks, open spaces, lots, drainage, and pedestrian crossings that are ADA compliant.
I have spent approximately 20 days in the field with a licensed surveyor, gaining hands-on experience with key surveying techniques and equipment. This included learning how to use GPS and total stations for boundary surveying (locating and marking property lines), topographic surveying (measuring elevation and terrain features), and construction surveying (laying out reference points and verifying construction elements such as roads and utilities).
I coordinate with architects, engineers, and other regulatory authorities professionals to ensure a cohesive and functional design by addressing any concerns or requirements related to the development process.

REPRESENTATIVE PROJECTS

Legacy Courts - Sparks, NV
Scope - Prepare on-site civil improvement plans for an apartment complex
March 2022 - September 2023
I developed comprehensive site plans under the guidance of my supervisor, encompassing demolition, site grading, drainage, erosion control, utility planning, construction details, and specifications for site improvements. I actively coordinated and engaged in regular meetings with the client, architect, and project team to communicate civil design updates and ensure alignment with project goals. Additionally, I collaborated closely with the landscape architect to integrate landscaping and irrigation plans. In terms of utility design, I was responsible for designing all utilities within 5 feet of the building footprint. I also prepared TMWA W-sheets for the review and approval of new fire hydrants and water services, while coordinating the removal of existing services. I compiled and submitted a detailed sanitary sewer report, outlining wastewater generation, collection, and conveyance to the main system. I developed a comprehensive hydrology report that analyzed pre- and post-development stormwater flows to ensure compliance with regulatory standards.

Silver Hills - Washoe County, NV
Scope - Preparation of revised design concepts for a single-family subdivision
January 2021 – March 2025
I collaborated with my design team to develop the civil improvement plans and Erosion Control Plan for two final maps, each consisting of approximately 150 units, ensuring full compliance with Washoe County's design requirements and the approved tentative map. I actively contributed to the site layout process, utilizing Civil 3D software to explore and refine mass grading options. Additionally, I was responsible for preparing the hydrology report, performing the necessary calculations, and designing the proposed channels, detention/retention basins, and storm drain system to accommodate the 100-year storm event. I also participated in the preparation of the sewer report and TMWA plans. Throughout the project, I coordinated with the property owner and utility providers, including NV Energy, to facilitate application processes and ensure seamless project execution.

Anderson Ranch – Carson City
Scope - Provide professional plot plans for individual lots
September 2024 - Present
I developed detailed plot plans that included existing property boundaries and dimensions based on survey and assessor data, along with the location of proposed building footprints and setbacks to ensure zoning compliance. I also identified easements, utility lines, and rights-of-way using available records. I designed and labeled driveways, parking areas, walkways, topographic contours, drainage patterns, fencing, and other improvements. I included zoning information, lot coverage calculations, and any required notes to meet city submittal requirements.

Kiley Ranch North Village 22 – Sparks, NV
Scope - Prepare detailed on-site improvement plans for a 386-unit apartment complex.
April 2025 - Present
I was responsible for preparing and submitting comprehensive on-site improvement plans following the approved administrative plan review application. These plans incorporate preliminary civil design elements such as grading and drainage, erosion control, sanitary sewer and water system design, signage, striping, and all relevant construction details. I compiled an Admin Review Report for the City of Sparks to ensure that the proposed site layout, land use, building placement, site access, parking, landscaping, and basic infrastructure, such as grading, utilities, and drainage, align with the planning and zoning regulations. I generated a conceptual sewer and water demand report to express that the current design is a part of a previously approved master report and connections are in compliance with the previously constructed infrastructure.
I am preparing the civil improvement plans for this project to outline the configuration of the building pads, grading and drainage, yard drain design, erosion control, sanitary sewer and water system design, signage, striping, and all relevant construction details. I depict the water mains in plan and profile drawings in coordination with TMWA, and included public storm drain and sanitary sewer mains in the profiles where necessary to facilitate construction of public facilities. My role also included managing and processing the building permit application with the City of Sparks. I prepared phased water plans and fire hydrant permits for TMWA, the City of Sparks, and the Washoe County Health Department. I generated sanitary sewer and hydrology reports in compliance with City of Sparks requirements. I designed an Erosion Control Plan per City standards and coordinated design efforts with the client, design team, sub-consultants, and regulatory agencies.

KAI NAM NGAI (21-690-26)

All work experience reviewed by two licensed professionals

DISCIPLINE:CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
07/28/2025

Citizenship
Hong Kong

SUMMARY

Engineering Experience after EAC degree
4 years

Total Engineering Experience
4 years

Experience under licensed engineer
4 years

Disciplinary Action
None reported

ABET EAC

FE EXAM

PE EXAM

4+

EDUCATION

Associates in Science
Pierce College
September 2016–December 2018

Bachelors in Civil Engineering (EAC)
University of Florida
August 2018–May 2021

EXAMS

Fundamentals of Engineering (FE)
Florida PE
February 2021

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

LICENSES

Additional Licenses
None

WORK EXPERIENCE

Valley Joist
Nevada (United States)
Lead Engineer
July 2021—July 2025

Verified by
Keith Juedemann
kjuedemann@valleyjoist.com

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

TASKS

My position is lead engineer. I am primarily responsible for the structural design and detailing of open web steel joists and joist girders, mainly used in commercial construction projects. I analyzed project specifications and structural drawings for loading and code requirements, including connection details, roof framing plans, loadings, uplift zone maps, etc. I communicated with my detailers to ensure proper information is used in the joist framing plans and bills of materials.

I reviewed and approved drawings & calculations for production and complied with code standards, customer requests and manufacturing capabilities. In some instances, I designed specialized joist profiles such as scissor joists, double-pitched joists, and field-spliced joists that comply with Steel Joist Institute (SJI) specifications.

I communicated with general contractors and EORs to catch up with project changes, resolve design issues, as well as with steel fabricators and other trades to incorporate special design considerations and collateral loads, and ensure that the joists and joist girders will not be in conflicts with other trades.

When errors occur in the field, I designed and drafted field modification sketches for the stamp engineer to review and approve. I communicated with the customer about the details of the field modifications, and assisted them when they have questions regarding weldments, materials and modification procedures. Similarly, when the customer requests revisions such as tenant improvements and additional loads on joists, I performed analyses on the joists and joist girders to determine their necessary reinforcements.

I am responsible for managing the shop order department and the detailing department. I assisted, assigned work, allocated schedules, and tracked project status. As an active member of the Engineering Practice committee of Steel Joist Institute since August 2022, I attended bi-yearly conferences and participated in drafting of the latest codes and technical digests for the steel joist industry.

REPRESENTATIVE PROJECTS

Working as a design engineer at Valley Joist, I contributed to the completion of hundreds of projects annually. These projects provided me with valuable opportunities to review and analyze structural drawings, giving me insights into design approaches from various trades. The following are selected projects in the field of steel joist and joist girder design and fabrication:

La Paloma Middle School
Moreno Valley, CA
December 15, 2022
Valley Joist was contracted to supply steel roof joists for this middle school. I reviewed the structural drawings and prepared calculations for chord splices, bearing seats, bridging, and top chord axial bar reinforcement for approval by the Division of the State Architect (DSA). I ensured that all calculations and designs complied with the California Building Code. Following DSA's review, I revised the joist placement plans and updated calculations to address their comments.

Scott & Sis Names YMCA
Tacoma, WA
September 25, 2024
I was involved in the detailing and design of the roof joists and bridging for this project. Valley Joist was responsible for manufacturing the roof joists. I reviewed both the structural and architectural drawings and used AutoCAD to set up the building

framing outlines, apply loads, and create connection details. I also drafted RFIs to clarify loading and connection questions with the customer. After the approval of the preliminary plans, I prepared the final joist placement plans for field use and the bill of materials for internal use. My responsibilities included calculating and applying fall arrest loads, net uplift, and additional RTU loads. I also created custom joist profiles to align with the building shape.

After the joists were delivered to the site, the customer reported that one joist was too long due to a masonry wall being placed incorrectly. I responded by drafting a field modification sketch and preparing the necessary calculations for review and stamping by our licensed engineer. The modification involved cutting the top chord and bearing seat, then welding a new bearing seat and end web to the joist.

North Creek Buildings A, B & C
Bothell, WA
March 12, 2025
Valley Joist was contracted to supply hybrid roof steel joists for this project. These wood nailer joists are specialized products commonly used on the West Coast, featuring 2.5" thick shop-installed wood members attached to the top chord of the steel joists. I designed the joist profiles to avoid conflicts with ESFR sprinkler systems and reviewed calculations to ensure compliance with required loading conditions and applicable building codes.

After project completion, the contractor submitted tenant improvement plans involving heavier RTU units. I performed the required calculations and prepared field modification sketches for our licensed engineer’s review and approval.

QUINLAN PARKER (23-104-03)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
08/06/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree

Total Engineering Experience
2 years, 1 month

Experience under licensed engineer
2 years, 1 month

Disciplinary Action
None reported

FE EXAM

PE EXAM

EDUCATION

Bachelors in Engineering Geology
University of California, Los Angeles
September 2018–June 2022

Masters in Civil Engineering
University of California, Los Angeles
September 2022–June 2023

EXAMS

Fundamentals of Engineering (FE)
California
May 2023

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

LICENSES

Additional Licenses
None

QUINLAN PARKER (23-104-03)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

ENGEO
California (United States)
Staff Engineer
July 2023—August 2025

Verified by
Todd Bradford
tbradford@engeo.com

Experience Summary
Full-Time
Engineering: 2 years, 1 month
Experience under licensed engineer: 2 years, 1 month

TASKS

I performed geotechnical site exploration drilling, designed laboratory testing program, performed geotechnical analysis and design recommendations for liquefaction analysis, settlement analysis, static and seismic slope stability analysis, and bearing capacity calculations. I performed on-site observations of temporary shoring installation by cement deep soil mixing and soldier beam installation and relayed engineering details of ongoing field operations to the Project Engineer. I advised contractor of means and methods of temporary shoring installation. I developed geotechnical recommendations for foundation design, earthwork grading, and soil and Mechanically Stabilized Earth retaining wall designs delivered to clients. I was the sole engineer on-site ensuring construction activities confirmed to geotechnical engineering recommendations contained in relevant reports and plans. I reviewed earthwork, foundation, and soil retaining wall plans to ensure compliance with recommendations in the geotechnical report.

REPRESENTATIVE PROJECTS

Project: Cornerstone Church and Chu Properties, Livermore, CA, USA, 2024-2025 - I performed a geotechnical exploration for the proposed residential development project in Livermore, California. The proposed development is a mixed-use site with multi-family homes and a 5-story affordable housing building on a concrete podium foundation. I scoped the subsurface exploration, which was four CPTs and three drilled borings, with one CPT and boring co-located for cross reference. I logged the soil encountered and developed a subsurface profile using the boring logs and CPT data. I determined the laboratory testing program to evaluate select soil samples for their engineering properties, and used them to calculate liquefaction-induced settlement. I calculated liquefaction susceptibility using the methods by Bray and Sancio (2006) and liquefaction settlement by Youd (2001) and Idriss and Boulanger (2008). I performed slope stability analysis with the software Slide2 to analyze static and seismic stability of the creek bank at the site for lateral spread potential. I calculated the appropriate bearing capacity for the design of the 5-story building's spread footings foundations. I wrote the geotechnical report that described our geotechnical findings and design recommendations, including the 5 story building foundation, post-tensioned residential building foundations, retaining wall design, and earthwork.

HEATH PATE (20-997-31)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
07/29/2025

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

Disciplinary Action
None reported

ABET EAC

FE EXAM

PE EXAM

4+

EDUCATION

Bachelors in Environmental Engineering (EAC)
University of Nevada, Reno
August 2016–December 2020

EXAMS

Fundamentals of Engineering (FE)
Nevada
May 2020

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

LICENSES

Additional Licenses
None

WORK EXPERIENCE

Christy Corporation
Nevada (United States)
Staff Engineer
April 2021—July 2025

Verified by
scott christy
scott@christynv.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

As a staff Engineer at Christy Corporation, I have worked under the direction of the senior engineer and principal engineer to complete a range of tasks related to land development. Christy Corporation performs civil engineering services for private clients in residential and commercial applications. My responsibilities as a staff engineer have grown from individual portions of larger tasks to leading overall site design including potable water, sewer, storm water, roadway, and grading design. A majority of my projects begin with the development of a tentative map or administrative review plan set that is put together in coordination with the client and public agencies in which the project is located. Once approved, I lead and assist the team in putting together a complete civil improvement plan set where I prepare AutoCAD Civil 3D drawings, permits and applications, technical specifications, and engineers cost estimates.

My responsibilities typically include creating utility layouts, roadway design, performing hydraulic and hydrologic analysis, designing storm water management systems, and performing grading and drainage design. I regularly coordinate with the client, public agencies, and subconsultants to best incorporate all requests, codes, and regulations into the final design. Additionally, I review geotechnical, hydrology, traffic, master plan reports and incorporate field survey data into design deliverables. Lastly, I provide engineering reports and response letters to support design decisions and permitting.

Outside of design work, I support the client by attending meetings with public regulatory agencies and contractors as part of the review and construction process. Part of the submittal process requires completing and submitting permits and applications needed for construction, including storm water prevention plans (SWPPP), erosion control plans, TMWA applications, NV Energy Applications, and Fire Department Design Applications.

REPRESENTATIVE PROJECTS

(2021–2024) I was involved in the design of utilities for the 5 Ridges Village 1B, a 46-unit townhome development located in Sparks, Nevada. I developed civil improvement plan sheets for potable water, sanitary sewer, storm drain, site layout, erosion control, and fire hydrant/fire access. I incorporated offsite flows from the mass grading design into the storm drain system that runs through the development and outlets into an existing detention pond. I performed hydrologic calculations using the SCS method and modeled hydraulics using StormCAD and FlowMaster. These tools helped me size storm drain pipes and locate catch basins to meet 100-year storm street spread requirements. I ensured compliance with Truckee Meadows Regional Drainage Manual (TMRDM) maximum velocity limits while minimizing pipe depths to reduce construction costs. Additionally, I coordinated and assembled plans for TMWA to retire and relocate existing infrastructure from a nearby water tank and former construction fill station. I completed and submitted the project's hydrology and sewer reports and verified consistency with the corresponding master reports.

