NEVADA STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS



Interim Board Meeting April 13, 2023 Virtual

1. Meeting Call to Order

2. Pledge of Allegiance

3. Public Comment

4. NRS/NAC 625 Waiver Requests

WAIVER REQUESTS Thursday, April 13, 2023

Applicants requesting waiver of NRS 625.183(4)(B)				
NAME	DISCIPLINE	то:	GRANT?	
1. Jadd Shelton	CHE	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...."

5. Non-Appearance Applications for Initial Licensure

Chemical

DISCIPLINE: CHEMICAL

GENERAL

Applying To Nevada

Application Type Initial - PE

Application Date 03/03/2023

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree

Total Engineering Experience

7 years, 6 months

Experience under licensed engineer

1 year

Other Experience

2 years, 8 months

Disciplinary Action

None reported







EDUCATION

Non-degree

Eastern Washington University September 2001–June 2002

Bachelors in Biology

Brigham Young University - Idaho August 2004–April 2008

Doctorate in Chemistry

Brigham Young University January 2008–December 2012

Masters in Mechanical Engineering

New Mexico Institute of Mining and Technology January 2016–January 2019

Non-degree

Kansas State University (online) August 2018–May 2019

Non-degree

University of Wiscosin Madison (online)

August 2022-December 2022

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..."







Additional Licenses

None

EXAMS

Fundamentals of Engineering (FE)

Utah

June 2020

Principles and Practice of Engineering (PE)

Chemical

Utah

September 2021

JADD SHELTON (17-430-29)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Emory University
Georgia (United States)
Postdoctoral Research Associate
October 2012—June 2015

Verified by

Experience Summary

Full-Time

Other: 2 years, 8 months

Experience under licensed surveyor:

None

O o

-DESCRIPTION

WORK EXPERIENCE

Autoliv Utah (United States) Chemist

August 2015-February 2022

Verified by
Kirk Rasmussen
kirk.rasmussen@yahoo.com

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



-TASKS

Energetic formulation development for automotive airbag applications. Designed and optimized formulation ingredients and formulations using computational thermochemical modeling and optimization codes. Formulations were developed on lab scale and taken to pilot scale and on to production scale. Wrote control plans for formulation spray drying on pilot scale as well as pressing propellant tablets. Tablet dimension optimization using ballistic codes. Helped solve large scale production issues such as device failure investigation or processing equipment malfunctions. Wrote design goal documents for energetic material design. Used DOE for initial chemical material design as well as large scale production of the material.

*Note, worked under PE reference Nyle Longhurst from August 2015 until his retirement in October 2019. Then worked under Kirk Rasmussen.



REPRESENTATIVE PROJECTS

Project 1:

Purpose: Design cool burning gas generant formulation for automotive airbag applications; Fall 2015-Fall 2019; Promontory, UT and Ogden UT. The project included a team of material/chemical engineers and inflator engineers. I designed novel energetic molecules for propellant formulations, to meet both burn temperature and burn rate specifications. I then took those novel materials and designed novel propellant formulations using thermochemical codes. Following propellant theoretical evaluation, I wrote control plans for the production of the leading candidate formulations on lab scale. I also wrote control plans for testing the material, and evaluated the data to further down-select propellants for pilot-scale spray dry production. I wrote control plans for the pressing of the material into tablets and worked with inflator engineers to evaluate the material performance in the inflator.

Project 2:

Purpose: Design novel autoignition material; Spring 2018-Fall 2020; Promontory, UT and Ogden UT. The project included a team of material/chemical engineers and inflator engineers. I designed novel autoignition formulations using thermochemical codes and optimization software such as JMP as well as SciLab codes developed internally by others. Performed DOE to optimized formulation ingredient amounts for targeted theoretical performance. I wrote control plans for the production of the leading candidate formulations on lab scale, and wrote control plans for testing. I also wrote control plans for tablet pressing of the formulations. I solved a powder flowability issue of the formulations by switching to ingredients with the different properties to allow for the desired powder flow in the presses. I collaborated with inflator engineers to evaluate the formulations performance in inflators, and iterated the formulation design to achieve desired performance targets.

Project 3:

Purpose: Organize and write design goal documents for the company's energetic material families; Winter 2021-Winter 2022. Promontory, UT and Ogden UT. The project included a team of chemists and chemical engineers and inflator engineers. Upper management saw the need for more organized and standard design documents for the energetic material- gas generants, initiators, boosters, autoignition material- and asked me to lead the project and prepare drafts. I organized the team meetings which selected the requirements for each design document and presented the ideas to upper management. I then wrote the first and second drafts for the side, booster, and autoignition materials before leaving the company.

Project 4:

Purpose: Design fast and cool burning propellant for novel side inflator design; Summer 2019-Winter 2022; Promontory, UT and Ogden UT. The project included a team of material/chemical engineers and inflator engineers. I designed and produced various novel materials with the needed properties to produce formulations with the desired performance. I applied those novel materials to novel propellants, using thermochemical code and DOE optimization software/codes to optimize theoretical performance. I

wrote control plans and lab work instructions for the lab scale preparation and testing of the material. I critically evaluated the material to down-select propellants to be progressed to pilot spray dry. I wrote with another process engineer control plans for the pilot-scale spray dry of the material, specifying order of addition, reaction temperature and time, etc. I wrote control plans for tablet pressing. After inflator evaluation with other inflator engineers, I oversaw the studies to increase tablet strength (wrote control plans and critically evaluated data with inflator engineers to down-select to the correct tablet dimensions - balancing ballistic and mechanical properties). Working with the team to move the propellant to production scale, I established production limits for material processing, such as reaction temperature limits, reaction time, concentrations, and order of addition. I began the patent application, concluding the first draft, for this product. The application was concluded by my colleague after I had left the company.

WORK EXPERIENCE

Northrop Grumman
Utah (United States)
Sr. Principal Research Scientist
February 2022—February 2023

Verified by
Mark Earl Ewing
Mark.ewing@ngc.com

Experience Summary
Full-Time
Engineering: 1 year

Experience under licensed engineer:

1 year



-TASKS

Energetic material formulation development for micro-electromechanical systems and propellant and other energetic material additive manufacturing. Explosive production from small scale to large scale. Material production and synthesis design of rocket motor material ingredients. Production support for large scale production of solid rocket propellant, keeping propellant within performance and mechanical specification limits.



REPRESENTATIVE PROJECTS

Project 1:

Purpose: Design propellant formulations for additive manufacturing into plenums of micro-electromechanical systems for microdigital thruster applications; March 2022-December 2022; Promontory, UT and Huntsville, AI; Team included chemical engineers and mechanical engineers.

I designed propellants for additive manufacturing for microdigital thruster applications. I designed a novel polymer system to achieve the desired propellant processing characteristics while also maintaining ballistic requirements. Performed thermochemical calculations and optimized propellant performance parameters, including both theorical and measured. I wrote control plans for the production and testing of the materials, and directed technicians in the process. I also designed inert simulant formulations for printing. I presented findings to 3D printing team, and iterated design based on their findings.

Project 2:

Purpose: Process intensification for the preparation of an insensitive explosive; March 2022-December 2022; Promontory, Utah; Team included chemical engineers and chemists.

I optimized a strategic synthetic step in the production of an insensitive explosive. The optimization included cost reduction by significantly decreasing waste production as well as decreasing reaction time and simplified the purification. This process included DOE design and execution. I also designed a novel crystallization unit operation, finding optimal solvent systems and system parameters (e.g.; temperature, concentration, etc). This led to improved crystal size and morphology, which are needed for explosive formulation development.

NCEES ID: 17-430-29 03/06/2023 Page 5 of 7

JADD SHELTON (17-430-29) All work experience reviewed by two licensed professionals

ADDITIONAL INFORMATION



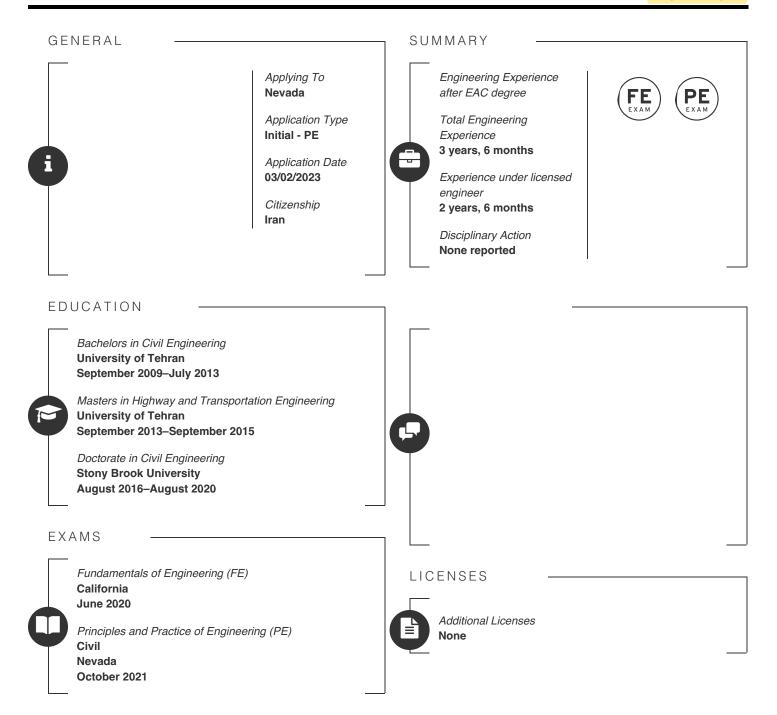
Start Date	End Date	Reason	Explanation
07/2002	07/2004	Unemployed	Served as a full-time missionary for The Church of Jesus Christ of Latter-day Saints in Belem Brazil during this time.

Page 7 of 7 NCEES ID: 17-430-29 03/06/2023

Civil

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL



All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Rahyaft Consulting Eng. Tehrān (Iran) Engineer

August 2015-August 2016

Verified by
Hossein Mousavi
mousavi.hossein1980@gmail.com

Experience Summary

Full-Time

Engineering: 1 year

Experience under licensed engineer:

None



TASKS

This was my first job out of the college. I was working with the company as a part-time employee during my master studies (2013-2015) and then turned into full time employee. The company was a small firm providing roadway design, traffic analysis, and transportation planning services. I was mostly supporting principal traffic engineers, in developing traffic simulation models and traffic studies. Also worked on multiple planning projects including a master plan, feasibility studies and corridor studies.



REPRESENTATIVE PROJECTS

City of Isfahan Cordon Pricing Feasibility Study: I performed a traffic analysis using VISSIM to evaluate the traffic impacts of a cordon pricing strategy at certain locations in the city of Isfahan, Iran. I collected traffic data and calibrated the model and contributed to develop the traffic analysis report.

Sadr Highway Corridor Study: I was part of the traffic analysis team for this project. I developed some portions of the traffic simulation model using AIMSUN, calibrated the model, and evaluated alternatives using measures of effectiveness, e.g., LOS.

City of Isfahan Transportation Master Plan: I used TransCAD software for development of a 4-step transportation model for a master plan.

NCEES ID: 19-747-73 03/09/2023 Page 2 of 7

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Parametrix
Nevada (United States)
Engineer III
September 2020—March 2023

Verified by

Amy Cummings

ACummings@parametrix.com

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



-TASKS

I began working at Parametrix in Sep. 2020 as Engineer II and then promoted to Engineer III in Jan. 2022. I've been responsible for a wide range of engineering tasks since I joined Parametrix in Sept 2020. My areas of responsibility include:

- 1 Traffic Operations Analysis: I analyze/evaluate traffic operations using traffic simulation tools. I develop traffic simulation models using VISSIM, Synchro, SIDRA, etc. and calculate performance measures such as delay, queue length, level of service, emission production for existing conditions as well as future improvement alternatives. I use Highway Capacity Manual methodologies and procedures for traffic operations analysis.
- 2 Traffic Safety Analysis: I collect, analyze, and visualize crashes and other safety-related information for different types of projects, from statewide planning projects to intersection operations improvements. I use FHWAs crash modification factors and safety countermeasures and Highway Safety Manual methodologies for these efforts.
- 3 Travel Demand Modeling: I develop travel demand models using tools like Cube and TransCAD. I evaluate different alternatives of a project and identify the long-term impacts of transportation improvement with these models.
- 4 Benefit/Cost Analysis: I am the company's lead Benefit Cost Analyst for federal grant applications. I calculate project costs using cost estimation manual/tools such as Nevada DOT's cost estimation manual and WIZARD tool. I also identify and quantify project benefits using the USDOT's Benefit Cost Analysis Guidance for Discretionary Grant Programs.
- 5 Transportation Data Analysis and GIS Mapping: I analyze traffic data (travel times, volumes, speeds, crashes, etc.) and develop reports to evaluate traffic conditions and to provide actionable insights to clients. I visualize geospatial data and transportation system performance via online and offline GIS maps.
- 6 Transportation Design: I design roadways in AutoCAD Civil 3D using AASHTO Green Book Guideline.

All tasks are 100% Engineering.



REPRESENTATIVE PROJECTS

I have worked on a wide range of projects in Nevada, Utah and New Mexico. Below is a list of selected projects:

- I-15 Sahara to Flamingo Feasibility Study (Client: New Mexico Department of Transportation): Using the NDOT's cost estimation manual and WIZARD tool, I developed cost estimations for the improvement alternatives along this stretch of I-15 in Las Vegas metro area. I also developed a benefit cost analysis report (attachment to the feasibility study report) for this project. Using NDOT's crash data, and the regional travel demand model, I calculated benefits related to safety, travel time savings, vehicle operating costs and emissions. The benefit-cost analysis will be used to evaluate the cost-effectiveness of the improvement alternatives.
- RAISE Grant 2022 Stewart Avenue (Client: City of Las Vegas): I developed a Benefit-Cost Analysis for the City's Stewart Avenue Complete Street Improvement project as part of the FY 22 RAISE grant application. I analyzed a wide range of data, including crashes, traffic volumes, speeds, ped/bike counts, transit ridership and property values, and quantified various types of project benefits. The City was eventually awarded \$24 million funding from the Bipartisan Infrastructure Bill. The compelling Benefit-Cost Analysis that I developed was instrumental to secure the funding for this project.
- District 3 General Engineering Services On-Call Task Order 2: I-40/Atrisco Vista Interchange Analysis (Client: New Mexico Department of Transportation): I developed traffic models and prepared traffic analysis report to assist the project team in

NCEES ID: 19-747-73 93/09/2023 Page 3 of 7

evaluating proposed alternatives for the intersection. I analyzed traffic data and developed VISSIM traffic simulation models for existing and four future alternatives. I calculated volumes and traffic queues at intersections and calculated performance measures such as intersection/interchange delay and level of service (LOS) for all alternatives.

- Point of the Mountain Alternatives Analysis-Phase 1 (Client: Utah Transit Authority): I developed VISSIM transportation models for existing conditions as well as the future alternatives. Also, using the FTA Simplified Trips on Project Software (STOPS), I analyzed transit data and developed ridership forecasts. I also developed conceptual preliminary engineering design for the identified preferred alternative.
- McCarran Blvd Corridor Study (Client: Regional Transportation Commission of Washoe County): Between diverse existing conditions and a substantial amount of new growth, an in-depth traffic analysis was necessary to understand the needs of the corridor, including safety, congestion, access control, multimodal accessibility, land use, and projected growth. I assisted in traffic analysis using Synchro/SimTraffic and analyzed traffic volumes, roadway/intersection conditions and speeds along the McCarran Boulevard loop spanning a large area that encompasses both Reno and Sparks. I also analyzed safety, transit, and land use data to identify needs along the corridor, and estimated traffic performance measures (delay, Level of Service, etc.) for future conditions of the corridor.
- Nevada State Freight Plan (Client: Nevada Department of Transportation): I analyzed various datasets related to freight mobility including truck GPS data, national freight origin-destination data (USDOT's FAF data) and other freight-related information to assess the freight supply chain and network in Nevada and to identify the needs. I've been working on freight traffic and origin-destination data to help NDOT identify the critical freight corridors in Nevada.
- Utah Managed Lane Study (Client: Utah Department of Transportation): I gathered data about managed lanes strategies and investigated case studies nationwide. I was also part of the screening team that developed a process to identify future managed lane opportunities in Utah. I analyzed traffic/safety data along candidate corridors that provided actionable insight for this purpose.
- Provo Safety Action Plan and Implementation Grant (Client: Provo City): I analyzed crashes in Provo City and identified the high-injury network of roadways in city. I was part of the team that developed a "Safe Streets and Roads for All" grant application for the city.

Please note that this list of projects is not exhaustive, and I have worked on several other projects not included here because of the word limit.

NCEES ID: 19-747-73 03/09/2023 Page 4 of 7

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Parametrix
Nevada (United States)
Engineer III
September 2020—March 2023

Verified by

Bardia Nezhati
bnezhati@parametrix.com

Experience Summary
Full-Time
Engineering: 2 years, 6 months
Experience under licensed engineer:
2 years, 6 months



-TASKS

I began working at Parametrix in Sep. 2020 as Engineer II and then promoted to Engineer III in Jan. 2022. I've been responsible for a wide range of engineering tasks since I joined Parametrix in Sept 2020. My areas of responsibility include:

- 1 Traffic Operations Analysis: I analyze/evaluate traffic operations using traffic simulation tools. I develop traffic simulation models using VISSIM, Synchro, SIDRA, etc. and calculate performance measures such as delay, queue length, level of service, emission production for existing conditions as well as future improvement alternatives. I use Highway Capacity Manual methodologies and procedures for traffic operations analysis.
- 2 Traffic Safety Analysis: I collect, analyze, and visualize crashes and other safety-related information for different types of projects, from statewide planning projects to intersection operations improvements. I use FHWAs crash modification factors and safety countermeasures and Highway Safety Manual methodologies for these efforts.
- 3 Travel Demand Modeling: I develop travel demand models using tools like Cube and TransCAD. I evaluate different alternatives of a project and identify the long-term impacts of transportation improvement with these models.
- 4 Benefit/Cost Analysis: I am the company's lead Benefit Cost Analyst for federal grant applications. I calculate project costs using cost estimation manual/tools such as Nevada DOT's cost estimation manual and WIZARD tool. I also identify and quantify project benefits using the USDOT's Benefit Cost Analysis Guidance for Discretionary Grant Programs.
- 5 Transportation Data Analysis and GIS Mapping: I analyze traffic data (travel times, volumes, speeds, crashes, etc.) and develop reports to evaluate traffic conditions and to provide actionable insights to clients. I visualize geospatial data and transportation system performance via online and offline GIS maps.
- 6 Transportation Design: I design roadways in AutoCAD Civil 3D using AASHTO Green Book Guideline.

All tasks are 100% Engineering.



REPRESENTATIVE PROJECTS

I have worked on a wide range of projects in Nevada, Utah and New Mexico. Below is a list of selected projects:

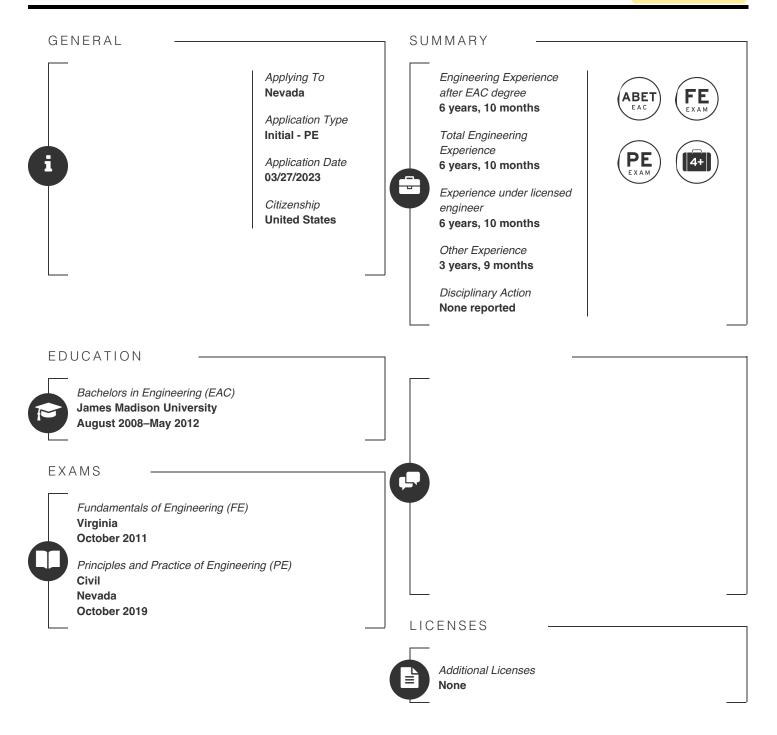
- I-15 Sahara to Flamingo Feasibility Study (Client: New Mexico Department of Transportation): Using the NDOT's cost estimation manual and WIZARD tool, I developed cost estimations for the improvement alternatives along this stretch of I-15 in Las Vegas metro area. I also developed a benefit cost analysis report (attachment to the feasibility study report) for this project. Using NDOT's crash data, and the regional travel demand model, I calculated benefits related to safety, travel time savings, vehicle operating costs and emissions. The benefit-cost analysis will be used to evaluate the cost-effectiveness of the improvement alternatives.
- RAISE Grant 2022 Stewart Avenue (Client: City of Las Vegas): I developed a Benefit-Cost Analysis for the City's Stewart Avenue Complete Street Improvement project as part of the FY 22 RAISE grant application. I analyzed a wide range of data, including crashes, traffic volumes, speeds, ped/bike counts, transit ridership and property values, and quantified various types of project benefits. The City was eventually awarded \$24 million funding from the Bipartisan Infrastructure Bill. The compelling Benefit-Cost Analysis that I developed was instrumental to secure the funding for this project.
- District 3 General Engineering Services On-Call Task Order 2: I-40/Atrisco Vista Interchange Analysis (Client: New Mexico Department of Transportation): I developed traffic models and prepared traffic analysis report to assist the project team in

NCEES ID: 19-747-73 93/09/2023 Page 5 of 7

evaluating proposed alternatives for the intersection. I analyzed traffic data and developed VISSIM traffic simulation models for existing and four future alternatives. I calculated volumes and traffic queues at intersections and calculated performance measures such as intersection/interchange delay and level of service (LOS) for all alternatives.

- Point of the Mountain Alternatives Analysis-Phase 1 (Client: Utah Transit Authority): I developed VISSIM transportation models for existing conditions as well as the future alternatives. Also, using the FTA Simplified Trips on Project Software (STOPS), I analyzed transit data and developed ridership forecasts. I also developed conceptual preliminary engineering design for the identified preferred alternative.
- McCarran Blvd Corridor Study (Client: Regional Transportation Commission of Washoe County): Between diverse existing conditions and a substantial amount of new growth, an in-depth traffic analysis was necessary to understand the needs of the corridor, including safety, congestion, access control, multimodal accessibility, land use, and projected growth. I assisted in traffic analysis using Synchro/SimTraffic and analyzed traffic volumes, roadway/intersection conditions and speeds along the McCarran Boulevard loop spanning a large area that encompasses both Reno and Sparks. I also analyzed safety, transit, and land use data to identify needs along the corridor, and estimated traffic performance measures (delay, Level of Service, etc.) for future conditions of the corridor.
- Nevada State Freight Plan (Client: Nevada Department of Transportation): I analyzed various datasets related to freight mobility including truck GPS data, national freight origin-destination data (USDOT's FAF data) and other freight-related information to assess the freight supply chain and network in Nevada and to identify the needs. I've been working on freight traffic and origin-destination data to help NDOT identify the critical freight corridors in Nevada.
- Utah Managed Lane Study (Client: Utah Department of Transportation): I gathered data about managed lanes strategies and investigated case studies nationwide. I was also part of the screening team that developed a process to identify future managed lane opportunities in Utah. I analyzed traffic/safety data along candidate corridors that provided actionable insight for this purpose.
- Provo Safety Action Plan and Implementation Grant (Client: Provo City): I analyzed crashes in Provo City and identified the high-injury network of roadways in city. I was part of the team that developed a "Safe Streets and Roads for All" grant application for the city.

Please note that this list of projects is not exhaustive, and I have worked on several other projects not included here because of the word limit.



CONNOR HEEDE (13-410-71)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Chartier Redevelopment Group New Jersey (United States) Assistant Project Manager July 2012—April 2016 Verified by

Experience Summary

Full-Time

Other: 3 years, 9 months

Experience under licensed surveyor:

None



- DESCRIPTION

NCEES ID: 13-410-71 03/27/2023 Page 2 of 5

WORK EXPERIENCE

AECOM USA, Inc New York (United States) Project Manager May 2016—March 2023 Verified by

David Beckett

david.beckett@aecom.com

Experience Summary
Full-Time
Engineering: 6 years, 10 months
Post EAC degree: 6 years, 10 months
Experience under licensed engineer:
6 years, 10 months



TASKS

I was hired as a Project Engineer by AECOM in May 2016. I was promoted to Office Engineer in October 2018, and promoted to Assistant Project Manager in November 2019. I was promoted to my current position of Project Manager since October 2021.

As a Project Engineer I performed design and constructability reviews, supervised and inspected the work for compliance with the construction documents, building code, and city/state/federal regulations. I reviewed submittals and provided comments, reviewed requests for information and provided responses, evaluated and negotiated change orders, analyzed and monitored the construction schedule and conducted bi-weekly progress meetings with the contractor, Engineer of Record, and the Client, and prepared the as-built drawings.

As Office Engineer I was responsible for reviewing design drawings, supervising construction, ensuring construction was in compliance with design documents, reviewing submittals and providing comments, reviewing requests for information and providing responses, evaluating and negotiating change orders, and analyzing and monitoring the construction schedule. Additionally, I reviewed and commented on regulatory reports and researched alternative remedial technologies.

As an Assistant Project Manager/Project Manager I perform pre-design site assessments, review all design documents, review all design subconsultant scopes of work, supervise construction, prepare/review daily construction reports, review submittals and provide comments, review requests for information and provide responses, conduct bi-weekly progress meetings with the client, evaluate and negotiate change orders, analyze and monitor the construction schedule, review and prepare as-built drawings, and review operation and maintenance manuals.



REPRESENTATIVE PROJECTS

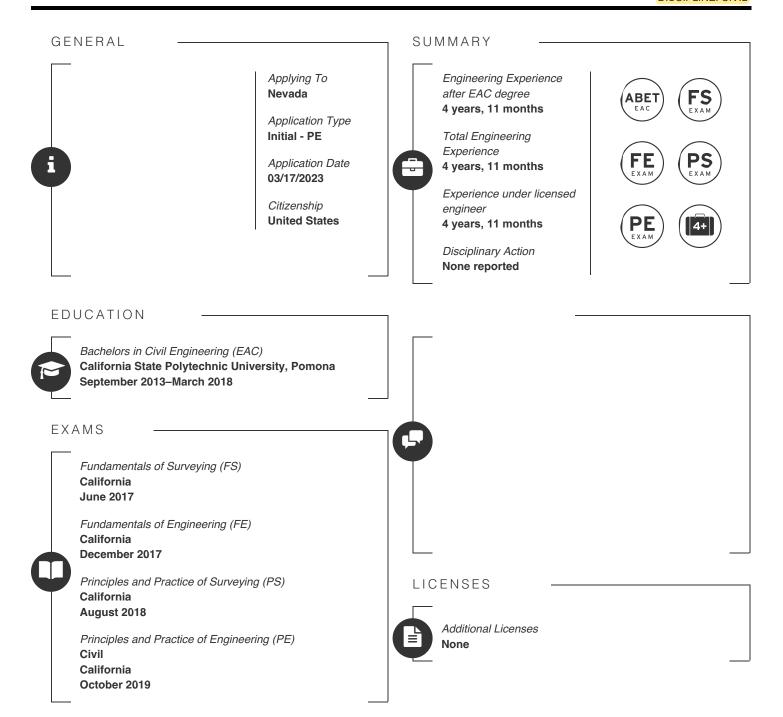
I was the Project Engineer on the JFK Terminal 5 Loading Dock Project (10/2016 – 9/2017). The project scope was to install powered loading dock gates and additional security structures at the Jet Blue Terminal at JFK Airport. This project included excavation, backfilling, concrete, asphalt, foundation, electrical, and mechanical work. I performed a constructability review and researched value engineering options prior to the start of construction. I was the onsite inspector overseeing all construction activities and ensured that all construction followed the contract drawings. Due to underground utilities in the area, I redesigned the footing and location of the loading dock gate foundation. I coordinated all the work between the airline, the facilities manager, the Port Authority, and the contractor daily throughout the duration of the project. I prepared the as-built drawings at the end of the project.

I was the Project Engineer on the Hunts Point Rail Spur Project (9/2017 – 10/2018). This project was located at the Hunts Point Produce Market in the Bronx, NY. The scope of work was the rehabilitation of approximately 2,700 feet of railroad track and several railroad crossings leading from the main line to the Hunts Point Produce Market rail entrance. I performed the design review for this project and provided comments to the Engineer of Record. I led the pre-bid site tour and described the job requirements to the potential bidders. I was the onsite inspector overseeing all construction activities and ensured all the work was conducted in accordance with design specifications/drawings and all applicable city/state/federal codes and laws. I coordinated with business owners, who had driveways crossing the track being rehabilitated, and scheduled the work in such a way to minimize the impact to their businesses. I reviewed all project submittals and replied to all requests for information submitted by the contractor. I reviewed the as-built drawings for accuracy and provided comments to contractor for any required revisions.