(2021–2025) I contributed to the design of utilities and stormwater management for the Silver Hills Development, a two-phase 276-unit subdivision located in unincorporated Washoe County. The project included new collector and arterial roadways, a water storage tank, a lift station, and a transmission main. As part of a master-planned community, the design required careful coordination with future development phases. I led the design of the overall water system, which included 6", 8", 10", 12", 14", and 16" mains made of C900 PVC and C151 ductile iron pipe. I designed vertical offsets to allow the system to cross large storm drain pipes and open channels within the subdivision, collector roads, and transmission main corridor. I also designed temporary grading and drainage improvements along Red Rock Road for partial widening. My design was coordinated with RTC and other engineers in my office to ensure that storm drain mains and lateral connections would be compatible with RTC's future widening project.

As part of the master and Phase 1 hydrology reports, I used the SCS method, HEC-HMS, and FlowMaster to model stormwater runoff from the subdivision, roadway widening areas, and transmission main cutoff channel. I designed a temporary offsite

detention pond to capture and infiltrate offsite runoff from the eastern portion of the project. The pond design referenced geotechnical data and TMRDM criteria. I also coordinated with subconsultants and TMWA to incorporate the pressure-reducing station and sanitary lift station designs into the water and sewer systems. I attended design coordination meetings with Washoe County, TMWA, and the client to address design conflicts, resolve utility layout issues, and represent the engineering team's approach.

(2023–Present) I took over leadership of the civil design for the Print Shop Lofts in Reno, Nevada. This adaptive reuse project converts a former warehouse into 20 loft-style apartment units. I was responsible for the design of a new storm drain inlet, sanitary sewer lateral connection, water service connection, and frontage improvements including new sidewalk along with curb and gutter. I performed hydrologic and hydraulic analyses to select the appropriate pipe size, slope, and alignment for the storm drain system, prioritizing cost-effective solutions to meet both city requirements and client budget. Due to frequent changes in the scope of work, I designed multiple approved alternatives for the sanitary sewer connection. I attended pre-construction meetings with TMWA and the City of Reno and continue to assist the contractor with construction services, including onsite visits and design revisions to resolve field conflicts.

(2024–2025) I was responsible for the preparation and submission of the administrative review plan set for Kiley Ranch Village 36 Duplexes in Sparks, Nevada. The project is medium density development consisting of 142 duplex buildings totaling 284 residential units. I designed the preliminary water system, storm drain layout, sanitary sewer network, site layout, and grading plan. I verified that the design met all relevant planning and zoning regulations and was consistent with city engineering standards. I completed preliminary hydrology and sewer reports that demonstrated conformance with the master reports and existing infrastructure within the Kiley Ranch master-planned community. After attending meetings with the City of Sparks and addressing their comments, the project was approved with conditions.

ELISE PERRY (24-625-08)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
07/29/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
5 years

Total Engineering Experience
5 years

Experience under licensed engineer
2 years, 2 months

Disciplinary Action
None reported

EDUCATION

Bachelors in Electrical Engineering (EAC)
University of Illinois, Urbana Champaign
August 2016–May 2020

EXAMS

Fundamentals of Engineering (FE)
Nevada
January 2025

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

LICENSES

Additional Licenses
None

WORK EXPERIENCE

Micron Technology
Idaho (United States)
Yield Enhancement Engineer
June 2020—April 2023

Verified by
Wayne Benjamin Harlow
wharlow@micron.com

Experience Summary
Full-Time
Engineering: 2 years, 10 months
Post EAC degree: 2 years, 10 months
Experience under licensed engineer: None

TASKS

I recommended improvements to design and manufacturing processes to address complex and recurring equipment and process issues. I conducted detailed statistical analysis, performed calculations, and developed predictive models to identify trends in electrical performance and to trace issues back to specific process steps or tools. I designed and conducted electrical characterization and testing on wafer samples for failure analysis and fault isolation. This involves manually probing, stimulating, and accurately measuring the electrical behavior of failing devices using advanced bench test equipment.
I conducted root-cause failure analysis for end-of-line and inline semiconductor wafers through electrical characterization and high-resolution imaging techniques including SEM (scanning electron microscopy), i-Phemos emission microscopy, Dual-beam FIB, and STEM (scanning transmission electron microscopy) to find root-cause defects and expose physical and structural fabrication defects.
I made recommendations for partner engineering departments including Metrology, Real-Time Defect Analysis, and Process Integration regarding failure analysis expertise. I developed new and custom failure analysis techniques and devised best-known methods to test and diagnose emerging yield issues. I performed correlation studies between inline inspection data and physical failure sites, improved fault isolation by refining test structures and electrical probing techniques, and optimized sample preparation workflows for faster defect localization and increased analysis throughput and efficiency.

REPRESENTATIVE PROJECTS

1. Characterization and Isolation of Manufacturing Arcing Defects (2022)

I reviewed inline inspection data, including optical inspections and E-beam inspections, to detect and flag potential arcing defect patterns, selecting and pulling representative wafers for detailed analysis. An initial preliminary SEM review was conducted to quickly identify surface anomalies and areas exhibiting signs of arcing damage. Following this, I performed thorough cross-sectional physical analysis using SEM (scanning electron microscopy), Dual-beam FIB, and STEM (scanning transmission electron microscopy) to investigate the microstructural and morphological features of the suspected arcing sites.
To further understand the nature of the contamination contributing to the arcing, I conducted elemental analysis using energy-dispersive X-ray spectroscopy (EDS) integrated with STEM. This allowed precise identification of foreign materials or contaminants present at or near the defect sites. Utilizing advanced data-mining and statistical correlation techniques, I then traced the occurrence of these arcing defects back to a specific fabrication tool or process step, enabling targeted corrective actions to mitigate the root cause and improve overall yield.

2. Investigation of Electrical Shorts (2020-2023)

I identified samples for analysis, extracted wafers, and conducted comprehensive electrical characterization. This process includes identifying pattern-dependent issues, electrically stressing the sample, and using specialized bench test platforms to inject precise electrical stimuli and log detailed responses on suspect devices to analyze how the device behaves under various electrical conditions.
I localized failure zones using i-Phemos emission microscopy, which enables detection of photon emission hotspots caused by leakage currents or shorts. These emission maps guide targeted cross-sectional analysis by highlighting defect-rich regions. Following localization, I performed in-depth physical failure analysis through SEM (scanning electron microscopy), Dual-beam FIB (focused ion beam), and STEM (scanning transmission electron microscopy) to visualize and identify microscopic defects, such as defective gate oxide breakdown, metal bridging, stringer defects, and particle-induced or contamination-related electrical shorts.
Finally, I correlated these physical defects with process data using advanced statistical tools and data-mining techniques. This analysis helped isolate root-cause defects to specific fabrication steps or tools, enabling targeted process improvements to reduce

yield loss and enhance device reliability.

3. Investigation of Electrical Opens (2020-2023)

I identified samples for analysis, extracted wafers, and conducted comprehensive electrical characterization. This process includes identifying pattern-dependent issues, electrically stressing the sample, and using specialized bench test platforms to inject precise electrical stimuli and log detailed responses on suspect devices to analyze how the device behaves under various electrical conditions.
Following localization, I performed in-depth physical failure analysis through SEM (scanning electron microscopy), Dual-beam FIB (focused ion beam), and STEM (scanning transmission electron microscopy) to visualize and identify microscopic defects, such as incomplete contact fill, voids, metal line breaks, or delamination.
Finally, I correlated these physical defects with process data using advanced statistical tools and data-mining techniques. This analysis helped isolate root-cause defects to specific fabrication steps or tools, enabling targeted process improvements to reduce yield loss and enhance device reliability.

WORK EXPERIENCE

City of Reno
Nevada (United States)
Senior Engineering Technician
May 2023—July 2025

Verified by
Justin George
GeorgeJ@reno.gov

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

TASKS

I designed and reviewed engineering plans and specifications for projects to ensure compliance with City policies/standards and industry standards, such as the Standard Specifications for Public Works Construction, NDOT Standard Plans for Road and Bridge Construction, International Building Code, National Electric Code, and the International Energy Conservation Code.

I reviewed traffic control plans for compliance with City policies/standards, project special provisions, and MUTCD.

I performed field inspections, prepared reports, and reviewed/provided comments on testing results for street rehabilitations, curb/gutter replacement/installations, sidewalk replacement/installations, restroom installations, new buildings, building demolition and renovations, new traffic sign/signal installation.

I commissioned and tested building facilities to ensure compliance with standard codes, project specifications, and industry standards such as ASHRAE, NEC, and IBC.

I reviewed project submittals, RFIs, and change orders for compliance with contract documents and compared costs to current industry costs.

I calculated pedestrian clearances to allow safe crossings in newly constructed signalized intersections.

I analyzed crash data to isolate hazardous intersections within the City of Reno. I wrote macros to evaluate RPD crash data for type, severity, and frequency. This was then encoded into GIS for visualization.

I calculated traffic flow capacities along principal arterials to determine the feasibility of allowing lane closures for work zones.

I designed signal timing to coordinate Pedestrian Hybrid Beacons with adjacent intersections to reduce vehicular delay for the 2nd Street mid-block PHB and adjacent signalized intersections.

I reviewed, researched, and provided solutions to service requests and inquiries from constituents regarding traffic calming, intersection sight distances, school zone markings/signs, signal design/warrants, stop control warrants, traffic control devices, and signage/markings. This included ensuring compliance with all traffic standards/codes, including PROWAG, MUTCD, AASHTO Green Book, AASHTO Roadside Design Guide, Highway Capacity Manual, and NCHRP Signal Timing Manual.

REPRESENTATIVE PROJECTS

1. ARPA Truckee Riverpath Lighting Improvements (2024-2025)

I designed engineering plans for lighting, electrical connections, base, sidewalk, and asphalt
I prepared project documents and specifications for asphalt, base, sidewalk, curb/gutter, and traffic device installation.
I performed construction administration duties including daily site inspections, attending regular meetings with consultants and architects, reviewing and answering requests for information and submittals during construction to ensure compliance with all codes, local standards, and project plans and specifications.
I reviewed and approved field design changes in collaboration with contractors, consultants, other groups within the City of Reno
I reviewed costs/change orders and schedules to ensure compliance with contract documents and verify that costs are reasonable and justified and compared costs to current industry standards.

2. Moana Springs Community Aquatic and Fitness Center (2023-2025)

I performed construction administration duties including daily site inspections, attending regular meetings with consultants and architects, reviewing and answering requests for information and submittals during construction to ensure compliance with all codes, local standards, and project plans and specifications.
I reviewed and approved field design changes in collaboration with contractors, consultants, other groups within the City of Reno
I conducted preliminary field work for street rehabilitations, curb/gutter replacement/installations, parking lot grading, asphalt installation, parking lot striping, sidewalk replacement/installations, restroom installations, new buildings, new traffic sign installation, renovations of existing traffic signals.
I reviewed costs/change orders and schedules to ensure compliance with contract documents and verify that costs are reasonable and justified and compared costs to current industry standards.
I commissioned and tested building facilities to ensure compliance with standard codes, project specifications, and industry standards such as ASHRAE, NEC, and IBC. This included testing pool and mechanical pumps, boilers, AHUs, VFDs, fan coils, reviewing test and balance, verifying electrical grounding for building and pool systems, reviewing insulation resistance tests, and verifying correct phasing and wiring connections.
I conducted construction punch walks, documented punch list items, tracked their progress to completion, and verified that all issues were resolved to meet quality standards and compliance with all codes, local standards, and project plans and specifications. This involved architectural, mechanical, plumbing, electrical, and pool issues.

3. Public Safety Center (2023-2025)

I performed construction administration duties including daily site inspections, attending regular meetings with consultants and architects, reviewing and answering requests for information and submittals during construction to ensure compliance with all codes, local standards, and project plans and specifications.
I reviewed and approved field design changes in collaboration with contractors, consultants, other groups within the City of Reno
I conducted preliminary field work for street rehabilitations, curb/gutter replacement/installations, sidewalk replacement/installations, parking lot grading, asphalt installation, parking lot striping, building renovations, building demolition, and new traffic sign installation.
I reviewed costs/change orders and schedules to ensure compliance with contract documents and verify that costs are reasonable and justified and compared costs to current industry standards.
I commissioned and tested building facilities to ensure compliance with standard codes, project specifications, and industry standards such as ASHRAE, NEC, and IBC. This included testing mechanical pumps, boilers, AHUs, VFDs, fan coils, reviewing test and balance, verifying electrical grounding for building systems, reviewing insulation resistance tests, verifying correct phasing and wiring connections, and testing security systems for the police facility.
I conducted construction punch walks, documented punch list items, tracked their progress to completion, and verified that all issues were resolved to meet quality standards and compliance with all codes, local standards, and project plans and specifications. This involved architectural, mechanical, plumbing, and electrical issues.

4. Rectangular Rapid Flashing Beacon (RRFB) Evaluation of Locations at Arlington Ave (2025)

Determined if crosswalk locations met conditions and requirements provided in MUTCD.
Designed the RRFB package required for locations, including signage and placement to comply with MUTCD and PROWAG requirements.
Determined timing of RRFB flashers to ensure flashers were activated for the proper duration to ensure safe pedestrian crossing.

DYLAN YORO (22-348-66)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
07/26/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
3 years, 1 month

Total Engineering Experience
5 years, 7 months

Experience under licensed engineer
5 years, 7 months

Disciplinary Action
None reported

ABET EAC · FE EXAM · PE EXAM · 4+

EDUCATION

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

EXAMS

Fundamentals of Engineering (FE)
Nevada
January 2022

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

LICENSES

Additional Licenses
None

WORK EXPERIENCE

NOVA Geotechnical & Inspection Services
Nevada (United States)
Student Intern
May 2018—June 2020

Verified by
Blake Douglas Carter
blake@westexconsulting.com

Experience Summary
Part-Time
Engineering: 7 months (25%)
Experience under licensed engineer: 7 months

TASKS

25% Engineering – I was responsible for performing concrete compressive strength tests, sieve analyses, maximum dry density and optimum moisture content tests (Proctors), as well as Plasticity Index and Liquid Limit tests. In the field, I conducted concrete sampling and testing—including slump, air content, temperature, and unit weight—as an ACI Concrete Field Testing Technician Grade I. I also managed the transport and proper curing of samples in the lab. Additionally, I edited and distributed the inspector's Daily Field Reports.