I was the Project Engineer on the Hunts Point Produce Market Freight Rail/Platform Project (9/2017 – 10/2018). This project was located within the Hunts Point Produce Market in the Bronx, NY. The scope of work was the rehabilitation of several freight rail lines, construction of additional freight rail lines, and the construction of a 1000-foot sawtooth platform for unloading railroad cars. I performed the design review for this project and provided comments to the engineer of record. I reviewed all contractor bids and

performed material take offs to ensure that the bidders' numbers were accurate and within the client's budget. I was the onsite inspector overseeing all construction activities and ensured all the work was conducted in accordance with design specifications/drawings and all applicable city/state/federal codes and laws. I led bi-weekly progress meetings with the contractor, engineer of record, and the client and I analyzed and monitored the construction schedule. I was responsible for preparing the contractor invoices on a work completed to date basis. I reviewed submittals, requests for information, and evaluated/negotiated change orders submitted by the contractor. I was responsible for updating the redline as-built drawings regularly as the project progressed.

I was promoted to Office Engineer when I started on the NYCDDC Remediation/Tank Program (10/2018 – present). I was promoted to Assistant Project Manager (11/2019) and ultimately my current role of Project Manager (10/2021) while working on the Remediation/Tank Program. The scope of this program is the remediation of petroleum contaminated sites located in the boroughs of the Bronx & Manhattan, NY and the replacement/upgrade of petroleum storage tanks located in the borough of Queens, NY. I am responsible for reviewing design drawings, reviewing documents filed with the Department of Buildings (including SOE drawings, construction fence drawings, etc.), reviewing Site Safety Plans, supervising construction, preparing/reviewing daily construction reports, reviewing submittals, reviewing requests for information, conducting bi-weekly progress meetings with the client, evaluating and negotiating change orders, analyzing and monitoring the construction schedule, reviewing and preparing as-built drawings, and analyzing and evaluating project budgets for current and future sites.



WORK EXPERIENCE

Hillwig-Goodrow
California (United States)
Assistant Engineer
April 2018—March 2023

Verified by
Alan Carter Hillwig
alan@hillwig-goodrow.com

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



TASKS

I am the lead designer and drafter for all engineering related projects at our office, which usually begins with preparing Tentative Maps for commercial and residential projects. The first task for me is determining pad elevations for buildings. I will make this decision by taking into account the need to have positive drainage away from the building envelope, but also balancing earthwork on the site. I will also determine if retaining walls are needed for the desired site configuration. The next item i address is designing street profiles by best fitting the road to the existing terrain and checking that it works for the overall goal of the project, but is also cost effective (earthwork) for construction. When the road design is complete, i use the same strategy for designing the utilities that will be serving the property (water, sewer, storm drain, etc.) After the Tentative Map phase, I take the design to final engineering where i prepare the plans for the reviewing agency. I will prepare a rough or precise grading plan (whichever is needed), i will also design and draft the plan and profile sheets for the streets, water, sewer and storm drain.



REPRESENTATIVE PROJECTS

Tract 30989 Winchester, CA (2018-2020)

This project was a little unique because it was completely approved and began construction before the 2008 recession. Prior to the recession, the builder had constructed about 1/2 of the road network and utilities. Our company was hired to bring the approved plans up to current standards so that construction could resume. My role on this project was verify which facilities had already been constructed. I then had to go through the County of Riverside Standards and Eastern Municipal Water District Standards and update the street, water, sewer and storm drain plans to current standards. One of the new standards implemented by Riverside County was to have ADA compliant corner and mid block crossings within the tract. I determined the locations for the mid block crossings and i also prepared the plan sheets and diagrams that detailed every corner and mid block curb ramp within the Tract.

Parcel Map 19597 Yucaipa, CA (2018-2020)

This project was a small 4 parcel and remainder parcel project within our community. The project was headed by another surveyor and engineer that sadly passed away. Our company took the project from where he left off. The prior engineer had already designed the rough grading for all parcels and they were constructed per that plan. Over a period of 2 years, the parcels were sold and each of the owners came to our company to have us prepare precise grading plans. The deigns for each lot were pretty standard in terms of providing adequate drainage. The challenges that i did face were creating access driveways to the rear of the parcel if the owner wanted to put their recreational vehicle behind the house. This involved removing graded slopes and replacing them with block retaining walls. I evaluated the conditions on the front side and back side of the wall to determine the height of wall that would be needed. We tried to stick with pre-approved city wall designs so that the owner did not have to pay the expense have having new wall deigned.

Stewart Residence Yucaipa, CA (2021-2023)

This project was for an owner builder in our community. I began this project by trying to determine the correct pad elevation for the house. This property was gently sloping terrain (towards the street) that already had about a 5 foot tall slope at the edge of the street. The owner wanted the house set back about 70 feet from the edge of the road for aesthetics. I designed an adequate pad and driveway for the house, but the owner then decided that he wanted to build a garage and ADU combo unit behind the house and he would also need to be able to park his 40 foot trailer in that garage. The original driveway design had maximum slope of 12% that was going to be too steep for the trailer. I redesigned the driveway to have a curved path in front of the house and the added length allowed me to bring the slope closer to 6%. The owner then decided that he wanted additional parking behind the garage/ADU, so i designed a driveway along side the garage to the back that was going to require a retaining wall that varied in height from 4 feet to 12 feet. I worked with Allan Block Company to design a wall that fit our needs. Another feature that i designed was a storm drain system around the garage/ADU and the house that was also able to incorporate the owners proposed "sunken" out door seating area between the 2 units. This project is still under construction and i am anxious to see it at completion

this year.

Other projects I am currently working on the final engineering for:

Tract 20480 Lake Arrowhead (2021-2023)

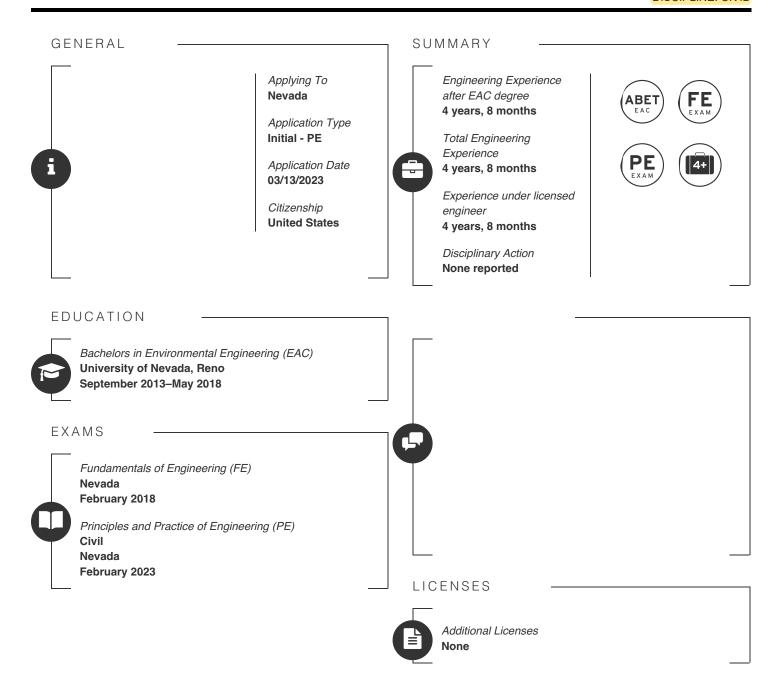
Tract 20415 Western Heights Water Company Yucaipa, CA (2021-2023)

Tract 20531 Gore Property Yucaipa, CA (2021-2023)

Tract 36703 Fairview Residences Riverside, CA (2021-2023)

Tract 37643 Monterra Homes Moreno Valley, CA (2021-2023)

Numerous single family home precise grading plans



WORK EXPERIENCE

GOLDER ASSOCIATES
Nevada (United States)
ENGINEER,STAFF ENGINEER
July 2018—March 2021

Verified by

Andrew John Schaper

Andrew.schaper@wsp.com

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



-TASKS

I assist in the design and drafting of mine site projects including grading, hydrological analysis, pump station design, water delivery systems and storm water design. I model and prepared trade off studies on water delivery systems and made recommendation for pressure reducing valve station, booster stations, and type of valving that may be necessary. I drafted construction drawings for heap leach pads in compliance of regulation code. I assisted the project manager with drafting technical specifications based on ASTM standards for site specific conditions and the recommendation of geotechnical engineers. I reviewed vendor product submittals to ensure they meet specifications and assist project managers with "request for information" on project specific questions.



REPRESENTATIVE PROJECTS

Rain Mine seepage ponds project located in Elko County, Nevada, a mine that is at its final closure stage. [May 2018 - July 2018] I assisted in the design of the pump station, valve box configuration and water main, and drafted supporting construction drawings of the site plan, pump station cross section and pipeline plan and profiles.

Phase 3 San Agustin heap leach facility located in Mexico is expanding their 100 acre heap leach pad. [August 2018 - January 2019]

I assisted in the design and drafting of the grading, hydrological studies, storm water design and settlement analysis of a fully stacked 50 meters tall heap leach pad.

Cerro Del Gallo heap leach facility and waste rock dump is located in Mexico. [January 2019- August 2019] I utilized updated topography to update and adjust the construction grading plans. I resized the solution collection pipes and graded in the perimeter diversion channels. I assisted in the documentations of the solutions collection pipe sizing, stability analysis, grading and quantities.

Kirazli heap leach facility is located in Turkey east of the historical city of Troy. [May 2019-July 2019]
I reviewed submittals for products to confirm that they meet or exceeds specification for construction. I assisted and developed work method statements for construction for ravine drains.

Round Mountain Pit Water Management located in Smokey Valley in Nevada. [August 2019- November 2019] I analyze the existing hydraulic delivery system and made recommendation to upsize vertical turbine pumps. I also lead the hydraulic modeling and provided trade-off studies of different horse power pumps. I developed the pump design and operating philosophy.

Glencore Grey Eagle tailings storage facility dam breach analysis is located in the Sierra Mountains in Northern California. [January 2020-April 2020]

I developed plan view exhibit with modeling data to show time for flood arrival to the nearby town and drafted inundated flood map.

La Yaqui Grande Pipeline extension, Mexico [February 2020 - June 2020]

I developed the hydraulic models for a 5 mile pipeline that was extend from the river basin of the Mulatos mine across mountainous valleys and delivered to the La Yaqui Grande mine site. I drafted plan and profiles of 3 separate pipeline alignments and I performed hydraulic analysis of the water main and made recommendations for pipe material and size, booster station and pressure releasing valve locations.

Victoria 2 Heap Leach Facility Pad Expansion in Mexico [February 2020 - March 2020]

I developed the design criteria for this leach pad based on the site limits, drafted the design drawings and and wrote the technical

specifications. I assisted with the design report and seismic analysis to show the development meets or exceeds the jurisdictional requirements.

Rain Mine Plans for Permanent Closure, Nevada. [April 2020 - July 2020]

I modeled the pump and system curves for the evaporation pond and made recommendation with manufactured pumps that are available. I graded in maintenance access for the pump stations and valve box. I performed a hydrological study on the existing capped heap leach and sized storm water channels, culverts and a event pond for the relining and lime treatment of the heap leach cap due to drain down contaminant reaching close to permitted levels.

Isabella Pearl heap leach facility expansion, Nevada. [July 2020-September 2020]

I calculated the leach pad settlement and ensure the seismic calculation is within jurisdiction code requirements. I designed the heap leach expansion with diversion channels and sized the solution collection piping.

La Yaqui Grande phase 2 freshwater detailed engineering located in Mexico. [October 2020 - March 2021]

I modeled, designed and recommended pipe delivery sizes based on peak hour demand, storage tanks based on fixture units, pump and pressure releasing valve locations. I drafted drawings for the pipeline and pump stations with a breaker tank. I compiled the cost estimation for long lead items such as steel fabricated tanks, different size and material pipes, valves and pumps.

WORK EXPERIENCE

WOOD RODGERS
Nevada (United States)
Assistant Engineer
March 2021 – March 2023

Verified by

Matthew James Roulias
mroulias@woodrodgers.com

Experience Summary

Full-Time

Engineering: 2 years
Post EAC degree: 2 years

Experience under licensed engineer:

2 years



TASKS

I assisted with the drafting and design of residential homes, commercial properties and roadways, which involves tasks like grading, hydrology, sanitary sewer design, storm drains, and water mains. I drafted plot plans and position homes on lots in compliance with jurisdictional and federal regulations. I provided effective designs by iterating between the grading, hydrology, and utilities in various developments to prevent flooding and found solutions that meet local codes and design standards.



REPRESENTATIVE PROJECTS

Rancharrah village 4, 6B and the event center located in Reno. NV is part of a larger planned unit development consist of mixed residential projects including a club house and commercial shopping centers. [March 2021 - September 2021]

I assisted in the design and drafting of the grading, hydrological studies, sewer design, storm water and water main systems. I assist with the drafting of tentative maps and place anticipated utilities to ensure future house lots will meet jurisdictional code requirements.

Stonebrook village E, F, G1, G2 and club house located in Sparks, NV are part of a larger planned unit development consist of single family residential projects. [July 2021 - October 2021].

I assisted with the drafting for grading, site plans, sewer layout, storm water design and water system design. I generated a fit list to ensure that all housing models met jurisdictional codes for setbacks.

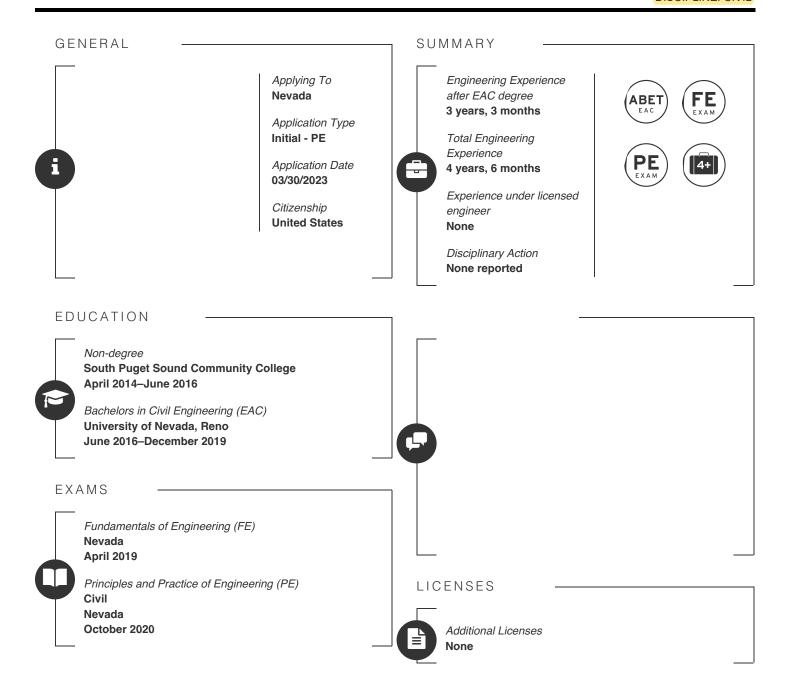
Talus Valley Backbone Phase 1 and 2, Mass Grading, Planning areas 10, 11, 16a, 16b, 18a, 19a, 19b, 20a, 20b, 20c and 21 in Reno, NV are part of a larger planned united development. This portion consist approximately 1300 lots designated for single to multi-family residential with multiple parks with connectivity trails, commercial area and schools [October 2021 - Now] I assisted in the design and drafting for grading, hydrology, sanitary sewer design, storm drain and water system design. I drafted the master sanitary sewer report and check to ensure that all sewer pipes will meet jurisdictional code requirements when future planning areas tie into the backbone infrastructure. I assisted with the design of the backbone roadways where I placed signage and striping, turn pocket geometry drafting, and sight triangles based on the manual uniform on traffic control devices and local jurisdiction code. I compiled the 250 acre site mass grading plans and I provided effective grading options for different stages of development of this project.

Nevada health center expansion located in Carson City, NV wanted to expand their facility to be able to accompany a mobile clinic [November 2022 - January 2023]

I drafted and designed the grading, hydrological studies, storm water design and I compiled the hydrological design report to ensure the project is within jurisdictional code.

Solid waste and recycling transfer station in Berkley, CA is updating their existing transfer station [January 2023 - February 2023] I assisted in the preliminary design and drafting of the grading, over excavation quantities based on the geotechnical report and provided effective use of walls to maximize available land use.

NCEES ID: 18-029-49 03/15/2023 Page 4 of 5



WORK EXPERIENCE

CFA Inc Nevada (United States) Civil Intern April 2018—January 2020 Verified by

Kevin German
kgerman@cfareno.com

Experience Summary

Part-Time

Engineering: 1 year, 4 months (75%) Post EAC degree: 1 month (75%) Experience under licensed engineer:





TASKS

Worked on design for both preliminary and/or final grading design of multiple projects along with sanitary sewer, storm drain, and water improvements in accordance with local codes. Additionally, I prepared sewer capacity and usage studies, hydrology reports, construction specifications, and SWPPP documents. Programs used included AutoCAD Civil 3D, Flowmaster, and Hydroflow Hydrographs.



REPRESENTATIVE PROJECTS

Hardie Ln Townhomes Special Use Permit (SUP) – Fernley (4/18-10/18) - I designed the site, grading, and utilities as required for the tentative map application of a 66-unit townhome development across 6.5 acres of undeveloped land in Fernley, Nevada. The project required considerations to drainage-ways that existed through the site and connectivity/continuation to adjacent infrastructure.

Grand Army of the Republic (GAR) Cemetery Parking Lot (7/19 - 9/20) - I designed the site and grading associated with a new parking lot for the GAR Civil War cemetery. I designed the project on behalf of the civil improvements in coordination with the Associated General Contractor (AGC), City of Reno, and several local contractors completing the work on a pro-bono basis.

City of Sparks Standard Details/Public Works Design Manual – Sparks (4/18 – Ongoing) – I drafted the standard details for the City of Sparks for delivery and publication in PDF and DWG (AutoCAD) formats. Work also included the creation of new standard details for fire installations that universally accepted amongst Reno, Sparks, and Washoe County fire departments. The City of Sparks Design Manual is still ongoing and is anticipated to be completed in the near future.

RTC 2019 Sparks Consolidated Road Rehabilitation Project – Sparks (10/18-11/20) – I performed existing site analysis and prepared improvement plans including grading plans, plan and profiles, signage & striping plans, as well as addressed and redesigned field conflicts as they arose throughout construction.

Grey Goose Self Storage Special Use Permit (SUP) – Stead (6/19-8/19) – I designed the grading, utility, and overall site layout for the SUP of a self-storage facility in Stead. The project required considerable hydrological improvements due the overall size of the development and the large increase in impervious surface to the parcel. A large number of existing easements and sewer infrastructure also incombered the site creating further obstacles for the overall layout of the site.

A Dog's Life Special Use Permit (SUP) – Washoe County (6/19-12/19) – I designed the conceptual site plan, grading, and utilities for a proposed dog kennel. Project adjacency to Pyramid Highway and an existing high-pressure gas main required large setbacks for all proposed development. Considerations to the grading, utility, and circulation of the site were also made for the future development of the site, including a permanent construction office, propane truck refill station, and a future office building.

NCEES ID: 19-911-79 03/31/2023 Page 2 of 5

WORK EXPERIENCE

CFA Inc Nevada (United States) Civil Designer January 2020—March 2023 Verified by

Kevin German
kgerman@cfareno.com

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

Experience Summary

None



-TASKS

I designed multiple projects, including but not limited to residential subdivisions, commercial and industrial buildings, parking lots, municipal standard details, roadway rehabilitation, etc. Work on the projects included overall grading and site design, sewer layout and capacity studies, hydrologic studies and designs, and water distribution designs. During the construction of these projects, I address, and update plans based on site constraints and address any discrepancies. Additional tasks included the preparation of design specifications for multiple projects. Programs used included AutoCAD Civil 3D, Flowmaster, Transoft Autoturn, and Hydroflow Hydrographs.



REPRESENTATIVE PROJECTS

South Meadows RV Storage – Reno (3/21-4/22) – I designed the site, grading, and utilities for a 13-bay private boat and RV storage facility. Design included pedestrian connectivity, RV dump station, and unique methods of stormwater management/conveyance with the site close proximity to Nevada Department of Transportation (NDOT) right-of-way.

Obexers Boat Storage – Carson City (1/21-10/22) – I designed the site, grading, and utilities, both for the initial Major Project Review (MPR) and final design, associated with the development of a winter boat Storage warehouse and maintenance building. The project required close consideration to treatment of petrochemical runoff and to overall site/building elevation due to the project's close proximity to the Carson City Airport, all while providing a balanced site to minimize export of site material.

Green Valley Park - Fernley (4/21-1/23)-I designed various site improvements in accordance with the City of Fernley's overall improvement plan for the park including the addition of three new shade structures, new bathroom facilities, ADA improvements, and site connectivity across the 7-acre park.

The Park At McCarran - Reno (3/20-Ongoing) – I designed the site and mass grading plans for the development of three warehouses, totaling approximately 1.5 million square feet of space, and retail additions across a 104-acre site located largely within a FEMA Zone AE flood zone. I designed the sanitary sewer, with considerations to the phased development, across the site's relatively flat topography which ultimately included the addition of a sewer lift station to convey flows from the southern side of the development.

Switch Citadel Campus – Storey County (10/20-Ongoing) – I designed the utility plan, horizontal control plan, grading plan, and site specific construction details associated with the development's 2nd and 3rd data centers. I also designed the utility plan, horizontal control plan, and mass grading plan for the sites 3rd, 4th, and 5th buildings which includes over 4.3 million cubic-yards of earthwork. Currently I am working on the mass grading plans for the development of the site's 6th and 7th buildings with associated utility and drainage improvements.

Fallon Paiute-Shoshone Tribe (FPST) Road Rehabilitation – Fallon (1/20-8/20) – I designed and created plan and profile sheets, striping plans, and project specific details for the rehabilitation of 4 existing roadways on FPST territory. Existing roadways were comprised of dirt and varying depths of failing asphalt concrete and required careful analysis to define limits of Full-Depth Reclamation (FDR) for proposed roadway section.

Carson Medical Group (CMG) Medical Office Building (MOB) – Carson City (8/21-Ongoing) – I designed the site, grading, and utilities for a new MOB off the southwest corner of the Carson City airport. The project required over 18,000 cubic-yards of imported fill to covey on-site gravity flows to existing infrastructure in the adjacent right-of-way. Close analysis was also required to ensure the proposed structure was low enough to maintain the appropriate avigation easement due to the project's adjacency to the airport.

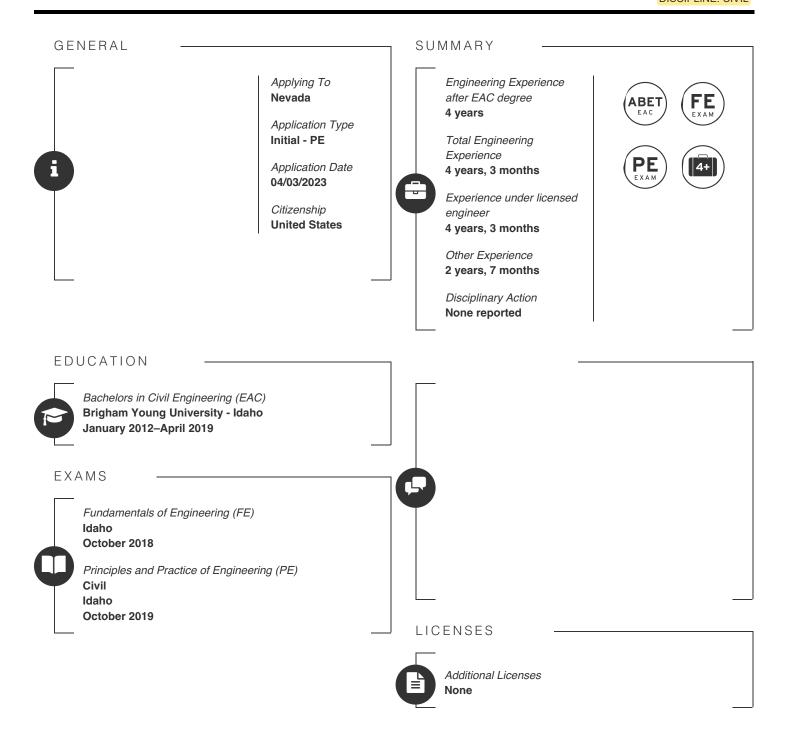
Dermody Properties Office – Reno (3/22-Ongoing) – I designed all site layout, grading, and utilities for Dermody Properties' new 3-story office building. Design required careful consideration of existing utilities and development that abuts the property, while maintaining accessibility for emergency services. Additional design considerations were taken across the site for Low Impact Development (LID) treatment and to achieve LEED Platinum accreditation. The project is currently in for it's final plan review and is expected to break ground in April 2023.

GARY RATLIFF (18-843-70)

All work experience reviewed by two licensed professionals

♥ 8866 SvI Box 18570 Niagara Drive Victorville, CA 92395

DISCIPLINE: CIVIL



GARY RATLIFF (18-843-70)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Baltazar Construction Verified by Experience Summary
California (United States)
General Laborer
May 2011—December 2011

DESCRIPTION

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

GARY RATLIFF (18-843-70)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

The Church of Jesus Christ of Latter-

Day Saints

Asunción (Paraguay) Missionary

November 2012 - November 2014

Verified by Experience Summary

Full-Time Other: 2 years

Experience under licensed surveyor:

None

DESCRIPTION

NCEES ID: 18-843-70 04/04/2023 Page 3 of 7

WORK EXPERIENCE

Keller Associates, Inc. Idaho (United States) Project Engineer January 2019—October 2022 Verified by

Colter Lamont Hollingshead
chollingshead@kellerassociates.com

Experience Summary
Full-Time
Engineering: 3 years, 9 months
Post EAC degree: 3 years, 6 months
Experience under licensed engineer:
3 years, 9 months



TASKS

Tasks and duties that for which I was responsible for include planning, design, construction engineering and inspection, and project management. I have and continue to perform these responsibilities depending on project needs.

Design Summary - Planning, Funding, Design, and Bidding of transportation projects. Tasks and duties include:

- Draft project planning document
- Draft project funding applications
- Geometric design
- Preparation of engineering drawings
- Draft Environmental Documents (SWPPP, 404 Permits)
- Draft contractual documents and technical specifications
- Utility Coordination
- Project Team Coordination
- Project Budget Reviews
- Project Scheduling
- Bid Coordination for advertisements, addendums, bid evaluation, award of contract

Construction Summary: Construction Engineering, Inspection, and administration of transportation projects. Tasks and Duties include:

- Coordination with Contractors to ensure projects comply to plans, specifications, traffic control, and environmental documentation.

- Coordination of material testing
- Document Control of all records submitted by Contractor, material testing, and inspectors
- Obtain and Maintain State of Idaho Inspector Qualification Program Certifications
- Draft change orders
- Prepare pay applications
- Pay Item quantity tracking and verification
- Review of Contractor submittals
- Interview contractor for labor compliance
- Manage inspectors
- Construction project closeout



REPRESENTATIVE PROJECTS

1st St & 45th East Intersection Improvement (Bonneville County, Idaho Jan. 2019 - Jul. 2021)

This project was to install a roundabout at a 4-way stop intersection. For the design portion of this project, I drafted the contractual documents and technical specifications, I designed the interior landscape of the roundabout, I quantified and calculated costs for each pay item, and I reviewed the plan set at final design and PS&E submittals for clarity and missing bid items. For construction of the project, I was the lead inspector and field engineer which involved shallow injection well construction, earthwork, utility coordination and relocation, and roadway construction. I coordinated with the project team including the Contractor, County officials, and my project team. I observed and documented daily construction activities. I resolved construction issues by applying engineering judgement and made recommendations to the project manager. I tracked and verified quantities, reviewed submittals, and reviewed pay applications.

US-30 Nounan to Bennington (Idaho Transportation Department, Bear Lake County, Jul. 2020 - June 2022)
This project was to improve the travel surface of the roadway and reinforce the roadway structural section. From milepost 424.5 to

NCES ID: 18-843-70 04/04/2023 Page 4 of 7

milepost 430.1 on US-30, C.R.A.B.S rehabilitation was selected and grade control was required through the City of Bennington to match into existing gutter. As the lead designer for this project, I designed the horizontal and vertical geometrics to match the existing surface along with transitions from a 2-lane roadway section to a 5-lane roadway section. I inventoried and evaluated culverts through the project area for rehabilitation or replacement recommendation to the project manager. I calculated pay item quantities including earthwork. I produced the plan set for the project manager to seal and sign for construction.

Bonneville County Transportation Plan (Bonneville County, Idaho Oct. 2021 - Sept. 2022)

I was the lead transportation planner for the Bonneville County Transportation Plan. This planning effort involved the evaluation of existing conditions of the transportation network, future conditions, pavement management system, safety evaluation, and recommended projects to improve the transportation network. For this project, I collected video of pavement to evaluate for pavement distresses, demographic data, current traffic volumes, 5 years of crash history. I analyzed the collected data, calculated future projections for demographics and traffic volumes, and recommended crash-reduction solutions for high accident locations and capital improvements for the transportation network. I discussed potential capital improvements with the client and helped them prioritize the projects into an adopted Capital Improvement Plan.