REPRESENTATIVE PROJECTS

Vu at MacDonald Highlands (May 2018 – August 2018)
This project included multi-level luxury residences in Henderson, located near Serenity Point Drive and Tranquil Peak Court. I was responsible for performing field concrete tests—including slump, temperature, air content, and unit weight—to verify mix compliance before placement. (Received ACI Concrete Field Testing Technician Grade I certification.)

Northern Nevada Sierra Medical Center (December 2019 – June 2020)
This project involved the construction of a hospital at Longley Lane and Double R Boulevard in Reno. I assisted with mild steel reinforcement inspections and structural steel inspections. I also collected grout and concrete samples in the field and performed compressive strength tests once the samples had cured.

Laboratory Work (August 2018 – December 2019)
In the lab, I performed concrete compressive strength tests, sieve analyses, and Plasticity Index tests. I also conducted maximum dry density and optimum moisture content tests (Proctors) across a variety of projects.

DYLAN YORO (22-348-66)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Wood Rodgers
Nevada (United States)
Assistant Engineer
June 2020—January 2025

Verified by
Jesse Jay Patchett
jpatchett@pdg-nv.com

Experience Summary
Full-Time
Engineering: 4 years, 7 months
Post EAC degree: 2 years, 8 months
Experience under licensed engineer: 4 years, 7 months

TASKS

100% Engineering - The major branch of Civil Engineering I am worked in is Land Development. I was responsible for analyzing onsite and offsite drainage by developing technical drainage studies. I was responsible for analyzing the existing and proposed water networks of the onsite domestic and fire water systems by developing water network analyses. I was responsible for designing the onsite and offsite utilties, grading, roadway improvements and developing the entire civil improvement plan set. I used software such as HEC-1, FlowMaster, WaterCAD, and AutoCAD Civll 3D.

I started off as an intern, then got promoted to a civil designer, and then was promoted to Assistant Engineer. As an intern I designed smaller portions of the grading and utility designs but within 3 months I was given more and more responsibility for the entirety of the civil design. I was then promoted to a Civil Designer, where I designed and developed the entire civil improvement plans and studies for the projects I worked on. I then became an assistant engineer where I designed and produced the entire civil improvement plans which include grading, roadway, and utility design, but I also reviewed the designs of our intern and other staff.

REPRESENTATIVE PROJECTS

Hopewell Lamb Cheyenne Warehouse (June 2020-October 2024)
Industrial warehouse on 5 acres in the City of North Las Vegas. I designed/developed the civil improvement plan set. I analyzed the domestic and fire water systems for the project with a water network analysis to ensure adequate pressure requirements were met. I also analyzed and designed the exhibits for the construction RFIs.

Hopewell Tropical and Shatz Warehouse (December 2020-August 2022)
Industrial warehouse on 5 acres in Clark County at the southeast corner of Tropical Parkway and Shatz Street. I analyzed the onsite/adjacent offsite drainage by completing a Technical Drainage Study. I analyzed the onsite domestic and fire water systems with a Water Network Analysis to ensure adequate pressure requirements were met. I designed/developed the civil improvement plan set. I designed the sewer, water, and designed the site grading for drainage and ADA requirements.

West Las Vegas Library (June 2022-February 2024)
Library on 5 acres in the City of Las Vegas southwest of the intersection of Mount Mariah Drive and Martin Luther King Boulevard. I designed/produced the civil improvement plan set. I analyzed the onsite domestic and fire water systems with a Water Network Analysis to ensure adequate pressure requirements were met. I designed/developed the civil improvement plan set to be reviewed/approved by the local agencies. I designed the sewer, water, and designed the site grading for drainage and ADA requirements.

Enterprise Torrey Pines (June 2022-June 2024)
Rent-a-Car facility in Clark County on 5 acres northwest of the intersection of Rafael Rivera and Torrey Pines. I designed/produced the civil improvement plan set. I analyzed the onsite domestic and fire water systems with a Water Network Analysis to ensure adequate pressure requirements were met. I designed and developed the civil improvement plan set to be reviewed/approved by the local agencies. I designed the sewer, domestic/fire water systems, onsite stormdrain and designed the site grading for drainage and ADA requirements.

Earl B. Lundy Elementary School Site Assessment (May 2023-July 2023)
Existing developments were damaged during a flash flood event at Mt. Charleston. I analyzed the site to determine the existing drainage system and failures associated with the system. I calculated the cost estimate for the restoration of the school site. I designed the grading plan to restore the site to its previous condition.

LMG Warehouse (October 2023-October 2024)

Industrial warehouse on 4 acres in Clark County. I designed/produced the civil improvement plan set. I analyzed the onsite domestic and fire water systems with a Water Network Analysis to ensure adequate pressure requirements were met. I designed/developed the civil improvement plan set to be reviewed/approved by the local agencies. I designed the sewer, domestic water system, fire water system and designed the site grading for drainage and ADA requirements.

Clearwater LV4 (December 2023-December 2024)
280,000 square foot industrial warehouse on 37 acres in the City of North Las Vegas. I designed/produced the civil improvement plan set. I analyzed the onsite domestic and fire water systems with a Water Network Analysis to ensure adequate pressure requirements were met. I designed and developed the civil improvement plan set to be reviewed/approved by the local agencies. I designed the sewer, domestic water, fire water and designed the site grading for drainage and ADA requirements.

Los Flores Civica Phase III (May 2024-January 2025)
11-acre site for a phased charter school. I designed/produced the civil improvement plan set. I analyzed the onsite domestic and fire water systems with a Water Network Analysis to ensure adequate pressure requirements were met. I designed and developed the civil improvement plan set to be reviewed/approved by the local agencies. I designed the sewer, water, and designed the site grading for drainage and ADA requirements.

Lake Mead Multi Use (April 2024-January 2025)
5-acre site for a commercial building and 4 apartment buildings. I designed/produced the civil improvement plan set. I analyzed the onsite domestic and fire water systems with a Water Network Analysis to ensure adequate pressure requirements were met. I designed and developed the civil improvement plan set to be reviewed/approved by the local agencies. I designed the sewer, domestic/fire water systems, and designed the site grading for drainage and ADA requirements.

DYLAN YORO (22-348-66)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Patchett Design Group
Nevada (United States)
Assistant Project Manager
February 2025—July 2025

Verified by
Jesse Jay Patchett
jpatchett@pdg-nv.com

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

TASKS

100% Engineering - The major branch of Civil Engineering I am working in is Land Development. I am responsible for designing the onsite and offsite utilities, grading, roadway improvements and developing the entire civil improvement plan set for commercial and/or industrial site civil work. I use software such as HEC-1, FlowMaster, WaterCAD, and AutoCAD Civil 3D. I am an assistant project manager and I design/produce the entire civil improvements plan set and also review the designs of other staff.

REPRESENTATIVE PROJECTS

Enterprise Windmill (2025)
Rent-a-car facility on 3.91 acres in Clark County at the northeast corner of Windmill Lane & Placid Street. I designed and produced the civil improvement plan set. I designed the sewer, water, and site grading for drainage and ADA requirements.

Henderson Community Ambulance (2025)
Community Ambulance facility on 6 acres in the City of North Las Vegas east of the Via Nobila & Via Centro. I designed and developed the civil improvement plan set including sewer, water, and site grading design for drainage and ADA requirements.

Rock Springs Bliss Car Wash (2025)
Carwash building on 1.11 acres in the City of Las Vegas north of Rock Springs Drive & Lake Mead Blvd. I designed & developed the civil improvement plan set including sewer, water, & site grading.

Ann & N 5th Bliss Car Wash (2025)
Carwash building on 1.82 acres in the City of North Las Vegas. I designed & developed the civil improvement plan set including sewer, water, storm drain & site grading.

Tradewinds Apartments (2025)
200 unit apartment building complex on 4.19 acres in the City of North Las Vegas. I designed & developed the utility plan and layout for the entitlement submittal.

Bright Angel Way & Michelli Crest Way (2025)
Two custom residences on 2.06 acres in Clark County. I designed & developed the civil improvement plan set including sewer, water, & site grading.

RSD Warehouse (2025)
Industrial warehouse on 1.91 acres in Clark County near Russell Road and Rogers Street. I designed and developed the civil improvement plan set including sewer & water design and well as site grading for drainage & ADA requirements.

Circle K (2025)
Circle K convenient store on 2.16 acres in Clark County. I analyzed the onsite and adjacent offsite drainage by completing a Technical Drainage Study update.

Sahara Demolition (2025)
Demolition of an existing building near Sahara Ave and Commercial Center on 1.03 acres in Clark County. I developed the civil demolition set for agency review.

Electrical

KYLE KING (23-102-92)

All work experience reviewed by two licensed professionals

DISCIPLINE: ELECTRICAL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
07/17/2025

Citizenship
Canada

SUMMARY

Engineering Experience after EAC degree

Total Engineering Experience
7 years, 11 months

Experience under licensed engineer
2 years, 7 months

Other Experience
1 year, 11 months

Disciplinary Action
None reported

FE EXAM

PE EXAM

NCEES EDU

4+

EDUCATION

Meets NCEES Engineering Education Standard

Bachelors in Electrical Engineering
Memorial University of Newfoundland
September 2006–June 2012

EXAMS

Fundamentals of Engineering (FE)
Nevada
April 2025

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

LICENSES

Additional Licenses
None

WORK EXPERIENCE

Nalcor Energy
Newfoundland and Labrador (Canada)
Work Term V Engineer
May 2010—April 2011

Verified by
Robert John Moulton
bobmoultonxyz@gmail.com

Experience Summary
Part-Time
Engineering: 9 months (75%)
Experience under licensed engineer: None

TASKS

I completed two work terms at Nalcor energy during the period from May of 2010 until April of 2011. This was approximately eight (8) months of full-time employment.

My first work term consisted of the following activities:

-Various safety training events (First Aid; Fall Arrest; Confined Space) necessary for time at job site
-Several weeks on site during the Stator Rewind of Unit 2 (hydrogenator)
-Authoring and presenting a summary of the Stator Rewind job (focusing on safety, how the work was completed, and issues that needed to be mitigated) to the Engineering team
-Research into the existing specs of a DC Excitation System for a hydrogeneration turbine
-Writing the draft spec to replace the existing DC Exciter for the abovementioned hydrogenator

My second work term consisted of the following:
-Learning to code in Java
-Learning SQL syntax and how to utilize a MySQL server within a Java environment
-Updating and expanding an existing application that modeled all of the Isolated Diesel Plants that Nalcor owned and operated, complete with historic data and highly customizable inputs

REPRESENTATIVE PROJECTS

Both of my Nalcor work terms were comprised of mostly or entirely a single project each.

During my first work term at Nalcor, I spent the majority of my time locating data that were needed to write the draft spec to replace the DC Excitation System for Unit 4 in the Bay D'Espoir (BDE) hydrogeneration plant. I searched through 10's of filing cabinets in the main Nalcor office building and the BDE plant. Every time that a piece of information that was needed was located, I recorded the data in the draft spec document and created a citation for the exact location of the document and the date the information was located. I searched through various digital directories as well. When digital data were located, I would again record the information in the draft spec document and create a citation for where the information was located, including the date and time the information was accessed. When possible, I saved a local copy of the document on my work computer. The end result of my work on this project was a completed draft specification document for the replacement of the DC Excitation System of Unit 4 in the BDE hydrogeneration plant, complete with an exhaustive set of citations.

During my second work term at Nalcor Energy, I worked almost exclusively on a single project: Improving the existing Isolated Diels Plant Simulator. I learned how to write code using Java, and I learned the syntax to read and write data in a MySQL server. I wrote Java code to perform quadratic regression to determine the fuel efficiency curve for each of the diesel generators in Nalcor's fleet. I reviewed the existing code and documented bugs. I fixed as many bugs as I could before the end of my work term. I wrote a report on the progress that was made on the application, and areas that require additional effort to add desired functionality. I compiled the Java code into a stand-alone application that could be launched on any computer within Nalcor's network to allow simulations to be run. The end result of my work during this period was that the application had greatly improved functionality, many less bugs, a thorough report on the current state of the application, my suggestions on how to proceed in the future to add functionality, and how to use the application.

WORK EXPERIENCE

Memorial University of Newfoundland
Autonomous Underwater Vehicle Labratory
Newfoundland and Labrador (Canada)
Work Term VI Engineer
September 2011—December 2011

Verified by
Nathan Smith
nathan.njs@gmail.com

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

TASKS

I worked primarily as a Controls Engineer on an Autonomous Underwater Vehicle (AUV) on a Research and Development project.

-Determine an objective ranking of the metrics that the AUV should exhibit in an Under-Damped Response to its PID controllers'
-Research tuning methodologies for PID and Modified PID controllers
-Develop plan to tune the controllers of the AUV
-Create a spec for an uninterruptable power supply (UPS) that would provide enough energy to issue a command for the AUV to return, and to shutdown the computer in the event of a power outage. UPS was to be installed in a Pelican Case
-Learn how to Telnet / SSH into the AUV in order to issue commands to the vehicle via Acoustic Ethernet Modem

REPRESENTATIVE PROJECTS

The main project I worked on during this work term was tuning several PID and Modified PID controllers on the AUV. To accomplish this, I first had to determine an objective ranking of response characteristics (Rise Time, Overshoot, Settling Time, etc.) for the AUV. Once the ranking of traits was established, I began researching various methods to tune the P, I & D gains on the controllers. I settled on an iterative Trail-And-Error tuning method, where the AUV would be sent out with a mission to dive to a given depth at a given speed, maintain that depth and speed for several minutes, turn back while maintaining depth and speed, and surface. Once the vehicle had surfaced, I downloaded and analyzed the mission data, and tuned a single gain, starting with the gain that was deemed to be least important. I planned on tuning a single gain until the corresponding response characteristics were acceptable, then moving on to the next gain. Once all three gains were tuned, I planned to check if any unacceptable response characteristics now existed and beginning the process again (repeating the process for each controller turned out to not be necessary). I repeated this process until all of the characteristics of the response were acceptable for the AUV while traveling at a speed of 1.5m/s; I recorded all of the controllers' settings for the AUV when traveling at 1.5m/s. I then ran a similar mission with the speed set at 1.0m/s. I determined that the vehicle could not be operated at 1.0m/s as the AUV would over-pitch while trying to reach the desired depth due to the fact that the AUV was designed to float if not moving through the water. I then ran another mission with the speed set at 1.2m/s and determined that the vehicle could operate at that speed. I repeated the same iterative process of Trial-And-Error to tune the PID controllers for the vehicle while traveling at a speed of 1.2m/s, and recorded the final settings for all of the controllers for a speed of 1.2m/s. Once this was completed, I ran several different mission types - maintain altitude (height above seafloor), trace a grid of the seafloor, etc. These missions were run for both 1.2m/s and 1.5m/s. The end result of my work on this project was that the vehicle had two sets of gain values for each controller - one for when the vehicle is to travel at 1.2m/s and one set for 1.5m/s. The sea trials were scheduled to take six weeks but were fully completed in less than five weeks.