WORK EXPERIENCE

Michael Baker International California (United States) Technical Specialist V October 2022—April 2023 Verified by

Daniel Robert Walden

Danny.Walden@mbakerintl.com

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



TASKS

Tasks and duties for which I was responsible for include design and project management. I have and continue to perform these responsibilities as needed on projects.

Design Summary - Design and Bidding of Transportation Projects. Tasks and duties include:

- Geometric Design
- 3D modeling
- Preparation of engineering drawings
- Utility Coordination
- Quantity Calculations



REPRESENTATIVE PROJECTS

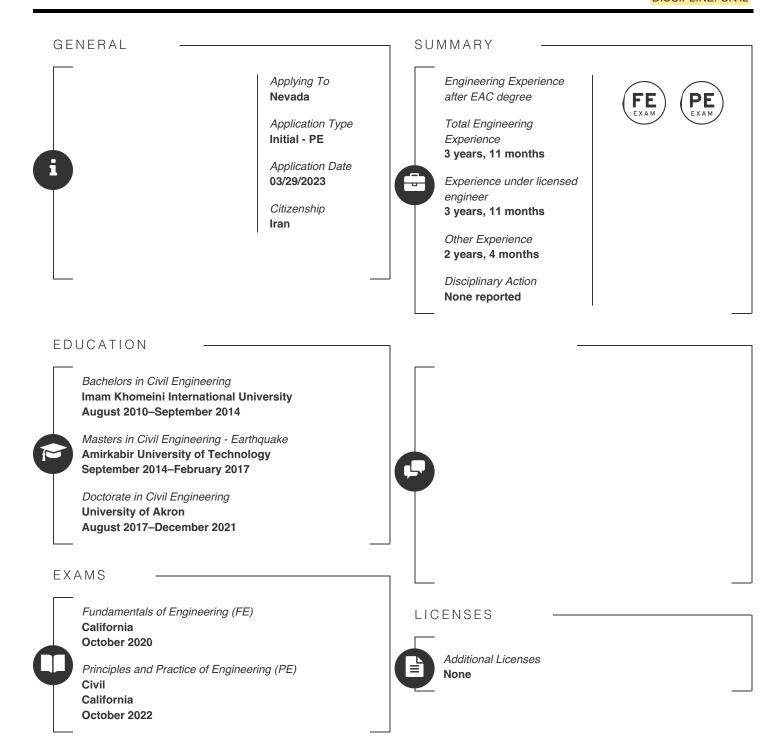
Good Hope Paving Project (Riverside County, California Oct. 2022 - Current)

This project was to construct new asphalt concrete roadway segments for three streets as part of a larger project to improve storm drainage. As the lead designer of this project, I designed the horizontal and vertical geometrics, the typical roadway cross section, and slope requirements for the project. I calculated the stopping sight distance at each intersection for the stop controlled minor roads. I coordinated with utilities that needed to adjust or relocate their facilities. Also, I calculated pay item quantities including earthwork and produced a preliminary plan set.

Capella St. Reconstruction (Riverside County, California Nov. 2022 - Current)

This project was to reconstruct and widen the existing roadway to improve the rideability and safety for residents. I designed the vertical alignment that improved the rideability of the roadway. I designed the roadway typical section that included the lane widths, shoulders, slopes, and locations of retaining walls. I calculated pay item quantities including earthwork for cost estimation purposes.

NCEES ID: 18-843-70 04/04/2023 Page 6 of 7



AHMAD SORAGHI (21-207-00)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

University of Akron Ohio (United States) Researcher

August 2017 - December 2019

Verified by
Ping Yi
Pyi@uakron.edu

Experience Summary

Full-Time

Engineering: 2 years, 4 months
Experience under licensed engineer:

2 years, 4 months



TASKS

During the first phase of my Ph.D. project (experimental design) I was involved with the structural design of Reinforced Concrete elements for the purpose of experimental testing of cyclic loading. More than hundreds of beam-end elements were designed, fabricated, tested, and analyzed. This project was a government-funded project by National Science Foundation (NSF). The results were then used for simulation purposes of RC buildings and bridges.



REPRESENTATIVE PROJECTS

PROBABILISTIC CHARACTERIZATION OF BOND BEHAVIOR AT REBARCONCRETE INTERFACE IN CORRODED RC STRUCTURES: EXPERIMENT, MODELING, AND IMPLEMENTATION, Akron OH, Reinforced Concrete bridge pier design, August 2017 – December 2021

- I designed more than a hundred beam-end RC elements based on the ACI 408, ACI 318, and ASTM A-944
- I calculated the required frame size, concrete strength, rebar size, transverse spacing, and all other design parameters
- I recommended the appropriate method of design to be inclusive to be applicable to various design parameter ranges
- I calculated the appropriate amount of rebar size, rebar spacing, concrete strength, transverse rebar size, and corrosion level
- I fabricated and constructed the designed RC elements
- I devised a practice to corrode the RC elements to reach a certain level of corrosion that occurs in bridge structures
- I tested the beam-end RC elements with monotonic and cyclic loading for earthquake simulation purposes.
- I reviewed the test results and analyzed them in order to change the design parameters and testing method if necessary.

NCEES ID: 21-207-00 03/30/2023 Page 2 of 5

WORK EXPERIENCE

Bureau Veritas California (United States) Project Manager, Structural Specialization

August 2021 - March 2023

Verified by
Marc Ryan Bayan
marc.bayan@bureauveritas.com

Experience Summary

Full-Time

Engineering: 1 year, 7 months

Experience under licensed engineer:

1 year, 7 months



-TASKS

I am conducting physical structure inspections and surveys of all civil features such as residential and commercial buildings, warehouses, etc. I am performing the collection and analysis of data for the required reports on the safety and monetary loss of the facilities. I am ensuring provisions for the safety and integrity of structures are complying with standards, such as ASTM, ASCE, and FEMA.

As a Project Manager (Structural Specialization), I am working with multiple buildings in various states of the United States and coordinate miscellaneous projects and/or assessments with California risk and earthquake assessment codes. I am responsible for buildings projects to lead efforts to gather and interpret data about the facility and to evaluate any element of the structure that could impact the behavior of the building in an earthquake event along with maximum loss of the facility.

I also perform general inspections for existing and under-construction buildings to ensure compliance with the design.

Besides, I will assist with the Tier 1 analysis of buildings to meet the Basic Performance Objective for Existing Buildings (BPOE) at the Collapse Prevention level using the Tier 1 evaluation procedure for the ASCE 41-17 Standard Seismic Evaluation and Retrofit of Existing Buildings.



REPRESENTATIVE PROJECTS

Club Quarter, Seismic Assessment, San Francisco CA, Reinforced concrete 11-story building, 2022

- I reviewed the structural calculations of collapse prevention based on ASCE 41-17. I also reviewed and evaluated the structural systems of the subject building.
- I interpreted the structural irregularities and their impact on the structural behavior related to lateral movements.

Le Conte Ave, Tier 1 Analysis, Berkeley CA, Light wood frame 2-story, 2022

- I calculated the seismic shear stresses applied to the structure using ASCE 41.
- I Recommended the inadequacy of the wood frame and shear wall panels.

Walnut Logistics Center, Tier 1 Analysis, Fullerton CA, Steel 1-story warehouse structure, 2021

- I calculated the total load applied to the structure.

The Old Spaghetti factory, Seismic Assessment, Newport Beach CA, 1-story wooden structure, 2021

- I recommended repair methods for a deteriorated wooden structure due to severe cracking.
- I recommended the fortification of deflected beams that were designed based on outdated codes.

StorageMart, Seismic Assessment, Edwards CO, 3 and 4-story steel structure, 2023

- I collected data for the purpose of the screening phase of Tier 1 analysis from primary components and connections in the seismic force-resisting system.

AHMAD SORAGHI (21-207-00) All work experience reviewed by two licensed professionals

ADDITIONAL INFORMATION

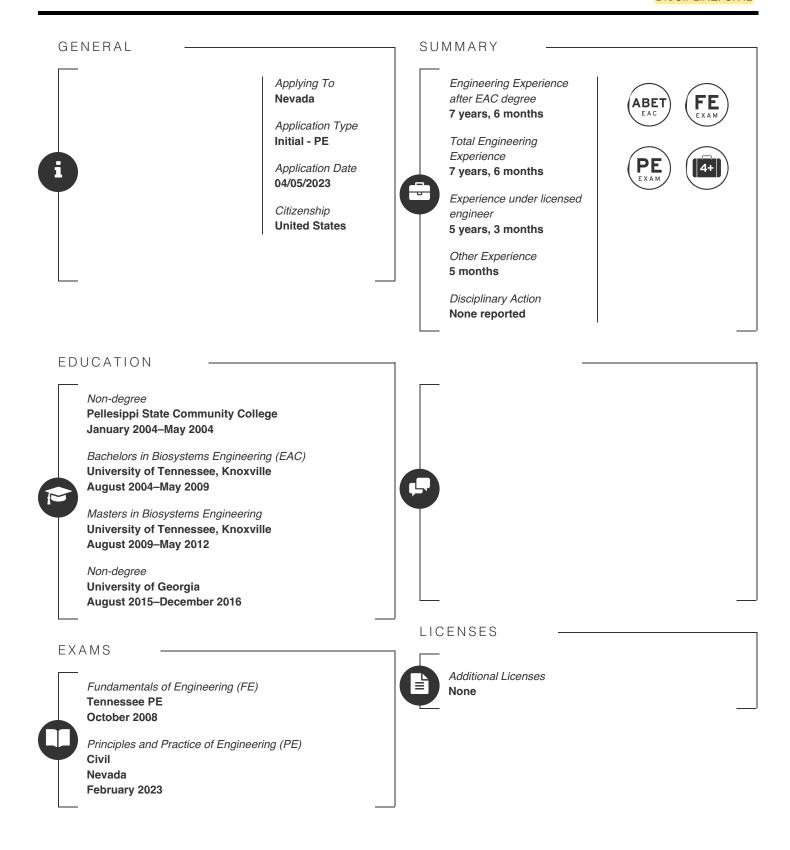


-TIME GAPS

Start Date	End Date	Reason	Explanation
07/2006	07/2010	Unemployed	Doing Highschool

Page 5 of 5 NCEES ID: 21-207-00 03/30/2023

DISCIPLINE: CIVIL



KENNETH SWINSON (21-966-19)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

University of Tennessee Tennessee (United States) Lecturer

August 2012-May 2013

Verified by

Dr. Richard Bennett rmbennett@utk.edu

Experience Summary

Part-Time

Other: 5 months (50%)

Experience under licensed surveyor:

None



-TASKS

Taught freshman engineering Spatial Visualization and Computer Methods in Engineering courses. Assisted with Engineering Fundamentals labs. Developed and improved lessons for introductory Excel, Matlab, and AutoCAD lessons. Created adn reviewed assignments and assisted with grading exams.



REPRESENTATIVE PROJECTS

Worked on implementing computer control boards into teaching lessons and projects for students. Reviewed and evaluated student projects.

WORK EXPERIENCE

Geosyntec Consultants Tennessee (United States) Staff Engineer July 2013—October 2014 Verified by
Keil Neff
kjn.water@gmail.com

Experience Summary

Full-Time

Engineering: 1 year, 3 months
Post EAC degree: 1 year, 3 months
Experience under licensed engineer:

1 year, 3 months



TASKS

I performed Civil and Water Resources Engineering calculations, GIS Mapping, hydraulic modeling, construction quality assurance, and database management.

I conducted soil and groundwater testing and data analysis

I performed laboratory testing for soil and water samples

I collected, processed, and analyzed GPS based bathymetric cross-section data



REPRESENTATIVE PROJECTS

Tennessee Valley Authority (TVA) River Operations update of Emergency Action Plans (2013-2014) Multiple rivers and dams across East Tennessee

I performed HEC-RAS and HEC-GeoRAS modeling for dam break scenarios determining flooding surge and extent. I collected, processed, and managed the GPS based bathymetric cross-sectional. This encompassed me planning river survey trips to several river sections, setting up base stations, navigating the rivers for conducting river cross-sections and ground-based cross-section surveys. I post processed the data and had to ensure data accuracy and quality for model input. I input cross-sectional data into ArcGIS and HEC-RAS model, calculated river width, depth, area, flow, and flooding extents for multiple flooding scenarios. I interpreted cross-sectional data determining thalweg and flow directions. I generated maps for river floodplains that were based from calculating flood height and extents.

WORK EXPERIENCE

United States Navy Central Region (Uganda) Staff Engineer

October 2016 - September 2017

Verified by

Anthony James Gleaton
gleaton.navy@icloud.com

Experience Summary

Full-Time

Engineering: 11 months
Post EAC degree: 11 months

Experience under licensed engineer:

None



-TASKS

I served as the only Engineer for Special Operations Command within all of Central Africa and was secondary Engineer for East Africa.

I reviewed all engineering plans and designs for proposed projects or operations by completing full engineering review for Special Operations Command Forward Central Africa and East Africa.

Inspected forward operating bases and camps for safety and security, including identifying and designing improvement and demolition projects.

I maintained multiple forward operating bases for full support of systems including mechanical, electrical, power generation, force protection, fire protection, HVAC, and water distribution.



REPRESENTATIVE PROJECTS

Due to the nature of the work performed for Special Operations Command certain details have to be omitted, such as locations. Expeditionary Runway Analysis (2017)

Location: Central Africa

I performed site visits to a remote location within Central Africa for identifying potential of strategic airlift of assets out of the operational environment. Monitored airstrip inspections, soil sample collection and reviewed analysis of soil sampling for determining landing capabilities with different aircraft types. I calculated clear zones, soil capacity, approach area, and obstruction analysis for airplane capabilities for landing and takeoff.

NCEES ID: 21-966-19 04/05/2023 Page 4 of 8

WORK EXPERIENCE

Paulding County DOT
Georgia (United States)
Senior Pre-Construction Engineer
October 2017—October 2021

Verified by
Kathy Stallard
kmd13@comcast.net

Experience Summary

Full-Time

Engineering: 4 years
Post EAC degree: 4 years

Experience under licensed engineer:

4 years



-TASKS

I design road layouts for new alignments, turn lanes, proposed intersection re-alignments, and roundabouts.

I calculate hydraulic and hydrological values for design of storm water catchment systems for roads, ponds, and culvert design. I review Civil Engineering design for County transportation projects.

I review Civil Engineering plans for all proposed commercial and residential construction projects with in the County to ensure the meet design standards and County Ordinances and Regulations.

I review storm water pollution protection plans.

I perform site distance studies, confirm proper sight distances, and calculate proper addressing along roads.



REPRESENTATIVE PROJECTS

New Road Alignment Design

Dallas, GA (2018)

I designed a new proposed road alignment between Main Street and Johnston Street in downtown Dallas. The project included inputting elevation data, creating horizontal and vertical alignments with MicroStation. I designed the road width, incorporating the layout into existing alignments. I designed the proposed new intersections for the new layout. I calculated a materials quantity and engineering cost estimate.

Paulding County Jail Design and Construction Project (2019)

Dallas, GA

I reviewed and commented on civil engineering plans for construction of a new County jail. I reviewed and commented on stormwater calculations, piping configuration, and pond capacity analysis. I reviewed and commented on transport planning, new road construction, access analysis, and vehicle path capabilities. I conducted site walk and final construction review for the new road.

Roundabout Design at Rosedale Dr, Depot Dr, and Seaport Ave

Paulding County, GA (2020)

I designed a preliminary roundabout layout at the intersection of Rosedale Dr, Depot Dr, and Seaport Ave utilizing MicroStation. The preliminary design was provided for site layout of a proposed construction project, determining future right of way limits, and provided to a consulting company for further design.

Extension of Constitution Blvd at Justice Center Drive Project

(2020) Dallas, GA

I designed a new proposed road alignment extending Constitution Boulevard across a stream to connect to Buchanan Street. The project included arched culvert design and creating horizontal and vertical alignments with MicroStation. I designed the road width with sidewalks and shoulders along with incorporating the layout into existing alignments. I calculated estimates of required earthwork and shoulder grading.

New Silver Comet Trailhead Parking Design and Construction

Paulding County, GA (2020-2021)

I planned and managed the design and construction of a new parking area and trailhead for the Silver Comet Trail on McPherson Church Road.

I conducted site surveys, initial design in MicroStation and layout of trailhead parking area. I provided layout to consulting company for full design and construction. I managed the project reviewing design submittals and utility management.

WORK EXPERIENCE

Naval Surface Warfare Center Corona Division California (United States) Assistant Public Works Officer November 2021 – March 2023 Verified by

Ashish P Patel
ashish.p.patel.civ@us.navy.mil

Experience Summary

Full-Time

Engineering: 1 year, 4 months Post EAC degree: 1 year, 4 months Experience under licensed engineer:

None



TASKS

I serve as the Assistant Public Works Officer and Infrastructure Division Operations Officer.

I review design submittals, plan MILCON and MINCON projects.

I review construction project designs and plans along with close out project documents and as-builts.

I manage and plan minor construction projects for our self-help team of Seabees.

Review preventative and corrective maintenance contractor plans, prioritize work, and identify maintenance.

I provide Naval Civil Engineering analysis during project design charettes.



REPRESENTATIVE PROJECTS

Performance Assessment Lab design

Norco, CA (2022-2023)

I perform Civil Engineering analysis for a currently planned Military Construction (MILCON) Project for a new lab. I perform design review for Unified Facilities Criteria (UFC) compliance and provided review and analysis during the design charette. I provide mechanical layout configuration inputs, especially with regard to maintenance capabilities and secure space access. I provide analysis and review of the project site location with regards to future road design and alignments around the building site and utility locations.

ADDITIONAL INFORMATION



-QUESTIONS

Has your original license lapsed? If yes, explain.

Nο

Have you ever been denied licensure by a jurisdiction? If yes, explain.

No

Have you ever been convicted of a misdemeanor? If yes, explain.

No

Have you ever been convicted of a felony? If yes, provide a brief letter of explanation and court documents.

No

Select the disciplines in which you are currently practicing. If more than 1% of time is devoted to a discipline, it must be included.

Disciplines

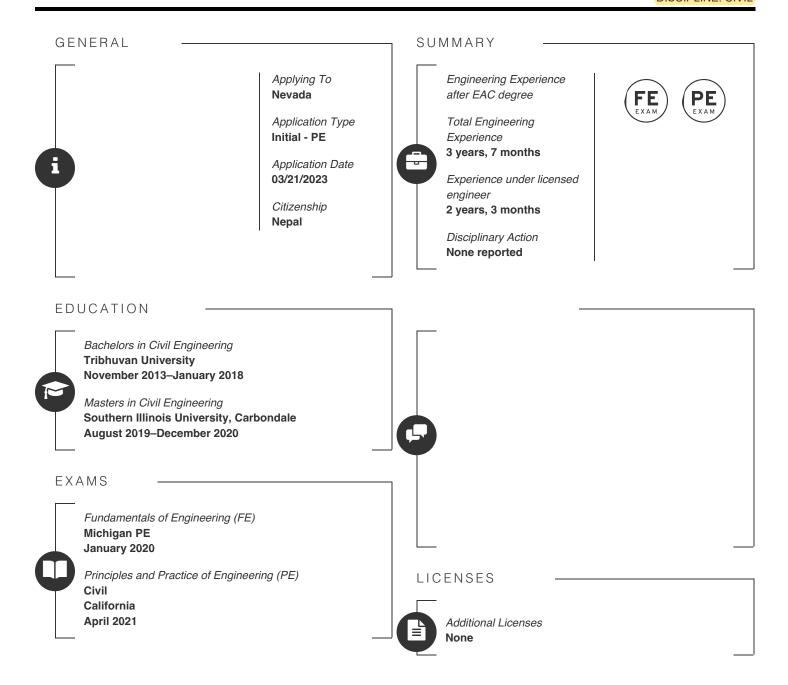
Civil, Environmental, Naval Architecture/Marine

Other Disciplines

Has a jurisdiction ever revoked, suspended, or disciplined your license? (Please note this includes a consent agreement, letter of reprimand, Etc.) If the action has been resolved a yes answer is still needed.

No

NCEES ID: 21-966-19 04/05/2023 Page 7 of 8



All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Asal Chhimekee Nepal Gandakī (Nepal) Site Engineer

March 2018-December 2018

Verified by
Rajendra Kumar Adhikari (Raju)
director@acn.org.np

Experience Summary

Full-Time

Engineering: 9 months

Experience under licensed engineer:

None



-TASKS

- Prepared the estimates of the materials (cement, reinforcement, and galvanized iron sheets) for fifty houses including their design within a certain budget.
- Distributed materials (cement, reinforcement, and galvanized iron sheets) to 50 households listed in 2015 earthquake victims who were unable to complete their house on time due to financial problems.
- Monitored the houses being constructed on the technical aspects of the building as per the building codes and guided masons for constructing houses as per building codes.
- · Resolved different conflicts that arose in the community.
- Tracked project status through all steps and ensured compliance with safety regulations and design requirements.
- · Prepared action plans, half monthly reports, monthly reports, and progress reports, and attended meetings.
- · Mobilized the community.
- · Co-ordinated with the local government for carrying out engineering works.



REPRESENTATIVE PROJECTS

-In 2015, there was a huge earthquake in Nepal with the epicenter in Gorkha, Nepal. It destroyed many houses and took many lives. The government had provided some limited amount of funds to every household of the Gorkha district for the reconstruction of the houses, but that fund was not sufficient for every household due to financial problems and lack of proper technical monitoring for construction. Thus, they were not being able to reconstruct their houses and the project could not go forward but more importantly, those people did not have anywhere to live and were having very difficult living with their family in their temporary made house. Asal Chhimekee Nepal reached that place and helped those households for taking their construction work forward by providing all the necessary construction materials as well as technical monitoring for the construction.

- -The project date was from March 2018 to December 2018.
- -My role in the project was to design the house for the benificiaries which meets the building code of Nepal as well as seismic codes. I distributed the construction materials provided by Asal Chhimekee Nepal to the households and guided the masons on the technical aspects of the building construction. Also, I was involved in the community works so there were some social conflicts which I had solved with the coordination with my social mobilizer and local authorities. Under my supervision at the end of the project, houses were successfully constructed which were as per the building codes as well as the seismic provisions were also met.

NCEES ID: 20-809-02 03/21/2023 Page 2 of 9

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Asal Chhimekee Nepal Gandakī (Nepal) Project Officer January 2019—July 2019 Verified by Raju Adhikari director@acn.org.np

Experience Summary

Full-Time

Engineering: 6 months

Experience under licensed engineer:

None



-TASKS

- Managed the whole project from the Planning Phase to Completion Phase including Design and Estimates, Procurement, coordination with Local Government, Supply of construction materials, Social Mobilization.
- · Resolved different conflicts that arose in the community.
- Provided training on the importance of reinforcement and ductility in a building to the local people of the community to construct sound houses against landslide and earthquake.
- Kept project teams on-task with proactive control of budgets, schedules, and scopes.
- · Guided the masons for house construction as per building code and monitored the houses being constructed.
- · Changed the traditional method of house construction without reinforcement to building a house with reinforcements.



REPRESENTATIVE PROJECTS

- -This is the project I was able to handle from the starting to the completion after the successful role of site engineer at Asal Chhimekee Nepal. In 2018 there was a huge landslide in Parbat, Nepal destroying 23 houses and took the life of a teenage boy. These people were not being able to afford to build a new house and they were facing difficulty staying in the rented house due to different social and economic factors. Asal Chhimekee Nepal is not for a profit organization that reached out to the people of that place and helped them build a new house by providing all the necessary construction materials.
- The Project date was from January 2019 to July 2019.
- For this project, I started with the collaboration with local government to find the number of actual landslide affected households which are in the need of the help. Then, I did the design works of the houses which are resiistant to both earthquake and landslide. People had the traditional method of house construction without the use of reinforcement. I gave them training on the importance of ductility of the buildings to resist the seismic as well as ground scouring by landslide. People then got convinced and changed thier method of house construction by the use of reinforcement. Thwn I asked for the quotation of the building materials from several suppliers and chose the lowest quoted and quality supplier. Then the construction work began and I continuously monitored the construction works. With the help of my social mobilizer and local government, I was able to resolve the conficts in the community and I was able to complete the project on time and successfully handed over the houses to the beneficiaries.

NCEES ID: 20-809-02 03/21/2023 Page 3 of 9

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Jacobs Engineering Group Inc. Colorado (United States) Structural Bridge Engineering Intern June 2020 - August 2020

Matthew Nork Matthew.Nork@jacobs.com Experience Summary

Full-Time

Engineering: 2 months

Experience under licensed engineer:

2 months



TASKS

- Completed the load rating of North Halsted St. Bridges.
- Completed the load rating of South Bridge.
- Performed thermal gradient analysis of South Bridge.
- Performed the preliminary analysis of bridge of Nevada High Speed rail project.

Verified by



REPRESENTATIVE PROJECTS

- Bridges located in N. Halsted St, Chicago, built around 1957 AD needed to be rated again. Bridges initially designed to withstand the railway track load as well. The rating was done as per the IDOT rating criteria and the field inspection reports. They were skewed bridges with built-up steel plate girders. I performed the load rating of some of the bridges and for this, I went through the drawings of the bridge, calculated the loads and formed a BrR model. Then rated the bridge in AASHTO BrR and generated a rating package report.
- The South bridge was on a 60% design phase. Located in Glenwood Springs, this bridge would improve emergency evacuation, emergency service access, and local land use access. It was a unique bridge in the way that it carried airplane load. The bridge had twenty-eight numbers of prestressed box girders BX 72x20 with nearly half of them skewed and remaining non-skewed. I performed the load rating of the newly designed bridges and for this, I went through the drawings of the bridge, calculated the loads and formed a BrR model. Then rated the bridge in AASHTO BrR.
- One of the box girders Bridges among three bridge structures of Southbridge at Glenwood Springs. A thermal gradient analysis of the cross-section of the bridge was conducted as per AASHTO LRFD in LARSA 4D by the team. I calculated the thermal stresses and plotted the variation of stresses along the cross section of the box girder for thermal analsis.
- The Nevada high speed rail runs from Nevada to Las Vegas with a maximum speed of 180 mph. One of the bridges along this railway included a three-span continuous prestressed spliced girder bridge with a total length of 465 ft. The bridge was in the 30% completion phase. For the preliminary design, feasibility checked for three girder system, four girder system and five girder configuration system of CA WF 120 girders to adopt the optimal girder configuration for the bridge. I modeled the bridge configuration in Midas Civil, calculated the dynamic loads to be applied to the model and then performed the dynamic analysis of the bridge to select the optimal girder configuration for the bridge.
- The worked on all of these projects from June 2020 to August 2020.

NCEES ID: 20-809-02 03/21/2023 Page 4 of 9

WORK EXPERIENCE

Jacobs Engineering Group Inc.
Colorado (United States)
Structural Bridge Engineer
January 2021—September 2022

Verified by

Matthew Nork

Matthew.Nork@jacobs.com

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



-TASKS

- Completed the load rating of Seattle Viaduct Load Rating in Seattle.
- Completed the quantity calculation and retaining wall design of Southbridge.
- Completed the design of bridges in Yellowstone National Park.
- Performed the load rating of Yellowstone bridge.
- Performed the Structural type selection for several bridges in Yellowstone park.
- Completed the Load rating of Galer street bridge in Seattle.
- Completed the design of superstructure components of ward road bridge.
- Completed the load rating of ward road bridge.
- Perfomed preliminary design of South Cheyenne bridge.
- Performed preliminary design of Crystal valley bridge.
- Performed miscelleneous structure tasks of bridge and other structures.