WORK EXPERIENCE

Parallel Services
Newfoundland and Labrador (Canada)
Designer
July 2013—June 2014

Verified by

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

DESCRIPTION

WORK EXPERIENCE

NOCLand
Newfoundland and Labrador (Canada)
NOC Specialist
January 2015—January 2016

Verified by

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

DESCRIPTION

KYLE KING (23-102-92)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

RothLochston
Newfoundland and Labrador (Canada)
Project Coordinator
May 2016—August 2016

Verified by
Chris Spencer
chris.spencer@nsainc.ca

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

TASKS

-Procurement, supply chain, and logistics management
-Created and maintained progress reports for various projects
-Meetings with client to ensure work was progressing in a satisfactory manner, and any potential issues were found early and solved
-Creation of Work Packages for upcoming work
-Travelled to various work sites on as-needed basis to supervise / manage workers, and/or to deliver materials that were urgently needed

REPRESENTATIVE PROJECTS

I mainly worked at the Long Harbour Nickle Processing Plant when it was under construction in the summer of 2016. I ensured electrical materials were arriving before they were needed; this was a constant endeavor. I would speak daily with multiple vendors, my immediate supervisor, and various members of the construction and engineering teams to ensure I had enough materials on-hand for work that was coming up over the next few days. Occasionally, a supplier would notify me that they were now unable to supply the materials for which they had previously provided me with a quote. When these materials were needed urgently, I would work with others (Teamsters, other vendors, and my supervisor) to ensure that I was able to provide a way to proceed with the work on time. The end result of my work was that there were no delays on any of the construction that I was working on; the electrical construction had the highest Performance Factor for any discipline on the project while I was on the Long Harbour project.

WORK EXPERIENCE

Great North Data
Newfoundland and Labrador (Canada)
Deputy Director of Operations
January 2017—August 2019

Verified by
James BW Goodwin
jgoodwin@hickslemoine.ca

Experience Summary
Full-Time
Engineering: 1 year, 4 months (50%)
Experience under licensed engineer: None

TASKS

When I began at Great North Data (GND), I was hired as a Client Support Specialist. I was briefly promoted to the In-House Electrical Engineer, and again promoted to the Deputy Director of Operations.

-Receipt, installation, and maintenance of clients' hardware
-Frequently worked alone during installation, configuration, and troubleshooting of clients' hardware
-Created and maintained databases of clients' hardware on company's properties
-Regularly modified the physical boundaries of the Cold Aisles and the Exhaust Aisle to maximum hardware uptime throughout the year

-Attended multiple meetings with GND executives and Engineering Services providers to ensure GND's requirements were being met
-Reviewed Nalcor Energy's plan to supply additional power capacity to the Labrador West area (needed to understand how to best expand the business)
-Created reports for management to report on status of ongoing projects
-Material procurement / supply chain management for expansion projects

-50% of my time at GND was spent on Engineering work.

REPRESENTATIVE PROJECTS

In Q2 of 2017, GND was rapidly expanding and adding client hardware to our networks. I created accurate and timely inventory of all deliveries to ensure that one client's hardware was not confused with that of another client. Once I had partitioned various clients' equipment, I triaged getting the equipment online as quickly and safely as possible, while ensuring the three-phase power distribution in our facilities remained as close to balanced as was reasonably possible. I also had to ensure that the hardware was installed in a manner that minimized leakage airflow from the Exhaust Aisle back into the Cold Aisles. As the summer progressed, I identified the need to add physical barriers in the existing air gaps to completely isolate the Exhaust Aisle from the Cold Aisles. The end result of my work was that all of our clients' machines were put online in as timely a manner as was permittable, uptime was maximized, and accurate databases of our clients' equipment were created and maintained. This work was an ongoing project from Q2 of 2017 until Q2 of 2019.

As GND was expanding, I had to work with vendors to determine the lead-time until construction could begin. I routinely sought multiple quotes from multiple vendors in order to determine the best vendor to use for a given project. Depending on the difference in lead-times, I occasionally recommend purchasing a more expensive package due to the fact that it would allow construction to begin months earlier than the lowest up-front cost option. I assisted in determining cable tray routes, cable routes, and panel schedules. The end result of my work was that the best vendor was selected to provide GND the needed materials to begin construction, and the materials were delivered to GND facilities on time.

WORK EXPERIENCE

Hatch
Newfoundland and Labrador (Canada)
Electrical Field Engineer
July 2019—May 2022

Verified by
Jeff Snook
jeff.snook@hatch.com

Experience Summary
Full-Time
Engineering: 2 years, 10 months
Experience under licensed engineer: None

TASKS

I worked as a Field Engineer on a construction project on a remote mine site.

-Created & maintained Engineering Change Notices
-Semi-regularly ran daily meetings with contractors to review state of ongoing work, resolve issues, etc.
-Review electrical designs; fix issues as needed
-Redline drawings; created and maintained field sketches
-Power distribution design; create and maintain associated documents
-Field visits to see state of ongoing work and identify path forward on issues
-Design power feeds and distribution to new dormitories
-Worked closely with Quality Assurance, Commissioning, Construction, Design, and Engineering teams
-Mentored work-term students and reviewed their work

REPRESENTATIVE PROJECTS

I reviewed the state of the "temporary temporary" (meaning very short term) distribution network that was installed at Dump 4 at the Voisey's Bay mine site in northern Labrador. I began this work in Q4 of 2019 and continued working on this until Q2 of 2022 when the project was completed. After I visited Dump 4 to document the existing distribution design, I created a block diagram for internal use to help me identify how to proceed. I reviewed the specifications for the transformer that was to be used for the temporary Dump 4 power distribution network. Based on the load growth that had already occurred at Dump 4, I recommended revising the design to allow the potential of further load growth. When the design was finalized, I worked with the construction team to ensure the design was followed. The result of my work was that Dump 4 went from being powered by an isolated diesel generator to being connected to the power grid at the mine site.

During Covid, the price of raw materials increased dramatically. Due to this fact, the need for additional dormitories on-site was identified. I worked with the Civil, Electrical, Mechanical, and Structural engineers beginning in Q3 of 2020 to identify various locations that new dorms could be added. Once the exact locations of the dormitories were identified, I had to design routing for power to each of the new dorms, and design all auxiliary power circuits (heat trace, outside lights, etc.). The routing included finding a piece of switchgear that had spare ampacity to draw from, sizing the cables, sizing the transformers, dealing with road crossings, and determining if voltage drop would be an issue for any individual dorm. When this project concluded in Q3 of 2021, the end product that was delivered was accommodations for an additional 300+ for workers to reside in while on site.

KYLE KING (23-102-92)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Nevada Gold Mines
Nevada (United States)
Electrical Engineer I
September 2022—May 2023

Verified by
Luis Guillermo Cruz Negron
luis.cruz@nevadagoldmines.com

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

TASKS

I worked as an Electrical Power Engineer in the Mining sector.

-Power transmission and distribution on a mine site, focusing mainly on Low and Medium Voltages
-Load forecasting for multiple mine sites
-Planning & budgeting for infrastructure additions / upgrades
-Factory Acceptance Testing for Multi-Switches and Power Distribution Centers
-Worked with Maintenance and Reliability technicians to investigate transformers and motors that may have needed thorough maintenance (IR and vibration measurements were taken to determine the state of the equipment)

REPRESENTATIVE PROJECTS

Upon starting my position at Nevada Gold Mines (NGM), I was asked to audit the existing electrical infrastructure at the Turquoise Ridge / Twin Creeks mine site. I began this work in Q4 of 2022 and continued until I left NGM (Q2 of 2023). I audited parts of the NGM electrical system, ranging from tracing overhead transmission lines to documenting electromechanical relay settings. When one segment of the transmission line reached its end, I would go into the nearby E-House and get as much data as was possible at that moment, and document data that we would need to gather when the relevant pieces of equipment were deenergized. The result of my work was a large but incomplete set of data on the existing state of the electrical infrastructure at the mine.

WORK EXPERIENCE

Ormat Technologies
Nevada (United States)
Electrical Engineer
June 2023—April 2024

Verified by
Chad Parker
cparker@ormat.com

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

TASKS

I worked as an electrical engineer in the Power Generation sector.

-Created specifications for a set of spare Generator Step-Up transformers (GSUs). The set of transformers needed to be able to allow at least one GSU to be installed in any of a larger set of plants, with a variety of generation and transmission voltages. Minimizing the cost of the transformers was a major concern.
-Updated multiple sets of drawings as part of projects that involved infrastructure upgrades at various plants. Drawings included Protection and Control, Single- and Three-Line Diagrams, and other electrical drawings. A senior electrical engineer approved of the drawings, then drawings were sent to the relevant teams (plant technicians and document controllers).
-Job-shadowing technicians and plant operators at various plants. I got to see some day-to-day maintenance and operation activities, some annual (and less frequent) maintenance, and assist with regular tasks (line flushing, gate operation, etc.).
-Reviewed pictures taken by others and existing electrical drawings of a plant and its associated substations for regulatory requirements (FAC-008). This procedure is used to identify the most-limiting and second most-limiting elements of a power plant that is a part of the Bulk Electric System (BES). A senior electrical engineer addressed questions I had on the exact requirements for this procedure. Once I had all the elements added for FAC-008, I was asked to add some additional elements for an additional regulatory process (PRC-005), as there is significant overlap between these two procedures.

Assuming the job-shadowing does not count as engineering work, 95% of my time at Ormat was spent on engineering work.

REPRESENTATIVE PROJECTS

I attended ETAP training for Arc Flash and Arc Fault modeling. After the week of training in Q4 of 2023, I went to multiple sites between Q4 of 2023 and Q1 of 2024 and gathered site data (including pictures and videos) that I then used to update the existing model for the relevant plant. Data gathered included the make and model of all electrical equipment, relay settings, nameplate ratings for: transformers; motors; motor control centers; breakers; and conductor lengths from source to destination for all relevant cables and wires. I completed the modeling for one plant (Heber II, located in southern California) and began my Findings Report for the model. The product of my work on this project was a model in ETAP of the Heber II plant that was ready for a senior engineer to review.

KYLE KING (23-102-92)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

DOWL LLC
Nevada (United States)
Electrical Design Engineer
May 2024—June 2025

Verified by
Philip Richard LeGoy
plegoy@dowl.com

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

TASKS

I am currently working as an Electrical Design Engineer at an Engineering Services company, primarily in the Water / Waste Water sector.

-Review existing designs in their current state (35%, 60%, 75%, 90% design sets)
-Redline drawings
-Work with Drafters to update drawings
-Site visits to document the state of the current infrastructure and gather information
-Record and distribute Meeting Minutes
-Holistically design Power Distribution systems, including everything from panel and breakers' sizes to voltage drop calculations and conduit fill ratios
-Work with Senior Electrical Engineers to ensure my work is acceptable

REPRESENTATIVE PROJECTS

On June 19th, 2024, I traveled from our office to a site approximately one hour away to meet with clients and determine the scope of the work that I needed to complete. I took measurements and notes on where an emergency generator was to be installed. I asked the clients questions regarding the orientation of the generator, where the exhaust should be directed, if there would be issues due to the proximity to residential houses, etc. I modified the existing drawing of the site to include the generator pad, conduit runs, number of cables and sizes, and other relevant electrical details based on the information gathered during my site visit. I created a Materials List for the work, including quantities and units ("feet"; "each") for all of the wires and cables, as well as the conduit and conduit 90's. Due to the time restraints the clients informed me of, I made this work a priority and was able to meet the deadline that was provided. The end result of my work on this task was that the clients were sent a complete set of electrical documents on time and on budget.

Fire Protection

MOHAMMAD MEHDI (16-827-33)

All work experience reviewed by two licensed professionals

DISCIPLINE: FIRE PROTECTION

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
08/15/2024

Citizenship
India

SUMMARY

Engineering Experience after EAC degree

Total Engineering Experience
20 years

Experience under licensed engineer
None

Disciplinary Action
None reported

EDUCATION

Meets NCEES Engineering Education Standard

Bachelors in Civil Engineering
Indian Institute of Technology - Kanpur
August 2004–December 2008

WAIVER REQUEST:NRS 625.183, item 4, part b, “Two of the 4 years of active experience must have been completed by working under the direct supervision of a professional engineer who is licensed in the discipline in which the applicant is applying for licensure, unless that requirement is waived by the Board”

EXAMS

Fundamentals of Engineering (FE)
AUS
April 2018

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

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

LICENSES

Initial License
Nevada CE
Issued: January 2025
Expires: December 2025

Additional Licenses
None

WORK EXPERIENCE

Strada Infrastructure Private Limited
Delhi (India)
Site Supervisor
June 1999—July 2004

Verified by
Kaneez Fatma
drkaneezfatma24@gmail.com

Experience Summary
Full-Time
Engineering: 5 years, 1 month
Experience under licensed engineer: None

TASKS

As a Site Supervisor at my father's organisation, I performed the following engineering-related tasks to ensure quality and compliance:
Site Supervisor l Strada Infrastructure Pvt Ltd], India
(June 1999 – July 2004)

1. Raheja Residential Project (1999–2002):

I reviewed and verified shop drawings, specifications, and fire protection system installations against NFPA/NBC codes, ensuring design compliance.
I performed engineering calculations for hydrostatic pressure tests and functional checks, analyzed test results, and approved system commissioning.
I coordinated with engineers to resolve discrepancies in IFC drawings and ensured safety standards were met during swimming pool mechanical system installations.