REPRESENTATIVE PROJECTS

- The South Spokane Street Viaduct was originally constructed in 1941, and seismically retrofit in 1998. In the mid-1990's, bridge widening drawings were prepared in accordance with the AASHTO Standard Specifications for Highway Bridges, Fifteenth Edition, 1992, including 1993 Interim Specifications. The widening design and construction were delayed pending funding and were eventually completed between 2010 and 2013. The viaduct spans west to east with the west end being near West Seattle and the east end being near Interstate 5 (I-5). The superstructure consists of various spans of precast/prestressed (PC/PS) concrete beams, cast-in-place concrete beams, and steel I-girders. In this project, I analysed all the steel girders to get the demand, then rated the girders in MS excel. I also rated the beam ledges and finally prepared a rating report.
- -Located in Glenwood Springs, this bridge would improve emergency evacuation, emergency service access, and local land use access. It was a unique bridge in the way that it carried airplane load. The bridge had twenty-eight numbers of prestressed box girders BX 72x20 with nearly half of them skewed and remaining non-skewed. My role was to design the retaining walls (MSE walls/Cantelever walls) and also to estimate their quantities.
- Yellowstone reiver bridge is one of the longest and massive composite steel girder continuous span bridges (1275 ft) in the USA located in Yellowstone National Park. It has four spans with the span length of 235ft, 400ft, 400ft and 240ft. This bridge is designed to replace the current located near by the project location. My role in this project was to design the superstructure. I also designed a pedestrian bridge in the Yellowstone park under the same project. In addition, after the completeion of the design works, I worked on the stucure type selection report for five bridges in north entrance road of Yellowstone park in which I conducted the preliminary design of the bridges and conducted the cost/quantity works to come to the selection report.
- -The Galer street project was conducted to support the city of Seattle in performing the load rating of the Galer street Flyover bridge. My role in this project was to create the superstructure model in CSiBridge software, rating the cross frames, beam ledges and pier crossbeams.
- Ward road bridge is the ongoing project in which new bridges are designed to replace the existing ward road bridge in the town of wheat ridge. The bridge will be constructed in phases without disturbing the traffic. My role in this project was to design the superstructure/substructure components which includes deck, approach slab, leveling pad, expansion joint. After the completion of the bridge design, I performed the load rating of the bridge and submitted a rating package of the bridge.
- South Cheyenne bridge project is located in Colorado Springs and the bridge is designed to expand the crossing in contrast to the existing bridge which has narrow roadway at the bridge and there is a curve in the crossing for which a new bridge is needed. My role in this project was to do the preliminary design along with the final design of the bridge which included girders, deck and other bridge components.
- Crystal valley bridge is located in Crystal valley in which new ramp bridge is designed to have a new crossing over the I-70. My role in this project was to conduct the preliminary analysis of different girder types to figure out the maximum span length we can go for the girders. Also, I performed preliminary quantitiy estimate of the wall that is present in the bridge.
- Other misselleneous works are some quick turnover taks I worked on. My role in the misseleneous taks were performing

NCEES ID: 20-809-02 03/21/2023 Page 5 of 9

calculations in New mexico.

calculations of anchor bolts checks of California high speed rail in California, QC of BRT structure in Utah, screed adjustment

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Jacobs Engineering Group Inc. Colorado (United States) Structural Bridge Engineer September 2022—March 2023 Verified by

Stephen Sowal

stephen.sowal@jacobs.com

Experience Summary

Full-Time

Engineering: 6 months

Experience under licensed engineer:

5 months



-TASKS

Design of girders for NW fishing project: I designed the girders to come up with the appropriate girder spacing, number of harped and straight strands for the girders, checked the haunch for undercamber and overcamber conditions, designed the deck to come up with bar sizes and spacing for the deck, designed the bearing for the dimension and height of the bearing, deigned the compression seal joint for appropriate size of the expansion joint. I also calculated the deck geometry at the tenth points.



REPRESENTATIVE PROJECTS

This is the Northwest Fishing bridge over Sunset creek located in Seattle, Wasington. My role in the project was the bridge designer where I designed the superstructure for girders, deck. I implemented the design through the WSDOT verified software PGSuper along with excel sheets and hand calculations for verification of the results for the design of the superstructure.

NCEES ID: 20-809-02 03/21/2023 Page 7 of 9

SHREE TRIPATHI (20-809-02) All work experience reviewed by two licensed professionals

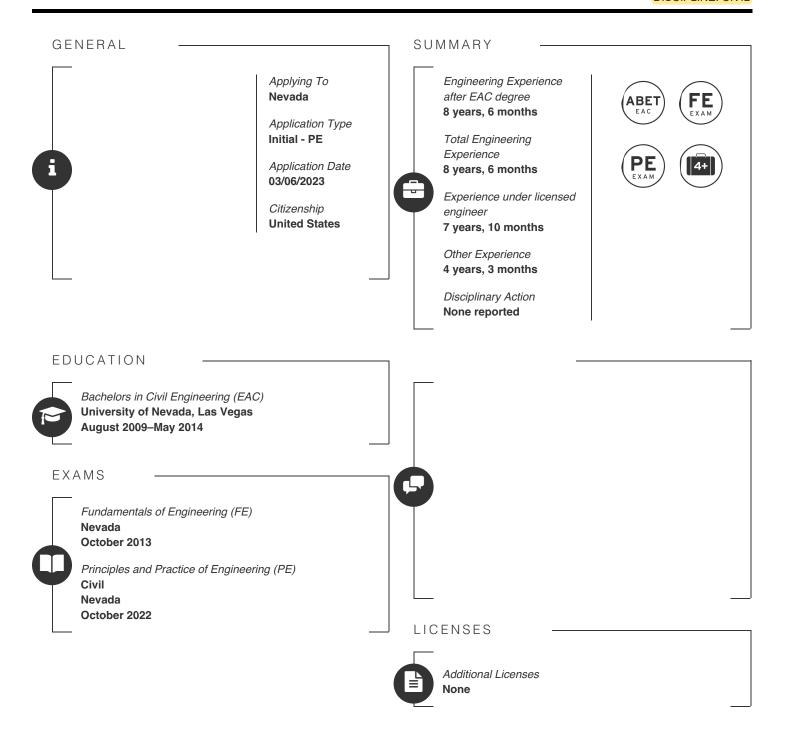
ADDITIONAL INFORMATION



-TIME GAPS

Start Date	End Date	Reason	Explanation
03/2013	10/2013	Unemployed	I graduated from my college on 03/2013 and the entrance examination for the undergraduate engineering was held in 05/2013. After the result came, I did the admission for the undergraduate studies. 10/2013 was the time when the semester began officially.

Page 9 of 9 NCEES ID: 20-809-02 03/21/2023



All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Radission Hotel Michigan (United States) Banquet Server

June 2002-December 2004

Verified by

Experience Summary

Part-Time

Other: 8 months (25%)

Experience under licensed surveyor:

None



-DESCRIPTION

NCEES ID: 14-686-71 03/31/2023 Page 2 of 12

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Lansing Community College Michigan (United States) College Writing Instructor May 2004—February 2008 Verified by

Experience Summary

Part-Time

Other: 1 year, 11 months (50%) Experience under licensed surveyor:

None



-DESCRIPTION

NCEES ID: 14-686-71 03/31/2023 Page 3 of 12

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Holiday Systems International Nevada (United States) Customer Care / Recruiter May 2008—August 2010 Verified by

Experience Summary

Part-Time

Other: 1 year, 9 months (75%)

Experience under licensed surveyor:

None



-DESCRIPTION

NCEES ID: 14-686-71 03/31/2023 Page 4 of 12

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Atkins Global (member of SNC-Lavalin Group) Nevada (United States) Engineer I, E.I

May 2014-September 2016

Verified by

Matthew Wilkinson
matthew.wilkinson@atkinsglobal.com

Experience Summary

Full-Time

Engineering: 2 years, 4 months Post EAC degree: 2 years, 4 months Experience under licensed engineer:

2 years, 4 months



TASKS

I fulfilled the role of engineer-in-training in my first career position after college graduation. I was tasked with gaining comprehensive knowledge of utility design, with practical engineering and work applications. I was tasked with reviewing as-builts and utility schematics to draw conceptual utility designs using AutoCAD Civil 3D. I utilized ArcGIS for large scale utility information. Design exhibits were a significant amount of deliverables that I was tasked with providing to clients. As I progressed, I move unto civil plans. Overall, I was provided opportunities to provide engineering services on utility projects during preconstruction and during construction.



REPRESENTATIVE PROJECTS

Pre-Design Collection System Capacity Upgrade - City of Las Vegas, Nevada.

I utilized as-builts and utility schematics to draft detailed utility drawings for conceptual planning. I coordinated with in-house survey team to locate and identify utilities in project area. I was responsible for plan production for civil design drawings (general notes, plan and profiles, etc.).

Sanitary Sewer Rehabilitation Design - City of Las Vegas, Nevada.

I was responsible for utility coordination and drafted a detailed utility drawing for conceptual planning. I imported large utility shape files from GIS into AutoCAD Civil 3D. I added all required annotations and notes; addressing red lines for 60%, 90%, and 100% percent submittals. I collected Mylar signatures from utility agencies.

Sewer Manhole and Pipe Rehabilitation Package - Clark County Water Reclamation District.

I was responsible for engineering services during construction (ESDC) including review of submittals, requests for information. (RFI) and as-built documentation. I redesigned existing sewer infrastructure to maintain uniform design and construction standards.

NCEES ID: 14-686-71 03/31/2023 Page 5 of 12

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Walker Engineering & Kimley-Horn

Associates

Nevada (United States)

Designer 1

October 2016-February 2017

Verified by
Treasea Wolf

Treasea.Wolf@kimley-horn.com

Experience Summary

Full-Time

Engineering: 4 months

Post EAC degree: 4 months

Experience under licensed engineer:

4 months



TASKS

I fulfilled the role of Designer 1. I transitioned from water projects to land development with this work experience. I was given drafting tasks under the supervision of a lead designer. I was tasked with utility design, plan production and small grading projects.



REPRESENTATIVE PROJECTS

ALA Charter School (KHA PROHECT #092928000)

APN: 124-35-102-001, 124-35-102-004

Dates: 10/2016 - 02/2017

My tasks included drafting water utilities and drafting site plans changes in AutoCAD Civil 3D, under the supervision of a lead designer. I was also tasked with sheet set production for the grading plan, utility plan, horizontal control, and traffic sheets.

NCEES ID: 14-686-71 03/31/2023 Page 6 of 12

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

The WLB Group Nevada (United States) Associate Engineer April 2017—May 2018

Verified by

Paul Eugene Valentine

pvalentine@wlbgroup.com

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

1 year, 1 month



TASKS

I fulfilled the role of Associate Engineer, under a Sr. Project Manager and Lead Designer. I developed my drafting and technical skills with my work experience here. I learned how to use HEC-1 for storm modeling with staff support. I learned and I was responsible for drainage studies and complete civil plan production under my lead.



REPRESENTATIVE PROJECTS

Aurora Heights-- CLNV No. 60792 (WLB Group Job No.417023-A-001)

APN: 124-22-701-006, 124-22-701-011

Dates: 06/2017 - 5/2018

I completed the technical drainage study for this 82-lot residential community. I designed two detention basins to mitigate flows to historical values. I also supported the lead designer in civil plan production for this project, including: grading, utilities, plan and profiles, signage and striping, and detail sheets. I was also responsible for two addendums and respective supplements to the addendums.

Ft. Mojave Wellness Center – Fort Mojave, AZ (WLB Job No. 113005-E-001) A portion of Parcel No. 244-19-003 per Mojave County recorder files

Dates: 04/2017 - 09/2017

I performed onsite watershed analysis using the Rational Method. I analyzed the required volume and design volume for the onsite retention basin. I designed ±2,000 FT of sewer design using Civil 3D, connecting the wellness center and service connections to a new 8" main conveying gravitational flows to a sewer lift station.

NCEES ID: 14-686-71 03/31/2023 Page 7 of 12

WORK EXPERIENCE

Lochsa Engineering
Nevada (United States)
Civil Designer
May 2018—October 2021

Verified by

Demetrius Karanikolas

Demetrius Karanikolas@lochsa.com

Experience Summary

Full-Time

Engineering: 3 years, 5 months Post EAC degree: 3 years, 5 months Experience under licensed engineer: 3 years, 5 months



-TASKS

I fulfilled the role as lead designer on several civil projects. I completed all of onsite grading and storm drain design. I completed the utility design and traffic design with senior guidance. I was responsible for coordination with Clark County Public Works (CCPW) and the local utility agencies for submittals, reviews, and addressing comments for approval. Through construction, I was on-call to address all field questions and to coordinate all field changes. I was responsible for all submittals and revisions and coordinated with CCPW and local agencies for drainage and civil design approvals.



REPRESENTATIVE PROJECTS

Stephanie and 215 Tavern / Restaurant and Office Building - PCVL2021155212 (Lochsa #181089)

City of Henderson, Nevada

APN: 178-15-310-004; Area: 1.75 AC

Dates: 04/2021 - 07/2021

I completed the water network analysis and led design team on the water utility design for project.

Uncommons Mixed Use Development — PW20-13383 (Lochsa Project #181145)

Clark County, Nevada

APN: 17604211009, 17604211005, 17604211007, 17604211006, 17604211012, 17604211011, 17604211010, 17604211014, 17604211011, 17604211010, 17604211014, 17604211011

17604211013, 17604211003, 17604211004, 17604211015

Area: 23.66 AC

Dates: 04/24/2020 - 10/10/2021

I was responsible and completed the storm drain design for this large mixed-use development. I worked closely with the lead designer and drainage team to meet all design needs. I would later be brought back to the project to update the hydraulic analysis and to provide common area exhibits for later phases of the project.

Building 11 and Building 12 Beltway Business Park — PW20-20811 (Lochsa Project #191163)

Clark County, Nevada

APN: 177-06-201-049; Area: 18.96 AC

Dates: 09/2018 — 05/2021

I was the lead designer on this project. I completed all of onsite grading and storm drain design. I was supported in the utility plan, and plan and profile production. I. I was responsible for coordination with Clark County Public Works (CCPW) and the local utility agencies for submittals, reviews, and addressing comments for approval. Through construction, I was on-call to address all field questions and to coordinate all field changes. I submitted all revisions and coordinated with CCPW and local agencies for civil design approvals.

Building 11 Beltway Business Park Rough Grading, Spillway & Junction Structure Modification PW20-16321 (Lochsa Project #171120)

Clark County, Nevada

APN: 177-06-201-046, 177-06-301-021, 177-06-301-005; Area: 29.01 AC

Dates: 09/2018 — 01/2021

I was the lead designer on this project. This project was primarily grading for the future Building 11 and 12 Beltway Business Parkway. I graded the site to allow for building pads to be formed, and yet maintained existing drainage channels. The existing

NCEES ID: 14-686-71 03/31/2023 Page 8 of 12

drainage basin onsite was redesigned to be smaller with more riprap and concrete channels in coordination with Clark County Public Works.

BBP Interim Detention Basin – PW18-14815 (Lochsa Project #171226)

Clark County, Nevada

APN: 177-06-201-025; Area: 14.77 AC

Dates: 05/2018 - 01/2021

I was the lead designer on this project. The detention basin is apart the Clark County Master Plan. I graded the site to allow for building pads to be formed, and yet maintained existing drainage channels. The existing drainage basin onsite was redesigned to be smaller with more riprap and concrete channels in coordination with Clark County Public Works.

Building 10 Beltway Business Park Phase 7– PW18-15575 (Lochsa Project #171052)

Clark County, Nevada

APN: 177-01-601-034; Area: 13.21 AC

Dates: 06/2018 - 10/2019

I was the lead designer on this project. I completed all of onsite grading and storm drain design. I completed the utility design and plans. I was supported in plan and profile production. I was responsible for coordination with Clark County Public Works (CCPW) and the local utility agencies for submittals, reviews, and addressing comments for approval. Through construction, I was on-call to address all field questions and to coordinate all field changes. There was a major redesign with approximately half of the storm drain was removed in favor of more surface flows and BMP swales to cut cost. I submitted all revisions and coordinated with CCPW and local agencies for drainage and civil design approvals.

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Westwood Professional Services Nevada (United States) Graduate Engineer II October 2021 – June 2022 Verified by

Joshua Scott Poulson
joshua.poulson@westwoodps.com

Experience Summary

Full-Time

Engineering: 8 months
Post EAC degree: 8 months

Experience under licensed engineer:

None



TASKS

I completed all of the design including: onsite grading with AutoCAD Civil 3D, utility design using 3D pipe networks, and traffic design. I was also responsible for that annotation and plan production. I coordinated with the architect for local agency submittals and reviews.



REPRESENTATIVE PROJECTS

Fire Station 58 – Villages at Tule Springs – CNLV #194-2002 City of North Las Vegas, Nevada APN: 124-23-212-003; Area: 3.55 AC

I was the lead designer on this project. I completed all of the design including: onsite grading, and specific material designs standard for fire stations in the City of North Las Vegas. I coordinated traffic design with the in-house traffic team, often joining in on meetings with City of North Las Vegas. I led this project to first round drainage approval. The next steps were the first civil submittal.

NCEES ID: 14-686-71 03/31/2023 Page 10 of 12

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Lochsa Engineering
Nevada (United States)
Project Manager
June 2022—February 2023

Verified by

Demetrius Karanikolas

Demetrius.Karanikolas@lochsa.com

Experience Summary

Full-Time

Engineering: 8 months
Post EAC degree: 8 months

Experience under licensed engineer:

8 months



TASKS

I currently function at the level of project manager. I complete all of my own design: including grading, all utilities, and traffic (plan and profiles, signage and striping) with some traffic support. When required, I perform the hydraulic analysis on all of my projects. I coordinate civil design requirements and provide deliverables to the architects via phone, e-mail, or meetings. I coordinate the entire submittal process with the local government and utility agencies from first submittal to approval signatures. During the construction phase, I respond to all RFIs. I am tasked with submitting revisions when required for any immediate design changes.



REPRESENTATIVE PROJECTS

Fontainebleu Casino Resort – PW07-3425 Lochsa Project #221141, previous #061024

Clark County, Nevada

APN: 162-09-617-001, 162-09-617-002;

Dates: 08/2022 - 2/1/2023

I completed all the final Public Works comments for the proposed civil improvements and traffic design for Las Vegas Blvd South and Elvis Presley Blvd. adjacent to the new Fontainebleu Casino Resort. Civil improvements include new driveways onto the Fontainebleu property, demolition of existing medians and installing new medians. I worked closely with Clark County Public Works to revamp the signage and striping to match a concurrent Las Vegas BLVD Improvement Project, in addition to meeting the most up-to-date standards and traffic requirements.

1401 West Pioneer Blvd. - Lochsa Project #221141

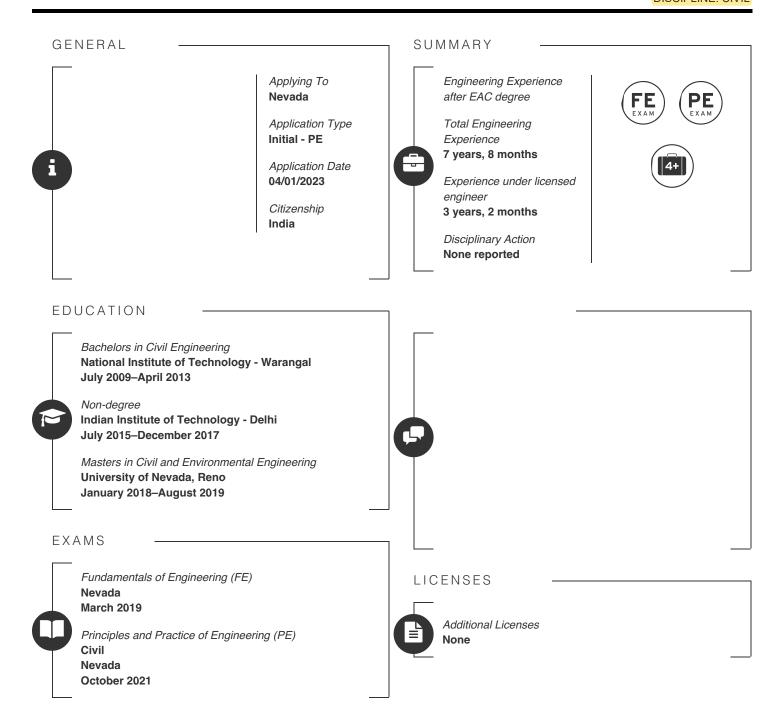
City of Mesquite, Nevada

APN: 002-13-310-001, 002-13-310-002; Area: 19.69 AC

Dates: 06/2022 - 11/2022

I am the project manager on this project. I completed all of the design including: onsite grading, utilities, traffic design (signage, striping and new streetlights), and half street improvements with plan and profiles. I am primarily responsible all design coordination with architects. I am also responsible for coordination with Mesquite Public Works and the local utility agencies for submittals, reviews, and addressing comments for approval. I designed over 2,000 linear feet of retaining wall and coordinated the structural design with my in-house structural team.

NCEES ID: 14-686-71 03/31/2023 Page 11 of 12



WORK EXPERIENCE

Larsen & Toubro Construction Telangana (India) Assistant Engineering Manager July 2013—January 2018 Verified by sai kumar koda saikoda@Intecc.com

Experience Summary
Full-Time
Engineering: 4 years, 6 months
Experience under licensed engineer:
None



-TASKS

Assistant Engineering Manager Jan 2017 to Jan 2018

Roles and responsibilities included the following:

- Played a crucial role in understanding client requirements to develop project concepts and maintain optimal workflow, including assigning and distributing workload etc.
- Led the process design aspects and supported the project manager in leading a team of five members
- Oversaw the team performing pump station design calculations, hydraulic flow calculations, and hydraulic analysis of Water Distribution Systems.
- In charge of maintaining regular and constructive communication with clientele and project team members

Senior Design Engineer July 2013 to Jan 2017

Roles and responsibilities included the following:

- •Performed pump station design calculations, Hydraulic Flow Calculations and conducted hydraulic analysis for Water Distribution Systems.
- · Played a crucial role in developing and adopting standards to streamline engineering tasks
- · Prepared cost estimates for projects during the design phase as well as during the bid phase of the project.
- Involved in providing design solutions for best engineering practices, detailed engineering design, hydraulic flow and pump head Calculations
- Developed drawings of plant layouts, PFDs (Process Flow Diagrams), P&IDs (Process & instrumentation Drawings) and General Arrangement Drawings
- Prepared pre-bid queries during tendering stage for several projects.
- Trained nine (9) Graduate and Post Graduate Engineer Trainees (GETs and PGETs) through their initial job phase.

As a fresh graduate engineer, assisted the process engineers in single calculations. Prepared Process & Instrumentation Diagrams (P&ID's) for several waste water and water treatment plants with the help of senior engineers. Transitioned into senior engineer role and led the process design efforts and then as an assistant engineering manager, also took care of coordination efforts between departments within the organization as well as with the clients.



REPRESENTATIVE PROJECTS

Riyadh City South Development Project- The project scope included design of Irrigation water supply network for the Riyadh city (2017-2018).

- As an assistant engineering manager in the team, reviewed the preliminary and detailed design and planning of the Irrigation Water Supply Network including the AutoCAD drawings, spreadsheets and the design report.
- · Played a key role in coordination efforts between clientele, vendors and the design consultancy.

Chevron Richmond Treatment Plant Hydraulic Modeling - Hydraulic upgrade of the existing effluent treatment plant in UK (2016-2017)

- As an assistant engineering manager, oversaw the hydraulic design of the Effluent Treatment Plant using Bentley WaterGems, simulating existing conditions, evaluating and optimizing flowrates and recommending modifications to the client to provide optimization to the existing system.
- · Played a key role in coordination efforts between clientele, vendors and the design consultancy.

South Wales Sludge Strategy Project for Cog Moors WwTW - Setting up of the Wastewater Treatment Plant in South Wales, UK (2016-2018).

· Produced Intelligent Process and Instrumentation drawings (P&ID's) by setting up the project on Plant 3D platform

- Created Pipe & Valve schedules for the vendors to review and provide a quote.
- Reviewed REVIT Models of the Wastewater treatment Plant.
- Also, performed technical review of pump vendors and cleared pump manufacturers for delivering high quality pumps for the plant.

Rajasthan Rural Water Supply & Fluorosis Mitigation Project - Constructing and Commissioning 250 Million Liters per Day (MLD) Water Treatment Plant (WTP) with future modular expansion to 300 MLD (2016).

- As a senior design engineer, performed process design of coagulation/flocculation tank. Determined the sizes by the iterative process.
- · Updated the design spreadsheets to meet the requirements of the current design
- · Revised design based on the comments from the agency and got approval for the design.

Design of 100 MLD and 90 MLD Water Treatment Plants (WTPs) at Sangareddy District, Telangana (2015-2016) -

- As a graduate engineer, assisted in preparing P&ID diagrams for the plants.
- Created P&ID diagram on AutoCAD.
- · Revised P&ID diagrams based on the comments from agency

8.33 MLD Sewage Treatment Plant (STP) at Gayeshpur for Kolkata Metropolitan Water & Sanitary Authority (KMW&SA) (2014-2015)-

- · As a graduate engineer, assisted in designing the primary treatment process including inlet chamber, screens and grit chamber.
- Reviewed the drawings created by CAD designer for the inlet, screen and grit chamber.
- · Worked on providing revisions to the design based on the comments from the agency to get the approval.
- Revised design based on the comments from agency

10 MLD and 31 MLD STP Development of sewerage network and wastewater treatment facility for Bhatpara municipal town for Kolkata Metropolitan Development Authority (KMD) (2013-2014) -

- · As a graduate engineer, assisted in designing the primary treatment process including inlet chamber, screens and grit chamber.
- Reviewed the drawings created by CAD designer for the inlet, screen and grit chamber.
- · Revised the sizes and the design based on the comments from agency

SANDEEP REDDY YANALA (20-080-03)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

VTN Nevada Nevada (United States) Office Technician II January 2020—January 2021 Verified by
Brian Troy Ruiz
brian.ruiz@prescott-az.gov

Experience Summary
Full-Time
Engineering: 1 year

Experience under licensed engineer:

1 year



TASKS

- Conducted research, data collection, and analysis during the due diligence stage of land development projects to determine the potential of the land.
- · Utilized AutoCAD Civil 3D extensively to prepare exhibits for technical reports related to water, sewer, and traffic.
- Performed water and sewer network analyses, including demand calculation, preparation of drawings using AutoCAD, hydraulic analysis using WaterCAD/SewerCAD, and technical report writing for submission to agencies/entities.
- Prepared traffic impact analyses, including trip generation, assignment and distribution, traffic simulation modeling, traffic control planning, bicycle/pedestrian planning, and crash analysis.
- · Developed and improved spreadsheets used for water, sewer, and traffic analysis to enhance accuracy and efficiency.
- · Demonstrated expertise in local codes for water, sewer, and traffic analysis and designed accordingly to ensure compliance.
- · Adhered to company CAD standards and exhibit requirements of the entities to ensure consistency and high-quality deliverables.

I started working at VTN with the focus on preparing traffic mitigation letters for residential/industrial and commercial projects. Then transitioned into preparing water network studies with the help of project engineer along with learning AutoCAD Civil 2D skills. I got an opportunity to work on updating the master sewer and traffic studies for Summerlin West project by Howard Hughes. Used softwares including Bentley WaterCAD/SewerCAD, and PTV Vistro. Also used Synchro to simulate the manuevers at traffic intersections for Summerlin West.



REPRESENTATIVE PROJECTS

Summerlin West - Master Traffic Study- The study includes design of all the intersections within the master plan area (close to 5000 acres).

• Updated the design and analysis of 100+ traffic intersections that were planned as part of the project. Perform traffic simulation using Synchro and LOS analysis using PTV Vistro.

Summerlin West- Master Sewer Study -The study includes design of the sewer network within the master plan

- Updated the design and analysis of the sewer network across 5000 acres area including demand calculation and use of Bentley SewerCAD for the analyses. Coordinated with various other local design consultants that were working on parts of the project site.
- Performed water/sewer/traffic analyses for several mid-size residential/commercial projects for land developers including DR Horton, KB Homes, Lennar etc.

SANDEEP REDDY YANALA (20-080-03)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Westwood Professional Services Inc., Nevada (United States) Graduate Civil Engineer II January 2021 – January 2022 Verified by
Thomas David Miller
Tom.Miller@westwoodps.com

Experience Summary
Full-Time

Engineering: 1 year
Experience under licensed engineer:

1 year



-TASKS

- Prepared and submitted applications for Tentative Maps, Zone Changes, Vacations, Entitlements, and other necessary permits.
- Prepared construction drawings for commercial projects, such as grading plan, plan and profile, construction details, storm drain and utilities, signage, and striping plans, that adhere to agency standards.
- Utilized AutoCAD Civil 3D to design grades around structures, including sidewalks, curb and gutter, swales, parking lots, and other necessary features, that adhere to local standards and follow ADA compliance.
- Created blocks and 3D labels in AutoCAD Civil 3D to streamline the drawing process and reduce preparation time of improvement plans.
- · Prepared responses, justification letters, and calculated bill of quantities to be used in bond estimates.

I switched from VTN to Westwood as a graduate civil engineer and pivoted my focus from water, sewer and traffic studies to preparing tentative maps, entitlements and improvement plans. I was a part of commercial team. I learnt AutoCAD Civil 3D including creating water and sewer networks and several custom commands of Westwood. I also got to learn grading of the commercial sites.



REPRESENTATIVE PROJECTS

DURANGO CASINO PROJECT in Las Vegas: It is a casino planned to be built on 70 acre area by Station Casinos.

• Played a crucial role in creating grading, traffic sheets by adding grade tags, labels, traffic signage and striping etc.,. Also, assisted in water network analysis by calculating water demand, no. of water hydrants, meters needed

TULE SPRINGS POLICE STATION: A police station planned in the Tule Springs master plan in City of North Las Vegas by D.R.Horton.

• Played a crucial role in creating Improvement plans including grading and utility design, cover sheet, signage and striping, details etc., Reviewed (QA-QC) the drawings per the improvement plan checklist of the local entity (CNLV). Created sheetset using sheetsetmanager on AutoCAD that helps in automatically updating the title block attributes of the planset.

TULE SPRINGS FIRE STATION: A fire station planned in the Tule Springs master plan in City of North Las Vegas by D.R.Horton.

• Created Improvement plans including grading and utility design, cover sheet, signage and striping, details etc., Reviewed (QA-QC) the drawings per the improvement plan checklist of the local entity (CNLV). Created sheetset using sheetsetmanager on AutoCAD that helps in automatically updating the title block attributes of the planset.

CADENCE MULTI-FAMILY - The project proposed a multi-family development in Henderson.

• Worked on utility sheets. Created water and sewer network using AutoCAD civil 3D and label the pipes and utility crossings and provided a utility crossing summary table.

WORK EXPERIENCE

VTN Nevada Nevada (United States) Office Technician III January 2022—March 2023 Verified by
Rachel B Lawrence
rachelr@vtnnv.com

Experience Summary
Full-Time
Engineering: 1 year, 2 months
Experience under licensed engineer:
1 year, 2 months



-TASKS

- Conducted extensive research by collecting and reviewing existing technical drainage studies for upstream sites to understand offsite drainage flow patterns, flow capacity, and other pertinent information.
- Performed hydrologic and hydraulic analysis, including the provision of onsite/offsite storm drain infrastructure, to ensure effective drainage has been provided on-site.
- · Designed and sized BMP swales to meet water quality standards by following Hydraulic Criteria and Drainage Design Manual.
- Coordinated and reviewed plan sets using checklists from relevant entities and provided redlines to ensure compliance with regulations.
- Demonstrated proficiency in AutoCAD Civil 3D and Bentley WaterCAD to create exhibits for water network studies, technical drainage studies, grading design, and plan and profile sheets.
- Conducted research, data collection, technical analysis, and technical writing for drainage study, traffic and water network design projects.

I was re-hired by the VTN Nevada company particularly because of my prior experience in Wastewater Treatment Industry and my background in Environmental Engineering. My current focus is to work as a design engineer for the Centrate and Acid Waste Pipelines project, which takes approximately half of the time and the rest half is focused on preparing technical drainage, Traffic and Water studies for residential, industrial and commercial projects. With the previous experience, I was able to work on the projects as they come by and took aid of project engineer when needed. I was involved in preparing the drainage studies for the first time in my career. I started with the single calculations that pertain to individual projects. However, I have grown to understand the exhaustive details including boundary conditions, existing flow patterns, requirement and provision of storm drain infrastructure, BMP swales etc. with minimal to no inputs from the project engineer. Also, used skills obtained at Westwood in grading design.



REPRESENTATIVE PROJECTS

Centrate and acid waste pipelines at FWRC (CCWRD): The scope of project is to design a 6000 ft+ centrate and acid waste pipelines along with pump station design. -ACTIVE project

- •Acting as a design lead role, in the design efforts of the pipeline including sizing, material selection, alignment and profile of the pipelines
- Supervising AutoCAD design work including review (QA-QC) of plan set (plan&profile drawings), providing redlines etc.
- Assisting in provision of specifications for the project at 60% design stage.
- Creating cost estimates for the entire project by research, data collection, analysis to come up with unit costs for material/labor. Calculating the quantities of all the material/labor work to complete the project.

Tule Springs Parcel 11 & 12: Single family residential projects located near the Aliante casino in North Las Vegas.

• Prepared technical drainage study by performing research on existing drainage studies to determine offsite flows, propose and design onsite storm drain infrastructure, technical report writing etc. Reviewed the TDS plans for the TDS submittal to CNLV.

Tule Springs Parks: A 5-acre and 2.3-acre Parks located near the Aliante casino in North Las Vegas.

 Played a key role in setting up grades on-site including ADA compliance of all the sidewalks and walking trails inside the project site, setting finished floors of structures, grading of baseball court and grading the site to drain according to technical drainage study. $\hbox{Tule Springs Parcel 15 \& 16: Single family residential projects located near the Aliante casino in North Las Vegas. } \\$

• Prepared traffic mitigation letter for the project including trip generation analysis, creating figures, report writing etc.

SANDEEP REDDY YANALA (20-080-03)

All work experience reviewed by two licensed professionals

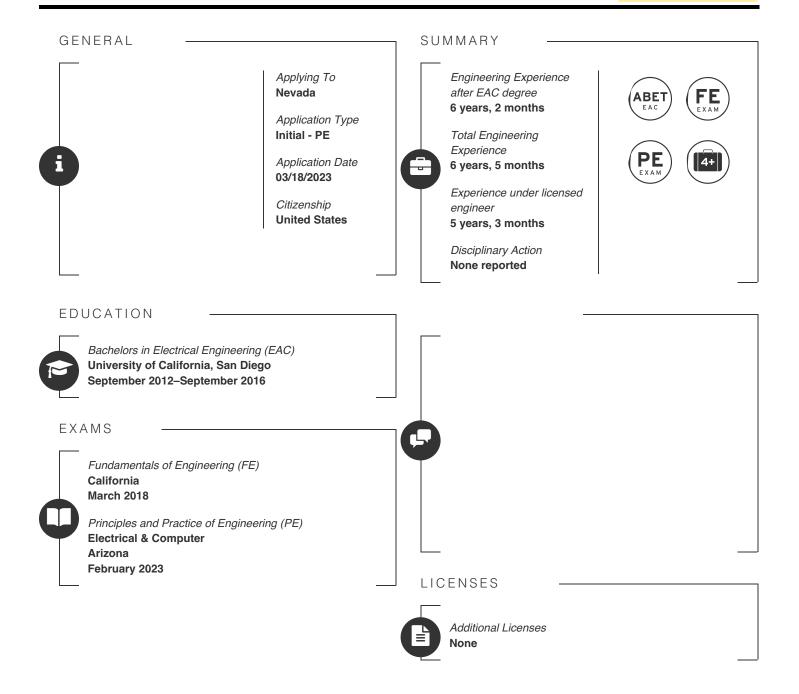
ADDITIONAL INFORMATION



-TIME GAPS

Start Date	End Date	Reason	Explanation
05/2008	06/2009	Unemployed	Took an year break before pursuing undergraduate studies for various reasons.

Electrical



WORK EXPERIENCE

Tk1sc
California (United States)
Senior Electrical Engineer
June 2016—January 2019

Verified by Brandon Gary Reed breed@tk1sc.com

Experience Summary
Full-Time
Engineering: 2 years, 7 months
Post EAC degree: 2 years, 4 months
Experience under licensed engineer:
1 year, 5 months



TASKS

I design electrical distribution systems for commercial buildings. Electrical design includes complete electrical infrastructure design for hospitals, labs, offices, and other facilities per NEC code. This includes the electrical main service switchgear for the building, panelboards feeding various loads, NEMA ratings for receptacles, and wire/disconnect sizing for loads. I also size and selectively coordinate breakers to avoid nuisance tripping. Part of the decisions I have made is choosing, locating, and sizing the electrical distribution. I also calculate the short circuit and voltage drop values to ensure AIC ratings and wire sizing of electrical systems are correct. I also provide and segregate emergency loads into article 700, 701, and 702 per the building needs and requirements. I choose and design lighting in areas to provide the adequate lighting footcandle levels for rooms based on type. I design and manage building projects electrically and supervise employees during the design. I attend client/contractor meetings to ensure electrical designs are completed correctly. I complete submittals and RFI for projects, design and draft using AutoCAD, Revit, Bluebeam, Excel, and other programs.



REPRESENTATIVE PROJECTS

One of the projects I have designed is the Sony Interactive Entertainment Facility in San Diego/CA/USA. This include the entire power distribution system of the building including the generator and UPS systems to feed the new data center in the building. Design also includes the specialty lighting and power for offices, sound studios, and other specific task rooms for game designs.

Another project I have designed from the ground up is The Dream Hotel in Palm Springs/CA/USA. In this hotel I helped designed the main electrical distribution system from the city's electrical feed (Southern California Edison) and all electrical distribution downstream of it. This includes using three different Automatic Transfer Switches to segregate article 700, 701 and 702 loads for the hotel. I have designed an AIC/Voltage Drop calculator for the company to accurately calculate the required wire sizes for voltage drop, and AIC ratings for panels. I had to size all panels, distribution boards, breakers, and wires to properly reflect the loads and to be in accordance to the 2014 National Electrical Code.

Another project I have designed was a portion of the Sharp Grossmont Hospital. This designed includes the special electrical distribution for the X-ray and MRI machines in the facility. In addition to this, the project had to be designed to be in accordance to OSHPD (Office of Statewide Health Planning and Development) codes and requirements.

I have have completed hundreds of other lab and office projects and in all those projects it was required to comply with the California Building Energy Efficiency Standards. Some of these standards include special lighting requirements such as primary, secondary, and skylight dimming zones. Other standards include occupancy sensing and astronomical time clock requirements. I also had to specify the correct lighting fixtures and controls to properly light the area in accordance to code which includes special low voltage dimming drivers. In addition to controls I also choose the correct lumen packages for light fixtures to properly light the space but still be under the Standard's lighting allowances per space.

NCEES ID: 18-809-77 03/20/2023 Page 2 of 5

WORK EXPERIENCE

Tk1sc
California (United States)
Electrical Engineer
January 2019—May 2019

Verified by Corey Callaway (Self)

Experience Summary

Full-Time

Engineering: (0%)

Experience under licensed engineer:

None



-TASKS

I design electrical distribution systems for commercial buildings. Electrical design includes complete electrical infrastructure design for hospitals, labs, offices, and other facilities per NEC code. This includes the electrical main service switchgear for the building, panelboards feeding various loads, NEMA ratings for receptacles, and wire/disconnect sizing for loads. I also size and selectively coordinate breakers to avoid nuisance tripping. Part of the decisions I have made is choosing, locating, and sizing the electrical distribution. I also calculate the short circuit and voltage drop values to ensure AIC ratings and wire sizing of electrical systems are correct. I also provide and segregate emergency loads into article 700, 701, and 702 per the building needs and requirements. I choose and design lighting in areas to provide the adequate lighting footcandle levels for rooms based on type. I design and manage building projects electrically and supervise employees during the design. I attend client/contractor meetings to ensure electrical designs are completed correctly. I complete submittals and RFI for projects, design and draft using AutoCAD, Revit, Bluebeam, Excel, and other programs.



REPRESENTATIVE PROJECTS

One of the projects I have designed is the Sony Interactive Entertainment Facility in San Diego/CA/USA. This include the entire power distribution system of the building including the generator and UPS systems to feed the new data center in the building. Design also includes the specialty lighting and power for offices, sound studios, and other specific task rooms for game designs.

Another project I have designed from the ground up is The Dream Hotel in Palm Springs/CA/USA. In this hotel I helped designed the main electrical distribution system from the city's electrical feed (Southern California Edison) and all electrical distribution downstream of it. This includes using three different Automatic Transfer Switches to segregate article 700, 701 and 702 loads for the hotel. I have designed an AIC/Voltage Drop calculator for the company to accurately calculate the required wire sizes for voltage drop, and AIC ratings for panels. I had to size all panels, distribution boards, breakers, and wires to properly reflect the loads and to be in accordance to the 2014 National Electrical Code.

Another project I have designed was a portion of the Sharp Grossmont Hospital. This designed includes the special electrical distribution for the X-ray and MRI machines in the facility. In addition to this, the project had to be designed to be in accordance to OSHPD (Office of Statewide Health Planning and Development) codes and requirements.

I have have completed hundreds of other lab and office projects and in all those projects it was required to comply with the California Building Energy Efficiency Standards. Some of these standards include special lighting requirements such as primary, secondary, and skylight dimming zones. Other standards include occupancy sensing and astronomical time clock requirements. I also had to specify the correct lighting fixtures and controls to properly light the area in accordance to code which includes special low voltage dimming drivers. In addition to controls I also choose the correct lumen packages for light fixtures to properly light the space but still be under the Standard's lighting allowances per space.

WORK EXPERIENCE

Stantec
Arizona (United States)
Electrical, EIT
May 2019—March 2023

Verified by
Martin Stephen Armenta
marty.armenta@stantec.com

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

3 years, 10 months



TASKS

I design electrical distribution systems for industrial water treatment. Electrical design includes complete electrical design for clean water treatment plants, wastewater treatment plants, transfer pump stations for wells and reservoirs, and roadway lighting per NEC code. This includes the electrical main services for the sites, motor control centers feeding various loads, motor starter types, different overcurrent protections, and wire/disconnect sizing for loads. Some of the decisions I make is choosing where to locate equipment to minimize voltage drop and avoid hazardous areas (or provide the correct area classifications). I choose, locating, and sizing the electrical distribution to adequately power all equipment. I use generator sizing software to correctly size the generators and adjust the loads per step to reduce peak inrush current. For facilities and roadway lighting I choose and design lighting in areas to provide the adequate lighting footcandle levels for the respected areas. I design and manage building projects electrically while coordinating with owners and contractors. I have complete submittals and RFI for projects, design and draft using AutoCAD, Revit, Bluebeam, Excel, and other programs. I have also edited specifications per project requirements and created basis of design reports to outline how electrical designs will be implemented for a new project. In addition, I have completed multiple field walks to verify existing conditions, inspect ongoing construction, and oversee electrical testing.



REPRESENTATIVE PROJECTS

One of the projects I have designed is the Clark County Water Reclamation District's new water treatment plant. This project is in Las Vegas, Nevada, USA. Design included the power distribution system to all process, HVAC, and electrical system of the facility. The plant includes: aeration basins, secondary effluent, blower building, secondary clarifiers, RAS, WAS, and scum handling. Electrical design includes all power distribution and lighting for all areas.

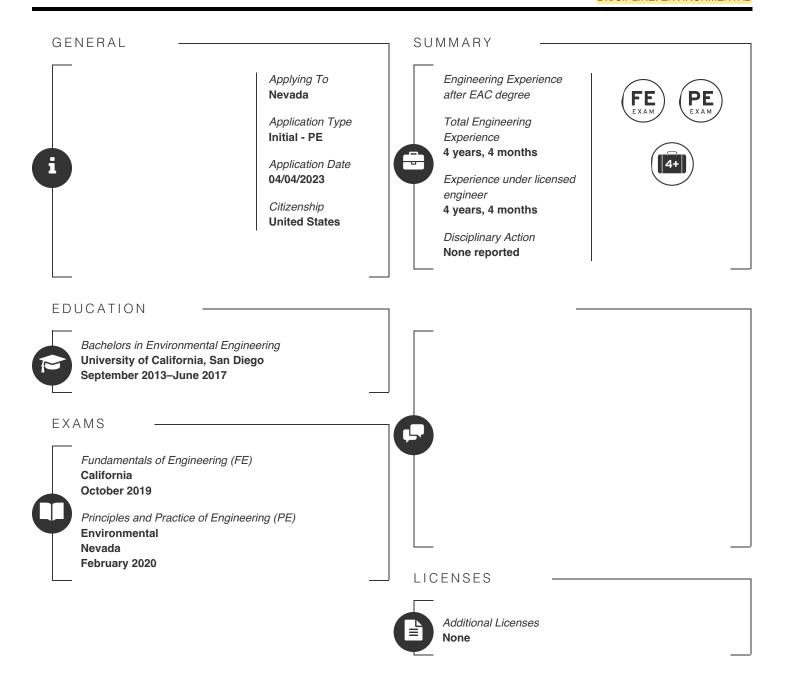
Another project I have designed from the start to finish is the City of Buckeye Broadway Road Water Campus. This facility is in Buckeye, Arizona, USA. The facility includes: backwash, arsenic treatment, reverse osmosis treatment, chemical treatment, and finish water transfer pumping. Electrically, two utility services where needed to feed the plant and 5 backup generators. The backup generators where fed via a paralleling switchgear configuration. Other design includes all power distribution, lighting, signal wiring, and control wiring for all instruments/equipment.

Other projects include:

- -multiple New Mexico Department of transportation street lighting projects
- -Town of Queek Creek, AZ street lighting
- -Ups Shipping facility in Nogales, AZ
- -Ten01 Tempe, AZ apartments inspection
- -Midnite Mines Water Pond Transfer in Wellpinit, Washington
- -US60 Gilbert Pump Station in Gilbert, AZ
- -Holiday Village Manufactured Home Community in Mesa, AZ
- -Gilbert Compressed Natural Gas vehicle refueling station in Gilbert, AZ
- -McCarren Airport moving walkway upgrade in Las Vegas, NV
- -91st Ave Wastewater Treatment plant in Tolleson, AZ
- -Big Bend National Park pumping rehab in Big Bend, TX
- -Glendale Lift Station 8 in Glendale, AZ

And hundreds more of projects not listed.

Environmental



WORK EXPERIENCE

Naval Facilities Engineering Systems Command Southwest California (United States) Environmental Engineer November 2018—March 2023 Verified by

Kathie J Beverly
kathie.j.beverly.civ@us.navy.mil

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



-TASKS

Nov'18 – Oct '19 & Apr '20 – Jun '21. Duties included oversight of air compliance programs at various Navy installations. Responsibilities included writing reports required by the local air pollution control districts, maintaining data, preparing point papers, and conducting briefings on program status and issues. Tasks assigned to me also included the preparation of scopes of work and government estimates for contract execution and management of several air compliance requirements. Once awarded, duties included oversight of the engineering and scientific requirements in the contracted work. Lastly, it was required to maintain up-to-date knowledge of changing air regulations that would affect Navy installation's day-to-day operations and briefing the installations on those changes.

Oct '19 – Apr '20. Duties included contract execution, management and subsequent oversight of the contracted work at various Base Realignment and Closure sites with the Department of the Navy. Responsibilities included reviewing all technical documents health and safety plans, and engineering drawings achieve regulatory closure on sites assigned to me.

Jun '21 – Current. Duties assigned to me include the management of aircraft mishap response, cleanup, and site restoration. This includes any future mishaps that require emergency support. Responsibilities also include environmental planning and compliance support requirements by Navy and Marine Corps training activities such as radon sampling, Operational Range Clearance of active bombing ranges, and Small Arms Range Clearance projects. This type of work includes range management and compliance with range safety, range environmental compliance, management of unexploded ordnance, and off range waste processing.

Most project duties include contract execution and management as well as review of all contractor technical documents to meet DoD requirements for environmental sampling, health and safety, and meet field work objectives. Responsibilities also include review of field reports and analysis reports for technical sufficiency to support project completion and regulatory approval.



REPRESENTATIVE PROJECTS

Nov '18 – Oct '19. I assisted in preparing the annual emission inventory reports and Annual Criteria and Toxics Emissions Inventory Reports for various Navy Installations. Aided the renewal of various local air permits for Navy installations. I advised Navy installations on changing state and local air regulation that could affect day-to-day operations. I evaluated and managed the air and water compliance programs at Naval Base San Diego. I inspected of a variety of air permits issued to the base. I assisted sailors understand and comply with the regulation and permit requirements. I performed inspections of the base subject to their storm water permit.

Oct '19 – April '20. I acted as project manager and performed document review responsibilities at a historic landfill at the former Marine Corp Air Station (MCAS) El Toro. Gathered historical documents and pertinent technical information to create a statement of work and independent government estimate for operation, maintenance, monitoring, and optimization of the monitored natural attenuation/institutional controls remedy for groundwater impacted by VOCs at various sites at former MCAS El Toro.

Apr '20 – Jun '21. I evaluated project requirements and developed scopes of work and independent government estimates to execute contracts for support at various Navy installations for air compliance programs including the Title V permit program, the mobile source program, the Airborne Toxic Control Measure program, the Emissions Inventory program, the New Source Review Program, and the Greenhouse Gas program. Stayed up-to-date on changing air regulations that could affect operations at Navy installations.

Jul '21 – Sept '21. I conducted two Environmental Condition of Property assessments that documented compliance with CERCLA. I performed a site assessment to identify any potential adverse environmental conditions including looking for signs of endangered species or significant cultural resources. I reviewed readily available Navy documents on the historical use of the site including any past environmental issues associated with the site.

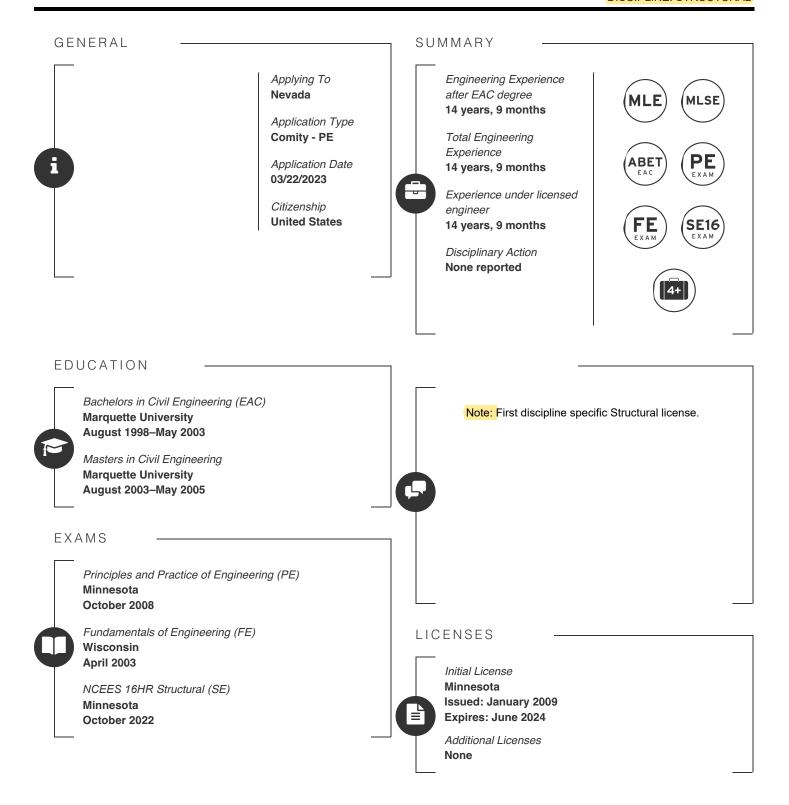
Jun '21 – Current. I determine project requirements and prepare scopes of work and independent government estimates for Small Arms Range bullet reclamation projects in order to provide the Marine Corp with safe and sustainable ranges. I provide support for Operation Range Clearance projects at various active Navy bombing ranges. Support includes conducting range management and compliance with range safety, environmental compliance, management of unexploded ordnance, and off range waste processing.

Jun '21 – Current. I am managing the environmental cleanup and site restoration of two aircraft mishaps. An F-35 aircraft mishap site within Anza Borrego State Park and a KC-130 aircraft mishap in an agricultural field in Thermal, Ca. Both sites experienced a significant fuel release. I have performed calculations of the nature & extent of release and the area of impacts. I used that to create a detailed conceptual site model to understand the fuel impact to the sites. This allows me to provide accurate technical review of work plans, health and safety plans, and other engineering drawings to effectively plan for removal of impacted media and site restoration work. I provided field work oversight of soil excavation, material handling, and sampling activities to ensure work conforms to work plans. I ensure figures, analysis, and text meet technical sufficiency and support regulatory close out of site.

Jan '22 – Current. I am sampling and assessing levels of radon at various Marine Corps installations within Southern California as directed by Navy/Marine Corps environmental requirements. I prepared a sampling plan, health and safety plan, and conducted the fieldwork at each installation by installing radon detectors in various buildings of each military installation.

Nov '21 – Current. I determined project requirements after communicating with National Park Environmental Staff in order to prepare a statement of work for contractor support to perform environmental cleanup and site restoration of an F-18 aircraft mishap site in a remote location of Death Valley National Park. I am managing all aspects of the project including technical review of a work plan with input from stakeholders, oversight of the debris removal and disposal, oversight of soil sampling for VOCs, TPH, and PAHs, and management of the environmental restoration of the site. I ensure all reports meet technical sufficiency and support regulatory close out of site.

Structural



ANNE CRISP (20-485-43)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Enterprise Engineering Consultants Wisconsin (United States) Structural Engineer June 2005—September 2005 Verified by

Daniel Paul Seyour
info@eecltd.com

Experience Summary

Full-Time

Engineering: 3 months
Post EAC degree: 3 months

Experience under licensed engineer:

3 months



TASKS

- -Performing structural calculations for wood and structural steel open structures.
- -Preparing design documents for wood and structural steel open structures.



REPRESENTATIVE PROJECTS

Park Pavilion structures in Wisconsin, Utah, Florida, etc. I averaged 2-4 park pavilion designs per day. 2005

I designed wood structures, mostly consisting of park pavilions and similar open structures. These structures typically had curved glulam beams, which I modeled and designed using engineering software. I also designed a few octagonal structural steel park pavilions. I designed the framing for each park pavilion for the design gravity and lateral loads, and I checked the diaphragm and standard connections. Before design, I contacted the building official in each location to confirm the correct building code requirements. My designs were performed using BOCA, UBC, IBC, and various state and local codes.

NCEES ID: 20-485-43 03/22/2023 Page 2 of 11

WORK EXPERIENCE

Opus A&E
Minnesota (United States)
Associate Engineer
November 2005—October 2008

Verified by
Craig Steven Kuske
ckuske@encompassinc.com

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

Experience under licensed engineer:

2 years, 11 months



-TASKS

Performed preliminary designs

Analyzed and designed gravity and lateral systems

Designed retaining walls

Produced contract documents

Coordinated design and detailing with architects and consultants

Communicated with superintendents, subcontractors, and project managers

Generated calculations for submittal

Inspected buildings during construction

Approved subcontractor shop drawings

Answered Requests for Information (RFIs)

Developed field fixes



REPRESENTATIVE PROJECTS

Medtronic Headquarters in Blaine MN

2005-2006

I designed the braced frame connections and performed other calculations for components of the structure under the supervision of more senior engineers.

Excelsior Crossings (Cargill) in Hopkins, MN

2006-2007

I designed an 8-story office steel-composite office building for a fast-tracked project. I designed the gravity and lateral systems, and I did a majority of the connection design.

Marquette Law School

2008

I designed a 4 story steel-composite law school building. I designed the gravity and lateral systems and performed connection design. I designed the diaphragm for its unique, pie-shaped layout with multiple roof levels and a large atrium.

ANNE CRISP (20-485-43)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Palanisami & Associates Minnesota (United States) Structural Engineer

November 2008 - January 2009

Verified by
Anne Crisp (Self)

Experience Summary

Full-Time

Engineering: (0%)

Experience under licensed engineer:

None



-TASKS

I performed preliminary designs for building structures. I calculated the design loads and designed structural members.

I designed steel, wood, masonry, and concrete structural elements.



REPRESENTATIVE PROJECTS

2008

I designed steel, wood, masonry, and concrete components on building structures. I reviewed design details that incorporated my design information. I assisted other engineers with their designs. Due to the short length of employment at this position, I was not assigned to any significant projects.

NCEES ID: 20-485-43 03/22/2023 Page 4 of 11

WORK EXPERIENCE

Ericksen Roed & Associates (contract position) Minnesota (United States) Professional Engineer

August 2010 - September 2011

Verified by

Ryan Stuart Bonniwell
rbonniwell@eraeng.com

Experience Summary

Full-Time

Engineering: 1 year, 1 month
Post EAC degree: 1 year, 1 month
Experience under licensed engineer:

1 year, 1 month



TASKS

I performed preliminary designs for building structures.

I analyzed and designed gravity and lateral systems for concrete and steel structures.

I designed retaining walls.

I produced contract documents for my structural designs.

I generated calculations for submittal.

I reviewed subcontractor shop drawings.

I answered Requests for Information (RFIs) during construction.

I developed field fixes for construction issues that occurred on buildings I designed.



REPRESENTATIVE PROJECTS

University of Minnesota Center for Magnetic Resonance Research in St. Paul, MN 2010

I designed the conversion of an aging parking ramp structure into a new research building. I designed for a large portion of one of the concrete floor slabs to be removed, and the remaining portion was strengthened with FRP exterior reinforcement. I analyzed the capacity of the existing columns for a longer unbraced length. I calculated the design loads based on the Minnesota building code.

Michaels store renovation in Mt. Pleasant, WI 2011

I analyzed an existing retail structure for the new loading for a conversion to a Michaels store. I analyzed steel joists for new roof top units, and I designed new joists where the existing were insufficient. I designed new framing where the owner wanted the existing façade and entry structures modified. I revised the general structural notes and plan notes for the project information.

ANNE CRISP (20-485-43)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Leo A Daly (contract position) Minnesota (United States) Structural Engineer

October 2011 - June 2012

Verified by
Anne Crisp (Self)

Experience Summary

Full-Time

Engineering: (0%)

Experience under licensed engineer:

None



-TASKS

I analyzed and designed gravity and lateral systems for commercial buildings.

I generated calculations for submittal.

I produced contract documents.

I utilized Revit to look for structural conflicts with other disciplines.



REPRESENTATIVE PROJECTS

Publix Warehouse

2011-2012

I designed the tilt-up wall panels and the steel joist roof framing for a 40,000 sq. ft. single-story steel industrial warehouse attached to a 10,500 sq. ft. office building.

WORK EXPERIENCE

BKBM Engineers
Minnesota (United States)
Structural Engineer
July 2012—September 2014

Verified by
Ronald LaMere
rlamere@bkbm.com

Experience Summary
Full-Time

Engineering: 2 years, 2 months
Post EAC degree: 2 years, 2 months
Experience under licensed engineer:





-TASKS

I performed preliminary designs for steel, concrete, wood, and masonry structures.

I analyzed and designed gravity and lateral systems for steel, concrete, wood, and masonry structures.

I designed concrete and masonry basement and retaining walls

I produced construction documents for schools, offices, hotels, and multi-family buildings.

I generated calculations for submittal.

I reviewed and approved subcontractor shop drawings.

I answered Requests for Information (RFIs) during construction.

I designed field fixes.

I performed field observations.

I answered contractor questions.



REPRESENTATIVE PROJECTS

MNSCU addition - Faribault, MN 2012-2013

I designed an addition and renovation of one of the academic buildings. I designed new openings in the existing clay-tile walls, and I analyzed the capacity of the existing building lateral system for the new layout. I designed the concrete and steel addition, including lateral and gravity systems, connections, and foundations. I performed construction administration tasks, including shop drawing review, answering RFIs and other contractor questions, developing field fixes, and performing field observations.