2. Sewage Pipeline Works (2002–2004):

I monitored pipe alignment and slope using a total station, ensuring adherence to engineering drawings and hydraulic requirements.
I reviewed design packages for precast chambers, conducted pressure tests, and verified effluent quality (BOD < 30 mg/L) at the WTP.
I calculated the invert levels using total station.
I resolved installation issues with contractors and inspectors, ensuring zero blockages post-commissioning.

REPRESENTATIVE PROJECTS

Representative Projects
1. Raheja Residential Project
Location: Gurgaon, India
Duration: 1999–2002

Project Overview:
This mixed-use residential development included six high-rise towers, a community center, and a food court on a 2.5-acre site. My responsibilities centered on fire protection systems, wet chemical suppression for commercial kitchens, and swimming pool mechanical systems.

Key Engineering Contributions: Reviewed and approved shop drawings for fire protection systems (sprinklers, hydrants, alarms), ensuring compliance with NFPA/NBC codes.
Conducted hydrostatic pressure tests and functional checks, analyzing results to certify system readiness before commissioning.
Resolved discrepancies between IFC drawings and on-site installations by coordinating with the client’s engineering team.
Supervised the construction of a 22m x 10m swimming pool, including waterproofing, structural integrity checks, and calibration of filtration/pump systems.
I calculated the position and levels of machinery installation using total station.

2. Sewage Pipeline Network & STP Construction

Location: Alwar, Rajasthan, India
Duration: 2002–2004

Project Overview:
A government-funded project replacing septic tanks with a sewage pipeline network (1.3m to 200mm diameter) connected to a 20 MLD water treatment plant (WTP).

Key Engineering Contributions: Monitored pipe alignment and slope (1:100 gradient) using a total station, ensuring hydraulic efficiency and preventing blockages.
Oversaw pressure testing of pipelines and verified household connection tie-ins to the main sewage line.
Reviewed design specifications for precast chambers and anti-theft manhole covers, ensuring durability and compliance.
Tested effluent quality (BOD < 30 mg/L) at the WTP and validated hydraulic performance pre-handover.
I calculated the invert levels using total station.

WORK EXPERIENCE

Webstructures Pte Limited, Singapore
Singapore (Singapore)
Structural Engineer
January 2009—November 2009

Verified by
Mohammad Mehdi (Self)

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

TASKS

- I worked as Structural Engineer for buildings with a reputed structural designing consultancy (Web Structures Pvt. Ltd) in Singapore that specializes in designing high rise buildings
- Work included assisting lead structural engineer with manual calculations, modeling of structures using various structures engineering software, assisting in preparing reports.

REPRESENTATIVE PROJECTS

My entry level role was in assisting Lead Engineer ((Mr. Liam) with some calculations & modeling.
Modeling of buildings include assisting in designing
some parts of five-star hotel in Arusha, Tanzania; a villa in Malaysia, and 130 m high building being designed for Malad, Mumbai, India (not completed by the time I was with the consultancy)

WORK EXPERIENCE

Indiabulls Real Estate Limited
Delhi (India)
Project Manager
December 2009—May 2014

Verified by
Kunal Shehrawat
shehrawatkunal@gmail.com

Experience Summary
Full-Time
Engineering: 4 years, 5 months
Experience under licensed engineer: None

TASKS

I started from the inception of the project Township development project (Dec'2009-Nov' 2010) . As project engineer for site execution, I checked that site execution is as per the approved drawings & that Safety measures are being followed. I also prepared Daily Progress Report (DPR) and submitted to Project Management Team. I also checked the bills that were submitted by the contractors & verified against the actual work executed at section of my site.

From Dec'2010- May' 2014 I was working as the Project Manager for the same project.
I checked mitigation plan for the project developed by the Planning team. I checked that project is being executed with the latest IFC drawings. I was also checking the performance of the contractors, verifying their bills, site verifying the variations, change in scope etc.
I checked the Daily Progress Report and Weekly Progress report submitted by the Contractor is accurate.
I was also evaluating the performance of the site team and sending appraisals to the HR team.

REPRESENTATIVE PROJECTS

Enigma Township (Sector-110, Gurgaon, India), A US $250-300 million housing project, from inception to completion (excluding the township extension). (Dec'2009-April'2014)

The project comprised 10 towers ranging from 11 to 24 stories, with apartments varying in size from 3350 to 7430 square feet. It contains total of 472 units in the initial phase. Project was cast-in-situ traditional slab system, with mid-rise buildings with one basement & Highrise buildings (4 in no's) with double basement. All the system was having Raft foundation without the need for the pile foundation.

Throughout the project, I championed the use of cutting-edge construction technologies. I analyzed the pros and cons of traditional and self-lifting formwork systems & discussed with senior management. This analysis factored in upfront costs, potential manpower and time savings, quality improvements, and reduced reliance on machinery.
(e.g., I analyzed the benefits of self-climbing formwork systems from Doka & Peri suppliers for high-rise buildings to minimize construction time and labor costs.)
Following these discussions, smart formwork system (Peri- Gridflex, Lewa Panel Systems & self climbing formwork) was implemented. This significantly reduced construction time and mitigated the risks associated with seasonal labor shortages, a common challenge in the North Indian market.
I checked the bills submitted by the contractors. I checked, analyzed & clarified the issues site construction related issues raised by the contractors.

WORK EXPERIENCE

Hitech Group of Companies, Dubai, UAE
Dubai (Dubayy) (United Arab Emirates)
General Manager - Projects
April 2014—December 2017

Verified by
MAHMOOD ALAM JAFRI
mahmood.alam@alfanar.com

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

TASKS

Tasks and Duties:

Engineering Tasks;
I developed Project Execution Plan . I carefully reviewed the Quality Management Plan created by the QA/QC team. Safety is paramount, so I also checked the Life, Health & Safety, Environment Plan developed by our HSE experts. I prepared the list of critical items for the project, particularly for the Long Lead Items. I also checked Method Statements submitted by the subcontractors.
I identified any missing information or conflicts between documents and drawings during construction stages(like clashes between architectural and structural drawings) by raising Technical Queries (TQs) with the consultants. This helped us avoid costly delays down the road.
To keep the project on track financially, I cross-checked & raised the bills prepared by billing team at the right times to ensure smooth cash flow.

Non-technical duties:
Identifying a decline in subcontractor performance, I implemented a system of quarterly ratings to assess their technical and financial capabilities. This provided with an updated picture of their strengths, leading to improved resource allocation and timely project execution.
And to streamline our procurement process, I reviewed the plans put together by the Procurement team.

REPRESENTATIVE PROJECTS

Project 1: 10 Villas in Dubai, UAE (May 2014 - Sep 2015)

Project Manager: I joined this project halfway through construction, of 10 villas

Turning things around:

Engineering(Technical) : I regularly prepared & raised the bills to ensure smooth cash flows. I regular raised Technical Queries (TQ) & Request for Information (RFI) for any discrepancy or conflict amongst various documents/drawings.
Procurement Efficiency: I prepared long lead items list (materials that take more than 3 months to get) for the procurement team to ensure its arrival on time.
Contract Management: This project involved some contract disputes. By leveraging my understanding of FIDIC guidelines for Redbook 1999, I did the forensic analysis of all the communications, reached at the root of the delay and in light of FIDIC resolved the contagious issues.

Project 2: High-Rise Building in Dubai (Feb 2015 - Dec 2017)

General Manager- Projects: High-rise project in Dubai – valued at AED 91 million. This building included G+3 podiums, 14 floors, and a health club.

Technical Highlights:

Foundation: We used a Contiguous Piling system for the basement to ensure stability and protect nearby structures.
Construction Techniques: The project utilized a Self Climbing system for core construction and Doka's Table formwork system for

efficient slab construction. We opted for flat PT slabs for the flooring system.

I cross-checked & raised the bills prepared by billing team. I developed Construction Sequence, methodologies for the construction of the project. I analyzed the structural system proposed by the Consultant for both its financial and technical efficacy. I also checked that final structural system is easily executable at site, familiar or easily teachable to site execution team.

I provided site specific inputs for developing the project baseline schedule. I checked the baseline prepared by the Planning Team. I verified billing for both clients and subcontractors.

WORK EXPERIENCE

Sobha Harland Contracting LLC
Dubai (Dubayy) (United Arab Emirates)
Projects Head - CEO Office
December 2017—December 2018

Verified by
Masoom Ali
masoom.ali16061982@gmail.com

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

TASKS

Tasks and Duties:
I checked project progress based on "Planned Vs Actual" analysis of Primavera schedule. I analyzed on-site data and key performance indicators to pinpoint potential delays and developed mitigation plans to keep the project on track.
I performed regular site inspections, audits etc to ensure the Group's rigorous quality standards throughout the projects' construction cycle.
Additionally, I reviewed all lifting plans and method statements submitted by subcontractors to ensure they aligned with our safety protocols.
For projects that were behind schedule, I checked the allotted manpower and resources and revised the resource loaded program to reflect the updated mitigation plan. I allocated resources based on the Mitigation Plan.

REPRESENTATIVE PROJECTS

Designation: Projects Head - CEO Office (December 2017 - December 2018)
Sobha Hartland, Dubai, UAE
Sobha Hartland is a grand-scale, eight million square foot mixed-use development nestled in the heart of Dubai's Mohammed Bin Rashid City. This freehold project boasts a diverse residential offering, ranging from studio apartments to opulent six-bedroom villas.

Key Responsibilities:

I developed strategies for the construction of Sobha Hartland Greens, a cluster of 16 eight-story apartment buildings and a prominent 14-story twin-tower complex.

I developed comprehensive zoning plans, establishing a meticulous construction sequence, and defining Pour Zones for the raft foundation. Additionally, I checked allotted timeframes for the activities by the planning team for Phase-2 of Greens, pre-cast villas & infrastructure works.

Executed Projects Details:
Project Details, Greens Phase-2:
Involved the construction of PT slabs across a plot area of 429,536 square feet, resulting in a total built-up area (BUA) of 638,480 square feet. This phase delivered 341 residences, comprising a mix of studios (46), one-bedroom apartments (213), two-bedroom apartments (39), and other configurations.

Precast Villas: Construction of 20 pre-cast villas, with Hollow Core Slab, Precast wall panels with mixed internal partitions, both precast and drywall/masonry works.

Infrastructure Works Details: construction of a Sewage Treatment Plant and the intricate network of internal drainage pipelines for the entire project.

WORK EXPERIENCE

T HO E Real Estate Development LLC
Dubai (Dubayy) (United Arab Emirates)
Director Project Delivery
February 2019—July 2020

Verified by
Rajat Sharma
rajat.sharma80000@gmail.com

Experience Summary
Full-Time
Engineering: 1 year, 5 months
Experience under licensed engineer: None

TASKS

I Managed day-to-day activities regarding business/support services to ensure seamless working operations. I supervised and guided highly skilled project delivery teams to ensure the achievement of project goals timely. I collaborated with division managers to manage Design Consultants, PMC's, Cost Consultants, Specialist consultants. I oversaw all projects' progress activities within programme, including significant milestones that affected project cost, schedule, and performance or client relations. I introduced productivity trackers and set target benchmark for the workers linked to salary, increasing output and improving quality control. I monitor technical department too for RFI/comments on MEP/architectural, Structural, ID drawings.

I am credited with leading risk assessment programmes to reduce the impact of risk and attaining overall projects targets as per stakeholder's expectations within constraints. I ensure monitoring project objectives and plans, including delineation of scope, scheduling, setting performance requirements, project logistics and construction.

•
I supported site time to clearly identify objectives/needs by developing all project execution, health & safety, and quality control plan in accordance with industry policies and standards.

•
I conducted cost-control programmes, including innovated system, data metrics, and international best practices that resulted in decreasing construction cost. Prepare presentations, dashboards etc for Higher Management.

•
I launched number of steering committees to ensure quality that guaranteed zero defects at handover.

•
I organized effective training sessions for project management teams to optimize performance level.

•
I optimized business volume/profit by conducting gap analysis and implementing business improvements.

REPRESENTATIVE PROJECTS

Example 01 :

I developed advanced managerial and design skills throughout career . I have developed comprehensive understanding of design processes and methodologies. This skill is also helped by the fact that I started my career as Structural designer.

Project: Sweden Island, THE WORLD ISLAND, Dubai- UAE Role: Director Project Delivery (2019-2020)

One of the islands of the project that we are developing by inhouse design and execution team, is Sweden Island.
When I was on site visit, I noticed that structural steel members for the completed roof are too bulky for the expected loads. I cross checked the model for the use of relevant codes:
Structural use of steelwork in building: BS 5950-2000, Wind loads: ASCE7-05, Seismic load: UBC 1997
I also checked expected loads
1. Dead load of steel members and glazing
2. Dead load for roof and floor finishing
3. Live load for glazing
4. Live load on roof and floor (where seating arrangement is made)
5. Temperature loads
I discussed with the design team and Managing Partner. In meeting this topic was Minuted and I got the responsibility for getting alternate design and also to study commercial effects of change in design (Attachment-01, Minutes of Meeting & drawings)

Changed design resulted on 78 tonnes lesser dead weight, cost reduction of 32% and easier and faster fabrication & installation.
Projects: Ikaria, Monaco & Cote D' Azur 5-star hotels, THE WORLD ISLAND, Dubai- UAE Role: Director Project Delivery (2019-2020)
I am involved in dewatering design plans and calculations. My involvement is to supervise work of preparing:
• Key plan, Pipe route, Discharge point, Dewatering system, Monitoring & analyze data from test well.,
Monitoring rate of silt removal from settlement tank
Project is man-made island. Due to tidal fluctuations and the ever-present risk of increased inflows due to open sea proximity, it is important to get modelling and design correct to achieve required drawdowns. Requirement of keeping excavation area dry all the time, risks due to tidal fluctuations are taken into account to optimize the costs as well. I have supervised dewatering design and calculations for Hotel Ikaria, Hotel Cote D' Azure & Hotel Monaco.
. All of these 5-star hotels are on the main island of "Heart of
Europe" project. Maximum excavation level at this main island is 7.35m & groundwater level is 1.2m. Calculations are made for::Radius of influence ,Depth of the well, Discharge, Well yield calculations,& finally, number of wells required for that particular area.