Primary school additions - Minneapolis/St. Paul Metro Area, including Cornelia Elementary 2013-2014

I designed the gravity and lateral systems (including connections and foundations) for several school additions throughout the Twin Cities. I designed the CMU walls and structural steel framing. My designs were issued via construction documents. I performed construction administration tasks, including shop drawing review, answering RFIs and other contractor questions, developing field fixes, and performing field observations.

WORK EXPERIENCE

Encompass, Inc.
Minnesota (United States)
Project Engineer

October 2014-February 2023

Verified by
Curt Isernhagen
curt@encompassinc.com

Experience Summary

Full-Time

Engineering: 8 years, 4 months
Post EAC degree: 8 years, 4 months
Experience under licensed engineer:





-TASKS

- -Write specifications
- -Write legal and inspection reports
- -Analyze and design gravity and lateral systems
- -Design retaining walls
- -Produce contract documents
- -Generate calculations for submittal
- -Approve contractor submittals
- -Develop field fixes
- -Perform field observations
- -Answer contractor questions
- -Meet with property managers, HOAs, and owners to discuss future and active construction projects
- -Perform bid reviews
- -Develop project budget estimates
- -Write construction contracts.



REPRESENTATIVE PROJECTS

Loop Calhoun façade repair project

2014-2015

I wrote the specifications for the façade repair project. I assisted with construction administration tasks, including reviewing submittals, performing site observations, developing punch lists, developing field fixes, and attending meetings.

Flour Sack Flats façade repair project

2015-2016

I investigated construction defects in the Flour Sack Flats façade and plaza area and wrote an inspection report. I developed construction documents (drawings and specifications) based on the identified defects/issues. I performed bid phase and construction phase services, including performing bid interviews, writing the contract, answering contractor questions, reviewing submittals, and performing site observations.

Condos on Blaisdell renovation project

2016-2019

I wrote the specifications for the structural and architectural components of the renovation/restoration project. I performed calculations and developed details for the structural components of the project. I provided structural construction administrative services, including reviewing submittals, developing field fixes, answering RFIs, and performing site observations.

Bridgewalk Condominiums building restoration project

2020-present

Phase 1: I wrote the specifications and designed the structural repair details for the Phase I project. I coordinated the architectural and structural details.

Redesign: I acted as project lead to develop and coordinate the structural, architectural, civil, mechanical, electrical, and plumbing drawings. I wrote the civil, structural, and architectural specifications, and I coordinated and reviewed the specifications for other disciplines. I performed structural calculations, and I supervised the structural calculations performed by a more junior engineer. I developed the contract between the owner and the contractor. I am currently performing construction administration tasks in preparation for starting construction this summer.

Bollis vs. McCall Construction legal case 2021-2022

I performed site observations and wrote legal reports related to a legal case between a homeowner and our client, the contractor. I attended arbitration and provided engineering testimony.

ANNE CRISP (20-485-43) All work experience reviewed by two licensed professionals

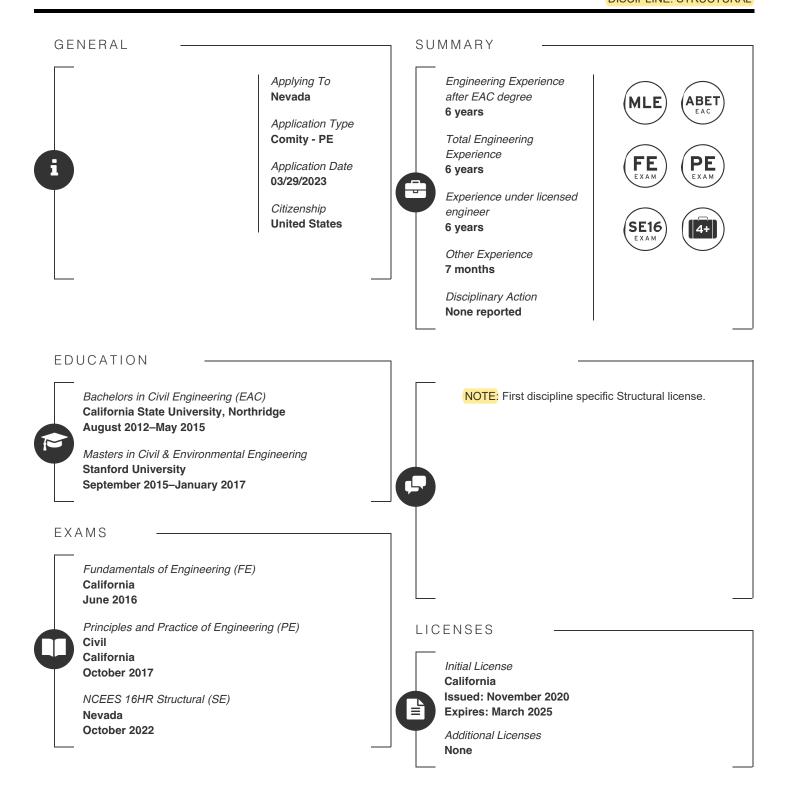
ADDITIONAL INFORMATION



-TIME GAPS

Start Date	End Date	Reason	Explanation
02/2009	07/2010	Unemployed	It was the Great Recession

NCEES ID: 20-485-43 Page 11 of 11 03/22/2023



ANDREW GOMEZ (16-081-21)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Upward Bound (CSU Northriddge) California (United States)

Verified by

Experience Summary

Part-Time

Other: 3 months (25%)

Experience under licensed surveyor:

None

O to

-DESCRIPTION

July 2014-May 2015

NCEES ID: 16-081-21 03/29/2023 Page 2 of 8

ANDREW GOMEZ (16-081-21)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

California Department of Toxic Substances Control California (United States) Student Assistang October 2014—August 2015 Verified by

Experience Summary
Part-Time

Other: 3 months (25%)

Experience under licensed surveyor:

None

O a

-DESCRIPTION

NCEES ID: 16-081-21 03/29/2023 Page 3 of 8

ANDREW GOMEZ (16-081-21)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Bobrick Washroom Equipment, Inc. California (United States) Summer Temp

July 2016-September 2016

Verified by

Experience Summary

Full-Time Other: 2 months

Experience under licensed surveyor:

None

O a

-DESCRIPTION

NCEES ID: 16-081-21 03/29/2023 Page 4 of 8

WORK EXPERIENCE

Englekirk Structural Engineers California (United States) Associate

March 2017-March 2023

Verified by

Daniel Yeuk-Hin Chan
daniel.chan@englekirk.com

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

Experience under licensed engineer:

6 years



-TASKS

Provide structural design of building structures including concrete, wood, and steel structures.

This includes the design and analysis of gravity members such as concrete slabs, beams, columns; steel beams, decks, and columns; wood beams, joists, posts, and stud walls; and cold-formed steel joists, built-up beams, posts, and stud walls among others for various loading conditions including residential, roof, assembly, storage, parking, etc. I also analyzed various structures for lateral forces due to wind and earthquakes and designed the lateral restraining systems including special concrete shear walls, special masonry shear walls, light frame wood shear walls with plywood sheathing, light frame cold-formed shear walls with steel sheathing, special concrete and steel moment frames, ordinary steel moment frames, cantilever column systems, and special eccentric braced frames among others. In addition to the design and analysis of new structures, I have also conducted analysis of existing structures including a reinforced brick masonry building which required a degree of retrofit by introducing a new concrete shear wall.



REPRESENTATIVE PROJECTS

Provided various engineering, coordination, and construction administration tasks for projects listed below including design of concrete slabs, PT slabs, wood beams/joists/posts, steel beams & columns, plywood sheathed wood shear walls, concrete shear walls, steel and concrete moment frames, steel braced frames, among others.

777 N. Front Street, Burbank, CA [2022-2023]

- 573 units, three structurally separated buildings each 7 or 8 stories tall, two residential buildings with 5 levels of wood over 3 or 4 levels of concrete on grade, one 8 story concrete parking and one level below grade all supported on conventional spread footings

I designed the wood gravity framing for the entire project including wood beams, joists, posts, and bearing walls plus some additional steel framing at balconies and canopies. In addition to design, I have also been managing the construction administration of the full residential buildings including responding to RFIs, reviewing shop drawings, and performing structural observations.

Lamp Lodge - 660 Stanford Ave, Los Angeles, CA [2019-2021]

- 82 units, 7 story affordable housing, 5 levels of wood residential over 2 levels of concrete supported on conventional footings on grade.

I designed the structural elements in their entirety for this project including all the vertical carrying elements (concrete columns, pad footings, slabs, and transfer beams; wood beams, joists, stud walls, and posts) as well as the lateral restraining elements (special concrete and masonry shear walls plus concrete diaphragms for the concrete portion and light frame wood frame shear walls with wood diaphragms for the wood portion).

637-641 N. La Peer, West Hollywood, CA [2019-2023]

- Mixed use, 124,000 sf, 3 stories and 2 levels below grade, concrete structure with concrete shear walls and moment frames supported on a mat foundation with tension micro-piles.

I designed the majority of vertical and lateral carrying elements including concrete two way slabs, beams, columns, special reinforced shear walls, special moment frames, and mat footing with micro-piles.

Westin Anaheim Resort - 1030 W. Katella Ave, Anaheim, CA [2018-2019]

- 613 keys hospitality, 9 levels of concrete hotel with one level of subterranean parking and 1 level of retail steel structure supported on a mat foundation and spread footings.

I designed all of the gravity elements including steel beams, decks, and columns; and concrete conventional and PT slabs, concrete beams, concrete columns, spread footings, and mat footing.

Budokan - 249 South Los Angeles street, Los Angeles, CA [2017-2018]

- Gym/community center, 3 stories and one level below grade, structural steel construction with BRBF lateral system supported on conventional footings.

I designed all the gravity steel framing including beams, columns, and decks as well as the ground floor suspended concrete two way slab, columns, footings, and retaining walls.

NCEES ID: 16-081-21 03/29/2023 Page 6 of 8

ANDREW GOMEZ (16-081-21) All work experience reviewed by two licensed professionals

ADDITIONAL INFORMATION



Start Date	End Date	Reason	Explanation
05/2009	07/2012	Unemployed	During this time, I was mainly focused on university studies and would tutor part time (free lance).

Page 8 of 8 NCEES ID: 16-081-21 03/29/2023

6. Governor Lombardo Executive Order 2023-003



EXECUTIVE ORDER 2023-003

Order Freezing the Issuance of New Regulations and Requiring a Review of Existing Regulations by All Executive Branch Agencies, Departments, Boards and Commissions

WHEREAS, state regulations should protect workers, consumers and the environment, while promoting entrepreneurship and economic growth; and

WHEREAS, state regulations can become outdated, result in unintended consequences, create conflicts or impose an unnecessary burden on citizens, businesses or government entities; and

WHEREAS, it is in the best interest of the state of Nevada that its regulatory environment be concise, transparent, stable, balanced, predictable and thoughtfully constructed; and

WHEREAS, Nevada's current regulatory structure is too often unfocused and inefficient, contains regulations that are obsolete and includes regulations that are unnecessarily onerous, thereby limiting the economic potential of the State; and

WHEREAS, Article 5, Section 1 of the Nevada Constitution provides that, "The Supreme Executive Power of this State shall be vested in a Chief Magistrate who shall be Governor of the State of Nevada;

NOW, THEREFORE, by the authority vested in me as Governor by the Constitution and laws of the State of Nevada, it is hereby ordered as follows:

SECTION 1

Every executive branch department, agency, board and commission shall undertake a comprehensive review of the regulations subject to its enforcement. On or before, May 1, 2023 each department, agency, board and commission shall provide a report to the Governor's office detailing how the regulation subject to its enforcement can be streamlined, clarified, reduced or otherwise improved to ensure those regulations provide for the general welfare of the State without unnecessarily inhibiting economic growth.

SECTION 2:

As part of its report, every executive branch department, agency, board and commission shall provide a list of not less than ten (10) regulations recommended for removal, ranking them in descending order of priority.

SECTION 3:

Prior to submitting their respective reports, every executive branch department, agency, board and commission shall hold a public hearing, after having provided reasonable notice consistent with Chapter 233B of the Nevada Revised Statutes, to key industry stakeholders, to: (i) vet their recommended changes; (ii) solicit input as to the merits of those changes and (iii) identify other regulatory changes stakeholders feel are worthy of consideration. Stakeholder input shall be reflected in the summary of findings and recommendations included in each submitted report.

SECTION 4:

Unless specifically exempt from this Executive Order as set forth in Section 5, no new regulations shall be proposed, approved or acted on by any executive branch agency, department, board or commission until such time as this Executive Order is rescinded.

SECTION 5:

The following regulations are not subject to the suspension set forth in Section 4:

(a) Regulations that affect public health;

- (b) Regulations that affect public safety and security;
- (c) Regulations that are necessary in the pursuit of federal funds and certifications;
- (d) Regulations that affect the application of powers, functions and duties essential to the operation of the executive branch agency, department, board or commission at issue;
- (e) Regulations that affect pending judicial deadlines; and
- (f) Regulations necessary to comply with federal law.

Until the suspension of this Executive Order, each executive branch department, agency, board and commission that intends to continue with the enactment of a proposed regulation under an exception to the freeze set forth in Section 4 shall submit a report to the Governor's office identifying which exemption the proposed regulation falls within and detailing the problem the regulation addresses or the value to the public of the regulation, how the regulation addresses the problem or the benefits provided by the regulation, why alternate forms of regulation are insufficient to address the problem and whether other regulations currently address the problem.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Great Seal of the State of Nevada to be affixed at the State Capitol in Carson City, this 12th day of January, in the year two thousand twenty-three.

Governor

Secretary of State

Deputy

6. a. Public Comment from Public Workshop held March 27, 2023

NEVADA STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS Regulations Workshop Meeting Minutes Held at 1755 E Plumb Lane, Suite 258, Reno, NV 89502 and 241 W Charleston Blvd., Suite 130, Las Vegas, NV 89102 on Monday, March 27, 2023 at 12:00 pm

1. Call to order

Ms Mamola began the meeting by thanking everyone in attendance and called the meeting to order at 12:01 pm. She said this meeting is a public workshop for receiving public comment on the board's recommendations as set out an attachment A and B in response to Governor Lombardo's executive order 2023-003. It's also for public comment to identify any other regulatory changes that workshop participants feel are worthy of consideration by the board.

2. Introduction of workshop process

Ms Mamola introduced the rules of engagement for the workshop and said that public comment is limited to 5 minutes. She said that Derek Vogel will serve as timekeeper. She instructed everyone who intends to make public comment that they will need to complete a public comment form and hand it to Mr Vogel before coming up to the microphone. Mr Vogel will note the time on the form.

Ms Mamola informed everyone that we will alternate between Las Vegas and Reno for each regulation proposed to be amended or appealed, beginning with the regulation that most people are here for. She said she would then go back to the other regulations proposed for repeal or update.

3. Public comment

There was no public comment.

4. Public comment on proposed repeal and amendments of Nevada Administrative Code chapter 625 as set out in Attachments A and B

The proposed repeal and amendments to Chapter 625 of the Nevada Administrative Code will provide for the following:

1) Eliminate license application fees for active military and active military spouses, and military veterans and military veterans' spouses

Ms Mamola reviewed the category and asked if there were any public comments. There were no comments.

2) Eliminate state specific exams

Ms Mamola asked if there were public comments on NAC 625.310, which the board proposes to remove Nevada specific exams to streamline and speed the licensing process.

Bob LaRiviere – Bob LaRiviere, land surveyor for the record, previous board chair and member of this board for nine plus years. I've always found the best way to work with people as a middle ground. My solution is I'm not for, I'm not against. What I would like to do is find a middle of ground of what I did 30 years ago in the state of California is a take home exam. That way everybody could take it, do a take home exam, be tested on our statutes of 278 and 625, and I see nothing wrong with the take home exam. Thank you.

Ms Mamola thanked Mr LaRiviere and read the following comment sent via email from **Robert McMillan**, a licensed land surveyor from California:

Dear Executive Director Mamola,

Please read this into the record at today's public hearing and register my comments in extreme opposition to the possibility of elimination of the Nevada State Specific Professional Land Surveyor Exam. I have been licensed as a Professional Land Surveyor in California since 1996. I am currently considering pursuing licensure in Nevada, with the intent to relocate to the Silver State. The actual practice and the laws that govern the practice of land surveying in Nevada are similar to those in California, however, Nevada is different enough that I, as a licensee, would feel very uncomfortable with the reduction of professional competency of licensees that would be caused by the elimination of the Nevada State Specific Professional Land Surveyor Exam. I understand that some people are concerned with the time between candidates being approved for examination in Nevada, and them actually taking the Nevada State Specific Professional Land Surveyor Exam, however, that is not attributable to any bureaucratic, legislative or regulatory delays created by the Nevada Board. The responsibility for the

delay is entirely up to the candidates. The delay in scheduling is a matter of candidate choice. In fact, the Nevada Board has streamlined the process of exam application approval so much that a candidate's application can be approved and the candidate can schedule the examination in as little as 24 hours, and results are available within 3 days. The current Nevada State Specific Professional Land Surveyor Exam is an open book exam with a passing rate of approximately 85%. Eliminating this exam would result in those 15% of candidates who are incapable of passing the open book exam to become licensed as Land Surveyors in Nevada. This would unleash their incompetence on the citizens of Nevada, jeopardizing the largest and most sacred investment that most people ever make - their homes. The Nevada Board website features the following quote: "Licensed professionals are regulated and have an obligation to adhere to ethical standards and protect health, safety, welfare of the public." To eliminate the Nevada State Specific Professional Land Surveyor Exam would be an unconscionable breach of ethics and dereliction of duty by the Nevada Board and Governor to the people of Nevada.

Sincerely,

Robert McMillan

Ms Mamola then asked for public comment from Las Vegas and Murray Blaney welcomed speakers to the microphone.

Mr Burn – Good afternoon board, my name's Paul Burn, PLS 11174, since January of 1995. I've been practicing here ever since. That's about 28 years. I'm also licensed in other states, which I'll get to in a minute. Given the governor's regulations, I'm in support of almost all of the and commend the board on their work on these streamlining, however, I'm solidly against the action to remove the state specific exam for comity PLS, this is in NRS 625.240.2.B and NAC 625.310.4 and 5, which I understand that's where we are now. My reasons are land surveying is very unique science and differences between states vary greatly. I also have a license in California and Colorado and have practiced in each with important differences in each land surveying. Differences are found in history, boundary determination and mapping to name a few. Surveyors in other states within our region have difficulty with mapping. Without understanding our laws in NRS 625.N78, they should at a minimum have to be familiar and show that by passing a state exam, NCEES uses the analogy of the three-legged table. The legs represent education, experience and exams. Here in Nevada just two years ago, the state exam for surveyors changed to open book. Even though I wasn't totally in favor of that, it happened and that raised the pass rate from percents in the forties to approximately 83%. I would think that would be sufficient to demonstrate a mindset of making it easier to successfully accommodate comity. I brought with me in closing one of many emails that I get often that this came, Thursday, March 23rd to me from one of my attorney clients. And it's not unusual and I want to read it to you word for word. Paul. Hope you're doing well. We are looking to carve out the drive-through pad from the AP and above, which is attached to this email. The client hired in Alice State Surveyor who said this can't be done by record of survey, but it looks like the property is already within a commercial subdivision. I am hoping to get the work moved to you guys. Would you be able to confirm this would be by record of survey and provide an information, quote, retiming and cost? If I am wrong, please let me know. Thank you. From my attorney client, we have, as we're all aware very unique mapping law here, which the testing forces a review. I know that you have some alternatives in mind, but the actual state exam is totally important for anyone who shows up with a PLS from another state and asks for comity in our state. It seems to me that it is the minimum requirement to become a PLS here. Thank you.

Mr Hancock – Good afternoon, Gary Hancock, city surveyor for the city of North Las Vegas. I'm going to try, I don't want to repeat a lot of this stuff because I agree with everything that both, Robert, which you read in and Paul have said 100%, just want to add a couple words. I do disagree with the proposal to eliminate this state specific exam, eliminating the state specific exam jeopardizes the health and the safety, and will have a negative impact on the public. I think it's very important that we vet who actually gets licensed, specifically for that reason. That is in statute that we are here to protect the health and the safety and you know, just signing something to say, yes, I've read the statutes, I don't think is good enough. Anybody can and it will happen. Unfortunately, there are people out there, they'll, hey, I'll just sign it and go on. And now I'm licensed. The exam already is open book and available during any time in the week, that's not prohibitive at all to me. That's, I don't know how you could speed that up any further than that, one of the things I know that they've talked to, you know, take home exam. I'm not sure if I'm in favor of a take home exam. This was my kind of idea on that one, and I'm not opposed to this completely, is have an internet exam that is timed and is at least, instead, hey,

take this home and take three weeks to look up the specific statutes to answer the questions. I think that's a little much, go ahead and have something that is timed. I'm not one who's completely in favor of memorizing statute. I'm in statute all the time. I'm rereading statute all the time. I get a question from the outside and I'm reviewing it. I'm also asking, towards other surveyors, what's your opinion on this and how do you read it? So, you're always back into statute. So I'm not asking people to memorize, which they don't have to. Thing is you have to be familiar enough to actually look it up. So, we need to know, we need to vet who is actually being licensed to know that they have that ability to do it. And with the pass rate where it is with open book, I think we're actually doing that already. And I don't see, by eliminating the exam with how it is currently set up, or even just modifying it a little bit, we'll really actually change and speed any of that up at the moment. Thank you.

Mr Wittie – Good afternoon. My name's Frank Wittie. I'm a Nevada PLS since 2011. PS number 21292. I'm the current NALS treasurer and I am the GPS coordinator for City of North Las Vegas. I am here to express my opposition to the proposed elimination of the Nevada State specific exam. I've reviewed the governor's executive orders 2023-003 and 004, and the board's minutes to address the same. In my professional opinion, the board has misinterpreted the orders by proposing the elimination of the Nevada State specific exam. The orders are requesting that the licensing process be sped up not eliminated. And if we were to eliminate the exam, we would be the only state to not have a state specific exam. That's not a state I want to be in. Thank you.

Mr Hulslander – Hello, my name's Jonas Hulslander, LSIT, Nevada Resident. I'm grateful for your time and consideration for my concerns regarding this proposal, the repeal of NAC 625.310. And I firmly believe that repealing this state's specific exam would negatively affect our profession in Nevada. It's widely acknowledged that among the Western states that there are significant gaps between the national exam and the public land survey system. And therefore, until NCEES can bridge this gap, it's crucial to maintain a state specific exam. And I believe that it's in our best interest of the entire profession to explore alternative solutions, in line with the governor Lombardo's executive order that will expedite incoming surveyors while safeguarding the integrity of our state surveyors. Thank you again for your time and attention to this matter.

Mr Phan – Good afternoon. My name is Eric and I'm a Nevada surveyor number 22408. I'm associated with the Aerotech mapping in town. I've been surveying for 20 years plus, between California and Nevada, the reason I'm here, I just want to state my statement as opposed to the board regard to eliminate the Nevada's state Pacific exam. For me, my opinion is that that's the only scale or the only hold back that we allowed to, I mean, for the system to investing the individual that who can qualify to do the work. I mean, technically surveying is very unique and, I'm proud to be part of that this profession. And, I don't want to make it any more kind of like handed out to me is, it's almost like now you're taking away, it's almost like handed out to anybody walking down the street. So, would you like to have a surgeon doctorate without taking a specific exam and going and surgery on you? I don't think that you want to do that. So that's what my take on it. Thank you.

Mr Blaney said that concludes comment from Las Vegas.

Ms Mamola then invited speakers in the Reno office and began by reading a letter from **Nancy Almanzan**:

Dear Ms. Mamola,

The Nevada Association of Land Surveyors (NALS) Board of Directors has reviewed Nevada State Board of Professional Engineers and Land Surveyors (BP ELS) proposed changes to the Nevada Administrative Code (NAC) 625 in response to the Nevada Governor's Executive Order 2023-003. In the interest of public safety, NALS strongly opposes the removal of the state-specific exam requirement. While we wholeheartedly support reciprocity and mobility of licensure, it is critical for those practicing have an understanding of the standards of practice, regulations, and laws for the creation of legal boundaries in the state of Nevada. The state-specific exam ensures that those seeking licensure meet that minimum competency. Professions such as Land Surveying are highly technical, and laws vary from state to state. We understand that the FS and PS provide the assessment of minimum competency for initial entry into the profession, but they do not address individual state laws and regulations. Requiring the state-specific examination provides this safequard and protects the public. Since the state-specific examination is open book and can be administered immediately upon application, maintaining this protection does not create a barricade or hardship to those seeking reciprocity. Therefore, to safeguard life, health, and property and to ensure public welfare, we urge the State Board to not proceed with the proposal to change the current requirements for Licensure pursuant to NAC 625.310. Representatives of NALS are available to discuss our position, should you have any questions.

Sincerely,

Nancy Almanzan, PLS

Ms Almanzan – Thank you, Patty. My name is Nancy Almanzan. I'm a licensed land surveyor in Nevada PLS 1363. I'm the current state president of the Nevada Association Land Surveyors and also the director from Nevada to the National Society of Professional Surveyors Professional Licensure According to the NCEES website, under the Surveying licensure section states that professional licensure ensures that individuals practice in a manner that protects the health, safety, and welfare of the public by satisfying minimum qualifications and education work experience and exams. Removal of the Nevada State specific exam unprecedented and will weaken the minimum competency of the Nevada surveying profession and have negative impacts on the public. I oppose the board's proposed proposal to eliminate the Nevada specific exam for professional land surveyors. In addition, I have comments from our executive director of the National Society of Professional Surveyors. The National Society of Professional Surveyors is the National Association representing professionally licensed land surveyors from all 50 states and territories. We work with our affiliate associations to provide guidance in keeping the health, safety and welfare of the public foremost in our duties of the surveying profession. NSPS has reviewed the proposed Nevada State Board of Professional Engineers and land surveyors proposed change to the Nevada Administrative Code 6 25. In response to the Nevada Governor's Executive Order, 2023-003, we offer the following comments. The surveying profession is dissimilar to other license professions. Each state has statutory law and procedural rules that

provide specific quidance for preparing a boundary survey. The state's specific exam is a critical part of assessing a candidate's competency. In regards to said laws and rules, this state's specific testing requirement must be in addition to the technical competencies typically tested by the National Council of Examiners for Engineers and surveying standard exams consisting of the fundamentals of surveying and the practical survey by keeping the state specific exam in place. This requirement supports surveyors duties to provide professional services that coincide with protecting the health, safety, and welfare of the public we serve. We also work with our affiliates to help educate those professionals who seek licensure by providing educational materials and training. Each state affiliate can quide the potential candidate with key information that highlights the unique laws and rules to recognize the successful completion of the state specific exam, also is our understanding that the state specific examination for Nevada is open book for each candidate. NSPS sees this as an opportunity for testing state law and rural competency is the best possible environment to encourage applicants to successfully pass the exam. In the interest of health, safety and public and welfare of the public NSPS strongly opposes the removal of the state specific exam requirement as proposed by the executive order. And signed by Timothy Birch, PLS the director of Executive Director of NSPS. Thank you.

Mr Keenan – Good afternoon, everyone. My name is Trent Keenan. I'm Nevada PLS 16802. Been licensed since December of 2004. I'm also licensed in Arizona, California, Utah, and Washington, where I took a and passed the state specific exam to practice in each one of those states. I'm here today on behalf of the Western Federation Professional Surveyors Board of Directors, where I'm currently the secretary Treasurer on the board. West Fed has reviewed this Nevada State Board of Professional Engineers and Lance Surveyors proposed changes to the Nevada administrative code NAC 625 in response to the executive order 2023-003 issued by the Nevada governor. The Westford West Fed Board opposes the elimination of the state specific examination requirement in the interest of public safety. While the West Fed Board supports the idea of reciprocity and mobility of licensure for its members, it is crucial for the practitioners to comprehend the standards and practices, regulations, and laws for creating boundaries in each state that they practice. The state's specific examination ensures that all aspiring licensees meet the minimum competency level. Land surveying is highly specialized profession and laws vary from state to state. And of course, while the FS and the PS offer the minimum competency of evaluation for initial entry into the profession, they do not address individual state laws. The state specific examination requirement is necessary to guarantee the public protection since the state specific examination is open and immediately available upon application. Retaining this requirement does not create a hindrance or hardship for individuals seeking licensure to practice in Nevada. Therefore, to protect the public health safety and ensure the welfare, the West Fed Board urges the state and the state board to not proceed with the proposed changes to the existing licensure requirements under NAC 625.310. Thank you.

Mr Carrington – Hello, my name is Robert Carrington. I'm a land surveyor in the state Nevada PLS number 9103 prior, and during my career I also served as a city surveyor for the city of Henderson. So I'm uniquely qualified to speak about the laws of the state of Nevada because I made sure that surveyors complied with them. First of all, I do agree with all the comments today about the removal of the state specific exam, it does prove minimum competency. It at

least requires surveyors to review those statutes and then further on as they develop their career to follow the statutes and regulations of local governments, and that's what I'd say. Thank you.

Mr Calkins - Good afternoon, Las Vegas. Good afternoon. Byron Calkins, great Basin College Land Surveying Department. I'm one of the instructors there. If you go to GBC, their website, if you go to the land surveying page, under degree plan, we have six or seven bullet points. These are objectives that a student would earn if earning this degree. And I'm just going to read the bullet list. Yep. Okay. So, land surveying GEOMATIC program objectives graduates with a BS with an emphasis and land surveying and geomatics will be able to proficiently apply sound measurement methods, mathematics, science, and surveying tools to collect, analyze, edit spatial information and professional applications, demonstrate competency in fundamentals and applications of land surveying and the acquisition and management of spatial data. Develop a sound background in the humanities social sciences, the arts to function in a multicultural and diverse environment. Provide fundamentals in business management to enable graduates to understand business environments and decision making processes, convey spatial information and graphical textual and verbal forms as an individual or a member of a collaborating group and professional team prepared to take and pass the fundamentals of land surveying examination developed by the National Council of Examiners and Engineering and Surveying and NCEES enter interprofessional employment in land surveying geomatics in the state of Nevada or other states or other countries, covered by we have the North American Free Trade Agreement. I have to update that. Obviously, we're no longer practicing under that. The statutes believe it's and then finally, satisfy the educational requirements for licensure required by NRS 625.257 as a professional land surveyor in Nevada and recognize the benefit of lifelong learning by participating in continuing education as students or as instructors. Thank you very much.

Mr C deBaca – Also, hello to Las Vegas. Hello, my name is Carl deBaca. My license number in Nevada is 7633. I was licensed in 1987. As a side note, I was licensed in 1988 in California after taking and passing a 50 question take home test, which they ceased offering in 1988, maybe minutes after I took the test. I have been an active participant in professional societies, including the Nevada Association of Land Surveyors, the California Land Surveyors Association, and the National Society of Professional Surveyors. Since 1990, I have served the profession of Land surveying in a number of capacities, including being the 2016 President of NALS. I have edited both the California surveyor and the Nevada Traverse magazines and have acted as the liaison from NALS to this board. And I have acted as the liaison from CLSA to the California Board of Professional Engineers, land Surveyors and geologists, for those reasons, I think that makes me uniquely qualified to comment on some of this stuff. In addition to those things, I also have served for many years on the curriculum advisory committee for Great Basin College, and I served as an adjunct professor there. So, I believe the proposed change to eliminate the state's specific examination and the licensing criteria is the result of the conflation of two completely separate issues. The first and most obvious is the problem with a declining number of professional surveyors and by association Nevada licensees. This is a national and demographic problem, and I don't believe that the proposed change will contribute to a resolution of this problem in any way. The second issue is a nationwide movement embraced and recently

expressed by our governor to tear down barriers to occupational licensing. This is a very honorable endeavor and one that I support completely, however, there's a world of difference between occupational licensing and professional licensing and the high standards that boards of regulation hold professional licensed land surveyors to in order to safeguard the health and safety of the public. In the case of the reciprocity applicant, the board can look at both the educational background and experience, but is there any guarantee that his knowledge of the public land survey system and Nevada laws and regulations is sufficient in the absence of an exam? In the case of a new applicant, the average college course on the public land survey system is not by itself sufficient to guarantee minimal competency any more than a single college course on route surveying that most civil engineering schools used to offer would guarantee that an engineer would be minimally competent to practice surveying, the exam in some form is a necessary component to ensure the public is protected and to prevent an inevitable increase in enforcement cases and an increase in malpractice related litigation. I believe that there are other options available to streamline the licensing process for reciprocity applicants. Thank you.

Mr Higgins said he has a letter from his firm that he wants entered into the record. Ms Mamola said that the letter would be entered without reading it out loud.

Dear Mr. Kidd,

Wallace Morris Kline Surveying, LLC (WMK) is a Nevada based land surveying only firm with over fifty employees and eleven (11) Nevada licensed professional land surveyors. The following comments are made regarding the proposed elimination of the Nevada State specific exam for professional land surveyors.

We have reviewed the Nevada Governor's Executive Orders 2023-003 and 2023-004, together with the minutes from the February 9, 2023 Interim Board meeting, which passed the motion to eliminate the state exams for licensing engineers and land surveyors as proposed by staff in the supporting documents for the board meeting.

WMK commends the work by the Nevada State Board of Professional Engineers and Land Surveyors (Board) in recent years of streamlining the process for reciprocity and testing. We encourage the Board to include the accomplishments already completed and proven successful in its report to the Office of the Governor and the Director of the Legislative Counsel Bureau.

WMK supports the expedited process, now in place for those seeking initial licensure or by reciprocity. However, the elimination of the state specific exam jeopardizes the mission of the Board, as stated in Nevada Revised Statute 625.005, "is to safeguard life, health and property and to promote the public welfare by providing for the licensure of qualified and competent professional engineers and professional land surveyors."

All 50 states and the District of Columbia require examination in order to demonstrate specific knowledge within each state. Executive Order 20233-004, Section 3 states:

"To the extent an occupation or profession is currently licensed in Nevada but is not subject to licensure requirements in the majority of states (26 or more), licensure shall be presumed to be unnecessary and that board shall provide a recommendation for phasing out such a licensing requirement by July 1, 2023."

6525 West Warm Springs Road, Suite 100, Las Vegas, Nevada 89118, Ph: 702.212.3967 Fx: 702.212.3963

Eliminating the state exams for licensing engineers and land surveyors is in direct conflict with this portion of the executive order. The National Council of Examiners for Engineering and Surveying (NCEES) promotes the path to licensure through three (3) steps, Education, Experience and Exams. Elimination of the Nevada State specific exam for professional land surveyors weakens 1/3 of this pathway.

Statutes and code vary greatly between states and specifically between eastern states, Texas and the Public Land Survey System (PLSS). Nevada now has an open book exam for the state specific exam for land surveyors. It is our understanding that the pass rate has increased dramatically since the open book was introduced. This has further advanced the licensing process, while maintaining an applicant's responsibility to be familiar with Nevada statutes, administrative code, the PLSS, water law, etc.

WMK will continue to support the Board, professional associations and our Nevada community. We believe an open dialogue between the Board and the professional community is warranted, prior to major decisions like this being made. We make the following recommendations:

- Remove the proposed elimination of the Nevada State specific exam for professional land surveyors.
- Immediately create a legislative sub-committee to address this specific issue. Include the formation of this sub-committee within the Board's report to the Office of the Governor and the Director of the Legislative Counsel Bureau. Also note that findings of the sub-committee's work will be provided in a subsequent report.
- Create legislative sub-committee, with a majority being Nevada licensed professional surveyors.
- Provide requisite public meeting notice(s) and start meetings as soon as practicable.

WMK will provide a representative if asked, should a legislative sub-committee be formed. Thank you for considering our comments. Please contact us with any questions you may have.

Sincerely,

Kevin Wallace, PLS Principal/CEO, Craig L. Morris, PLS Principal/COO, Jason Kline, PLS Principle/President, Tex J. Brooks, PLS Principal, Matthew Burrell, PLS Principal, Jason Higgins, PLS Principal, Craig Matsueda, PLS, Kurt Orban, PLS, Lance West, PLS

Mr Higgins – Members of the board. Thank you for the opportunity to be here. My name is Jason Higgins, Nevada, PLS 13601. I'm also licensed in Arizona. I've served our professional community on numerous boards, including a state president of the Nevada Association of Land Surveyors in

2019. I've served on the Nevada Board of Engineers and Land Surveyor subcommittee on the Nevada specific exam review for Land surveyors and currently serve on the standards of practice subcommittee. I've review reviewed the proposed changes outlined in materials provided for this public workshop. The governor's executive orders 2023-003 and 004. I support the proposed changes included herein with the exception of the elimination of any state specific exam currently required. I provide the following comments regarding the elimination of the state specific exam for Land surveyors. One, the Nevada Board of professional Engineers and Land surveyors is to be commended for the proactive work accomplished in recent years to streamline the process of licensure. Gone are the days when it would take months to have an application approved exams given twice a year and results would take weeks or longer to find out. Once an application is approved, a candidate may sit for examination the next business day, allowing issuance of licensure within weeks or even days from initial application. The barrier of someone seeking reciprocity has in effect been removed. The board has also made the Nevada specific exam for land survey's and open book exam. This has increased the pass rate from less than 50 to over 80%. The board has satisfied the governor's request without elimination of the Nevada State specific exam. I believe the board's proactive approach to getting applicants licensed in an expedient manner provides a great story to tell in its report to the office of the governor and the director of the legislative general counsel bureau. The Nevada specific exam for land surveyors tests for minimum competency on the public land survey system and the following chapters of Nevada law NRS 116 Common Interest Communities, 278 Planning and zoning, 327 Nevada Coordinate System, 329 Perpetuation of Corners, 533 Adjudication of vested water rights, 534 underground water and wells, 625 professional engineers and land surveyors and also NAC 625 being the same. These statutes and codes are unique to Nevada and have been the foundation of the Nevada specific exam since its beginning. Removal of the exam lowers the minimum competency requirement below minimum. How can the board, public or other professionals rely upon professional and surveyors that have not met the minimum competency to provide these professional services? I encourage the board to consider the following. Remove the proposal to eliminate the state specific exams. Immediately create a legislative subcommittee to include Nevada license land surveyors include the subcommittee creation in the board's report to the governor's office of the governor and the director of the legislative council. Then provide subsequent reports as needed to continue to show the board's proactive work beyond the requirements and request in the executive orders. This approach satisfies or exceeds compliance with the governor's executive orders while providing an opportunity for dialogue with the professional community. Thank You.

Mr Phillips – Good afternoon. My name is Greg Phillips. I'm a Nevada Professional Land Surveyor Certificate 17616. I am past president of Nevada Associational Land surveyors and the other west Fed delegate from Nevada. I'm here today to oppose elimination of the Nevada State specific exam for professional and surveyors in my opinion this proposal will jeopardize the health and safety of the public. There's been a lot of good comments today and I'm sure there's going to be quite a few more. So, I will follow up with a written statement with more detail on my specific concerns. Thank you.

Mr Moore – Hello, good afternoon. My name is Justin Moore, Nevada Professional Land Surveyor 22362. And I am in opposition, imagine that as everyone here seems to be, all 50 states including, Washington, DC have a state specific examination for that reason, because every state is different, a universal or a regional licensure would, excuse me, it's not effective going state to state. Each state has different regulations, different codes, and a professional needs to be competent in those state and local codes, statutes. And I just am in opposition. Thank you.

Mr Jefferson – Good morning. My name is Brett Jefferson. I'm a fellow of the National Society of Professional Lance Surveyors, a trustee to the NSPS Foundation, past area director for NSPS and a past NSPS Governor. I'm a past president of the Nevada Association of Land Surveyors as well as the Southern chapter. I'm also a past adjunct professor in the Land Surveying Associate Program at CSN, where I taught surveying 101 boundary control and legal principles and writing and interpreting legal descriptions. I'm a professional land surveyor licensed to practice in Nevada, California, and Arizona. I was first licensed in Nevada in 1989. I was required to pass a state specific exam. I then applied to California and successfully passed their state exam in 1990 and subsequently applied to Arizona and pass their state specific exam. In 1991, I did not view the requirement to pass a state-specific exam as a barrier to licensure or to expand my practice to other states. It was a process to measure my professional competence and I accepted it and in fact embraced it. I reached out to those states for study material recommendations and I studied before I sat for the exams. Neither did I feel that it was anything unfair or unnecessary contained in these exams. They ensured that I was minimally competent to practice in those states as well as the unique problems and challenges that are prevalent to surveying in those states. The qualifications and examination standards set by the Nevada Board of Professional and Surveyors, for ethical, professional and technical competency are intended to protect Nevadans in their businesses, public and private developments, real property investments and incorporated cities and counties. Lowering the proven knowledge by eliminating the state specific exam will obviously reduce that level of protection. If the knowledge component contained in the state specific exam is no longer tested for the state board sacrifices the security provided by the exam, which will likely lead to increased complaints and litigation filed by damaged agencies, governments, and citizens. As a result, the purpose of the board to safeguard life, health and the property and promote the public welfare through the state specific exam has accomplished these goals for decades. The result of eliminating the exam will lower the minimum competence bar the board's mission to uphold the value and of the professional of land surveying licensure by assessing minimum competency for initial entry into the profession. The state's specific exam for land surveying in Nevada has been the gold standard in the Western states for literally decades. Other states have emulated Nevada's exam the board and now should be complimented on the relevancy of the exam. The board should also be complimented for streamlining the state specific exam process. It is an open book exam. Zoom proctors can be scheduled with the examinees within 24 hours of application. The streamlining of the exam process by the board has now facilitated an expedient state specific exam timeline. That eliminates time as a barrier to obtaining a PLS license. The fact that 15 to 20% of applicants fail the state specific exam is a critical argument to this issue. There are individuals that are the individuals that are of concern that elimination of the exam would

become licensed. The protection of agencies, governments, and of citizens would be reduced. The exam is doing its job. Perhaps even more importantly, to note that the public does not and will not ever know which professional land surveyors have been tested versus those land surveyors that have not been tested for Nevada state specific laws. These things will not come to fruition until damages have occurred. Complaints have been filed and litigation instituted. I urge the board and our PLS representatives to take testimony today into consideration and not lower the minimum competency standards for Nevada PLS candidates by eliminating the state specific exam. Thank you for your time regarding and thank you for this opportunity to speak on this very important issue. Thank you.

Mr Denman – Good afternoon. Just want to take a minute to thank the board for allowing us to be here, it's an honor to be in the building, just an honor for the representation they give to our profession and the livelihood that is brought to all of us and to be in the same room with all of you. So, my name is Eric Denman. I'm a Nevada PLS 14900. Been a PLS for over 20 years and currently serving as the Vice President of the Southern Chapter of the Nevada Association of Lance Surveyors. I believe the board has taken practice steps to streamline the licensing process over the last decade with the most recent step in making the Nevada State Specific Exam open book. The board is to be commended for these accomplishments. However, elimination of the state specific exam for Land Surveyors goes a step too far. Each and every state in our nation has different laws, regulations, and codes applicable to their respective states. Whether an initial applicant or someone seeking reciprocity, minimal competency is an essential to licensure. Elimination of the state's specific exam lowers the bar where minimal competency cannot be reached. I also find the elimination of the state's specific exam as a conflicting concept from the board that recently implemented a requirement for continuing education for Nevada licensed surveyors focused on the same state specific material. If it's important enough to require continuing education, which it definitely is, then it remains important for new licensees to this great state to be tested on the same specific exam to maintain competency. Thank you for your time.

Mr Enke – Good morning, Todd Enke, PLS 19734, second generation surveyor. My dad is a licensed surveyor in California where I grew up, I strive to get a California surveyor's license, after obtaining my Nevada one, I realized how hard I had to study to be proficient in that. One of my goals is to, again, a California surveying license, but I understand how different the rules are from continually talking to my dad, who is the city surveyor for City of Tracy, that's my goal law. And I, for me to be a competent surveyor in our state or any other state, I believe knowing the laws and rules and regulations of those states is important. Thank you.

Mr Trotter – Hi everyone, Shane Trotter, Nevada PLS 24870. I'm here to express my opposition to the proposed elimination of the Nevada State Specific Exam for professional land surveyors. And the one thing I have to add is, I am a land surveyor that was licensed with a bachelor's degree in land surveying in geomatics as well as, I was an adjunct professor at GBC, and just to kind of give you guys an idea or example, when I graduated from GBC I took the national exam. I studied about 30 minutes for it and, and passed the test on my first try, with the education, knowledge and experience that I was given as a student of GBC. I studied several hours for the

Nevada State specific exam, reading and becoming familiar with the laws and I barely passed the state specific exam. So I think it's important to keep an exam, and I think that the board has done a good job of streamlining it. Making it open book is fair because we all as professionals reference the law, and, I think it's important to keep the exam. Thank you.

Mr Wright - Hi there. My name is Stewart Justin Wright. I'm licensed in Arizona originally and in Nevada second as a reciprocity applicant here in 2009. I'm opposing the removal of the state specific exam, when I moved here from the state of Arizona, I was familiar with the Arizona law because I had taken their state specific exam and I had learned how to navigate the laws in regards to subdividing land according to their laws. When I moved to Nevada and applied for reciprocity, I took their state exam as well, studied for the exam. I learned quickly that the laws that applied in Arizona were significantly different than the laws in Nevada, and I think that's important. And in my case, I feel like the test did its job, so I'm opposed to it. I also believe that the test should be testing us on ethics. And, I think that if we don't have a benchmark for ethics, so we don't test people on ethics, how are we going to offer continued education on ethics and how are we going to ask people to apply continuing education when it comes to ethics, when we don't even test them as a baseline when it comes to the ethical values. And finally, I'd just like to state that I think that the exam also touches on the public land survey system and others from other states. The move here may not be familiar with the public land survey system, and I think that we need to touch base on the public land survey system. And I think the idea was to try to test people on their weaknesses when they come to our state and work under our laws.

Mr West – Lance West, Nevada PLS 18232. Also licensed in the state of Oklahoma. Currently to become a PLS in Nevada, you have to have a land surveying degree, but we don't differentiate if that comes from a PLS state or some other state. By removing the state specific, you have no way to know if that applicant has met the minimum competency requirements yesterday, someone compared driving a car from one state to another and how the laws are different. And comparing that to the survey laws. If I break a law in another state driving a car that affects me, I pay the price. If I don't know the law of surveying in another state that not only affects me, but countless other people as well. That's all I have. Thank you.

Mr Matsueda – Hi, I'm Craig Matsueda from Las Vegas, Nevada PLS 17022. Also licensed in California, licensed number 6820. I would like the record to show that as a licensed surveyor in the state of Nevada, I oppose the elimination of the state's specific exam currently required for in Nevada. From a mapping perspective, there are specific regulations in the Nevada revised statutes that are unique to Nevada and are essential to the minimum proficiency requirements for Nevada licensure. My main concern in eliminating the state specific exam presumes and I emphasize presumes a minimum proficiency regarding state statutes rather than currently an applicant has to demonstrate to the public that he or she has knowledge and possesses a minimum proficiency in regarding Nevada statutes by passing an exam. I strongly feel that knowledge of and possession of minimum proficiency requirements of state specific regulations to practice land surveying in the state of Nevada should be demonstrated and I emphasize demonstrated by passing an exam and not presumed prior to licensure. Thank you.

Mr Wooten – Good afternoon. My name is Jonathan Wooten, PLS number 18146, licensed in Nevada and also Arizona. I'm here today to object to the board's recommendation to remove the requirement for the state specific exam. I feel that the state exam is a necessary step in the licensing process to ensure the minimum competency to practice land surveying in accordance with the laws and regulations specific to the professional work of land surveying in this state, without testing the applicant for licensure, I believe that we're failing to protect the profession of land surveying in the state and also, failing to promote the ethical obligations. Land surveyors are charged with to protect the public safety and welfare. And I also believe that it's the duty of this board to ensure that you're providing licensure to qualified and competent professional land surveyors as stated in NRS 625.005. And I strongly urge the board to not eliminate the requirement for the state specific exam.

Mr Hamlin – Hello, I'm Cole Hamlin. I'm not a PLS, but as a person who's working towards licensure, I think my perspective is important. I'm opposed to removing the state specific exam because I believe it is important for a state licensed professional to be competent in state statute. I also feel that the state exam is not a hurdle, but a necessary step in becoming a professional, a licensed professional.

Mr Ariotti – Hello, my name is Nicholas Arriotti, Nevada PLS 22373. I would like to say that I strongly disagree with the removal of the state specific exam, and I would like to support every comment made here today as being something that I would like to say myself. So, thank you.

Mr Perazzo – Hello Las Vegas. My name is Pete Perazzo, PLS 14634. I was licensed in the year 2000. I sat for the test and also the state specific, which I failed. I got passed on the federal level. So I started survey in 1985, sat for the test 15 years later and failed the state specific, I'm not proud of that, but working eight years with the Bureau Land management gives you a perspective that you don't have at other agencies. I then went to the state DOT where there was a few PLSs, but very few in the field, none of which had PLSS backgrounds. Other comments I will send by email, but I'm in opposition to the change. Thank you.

Mr Callahan – Silas Callahan, I am not a surveyor. I am an engineer, but I want to express my opposition as an engineer. I rely on land surveyors that know the laws and removing that test is a detriment to that, that's all I have.

Ms Mamola asked if there are any more comments related to NAC 625.310. There were no comments, and she moved on to the next category.

3) Repeal regulations that are outdated, unnecessary, and/or redundant

There were no comments.

5. <u>Public comment on any other regulatory changes that workshop participants feel are worthy of consideration by the Board.</u>

There were no comments.

6. Closing public comment.

There were no comments.

7. Adjournment

Ms Mamola thanked everyone for their participation and adjourned the workshop at 1:05 pm.

Received via email - 4.4.2023

NRS 625 requires an applicant to demonstrate to the Board of Engineers and that they have sufficient education and experience to meet the minimum requirements for licensure in the state. According to statute, that means an acceptable four year college degree and passing the Fundamentals of Surveying and the Principals and Practices of Land Surveying Exam, as well as the Nevada State Specific Exam (2 hours). The Fundamentals and Principals exams test according to national requirements for surveying and are computer based exams administered and graded by NCEES. These exams are only designed to determine "Minimum Competence" as a surveyor. Nevada registrants need to demonstrate they have the skills tested by the national exams, but they also need to demonstrate that they have a good understanding of the requirements for surveying in Nevada as presented in NRS 625, 328, 329, NAC 625 and 329, as well as the rules for surveying in the Public Land Surveying System. This makes Nevada a unique state in which to survey and the state specific exam is designed to determine that the applicant is at least minimally competent to survey within the borders of Nevada. If an applicant is approved to take the test, they can access it and take it within 24 hours of being approved. I don't know how an applicant can demonstrate knowledge of Nevada statutes without taking at least the 2 hour exam that tests their knowledge in these areas. Even applicants for comity, would need to demonstrate understanding of Nevada laws and public land surveying procedures.

Elimination of the State Specific Exam, would be a detriment to public health and safety in Nevada, which is the reason that as engineers and land surveyors we need to demonstrate our competence for licensure.

Please keep the requirement for this exam in place. It is important to the health and safety of all Nevadans.

Respectfully submitted,

George G. Lindesmith Nevada PLS 6306 Nevada WRS 704 Nevada Board of Professional Engineers and Land Surveyors 1755 E. Plumb Lane Suite 258 Reno, NV 89502

RE: Proposed Change to NAC 625.310

Dear Board members,

My name is Carl C.de Baca, Licensee No. 7633. I was licensed in the Silver State in 1987. I have been an active participant in professional societies, including the Nevada Association of Land Surveyors, the California Land Surveyors Association and the National Society of Professional Surveyors since 1990. I have served the profession of Land Surveying in a number of capacities including being the 2016 president of NALS, editor of both the California Surveyor and Nevada Traverse magazines, and have acted as a liaison to both this board and the California BPELSG over the years. I have also served for many years on the Great Basin College LSG Curriculum Advisory Committee and have been an adjunct professor for that program. I believe all this makes me uniquely qualified to comment on the proposed changes to NAC 625.310(B)5.

I suggest that the proposed change to eliminate the state-specific examination from the licensing criteria is the result of the conflation of two completely separate issues and will not adequately address either one. The first and most obvious issue is the problem with the declining number of professional surveyors and by association of Nevada licensees. This is a national demographic problem and the proposed change will not contribute to a resolution of this problem.

The second issue is a nationwide movement, embraced and recently expressed by our governor to tear down barriers to occupational licensing. This is an honorable endeavor and one which I completely support. However, there is a world of difference between occupational and professional licensing, which requires the high standards that Boards of Regulation hold professional surveyors to in order to protect the health and safety of the public.

In the case of reciprocity applicants, the Board can look at both the educational background and experience of the candidate but is that any guarantee that his or her knowledge of the PLSS and Nevada laws and regulations is sufficient, in the absence of an exam?

In the case of the new applicant, the average college course on the PLSS is not sufficient, by itself, to guarantee minimal competency, any more than a single college course on route surveying that most civil engineering schools used to offer would guarantee that an engineer would be minimally competent to practice surveying.

An exam, similar to those required in all the other surrounding states, is a necessary component to ensure that the public is protected and to prevent an obvious and inevitable increase in enforcement cases and an increase in malpractice-related litigation.

It seems to me that the Board has other options available to streamline the licensing process, without foregoing examination, at least for reciprocity applicants.

Respectfully submitted,

Carl R. C.de Baca PLS 7633

Call C. Se Baca

April 4, 2023

Patty Mamola Executive Director Nevada State Board of Professional Engineers and Land Surveyors

Subject: Nevada Governor's Executive Order 2023-003: Proposed Changes to NAC 625

Dear Ms. Mamola,

I am a licensed Professional Surveyor in the State of Nevada, a member of the Nevada Association of Land Surveyors and I have reviewed the Nevada State Board of Professional Engineers and Land Surveyors (BPELS) proposed changes to the Nevada Administrative Code (NAC) 625 in response to the Nevada Governor's Executive Order 2023-003. In the interest of public safety, I strongly opposes the removal of the state-specific exam requirement.

I wholeheartedly support reciprocity and mobility of licensure, it is critical for those practicing to have an understanding of the standards of practice, regulations, and laws for the creation of legal boundaries in the state of Nevada. The state-specific exam ensures that those seeking licensure meet that minimum competency.

Professions such as Land Surveying are highly technical and laws vary from state to state. I understand that the FS and PS provide the assessment of minimum competency for initial entry into the profession, but they do not address individual state laws and regulations. Requiring the state-specific examination provides this safeguard and protects the public.

Since the state-specific examination is open book and can be administered immediately upon application, maintaining this protection does not create a barricade or hardship to those seeking reciprocity.

Therefore, to safeguard life, health, and property and to ensure public welfare, I urge the State Board to not proceed with the proposal to change the current requirements for Licensure pursuant to NAC 625.310.

Should you have any questions, you can reach me at kalmeterwoodrodgers.com

Sincerely,

Kevin Almeter, P.L.S.

Nevada Certificate No. 19052

April 4, 2023

Patty Mamola Executive Director Nevada State Board of Professional Engineers and Land Surveyors

Subject: Nevada Governor's Executive Order 2023-003: Proposed Changes to NAC 625

Dear Ms. Mamola,

I am a licensed Professional Surveyor in the State of Nevada, a member of the Nevada Association of Land Surveyors and I have reviewed the Nevada State Board of Professional Engineers and Land Surveyors (BPELS) proposed changes to the Nevada Administrative Code (NAC) 625 in response to the Nevada Governor's Executive Order 2023-003. In the interest of public safety, I strongly opposes the removal of the state-specific exam requirement.

I wholeheartedly support reciprocity and mobility of licensure, it is critical for those practicing to have an understanding of the standards of practice, regulations, and laws for the creation of legal boundaries in the state of Nevada. The state-specific exam ensures that those seeking licensure meet that minimum competency.

Professions such as Land Surveying are highly technical and laws vary from state to state. I understand that the FS and PS provide the assessment of minimum competency for initial entry into the profession, but they do not address individual state laws and regulations. Requiring the state-specific examination provides this safeguard and protects the public.

Since the state-specific examination is open book and can be administered immediately upon application, maintaining this protection does not create a barricade or hardship to those seeking reciprocity.

Therefore, to safeguard life, health, and property and to ensure public welfare, I urge the State Board to not proceed with the proposal to change the current requirements for Licensure pursuant to NAC 625.310.

I took and passed the State Specific Survey Exam to obtain my Nevada Land Surveyors license via comity. It is imperative that this requirement continues to protect the public as it educates future Nevada Land Surveyors. It will also help to avoid bad survey practices, future litigation, and help to reduce the Nevada State Board of Professional Engineers and Land Surveyors time investigating future violations.

Should you have any questions, you can reach me at mlong@woodrodgers.com or Ph. 916.869.3286.

Sincerely,

Michael E Long

Nevada Certificate No. 11186

Licensed in CA, NV, AZ, UT, OR, ID

Certified Federal Surveyor No. 1566

Received via email - 4.4.2023

Members of the Board,

I am writing this letter as a written objection to the removal of the Nevada State Specific Land Surveyors exam for new and reciprocity licensees. As I stated in my testimony at the Workshop last week, I was originally licensed in Arizona in 2005. In 2008, I sought reciprocity in Nevada as I moved with my family to Henderson, NV. I was shocked when I studied for the Nevada State Specific Exam at the difference in the laws between Arizona and Nevada, particularly in regards to Land Divisions in NRS 278.

The State-Specific Exam requires new licensees and reciprocity licensees to study the Statutes applicable to Land Surveying in our state. The National Exams required prior to licensure through NCEES do not cover this material. This exam is the best and most efficient way to make sure that new licensees know and understand our laws.

In addition, the State Specific Exam also tests new licensees on many of the basics of working within the Public Land Survey System PLSS. Many states within the United States are not PLSS states. Those applying for reciprocity from one of those states that do not have PLSS experience would not be trained to perform boundary survey work in our state. The Nevada State Specific is the only place where this can be tested for reciprocity licensees.

The State-Specific Exam was carefully crafted to test new licensees on information that they will need to know prior to working as a professional in our state. It is designed to protect the public welfare and also protect new licensees from unknowingly breaking laws and getting themselves in trouble.

I believe we will see an uptick in court cases and disciplinary actions by the board if we remove this examination in our state. Finally, another result of this policy will result in municipalities and utility agencies facing a heavier burden in reviewing submittals from Land surveyors who are not completely educated on this material. This will result in higher taxes and higher utility fees all of which would have a negative impact on Nevada Residents.

Please reconsider your position on this matter. I believe there are other avenues that can be explored to accomplish the Governor's mission to streamline development in our state without sacrificing the quality of our workmanship and our reputation as Nevada Licensed Land Surveyors.