Example 02:
I have monthly performance reviews of labours/technical staff and for the plants and machinery with the Managing Partner and other senior management. Moreover, I worked on THE WORLD Island 5-star hotels. I went onsite to make a study performance of the staff, labors and machineries. I suggested the method for capacity
building, proper training, continual evaluation of the performance of the labors. In my recommendation to Managing Partner, ways for the calculation of bonuses for the labor were suggested and were subsequently accepted by the management. Keeping in mind the principle of Transparency from code of ethics. I suggested procedure of promoting performing staff from labor to chargehand/trade expert, supervisor etc.
I have built my leadership skills while working on Intercontinental Hotel project, where I took the lead of reaching out to my team & to the client, understanding full requirements and presenting suitable options for both logistics and mobilization to choose which ever is feasible . The major concern was that project is located on artificial island connected to mainland through bridge with maximum 40 tones capacity. I had proposed two plans to
suit the client's requirement, our requirements and also the constraints of loads of the trucks crossing the bridge. I proposed a plan where we will not take out excavated soil from the island to storing area through the bridge, rather we shall rent available plot for storing of excavated soil. Here were reduced frequency of trucks for taking out and bring-in
backfilling material. Similarly, plan was devised to bring heavy equipment in parts. Furthermore, I had draughtsman working with me, once I sketched the drawings and did the calculations, I then hand it over to the draughtsman to proceed of creating the CAD file.

WORK EXPERIENCE

A N T Engineering Consultants LLC, Dubai, UAE
Dubai (Dubayy) (United Arab Emirates)
Director Project Management
September 2020—March 2023

Verified by
Ahmed Haris
haris@antcpl.com

Experience Summary
Full-Time
Engineering: 2 years, 6 months
Experience under licensed engineer: None

TASKS

Major tasks & duties:
I verified contractor bills cross-checked by site team, ensuring accurate measurements and costs.
I made regular site visits to check the quality of work being performed by the Contractor's Team.
I resolved issues raised by contractors through Technical Queries (TQ) and Requests for Information (RFI).
I resolved technical & commercial problems, disputes between parties. Keeping the project on track was a priority, so I regularly reviewed the Primavera schedule and led coordination meetings to identify any potential roadblocks.

Beyond the technical aspects, I contributed to broader project success.:

I collaborated with consultants to develop comprehensive cost analyses, optimizing budget allocation and resource utilization. Additionally, I conducted in-depth project assessments to identify areas for improvement and enhance team performance through targeted training initiatives.

REPRESENTATIVE PROJECTS

My Engineering Role in Major Projects:

1. Desalination Plant, Ras Al Khaimah (UAE):
Project Description : The plant produces a daily capacity of 22 million imperial gallons of desalinated water using reverse osmosis, a widely used technology for seawater desalination. Notably, the plant is partially powered by a 40MW solar plant, indicating a sustainable approach to desalination.
Role as Director Project Management:
Site Inspection & Quality Control: I regularly inspected construction progress, ensuring adherence to plans and proper monitoring by our engineers.
Budget Management: I measured KPIs and regularly analyzed Planned Vs Actual progress to have close budget oversight. I resolved variations amicably with minimal financial impact.
Technical Problem-Solving: I resolved technical issues arising on-site. I resolved Technical Queries (TQ) and Requests for Information (RFI) from contractors.

2. JVC Townhouses, Dubai (UAE):
Project Description : Project type: G+2 townhouses development.
Apartment size: 2400 square feet per townhouse
Total units: 39 townhouses
Quantity Surveying: I verified contractor bills cross-checked by site engineers, ensuring accurate measurements and costs.
Communication & Resolution: I resolved issues raised by contractors through Technical Queries and Requests for Information.

Modernization and Knowledge Sharing:

Technology Adoption: I implemented PlanGrid at the Desalination Plant for real-time progress tracking and team learning.
Knowledge Transfer: I train managerial trainees on company best practices, construction techniques, safety protocols, interpreting data from BIM models and drone surveys.

Continuous Learning and Sustainability:

Self-Improvement: I actively participated in workshops, trainings, and safety drills to stay updated and handle diverse situations.

Sustainability Focus: As a strong advocate for sustainability, I strive to learn and implement the United Nations' Sustainable Development Goals 2030 in my projects.

WORK EXPERIENCE

Qabas Real Estate Development Co.
Eastern Province (Saudi Arabia)
Senior Project Manager
July 2023—July 2025

Verified by
Sayed Abdul hameed Bacha
Sayed.Bacha@qabas-re.com

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

TASKS

I prepare Monthly Reports for the residential compounds under construction. I am involved in the Testing & Commissioning stages of the site execution for the Residential Projects. I am also involved in closing Punchlist items and final Handover of the projects . I am Preparing Schedule (resource and cost loaded) for the upcoming Residential Projects.

Fire Prevention :

Responsibilities:
System Optimization:

I evaluate energy efficiency of diesel generators per SASO standards.

I Audit firewater demand calculations per NFPA 20/22.
Technical Audits:

I verify structural/fireproofing details against SBC 801 and SAEP-112.

I verify fire alarm and suppression systems meet NFPA 72 and SAES-B-014.

Documentation:

I prepare PE-stamped compliance reports for SA review.
Design Review:

I review architectural, mechanical, and electrical drawings for compliance with IBC 2015, NFPA, SBC, and SAES/SAEP standards.

I verify load calculations (electrical, HVAC, fire protection) and ensure optimization through value engineering.

Code Compliance:

I work to resolve conflicts between Saudi Aramco (SA) and EPC requirements in coordination with the Professional Engineer (PE).

I validate fire/life safety systems (e.g., egress, alarm zoning) per NFPA 101/72 and IBC Chapter 9.

REPRESENTATIVE PROJECTS

Six (06) Residential Compounds for Saudi Aramco stretching for the West coast to East Coast of Saudi Arabia.
(Built Up Area: 71,672 m2)

Presently involved in designing of firefighting system, hydraulic calculations, Life Safety Analysis , FF and FDAS strategy planning and design in coordination with the appointed Design Development Consultancy for two Saudi Aramco residential compounds in Haradh and Wudayhi to cater to 1330 and 640 residential units respectively.

Two upcoming Residential compounds at Haradh & Wudahyi.

Haradh Project will provide the development and construction of Residential Buildings and Support Facilities at Haradh and Wudayhi Area in the Eastern Province of the Kingdom of Saudi Arabia,. The Bachelor Camp also includes other facilities such as site preparation, roads and parking, required permanent communications for the proposed camp facilities, electrical power, non-electric utilities systems, and HVAC.

A total site area of 1.26 million SM is prepared for residential camp buildings and supporting facilities. The total area expanded Haradh Bachelor Camp and Wudayhi residential camp is as given below.
(Built Up Area: 75,534 m2 for Haradh & 62,226 m2 for Wudayhi project)

I also checked the Life Cycle Cost Analysis (LCC) for "Chiller Water System Study Report: Water Cooled Chilled Water System vs Air Cooled Chilled Water System". I found technical discrepancies in the financial analysis report which does not cover Air-Cooled Chiller costs for full life cycle of the project. Project is for 23 years and Air cooled chiller's life span is considered for 15 years. So to cover the full life cycle of the project, we need to take into consideration that after 15 years we need to make investment in Chillers procurement and installation. This discrepancy was highlighted by me and rectified by the Consultant.

Fire Prevention:
Project Portfolio: Temporary Camp Facilities (TCF) – Design & Compliance Review:

1. TCF Haradh Owner & EPC Expansion (2023–2024)
Location: ~2 km from Haradh Area, KSA
Scope:

107 portable buildings with mixed occupancies (R/R-2 Residential, B Business, S Storage, U Utility, A-2/A-3 Assembly).

Capacity: 900 occupants.
Facilities Provided:

Offices, dining, laundry, dedicated power (diesel generators), raw water, fire water, and fire alarm systems.

Recreational/auxiliary facilities, including security infrastructure.

2. TCF Haradh Saudi Aramco - PMT (2024–2025)
Location: Adjacent to Saudi Aramco compound (Haradh Village, KSA)
Scope:

16 portable buildings (R/R-2, B, S, A-2, A-3 classifications).

Capacity: 15 occupants.
Facilities Provided:

Offices, dining, laundry, dedicated power/water/fire systems, irrigation, and security.

3. TCF Wudayhi (2024–2025)
Location: Wudayhi Area (near Al Kharj, KSA)
Scope:

222 portable buildings (R/R-2, B, S, A-2, A-3).

Capacity: 1,300 occupants.
Facilities Provided:

Full amenities (power, water, fire systems, irrigation, recreation).

Mechanical

IAN HORAK (16-218-86)

All work experience reviewed by two licensed professionals

DISCIPLINE: MECHANICAL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
07/31/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
8 years, 4 months

Total Engineering Experience
8 years, 4 months

Experience under licensed engineer
8 years, 4 months

Other Experience

Disciplinary Action
None reported

EDUCATION

Bachelors in Mechanical Engineering (EAC)
University of Nevada, Las Vegas
August 2007–May 2016

EXAMS

Fundamentals of Engineering (FE)
Nevada
April 2016

Principles and Practice of Engineering (PE)
Mechanical
Nevada
July 2025

LICENSES

Additional Licenses
None

IAN HORAK (16-218-86)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Pizza Hut
California (United States)
Delivery Driver
May 1991—January 1997

Verified by

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

DESCRIPTION

IAN HORAK (16-218-86)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Ritz Carlton Laguna Niguel
California (United States)
Guest Services Agent
January 1997—August 2005

Verified by

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

DESCRIPTION

IAN HORAK (16-218-86)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Green Valley Ranch Resort and Casino
Nevada (United States)
Guest Services Agent
August 2005—September 2016

Verified by

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

DESCRIPTION

IAN HORAK (16-218-86)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

FEA Consulting Engineers
Nevada (United States)
Senior Draftsman
September 2016—March 2020

Verified by
Robert Finnegan
rfinnegan@fealasvegas.com

Experience Summary
Full-Time
Engineering: 3 years, 6 months
Post EAC degree: 3 years, 6 months
Experience under licensed engineer: 3 years, 6 months

TASKS

I worked in the mechanical and plumbing department where I was tasked with design and drafting of plumbing systems under the oversight of senior engineers. My role with the company, in chronological order, was drafting mechanical and plumbing designs as a junior draftsman, construction document development, and designing and drafting plumbing systems under the oversight of senior staff, with a focus on restaurants, casinos, and hotels. I analyzed space requirements for all plumbing systems, and calculated water fixture rate demands and pipe flow rate requirements for all plumbing systems, including waste and vent, Sovent systems, grease waste, storm drainage, domestic water systems, and natural gas systems. For the latter part of my employment, I was trained and worked directly under the mentorship of a certified plumbing designer as well as senior staff members. I performed space analysis, calculations, design, and drafting.

REPRESENTATIVE PROJECTS

Circa Hotel Casino, Las Vegas, Nevada 2018-2020 I was the lead designer and drafter for the low rise retail, restaurant, and casino space plumbing systems. I analyzed all plumbing requirements and performed calculations for all waste and vent, domestic water, natural gas, and storm drain systems. I designed all of the low rise plumbing systems to meet the facility requirements. I analyzed domestic water pump requirements for the high rise plumbing, which included calculation of pump size requirements and water distribution.

Hotel Del Coronado, San Diego, California 2018-2020 I analyzed domestic water, waste and vent, and storm drain requirements for the entire facility, and designed these plumbing systems. I designed and drafted all of the plumbing systems for construction documents.

Nevada State College, Henderson, Nevada 2018-2019. I designed and drafted all plumbing systems for the student housing low rise buildings. I analyzed and calculated all space requirement for student residential spaces, common areas, and storm drain requirements.

Resorts World Las Vegas, Las Vegas, Nevada 2016-2018 I drafted lowrise and highrise plumbing systems, including retail spaces, restaurants, theater, and guest suites.

IAN HORAK (16-218-86)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Engin8
Nevada (United States)
Mechanical Director
September 2020—July 2025

Verified by
Soren Daniel Peterson
soren@engin8.com

Experience Summary
Full-Time
Engineering: 4 years, 10 months
Post EAC degree: 4 years, 10 months
Experience under licensed engineer: 4 years, 10 months

TASKS

I provide space analysis, calculations, design, and drafting for mechanical and plumbing systems for a diverse range of projects including custom residences, multifamily developments, industrial labs, medical facilities, flight simulation facilities, and marijuana cultivation. I started at the company performing analysis, calculations, design, and drafting of mechanical and plumbing systems. My scope of work has since expanded to also include project management, implementing the company's intern program, and reviewing the work of junior engineers. My current title is Mechanical Director, which includes all previously mentioned tasks, as well as quality control, training of junior employees, project coordination, off site inspections, contractor coordination, building department coordination, and client development.

REPRESENTATIVE PROJECTS

Rampage Residence - Las Vegas, Nevada 2023 - present. I am the lead mechanical and plumbing designer for a 55,000 square foot custom residence, which includes below grade parking, an atrium/banquet space, and a natatorium. I analyze and calculate all space requirements for the entire property, and design and draft all the air conditioning and plumbing systems. This includes VRF system air conditioning, domestic water pump flow rate requirements, garage exhaust purge, sump pump requirements, cigar smoke mitigation, and natatorium dehumidification and space conditioning.

CAE, Las Vegas, Nevada 2022-2024 I was the lead mechanical designer for a commercial flight simulation training center which has a 400 ton central plan with hydronic pipe distribution. I analyzed and calculated all space requirements for outdoor air ventilation and cooling loads. I analyzed and calculated all hydronic pipe flow rates and sizing based on fan coil gpm demands and friction losses. I designed and drafted all mechanical systems, including duct and air distribution, and hydronic piping. I calculated all heating, cooling, and flow requirements, and designed and drafted the central plant.

Illumina at Raider Way, Henderson, NV 2022-2024 I was the lead mechanical and plumbing designer for a 5 story luxury multifamily development, which included residences, pool areas, parking garage, and central clubhouse with a full restaurant, athletic center, day spa, and work spaces. I analyzed and calculated all space requirements for heating and cooling loads, ventilation requirements, and exhaust. I analyzed and calculated all space requirements for domestic water, waste and vent, natural gas, and storm drain distribution. I designed and drafted all mechanical and plumbing plans.

Curiteva Lab, Hunstville, Alabama 2023 I was the lead designer for a laboratory space within an existing warehouse, which included hazardous fume exhaust, monitoring and conditioning of the air to precise temperature and humidity requirements, and emergency purge exhaust systems. I analyzed space requirements, which include exhaust hood requirements, equipment heat loads, exhaust duct routing, exhaust termination, exhaust insulation, and dehumidification. I calculated cooling loads, dehumidification rates, exhaust rates, and makeup air requirements. I designed and drafted all mechanical and plumbing plans.

Planet 13, Las Vegas, Nevada 2020-2024 I designed mechanical and plumbing systems of Planet 13's full campus of facilities, including the design of their marijuana cultivation facility, dispensary design, smoking lounge, and their "Cannabition" museum/attraction space. I analyzed and calculated all space requirements based on recently implemented building codes and regulations for both the grow facility and indoor consumption lounge, I designed systems to meet all regulatory requirements for air change rates, ventilation, odor control, and worker safety. I analyzed and calculated space cooling requirements, ventilation rates, exhaust purge requirements, and fertigation systems for the cultivation facility. I designed and drafted all mechanical and plumbing systems for the cultivation facility.

Land Surveyor

JONAS HULSLANDER (14-067-67)

All work experience reviewed by two licensed professionals

DISCIPLINE: LAND SURVEYING

GENERAL

Applying To
Nevada

Application Type
Initial - PS

Application Date
08/02/2025

Citizenship
United States

SUMMARY

Total Surveying Experience
21 years, 3 months

Experience under licensed surveyor
21 years, 3 months

Other Experience

Disciplinary Action
None reported

FS EXAM

PS EXAM

4+

EDUCATION

Bachelors in Land Surveying/Geomatics
Great Basin College
January 2020–May 2024

EXAMS

Fundamentals of Surveying (FS)
Nevada
October 2012

Principles and Practice of Surveying (PS)
Nevada
April 2025

LICENSES

Additional Licenses
None

JONAS HULSLANDER (14-067-67)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Southwest Engineering
Nevada (United States)
Chainman
July 2002—April 2004

Verified by
Jonas Hulslander (Self)

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

TASKS

Equipment Setup and Operation: Under direct supervision, I was responsible for the accurate setup and positioning of various surveying instruments, including GPS systems, total stations, and levels. This involved ensuring proper calibration and stability of equipment to obtain reliable measurements.

Data Acquisition and Recording: I meticulously operated surveying equipment to obtain and record precise information for establishing boundary lines, determining exact elevations, and capturing existing site features. The accuracy of this data was paramount for subsequent design and construction phases.

Construction Layout and Monumentation: I assisted in setting points for construction layouts, translating design plans into physical markers on the ground. This included setting monuments to delineate property and sectional corners, ensuring legal and physical boundaries were clearly established.

Quality Control and Standards Adherence: I actively checked Monument Tie maps for accuracy and adherence to city standards, contributing to the quality control process and ensuring all field work met regulatory requirements.

Safety Protocols: I was responsible for setting barricades and cones in strict accordance with the Manual on Uniform Traffic Control Devices (MUTCD) standards, ensuring a safe working environment for the survey crew and the public.

REPRESENTATIVE PROJECTS

Subdivision Developments: Assisted in the layout of new residential and commercial subdivisions, ensuring precise placement of property lines, infrastructure, and building footprints according to design plans.

ALTA/ACSM Land Title Surveys: Participated in comprehensive ALTA surveys for commercial and industrial properties, meticulously collecting data to delineate property boundaries, easements, and improvements, crucial for real estate transactions and development planning.

Topographic Surveys: Conducted detailed topographic surveys for various sites, capturing existing ground conditions and features essential for site design, grading, and drainage plans.

Industrial and Commercial Building Projects: Supported the construction layout for large-scale industrial and commercial facilities, setting precise control points and lines for building foundations, utilities, and access ways.

Apartment Complexes: Contributed to the layout and as-built surveys for multi-family residential developments, ensuring accurate placement of buildings, parking, and landscaping.

Roadway Construction: Assisted in the layout of new roads and the reconstruction of existing ones, focusing on centerline establishment, grade control, and utility placement.

College Campuses: Engaged in surveying tasks on college campuses, which included infrastructure upgrades, new building construction, and campus mapping.

JONAS HULSLANDER (14-067-67)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Nevada Army National Guard
Nevada (United States)
Specialist
March 2000—March 2006

Verified by

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

DESCRIPTION

JONAS HULSLANDER (14-067-67)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

City of Henderson
Nevada (United States)
Manager of Land Survey
April 2004—July 2025

Verified by
Michael George Kidd
michael.kidd@cityofhenderson.com

Experience Summary
Full-Time
Surveying: 21 years, 3 months
Experience under licensed surveyor: 21 years, 3 months

TASKS

1. Survey Technician I 4/2004
Focused on foundational field surveying. Assisted crews in data collection for topographic, boundary, construction layout, and as-built surveys. Operated and maintained basic surveying instruments (total stations, GPS, levels). Performed field support tasks and ensured safety/traffic control per MUTCD standards.

2. Survey Technician II 8/2005
Advanced to independent field operations and initial data processing. Led small crews for complex topographic, boundary, and construction surveys, including control networks. Processed raw data using specialized software (e.g., AutoCAD Civil 3D) and prepared CAD maps/plats. Coordinated field activities and conducted quality checks. Mentored junior technicians.

3. Senior Survey Technician 4/2016
Served as a technical lead for complex municipal survey projects. Performed advanced geodetic and cadastral computations. Developed and managed CAD/GIS datasets. Established rigorous quality control, conducting final reviews of survey plats, maps, and civil plans for strict adherence to Nevada Revised Statutes (NRS). Researched legal descriptions, supervised junior staff, and provided technical consultation, including input on drone surveying.

4. Manager of Land Survey 5/2024
Held a leadership role, managing the strategic direction and operations of the Land Surveying division. Oversaw planning, scheduling, and execution of all municipal survey projects, including budget and resource allocation. Recruited, trained, and evaluated staff. Ensured comprehensive compliance with NRS and local ordinances, overseeing the review of civil plans and plats. Developed and managed the City's drone surveying program. Managed official city survey records and acted as a key inter-departmental liaison.

REPRESENTATIVE PROJECTS

UAS Program Development and Management: I played a key role in designing and implementing the Public Works Unmanned Aerial System (UAS) program. As an FAA Part 107-certified pilot, I ensure our UAS operations comply with federal regulations while supervising two additional certified team members. This initiative has significantly expanded our aerial surveying capabilities, enhancing operational efficiency and data acquisition for various municipal projects. My involvement spans over five years, demonstrating continuous operation and enhancement of this vital program.

GNSS Network Integration: I assisted in the implementation of the City’s connection to a GNSS network by installing and maintaining two base stations, integrating them into the Utah Pivot Virtual Reference Network. This upgrade significantly enhanced GNSS correction capabilities, expanding coverage through UHF radio and NTRIP internet protocols. This provided both public users and City surveyors with more efficient, accurate, and reliable positioning solutions across the city, a key operational improvement.

Large-Scale Vertical Control Networks (Implementation): I completed over 150 miles of first-order, second-class circuit leveling work, establishing four large-scale vertical control networks crucial for the City of Henderson’s infrastructure. These projects involved the precise implementation of elevation benchmarks using digital levels and NGS leveling techniques, supporting roadway design, flood control, and utility improvements.

Horizontal Control Networks (Implementation): I completed three large-scale horizontal control networks, utilizing static GNSS observations, total station traverses, and least squares adjustments to establish accurate and reliable control points. These were essential for maintaining precise geospatial alignment for development and infrastructure.

GIS Integration and Control Database Development: I oversee the incorporation of survey data into GIS databases, standardizing measurement procedures for long-term data accuracy and accessibility. A significant design and implementation effort involved collaborating with the City GIS team to use a low-distortion projection (Nevada Coordinate Reference System) and integrate it into our control database. This streamlines the transition from arbitrary coordinate systems to georeferenced projects, enabling seamless integration with diverse datasets and eliminating manual translations, thereby improving project flexibility and operational efficiency. Furthermore, I am actively collaborating with the Public Works Flood Department to update all detention basin control, ensuring accurate georeferencing for improved maintenance and supporting machine control implementation, which has led to significant cost savings in operation.

Throughout my tenure at the City of Henderson, I gained extensive practical experience in precise construction stakeout, contributing to the direct implementation of hundreds of municipal projects. This included large-scale road corridors, where I ensured accurate alignment and grade for critical transportation infrastructure. My work also encompassed detailed stakeouts for complex sewer and water utility networks, parks, and bridge projects, where precision was paramount for successful construction.

Digital Right-of-Way Review & Compliance System: I designed and implemented a transformative digital file management system that transitioned the civil plan and map review process from cumbersome physical folders to a fully digital workflow. This crucial operational improvement has dramatically increased efficiency and accessibility while substantially reducing paper dependency for the review of right-of-way plans, maps, easements, dedications, and vacations. This system ensures rigorous adherence to city standards, Nevada Revised Statutes (N.R.S.), and Nevada Administrative Code (N.A.C.).

GIS-Based Benchmark Roadmap Development: I designed and implemented a comprehensive GIS-based roadmap by meticulously reviewing and analyzing historical level runs. This roadmap details the establishment of every city benchmark, providing a critical tool for future planning. This comprehensive mapping enables a smooth transition of the 2004 vertical control network to the next datum, ensuring all benchmarks are conventionally re-leveled or accurately adjusted from the original raw data, thereby preserving survey integrity and continuity in operation.

GREGORY LINDSEY (23-212-87)

All work experience reviewed by two licensed professionals

DISCIPLINE: LAND SUVEYING

GENERAL

Applying To
Nevada

Application Type
Initial - PS

Application Date
06/24/2025

Citizenship
United States

SUMMARY

Surveying Experience after ANSAC degree
3 months

Total Surveying Experience
4 years

Experience under licensed surveyor
4 years

Other Experience

Disciplinary Action
None reported

EDUCATION

Bachelors in Geomatics (ASAC)
Oregon Institute of Technology
March 2021–March 2025

EXAMS

Fundamentals of Surveying (FS)
California
September 2023

Principles and Practice of Surveying (PS)
California
May 2025

LICENSES

Additional Licenses
None

GREGORY LINDSEY (23-212-87)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

PEO Brokers
California (United States)
COO of insurance agency specializing in workers comp.
January 2018—September 2020

Verified by

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

DESCRIPTION

GREGORY LINDSEY (23-212-87)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Webb Land Surveying
California (United States)
Prty Chief/Technician 3
October 2020—April 2023

Verified by
Matthew Scott Webb
matt@webblandsurveying.com

Experience Summary
Full-Time
Surveying: 2 years, 6 months
Experience under licensed surveyor: 2 years, 6 months

TASKS

Involved in all stages of the survey process. Reasearch, composite maps, filed work, data reduction and final deliverables.
My introduction to surveying job which taught me the basics in the field and office tasks including CAD. Added more tasks as I developed better skills and knowledge.

REPRESENTATIVE PROJECTS

Project: Morken Family Record of Survey
date- 07/2021
location- North Lake Tahoe, CA
I performed the field survey for the residental vacant lot as well as the foundation staking.
Material descrepencies were found during the survey which triggered an ROS. Cal-Trans had recently surveyd the ROW and monumentation was found that was of no record. I tracked down the needed information from the district that contiols the area. The lot frontage, on the ROW, had to be prorated across the entire subdivision as only the outermost bounds had record monuments.

Project: Lakeshore Falken House
date- 06/2022
loctation- Incline Village, NV
A 50 million dollar residental house project on Lake Tahoe which required shoring during excavation and I set up the monitoring for it using unique control points to ensure high accuracy measurments as dictated by local agencies.
After inital excavation I took the design plans and drawings to extract the massive foundation and create the stake points.

GREGORY LINDSEY (23-212-87)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Psomas
California (United States)
Surveyor III
May 2023—June 2024

Verified by
Steven Brian Killmer
steven.killmer@psomas.com

Experience Summary
Full-Time
Surveying: 1 year, 1 month
Experience under licensed surveyor: 1 year, 1 month

TASKS

Office surveyor working under survey group manager for large agency contracts.
Was also tasked with bridging the gap with the geomatics team and the survey team, more specifically, integrating GIS systems to better track survey data company wide.
Began training with remote sensing data for large mapping projects. Gained my LSIT while working here.

REPRESENTATIVE PROJECTS

Project: American River Flood Insurance - SAFCA
date- 05-09/2023
location- Sacramento Valley, CA
State of California needed to update insurance with FEMA and I oversaw mapping the entire system as well as updating maintenance easements.
I utilized many techniques to complete the task including, harmonizing sequential conveyances abutting simultaneous conveyances and the chain of rights that accompanies, marrying LiDAR point clouds with historical imaging and conventional data to determine the changes in course along the river over time to ensure proper placement of shifted easements.

Project: CA Fish & Wildlife - Lake Berryessa
date- 02/2024
location- Lake Berryessa, CA
Boundary line agreement between multiple parties with the adjoiner being a rancho. I did enhanced research to track down the timeline of lands around the rancho. Talked to local land owners to obtain parol evidence of the boundary. I coordinated the project across government agencies and private parties.

GREGORY LINDSEY (23-212-87)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Epoch Geospatial and Land Surveying Services, LLC
California (United States)
Project Surveyor
May 2024—August 2024

Verified by
Michael Farrauto
michael@epoch-geo.com

Experience Summary
Full-Time
Surveying: 3 months
Experience under licensed surveyor: 3 months

TASKS

Oversaw projects from initial setup to final deliverables and all aspects in between.
Helped to manage the field crews and oversaw their work, both in the field and in the office.
Took on other responsibilities on the business side of things as well. Marketing, administrative work, amongst other daily business tasks.
Overall, 90% survey work.

REPRESENTATIVE PROJECTS

Project: California FIsh and Wildlife Control
Date: July 2024
Location: South Lake Tahoe, CA

I did my first full static network for CA Fish and Wildife, utilizing my experience with processing GPS data and applying that to my first field collection. I tied into published NGS control as well as set points with overlapping observations during the field visit. Post-field work involved OPUS and tieing to CORS stations for the best solution.

GREGORY LINDSEY (23-212-87)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Lumos & Associates
Nevada (United States)
Survey Coordinator
March 2025—June 2025

Verified by
Michael Benj Craven
mcraven@lumosinc.com

Experience Summary
Full-Time
Surveying: 3 months
Post ASAC degree: 3 months
Experience under licensed surveyor: 3 months

TASKS

Work directly under the group manager leading crews with daily instructions, attending project meetings, writing proposals, perform filed work, and reduce and draft data using TBC and CAD.

Majority of the office tasks I perform are writing legal descriptions, drafting composite maps for crews, resolving boundaries, and producing final maps and reports.

For my survey calculations I mainly use computer aided tools like TBC for adjusting static observations, CAD for all other point transformation, and hand calcs with hp-35 or excel when I only have plans to go from.

REPRESENTATIVE PROJECTS

Project: FAA Elevation Certification
date- 04/2025
location- South Lake Tahoe Airport, CA
I coordinated between the airport and the FAA consultant to certify that the as-built elevation of the new building next to the tower meet design specs.
Set up a control network on required coordinate system using NGS published monuments to tie into the location of the building and conform to the survey contract.
I made sure to meet and exceed the required order of accuracy. Part of this field procedure, along with many others I work on, required me to use both conventional and GNSS data to tie into known points.
Drafted the certification letter for the FAA and pertinent report of the survey.

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Explanation
June 2002	December 2017	Unable to change dates on this. 8/24 - 3/25 I was finishing my Geomatics degree and was unemployed for this time period.

Structural

ERIC DAHL (14-132-19)

All work experience reviewed by two licensed professionals

DISCIPLINE: STRUCTURAL

GENERAL

Applying To
Nevada

Application Type
Comity - PE

Application Date
07/30/2025

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
16 years

Total Engineering Experience
16 years

Experience under licensed engineer
16 years

Disciplinary Action
None reported

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

EDUCATION

Bachelors in Civil Engineering (EAC)
Rensselaer Polytechnic Institute
September 2004–May 2008

Masters in Civil Engineering
Rensselaer Polytechnic Institute
September 2008–May 2009

NOTE: First discipline specific Structural license.

EXAMS

Principles and Practice of Engineering (PE)
Civil
New York
April 2013

Fundamentals of Engineering (FE)
New York
April 2008

Structural (SE)
Structural
New York
April 2025

LICENSES

Initial License
New York
Issued: June 2013
Expires: August 2027

Additional Licenses
FL PE, MO

ERIC DAHL (14-132-19)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Geiger Engineers
New York (United States)
Principal
July 2009—July 2025

Verified by
Karen Allen Lynch
kal@geigerengineers.com

Experience Summary
Full-Time
Engineering: 16 years
Post EAC degree: 16 years
Experience under licensed engineer: 16 years

TASKS

I am one of the principals at Geiger Engineers where I have been employed as a structural engineer for the last 16 years. Over the course of my career, I have had the opportunity to work on numerous challenging and interesting engineering projects. My responsibilities have included analysis, structural design, preparation of construction documents and management of projects both during design and under construction.
I have created computer models and run analysis for a variety of structures. I have modelled everything from simple 2d frames to entire buildings including complex long span structures. I have used the results of the modeling to size members per the pertinent design standards and extract relevant results such as displacements, reactions and member end forces.
I have also performed design for complete structures including member layout, connections, lateral force resisting systems, diaphragms and foundations. I have designed structures in steel, concrete and wood. I have developed loading criteria using the latest building codes (IBC, ASCE 7, etc).
I am responsible for developing construction documents including drawings and specifications. I develop plans and details that are code compliant and provide clear direction for the construction of the structure.
As a manager, I break the project into various tasks and assign to team members. I am responsible for checking the work of each team member and ensuring that a project is completed correctly and on schedule. I work with junior engineers to help develop their skills and knowledge in the profession of engineering.
I perform various construction administration tasks including site visits, site reports, review of shop drawings, and answering requests for information (RFI's). I am also responsible for communicating the owner, contractor and other design professionals (ie architects) to address issues as they arise in a project.

REPRESENTATIVE PROJECTS

Period: 2025
Role: EOR
Project: SF Giants Coke Bottle LED Structure
New curved steel frame for LED board in San Francisco, CA.
Responsible for structural design and construction documents. Designed and analyzed the steel frame for LED weight and environmental loads from wind and seismic. Designed all connections.

Period: 2024
Role: EOR
Project: Buffalo Sabres Centerhung Scoreboard
New centerhung scoreboard for Sabres NHL team.
Responsible for structural design and construction documents for the steel frame supporting the LED video board. Designed and analyzed the framing and connections.

Period: 2023
Role: Project Manager
Project: JMA Dome New Signage, Syracuse, NY
Added 30' tall steel letters to the steel crown truss for the JMA Dome.
Responsible for structural design and construction documents. Analyzed the framing and connections to the existing structure. Performed staged erection analysis to confirm stability during erection.

Period: 2022–2024
Role: Project Manager
Project: Miron Victory Court, Syracuse, NY

New 20,000 SF addition to JMA Dome, between two existing buildings, creating snow load concerns.
Responsible for structural design and construction documents. Developed load criteria and framing concepts to suit site. Designed concrete foundations including pile caps, grade beams, retaining walls, and vaults. Oversaw analysis of the steel frame and lateral system.

Period: 2021–2022
Role: Project Manager
Project: WillowBrook Farm, Clinton Corners, NY
New heavy timber addition to existing farmhouse. Designed and analyzed timber frame, wood shear walls, and connections. Designed masonry chimney and concrete foundations including spread footings, basement, and retaining walls. Reviewed construction progress and identified deficiencies for correction.

Period: 2018–2020
Role: Project Manager
Project: Carrier Dome New Roof Structure, Syracuse, NY
Managed design of a 250,000 SF cable-supported roof replacing the air-supported roof.
Developed computer models, sized structural members, and extracted results. Managed engineers designing all aspects and creating construction documents. Actively involved during construction, answering RFIs, reviewing shop drawings, and making site visits.

Period: 2017
Role: Project Manager
Project: USTA Broadcast Building, Queens, NY
New two-story steel-framed office building for broadcast partners. Poor soil required a lightweight, post-tensioned waffle slab foundation.
Designed steel superstructure and connections. Designed foundation including waffle slab.

Period: 2016
Role: Project Manager
Project: Titletown Sledding Hill, Green Bay, WI
New man-made sledding hill and rink near Lambeau Field using a cast-in-place concrete structure with a green roof.
Designed concrete superstructure including slabs, beams, and elevator shaft. Designed foundation with retaining walls and pile caps. Performed CA tasks including RFIs, shop drawing review, and site visits.

Period: 2015–2016
Role: Project Engineer
Project: Louis Armstrong Stadium, Queens, NY
New 14,000-seat tennis stadium with retractable roof.
Developed computer models, sized steel members, and extracted results. Designed lateral system using buckling restrained braces and moment frames. Designed steel connections and concrete pile caps. Performed CA tasks including RFIs, shop drawing review, and re-design for misaligned pile caps.

Period: 2011
Role: Project Engineer
Project: USTA West Side Campus Improvements, Queens, NY
New spectator seating for practice courts.
Ran analysis models, sized steel members, and designed connections. Performed CA tasks including RFIs, shop drawing review, and site visits.

Period: 2009–2010
Role: Project Engineer
Project: BC Place Stadium, Vancouver, Canada
Part of team designing new tension membrane roof with retractable center.
Designed and calculated various components including the center-hung gondola, speaker hoists, and catwalk framing.

STEPHEN DAY (19-603-82)

All work experience reviewed by two licensed professionals

DISCIPLINE: STRUCTURAL

GENERAL

Applying To
Nevada

Application Type
Comity - PE

Application Date
07/12/2024

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
5 years, 1 month

Total Engineering Experience
5 years, 1 month

Experience under licensed engineer
5 years, 1 month

Disciplinary Action
None reported

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

EDUCATION

Bachelors in Civil Engineering (EAC)
University of Kentucky, Lexington
August 2016–May 2019

Masters in Civil Engineering
University of Kentucky, Lexington
August 2018–May 2020

NOTE: First discipline specific Structural license.

EXAMS

Fundamentals of Engineering (FE)
Kentucky
January 2019

Principles and Practice of Engineering (PE)
Civil
Tennessee PE
June 2023

Structural (SE)
Structural
Oregon
April 2025

LICENSES

Initial License
Tennessee PE
Issued: July 2023
Expires: July 2027

Additional Licenses
AR, CA, CO, ID, KY, MN, MT, NE PE, NV, NM, ND, OK, OR, SD, UT, WA, WI, WY

STEPHEN DAY (19-603-82)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

AG&E
Tennessee (United States)
Project Engineer
June 2020—February 2024

Verified by
Warren Goodrich
warrensg@gmail.com

Experience Summary
Full-Time
Engineering: 3 years, 8 months
Post EAC degree: 3 years, 8 months
Experience under licensed engineer: 3 years, 8 months

TASKS

-Performed structural design using manual calculations and computer aided structural analysis design software packages such as RISA and RAMSS.
-Created structural reports, structural contract documents, and calculation packages.
-Used computer aided design technology such as REVIT to develop BIM models.
-Liaised with professional colleagues such as architects and engineers.
-Developed training documents.
-Performed construction administration.

REPRESENTATIVE PROJECTS

NNSMC MOB – Structural Design of a Medical Office Building in Reno, NV

8/19/2021

I designed and performed calculations for a medical office building. The MOB was a two-story steel framed office building with a composite deck at the second level and a metal deck at the roof. The lateral force resisting system consisted of Side Plate moment frame connections due to the Seismic Design Category being E. I helped contractors and subcontractors in understanding the design intent as well as in determining adequate substitutions and field fixes given the unique constraints of the project due to its SDC. I also performed general inspections during construction to ensure compliance with the design.

301 15th Ave. – Structural Design of a Mixed-Use Apartment Building in Nashville, TN

5/23/2022

I designed and performed calculations for a mixed-use apartment building. The building consisted of two basement levels framed in post-tensioned concrete, an additional two levels above grade framed in post-tensioned concrete, a third podium level framed with traditionally reinforced concrete and 5 levels above the podium framed in timber. The lateral force resisting system consisted of concrete shear walls at the concrete levels and wood panel shear walls at the wood levels.

Tridon Drive Warehouses – Structural Design of Three Warehouses in Smyrna, TN

2/21/2023

I designed and performed calculations for three warehouse buildings. The three warehouses consisted of concrete tilt panel walls with a roof supported by steel joists. The lateral force resisting system consisted of concrete tilt panel shear walls. I helped contractors and subcontractors in understanding the design intent as well as in determining adequate substitutions and field fixes. I also performed general inspections during construction to ensure compliance with the design.

STEPHEN DAY (19-603-82)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Apex Structural Engineering
Tennessee (United States)
Senior Structural Engineer
February 2024—July 2025

Verified by
Kevin William Hampel
kevin@apexstructural.com

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

TASKS

-Performed structural design using manual calculations and computer aided structural analysis design software packages such as RISA and TSD.
-Performed connection design using manual calculations and computer aided structural analysis design software packages such as RISA Connection, RAM Connection, Descon and IDEA StatiCa.
-Created structural reports, structural contract documents, and calculation packages.
-Used computer aided design technology such as REVIT to develop BIM models and create connection design submittal packages.
-Liaised with professional colleagues such as architects, engineers, detailers and fabricators.
-Developed training documents.
-Performed construction administration.
-Managed a team of design engineers

REPRESENTATIVE PROJECTS

SBN100 – Structural Connection Design for a Data Center in New Carlisle, IN

3/28/2024

I designed and performed calculations for the connections for the Data Center. The Data Center was one-story and steel framed with a composite deck at the CSH level and a metal deck at the roof. The lateral force resisting system consisted of braced frames. Connections included standard gravity connections, vertical braced frame connections, drag strut connections, horizontal bracing connections and moment connections. I helped the detailers and fabricators in understanding the design intent as well as in determining adequate substitutions and field fixes as conflicts arose.

HSHS St. Elizabeth ASTC – Structural Connection Design for an Ambulatory Surgical Treatment Center in O'Fallon, IL

6/27/2025

I designed and performed calculations for the connections for the Ambulatory Surgical Treatment Center (ASTC). The ASTC was three stories and steel framed with a composite deck at the floor levels and steel joist framed with a metal deck at the roof. The lateral force resisting system consisted of special concentrically braced frames due to the Seismic Design Category being D. Connections included special concentrically braced frame connections and drag strut connections. I helped the detailers and fabricators in understanding the design intent as well as in determining adequate substitutions and field fixes given the unique constraints of the project due to its SDC.

Mercedes-Benz Vans – Structural Design of multiple new buildings and additions to existing buildings on the campus in Ladson, SC

7/2/2025 (Design phase currently in progress and not completed)

I designed and performed calculations for multiple new buildings and additions to existing buildings on the campus. The buildings included the addition on to a one-story steel framed body shop, the additional on to a one-story steel framed assembly building, a new independent steel framed energy center building, a new independent steel framed canopy, upgrades of existing steel framed pipe racks, addition of new steel framed pipe racks, etc. The lateral force resisting system for a majority of the buildings consisted of Side Plate moment frame connections due to the Seismic Design Category being D. I helped contractors and subcontractors in

understanding the design intent as well as in determining adequate substitutions and field fixes given the unique constraints of the project due to its SDC.

5. Public Comment

6. Adjournement