Respectfully, Stewart "Justin" Wright Nevada Professional Land Surveyor, PLS 19197 Arizona Registered Land Surveyor, RLS 43351 Certified Federal Land Surveyor, CFEDS Certificate No. 1660

Received via email - 4.5.2023

Members of the Board,

It is my understanding that under Governor Lombardo's Executive Orders No. 2023-003 and 2023-004, the state specific exams under the purview of the Nevada Board of Professional Engineers and Land Surveyors are proposed to be eliminated.

Please note that we are opposed to this. Although all options for expediting the licensure process should be examined, I believe that the state-specific exam is important for engineers and surveyors, due to the ethics requirements that are not reflected in other states, and especially with the surveyor exam, this is our state's opportunity to identify criteria and minimum standards of care that apply specifically within Nevada and should not be eliminated. Just as Nevada does not require a seismic section for civil engineers, it is my understanding there are specifics covered in the state-specific survey exam that help set a standard of care that we have come to expect from the surveyors providing information to us in Nevada, and the thought of eliminating is a concern.

Thank you for your consideration.

Tom Brady

6. b. Regulation to be Repealed and Updated

Regulation	1	Status	Proposed Action
GENERAL I	PROVISIONS		
625.010	Definitions.	No change	
<u>625.011</u>	"Biennial renewal period" defined.	No change	
625.012	"Board" defined.	No change	
625.0123	"Board Liaison" defined.	No change	
625.0125	"Examination" defined.	No change	
625.013	"Firm" defined.	No change	
625.014	"Licensee" defined.	No change	
625.016	"Professional development hour" defined.	No change	
625.017	"Quarter credit hour" defined.	No change	
625.018	"Respondent" defined.	No change	
625.019	"Semester credit hour" defined.	No change	
625.020	Engineering and land surveying licensed as separate professions.	No change	
STATE BO	ARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS		
<u>625.100</u>	Officers: Election; term; vacancies; removal.	No change	
625.110	Meetings.	No change	
<u>625.125</u>	Appointment of members emeriti.	No change	
LICENSUR	E, CERTIFICATION AND REGISTRATION		
625.210	Application for licensure or certification; fees.	Proposed to Amend	Waive application fees for active military, active military spouses, military veterans and military veteran spouses
625.215	Experience in land surveying.	No change	
625.217	Active experience in engineering.	Added in 2021	
625.220	Disciplines of engineering.	No change	
625.230	Applications for licensure in multiple categories or disciplines.	Proposed Repeal	Priority 1 - Repeal
625.240	Licensure on basis of previous licensure in another jurisdiction; examinations;	Proposed to Amend	Waive application fees for active military, active military spouses,
	evaluation of applications; issuance of license.		military veterans and military veteran spouses
<u>625.260</u>	Licensure as structural engineer required for certain activities; exceptions.	Updated in 2019	
625.310	Examinations: Generally.	Proposed to Amend	Remove Nevada specific exams to streamline and speed licensing
			process
<u>625.330</u>	Examinations: Notice and duty to appear.	Proposed Repeal	Priority 2 – Repeal
<u>625.410</u>	Expiration and renewal of licensure; fees.	Updated in 2021	
<u>625.420</u>	Retired or inactive status of licensee; reinstatement to active status.	No change	
<u>625.425</u>	Registration of firm: Application; requirements; renewal; fees; notice to Board of	Updated in 2021	
	certain changes.		
CONTINUI	NG EDUCATION		

		1			
625.430	Requirements for renewal of license; carry forward of excess professional development hours.	Updated in 2021			
625.440	Exceptions to requirements for renewal of license.	No change			
<u>625.450</u>	Waiver of requirements for renewal of license.	No change			
625.460	Inactive status: Requirements for renewal of identification card.	Proposed Repeal	Priority 5 – Repeal		
<u>625.470</u>	Assignment of professional development hours to certain activities.	Updated in 2021			
625.480	Proof of completion of professional development hours; form.	No change			
625.490	Notification of failure to complete required number of professional development hours.	No change			
CODE OF C	·				
625.510	Fundamental principles.	Updated in 2021			
625.520	Relations with the public.	Updated in 2021			
625.530	Relations with employers and clients.	Updated in 2021			
625.540	Relations with other engineers or land surveyors.	Updated in 2021			
625.545	Written contract required for each client.	Updated in 2019			
625.550	Licensee employed by governmental entity: Notification to Board of certain	Updated in 2021			
<u> </u>	conduct by another licensee.				
MISCELLAI	NEOUS PROVISIONS	L			
625.610	Stamps, seals and signatures on documents; revision of original plans prepared	Updated in 2022			
	by another licensee.				
<u>625.611</u>	Plans, maps and specifications submitted to public authority: Contents; stamps	Updated in 2022			
	and signatures.				
625.612	Reports, studies, test results, certifications and calculations submitted to public	No change			
	authority: Stamps and signatures.				
625.613	Documents prepared by licensee: Inclusion of supplemental information;	Updated in 2022			
	contents.				
<u>625.615</u>	Contact information of licensee: Filing with and use by Board; notice of change.	Updated in 2021			
<u>625.620</u>	Fictitious names.	Proposed Repeal	Priority 3 – Repeal		
<u>625.625</u>	Notice of change in licensee's employer, category or discipline.	Proposed Repeal	Priority 4 – Repeal		
<u>625.630</u>	Prohibition on advertising for or offering to perform engineering in discipline in	Updated in 2021			
	which licensee or firm is not licensed.				
PRACTICE	BEFORE STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS				
Parties		T			
<u>625.635</u>	Representation of parties; qualifications of attorneys.	Proposed Repeal	Priority 6 – Repeal		
Disciplina	Disciplinary Action				
625.640	Procedure for complaints concerning professional misconduct or	Updated in 2022			
	incompetence.				

<u>625.642</u>	Licensee to provide written notice of disciplinary action taken by another entity.	Updated in 2022	
625.645	Conditions of probation.	Updated in 2022	
Advisory C	ommittees		·
625.646	Establishment of advisory committee to provide assistance and participate in certain evaluations; members; travel expenses and subsistence allowances.	Updated in 2022	
625.6465	Evaluation and investigation of complaint: Duties of Executive Director; procedures for conference between advisory committee and respondent.	Updated in 2022	
625.647	Evaluation and investigation of complaint: Duties of advisory committee; report to Executive Director and Board Liaison.	Updated in 2022	
625.6475	Evaluation and investigation of complaint: Conference with respondent; effect of refusal of respondent to participate in conference or review of complaint; continuance of conference; hearing de novo.	Updated in 2022	
Miscellane	ous Petitions		
625.649	Petitions for adoption, amendment or repeal of regulations.	No change	
STANDARD	S OF PRACTICE FOR PROFESSIONAL LAND SURVEYORS		
General Pr	ovisions		
<u>625.651</u>	"Positional certainty" defined.	Technical review	
<u>625.655</u>	Applicability of statutes and regulations.	No change	
<u>625.660</u>	Responsibility for compliance with standards of practice.	Proposed Repeal	Priority 7 – Repeal
<u>625.662</u>	Units of measurement.	Technical review	
<u>625.664</u>	Positional certainty: Minimum confidence level.	Technical review	
<u>625.666</u>	Positional certainty: Horizontal and vertical components of certain land surveys.	Technical review	
625.668	Positional certainty: Horizontal and vertical positions of monuments.	Proposed Repeal	Priority 8 – Repeal
Land Boun	dary Surveys		
625.670	Required research, identifications, measurements and computations.	Technical review	
625.680	Disagreements concerning measurements or positions of monumented corners.	Technical review	
625.690	Location of corners, boundaries and monuments.	Proposed Repeal	Priority 9 – Repeal
625.700	Report to client of discrepancies concerning boundary lines.	Technical review	
625.710	Identification and description of monuments.	Technical review	
625.720	Drawing of survey; certification.	Technical review	
625.740	Classifications of surveys; use of classifications and requirements for positional certainty.	Technical review	
Constructi	on Surveys		•
<u>625.760</u>	Contract drawings and specifications; special instructions.	Technical review	
625.765	Establishment of final location of points.	Proposed Repeal	Priority 10 – Repeal

<u>625.770</u>	Verification of location of certain points; notification of insufficient dimensions	Technical review	
<u> </u>	or details.		
625.775	Positional certainties for marking locations of proposed fixed works.	Technical review	
<u>625.780</u>	Sketches, cut sheets and field notes.	Technical review	
<u>625.785</u>	Verification surveys: Exchange of information.	Technical review	
Miscellaneous Provisions			
<u>625.790</u>	Preparation of legal description of property.	Technical review	
<u>625.795</u>	Duties regarding geographic information systems.	Proposed Repeal	Priority 11 – Repeal

In support of the Governor's initiative to make Nevada the most military friendly state in the US, the Board voted to waive application fees for active military, active military spouses, military veterans, and military veteran spouses at its July 14, 2021, regular meeting. The proposed regulation change amends the regulation to that effect.

NAC 625.210 Application for licensure or certification; fees. (NRS 625.140, 625.390)

- 1. An applicant shall not give the Executive Director of the Board as a professional reference.
- 2. Each applicant must complete and transmit a National Council of Examiners for Engineering and Surveying Record that verifies his or her college and postgraduate education, work experience, references and license examinations to the Board.
- 3. Each applicant, with the exception of those outlined in section 4, must pay the following fee, as appropriate, at the time of application:
- (a) For each application for licensure as a professional engineer or professional land surveyor or for licensure in an additional discipline of engineering, \$25.
 - (b) For each application for certification as an engineer intern or a land surveyor intern, \$50.
 - 4. Application fees are waived for the following:
 - (a) Active military members and active military spouses.
 - (b) Military veterans and military veteran spouses.

[Bd. of Reg'd Professional Eng'rs, § 625.210, eff. 8-16-78]—(NAC A 3-18-80; 5-13-82; 12-22-83; 12-9-86; A by Bd. of Reg'd Professional Eng'rs & Land Surv., 11-20-89; 7-10-92; A by Bd. of Professional Eng'rs & Land Surv. by R211-99, 5-10-2000; R115-12, 12-20-2012; R137-20, 4-14-2021)

This regulation is outdated and does not conform to current Board practices. An NCEES Record details all experience of an applicant and a single record can be used for multiple disciplines. Also, several engineering disciplines overlap, such as Electrical Engineering and Control System Engineering or Mechanical Engineering and Fire Protection Engineering. It is not uncommon for an applicant to seek licensure in two similar disciplines. It is therefore an unnecessary to require a separate application/NCEES Record for a secondary discipline.

[NAC 625.230 Applications for licensure in multiple categories or disciplines. (NRS 625.140)

- 1.—An applicant who applies for licensure in more than one discipline of engineering or in both the categories of professional engineer and land surveyor must:
- (a)—File a separate application for each additional category or discipline requested and pay the application fee for each additional application filed; and
- (b)—Complete and transmit separate National Council of Examiners for Engineering and Surveying Records that verify his or her college and postgraduate education, work experience, references and license examinations to the Board for each category or discipline for which he or she is applying.
- 2. If an applicant who is not a professional engineer concurrently applies for initial licensure in two or more disciplines of engineering, the Board will not approve the application unless the applicant submits evidence of significant experience, or education and experience, in each of the disciplines.
- 3. The Board generally will not approve an application in an additional discipline of engineering unless the applicant possesses a minimum of 10 years of education and experience.
- 4.—The Board may accept a second baccalaureate degree in an approved curriculum in partial satisfaction of the requirements for licensure in an additional discipline of engineering if the applicant clearly shows that he or she possesses significant experience in the additional discipline, but in no case will the Board grant such a license within 6 years after the applicant received his or her first baccalaureate degree.
- 5. An applicant who applies for licensure on the basis of comity in more than one discipline of engineering may be granted licensure in the additional disciplines if the applicant clearly shows in the application that he or she possesses the required education and experience and his or her claims of proficiency are substantiated by an examination offered by the Board.

[Bd. of Reg'd Professional Eng'rs § 625.230, eff. 8 16 78] (NAC A by Bd. of Reg'd Professional Eng'rs & Land Surv., 7 10 92; A by Bd. of Professional Eng'rs & Land Surv. by R211-99, 5-10-2000; R073-09, 10-15-2010; R115-12, 12-20-2012; R137-20, 4-14-2021)]

In support of the Governor's initiative to make Nevada the most military friendly state in the US, the Board voted to waive application fees for active military, active military spouses, military veterans, and military veteran spouses at its July 14, 2021, regular meeting. In addition, the Board voted to remove the requirement of 1.(b) and replace with an attestation of review of Chapters 625 of NRS and NAC in the application for licensure to expedite the licensure process for endorsement/comity licensure applicants. The proposed changes amend the regulation to that effect.

NAC 625.240 Licensure on basis of previous licensure in another jurisdiction; examinations; evaluation of applications; issuance of license. (NRS 625.140, 625.382)

- 1. An applicant who applies for licensure in this State on the basis of previous licensure in another state, territory, possession of the United States or country that is a signatory to the mobility agreements of the International Engineering Alliance must:
 - (a) Pay an application fee of \$125, with the exception of those identified in section 5, and:
 - (1) File the required application with the Board; or
 - (2) Transmit a National Council of Examiners for Engineering and Surveying Record to the Board;
- [(b) Pass a short written examination on chapter 625 of NRS and the regulations and code of conduct of the Board; and
 - (c) (b) Pass an oral examination if required by the Board.
- 2. After the oral examination, if applicable, the Board may require the applicant to pass another examination acceptable to the Board as a condition precedent to licensure.
- 3. The Executive Director of the Board may review and evaluate the applications submitted pursuant to this section to determine if the applications satisfy the criteria of a Model Law Engineer or Model Law Surveyor, as set forth by the National Council of Examiners for Engineering and Surveying. If the applicant satisfies these requirements, the Executive Director of the Board shall notify the Board and the Board may issue a license to practice professional engineering or land surveying to the applicant.
- 4. As used in this section, "mobility agreements" includes, without limitation, the APEC Agreement and the International Professional Engineers Agreement.
 - 5. Application fees are waived for the following:
 - (a) Active military members and active military spouses.
 - (b) Military veterans and military veteran spouses.

[Bd. of Reg'd Professional Eng'rs § 625.240, eff. 8-16-78]—(NAC A by Bd. of Reg'd Professional Eng'rs & Land Surv., 11-19-85; 11-20-89; A by Bd. of Professional Eng'rs & Land Surv. by R211-99, 5-10-2000; R115-12, 12-20-2012; R137-20, 4-14-2021)

The Board proposes updating this regulation in two areas—the structural exam and state-specific exams.

The proposed update related to the structural exam is to clarify the requirements. Prior to taking the structural exam, applicants must take the national fundamentals of engineering exam. This is stated in statute but not in regulation, and it is not specifically addressed in relation to the structural exam. Also, currently the national structural exam is a two-part 16-hour exam,—two separate eight-hour exams, only offered in pencil-and-paper. One exam is for vertical components and the other exam is for horizontal components, and both exams must be passed for licensure as a structural engineer (SE). In the future, the exam will be a computer-based four-part exam—still 16-hours, but offered as four shorter exams. Therefore, the language is proposed to be updated to provide clarity and allow for the upcoming changes to the exam length/format.

The other proposed regulation changes are related to removing the requirements for Nevada specific exams. Removing Nevada specific exams streamlines and expedites the licensing process enabling applicants to begin work in Nevada as soon as the applicant is approved to be licensed. Currently applicants must pass the national fundamentals exam and the professional practice exam, these exams establish minimal competency for entry into professional practice. The state-specific exams are deemed not necessary as their purpose is to make applicants aware of Nevada's laws and regulations related to professional practice. This awareness can be accomplished via alternate methods, such as signing an attestation, or a congratulatory letter following licensure containing the pertinent information.

Licensing data from the last two years shows there is a lag time between license approval and actual licensing. For engineers, the lag time averages 9 days. For land surveyors applying for endorsement license the lag time median is approximately 128 days, an average of 225 days. This licensing lag time can be eliminated by removing the state-specific exams.

NAC 625.310 Examinations: Generally. (NRS 625.140, 625.154, 625.193, 625.280)

- [1. The Board will offer Nevada-specific examinations at least once each year. Specific information concerning times and places for scheduled examinations may be obtained from the office of the Board.]
- [2.] 1. The Board will require the passing of the following examinations that are prepared by the National Council of Examiners for Engineering and Surveying which meet the requirements for licensure as an engineer:
- (a) The Fundamentals of Engineering, which is a national examination that covers the fundamentals of engineering, unless the requirement is waived by the Board; and
- (b) The Principles and Practice of Engineering, which is a national examination that covers the principles and practice of engineering.
- 2. The Board will require the passing of the following examinations that are prepared by the National Council of Examiners for Engineering and Surveying which meet the requirements for licensure as a structural engineer:

- (a) The Fundamentals of Engineering, which is a national examination that covers the fundamentals of engineering, unless the requirement is waived by the Board; and
- (b) The Principles and Practice of Structural Engineering, which is a national examination that covers vertical and lateral components for design of buildings.
- 3. The Board will require the passing of the following examinations that are prepared by the National Council of Examiners for Engineering and Surveying which meet the requirements for licensure as a land surveyor:
- (a) The Fundamentals of Surveying, which is a national examination that covers the fundamentals of land surveying, unless the requirement is waived by the Board; and
- (b) The Principles and Practice of Surveying, which is a national examination that covers the principles and practice of land surveying.
- [4.—The Board will require the passing of a short examination on this chapter and chapter 625 of NRS.
- 5. In addition to the examination set forth in subsection 4, the Board will prepare and offer a 2-hour examination that covers the laws of this State and the procedures for the practice of land surveying. The Board will offer this examination at least once each year.
- 6. <u>4.</u> The examination to become a structural engineer is a 16-hour examination which is composed of two parts, each of which lasts 8 hours.]

[Bd. of Reg'd Professional Eng'rs, § 625.310, eff. 8-16-78]—(NAC A by Bd. of Reg'd Professional Eng'rs & Land Surv., 3-18-80; 12-9-87; 7-10-92; A by Bd. of Professional Eng'rs & Land Surv. by R211-99, 5-10-2000; R073-09, 10-15-2010; R115-12, 12-20-2012; R137-20, 4-14-2021)

This regulation is recommended to be repealed as it is unnecessary. If an applicant chooses not to appear for an examination scheduled by the Board, the only harm is to the applicant. This is really common sense and does not need to be stated in a regulation.

[NAC 625.330 Examinations: Notice and duty to appear. (NRS 625.140)

- 1. If the Board schedules an examination for an applicant, the Board must send to that applicant a notice of the time and place to appear before the Board for the examination.
- 2.—An applicant who is sent a notice shall appear before the Board in accordance with the schedule established by the Board.

[Bd. of Reg'd Professional Eng'rs, § 625.330, eff. 8-16-78] (NAC A by Bd. of Professional Eng'rs & Land Surv. by R211-99, 5-10-2000; R115-12, 12-20-2012; R137-20, 4-14-2021)

This regulation is proposed to be repealed. A licensed professional should not need to be reminded in regulation that being in responsible charge of work means adhering to the statutes and regulations relating to their profession and the work performed.

[NAC 625.660 Responsibility for compliance with standards of practice. (NRS 625.140, 625.250)

Responsibility for adherence to the minimum standards of practice for engaging in the practice of land surveying rests with the professional land surveyor in responsible charge of the work. Failure on the part of any Nevada professional land surveyor to comply with these minimum standards may be considered by the Board as evidence of gross negligence, professional incompetence or misconduct in the practice of land surveying.

— (Added to NAC by Bd. of Reg'd Professional Eng'rs & Land Surv., eff. 7 18 88; A 7 10 92; A by Bd. of Professional Eng'rs & Land Surv., 11 14 97)

This regulation is proposed to be repealed. The regulation restates what is written in NAC 625.666 and therefore it is redundant and is not necessary.

[NAC 625.668 Positional certainty: Horizontal and vertical positions of monuments. (NRS 625.140, 625.250)

When conducting a land boundary, topographic, control or geodetic survey, a professional land surveyor shall ensure that the horizontal and vertical positions of the monuments established by the surveyor comply with the requirements for positional certainty set forth in NAC 625.666.

— (Added to NAC by Bd. of Professional Eng'rs & Land Surv., eff. 11 14 97)



This regulation is proposed to be repealed. Item 1 states the obvious—that is the duty of a professional land surveyor. Item 2 is already stated in NRS 625.380.

[NAC 625.690 Location of corners, boundaries and monuments. (NRS 625.140, 625.250)

- 1. The professional land surveyor shall make a final analysis and reach a conclusion as to the most probable location of corner positions and boundary lines.
- 2. A professional land surveyor shall set monuments pursuant to the provisions of NRS 625.380 and all applicable local ordinances.

— (Added to NAC by Bd. of Reg'd Professional Eng'rs & Land Surv., eff. 7 18 88; A 7 10 92; A by Bd. of Professional Eng'rs & Land Surv., 11-14-97)

This regulation is proposed to be repealed. This regulation is not necessary. Positional certainty related to construction surveys is addressed in other regulations.

[NAC 625.765 Establishment of final location of points. (NRS 625.140, 625.250)

When conducting a construction survey, a professional land surveyor shall establish the final location of points within positional certainties which ensure that the proposed fixed works may be properly constructed.

- (Added to NAC by Bd. of Professional Eng'rs & Land Surv., eff. 11 14 97)



This regulation is recommended to be repealed. The regulation is outdated and no longer applicable/necessary.

[NAC 625.795 Duties regarding geographic information systems. (NRS 625.140, 625.250)

- 1. When contributing information to a geographic information system, a professional land surveyor must include for use as metadata a statement describing the positional certainty of each type of information contributed to the system by the professional land surveyor.
- 2. When advising the developers of a geographic information system, a professional land surveyor must make recommendations concerning the appropriate methods for:
- (a)—Conducting a survey for the development of the system; and
- (b)—Compiling data for the contribution of additional information to the system after it is developed.
- 3. A professional land surveyor shall comply with the provisions of NAC 625.651 to 625.795, inclusive, when conducting surveys to collect information that will be included in a geographic information system.
- 4. As used in this section:
- (a)—"Geographic information system" means a collection of computer hardware, software and data that is used for the collection, management, manipulation, analysis and display of information that includes a positional component.
- (b) "Metadata" means data that describes information used to describe an object.

— (Added to NAC by Bd. of Professional Eng'rs & Land Surv., eff. 11-14-97)

This regulation is outdated and proposed to be repealed. The Board's online license renewal system (put into operation in 2015) clearly states the license expiration date, whether a licensee chooses active or inactive status at time of license renewal. The second sentence is already covered by NAC 625.420.

[NAC 625.460 Inactive status: Requirements for renewal of identification card. (NRS 625.140, 625.398)

The identification card issued to a licensee who has changed his or her status to inactive status pursuant to NAC 625.420 expires on the same date as his or her license would expire if the licensee were on active status. To renew the identification card, a licensee who has changed his or her status to inactive pursuant to NAC 625.420 must comply with the requirements of NAC 625.430 in the same manner as a licensee who is on active status.

— (Added to NAC by Bd. of Professional Eng'rs & Land Surv., eff. 11-14-97)]

This regulation is outdated and proposed to be repealed. The Board's online firm registration process requests the same information that would be included in a "certificate of fictitious name". The Board requires a Nevada Business License as part of its firm registration and in obtaining a Nevada Business License, a firm would be required to file a certificate of fictitious name in the form required by chapter 602 of NRS with the Nevada Secretary of State's Office.

[NAC 625.620 Fictitious names. (NRS 625.140)

Any licensee or firm which conducts business under an assumed or fictitious name or designation and which does not show the real name of the firm or names of the persons engaged or interested in the business shall file with the Board a certificate of fictitious name in the form required by chapter 602 of NRS within 30 days after the first use of the name or designation.

[Bd. of Reg'd Professional Eng'rs § 625.620, eff. 8-16-78]—(NAC A by Bd. of Professional Eng'rs & Land Surv. by R077-09 & R078-09, 10-15-2010)

This regulation is outdated and recommended for repeal. The intent of 1. (a), contact information, is already addressed in NAC 625.615, and any change relating to discipline of engineering or land surveying is information that is collected at the time of license renewal and no additional notification is required.

[NAC-625.625 Notice of change in licensee's employer, category or discipline. (NRS 625.140)

- 1.—If any information on file with the Board concerning a licensee's:
- (a) Employer; or
- (b)—Category or discipline of engineering or land surveying,
- → changes, the licensee shall submit written notice of the change to the Board within 30 days. The notice must include any change of the contact information of the licensee's principal place of business.
- 2. As used in this section, "contact information" means the address, telephone number and electronic mail address of the licensee's principal place of business.

(Added to NAC by Bd. of Reg'd Professional Eng'rs & Land Surv., eff. 10 11 91; A by Bd. of Professional Eng'rs & Land Surv. by R137-20, 4-14-2021)

6. c. Executive Order 2023-003 Draft Report



Nevada Board of Professional Engineers & Land Surveyors

May 1, 2023 Report

Prepared for the Office of the Governor and the Director of the Legislative Counsel Bureau

In response to Executive Order 2023-003

Table of Contents

Table of Contents	
Introduction	
Section 1 Comprehensive Review of Regulations	4
Section 2 Regulations for RemovalRegulations Proposed to be Repealed:	
Section 3 Mandatory Meeting and Report	18
Appendix A	
Public Workshop Meeting Minutes	19
Post-Workshop Public Comment	19
Public Comments Contact Information	19
Appendix B	41
Public Hearing Meeting Minutes	41
Post-Hearing Public Comment	41
Public Comments Contact Informaton	41

Introduction

The **Nevada Board of Professional Engineers and Land Surveyors (NVBPELS)** statutorily protects the public health, safety, and welfare by regulating and providing leadership to the engineering and land surveying professions—individuals and companies—that practice engineering and land surveying in Nevada. NVBPELS operates on behalf of the Nevada government through the Professional Engineering Act of March 29, 1919. Professional Land Surveying was added to the act on March 31, 1947. The regulations promulgated by the Nevada Legislative Counsel Bureau and administered by NVBPELS for ethical, professional, and technical competency, ensure that Nevadans are protected in their workplaces and communities. NVBPELS is funded solely by its licensing revenues and is independent from the state's general fund.

NVBPELS regulates over 22,000 professional engineers and land surveyors. Actively practicing professionals total over 13,500—about 3,400 of whom are Nevada residents—with a nearly equal split between northern and southern Nevada. These **professional engineers and land surveyors are vital contributors to Nevada** in the following areas:

- Design, construction, maintenance, renovation of hospitals, healthcare facilities, schools, and other essential public infrastructure needed for communities, such as roadways and transit, and clean safe drinking water;
- Operate at the forefront of discovering and developing Nevada's resources and the identification
 of alternative energy sources, such as wind power, fuel-cell technology, other renewable
 resources; and
- Create and expand cutting edge companies and innovate technology that helps drive diversification of Nevada's economy.

NVBPELS has **implemented initiatives to expedite licensing** by endorsement and **support diversification of our economy** by partnering with cutting edge companies and technology innovators through:

- Processing approximately 100 endorsement license applications monthly, and approving licenses in less than three days—often licensing professionals the same day as approving license applications;
- Implementing simpler and faster processes for new firms seeking to offer and provide professional services; and
- Committing to continuous review of statutes, regulations, and processes for eliminating unnecessary barriers to professional practice in Nevada and improving processes that are customer-focused and provide for simpler faster licensing.

NVBPELS has put forward **initiatives to become one of the most military-friendly state** by:

- Waiving application fees and priority processing for military members and their spouses (\$0 fee and licensing in less than 3 days);
- Waiving application fees and priority processing for military veterans and their spouses (\$0 fee and licensing in less than 3 days).

Section 1 Comprehensive Review of Regulations

Per chapter 625 of Nevada Revised Statutes, the legislature empowers the Nevada Board of Professional Engineers and Land Surveyors to issue licenses to qualified and competent professional engineers and land surveyors and regulate the practice of engineering and land surveying. The qualifications and requirements for determining competency have been determined legislatively to be three-part—education, national exams, and four years of qualifying experience. Nevada statutes are consistent and similar to laws in all fifty US states and its territories for licensing of professional engineers and land surveyors.

Regulations support and provide detail on the processes used by NVBPELS to support statutory requirements. As of July 2017, NVBPELS has worked diligently to review all regulations in Nevada Administrative Code chapter 625 and has updated many to improve and remove outdated text. To date, NVBPELS has updated 32 and eliminated 5 regulations to streamline, clarify, reduce, improve, and ultimately remove unnecessary barriers to licensure. These prior regulatory updates have expedited the licensing process for new workers, endorsement applicants are approved to be licensed within three days of NVBPELS receiving a completed application. Often applicants are approved the same day the application is received. For new/first-time licensees, applicants are approved on average within 20 days of NVBPELS receiving a completed application. New/first-time applicants are considered at board meetings and the NVBPELS meets every month to review and approve initial applicants.

In response to Governor Lombardo's Executive Order 2023-003, NVBPELS has identified three regulations that could be updated to further speed licensure for new workers coming to Nevada and support efforts to be the most military friendly state in the US, NVBPELS proposes updating:

- NAC 625.210 add text to waive fees for active military, spouse of active military, military veterans, and spouses of military veterans
- NAC 625.240 add text to waive fees for active military, spouse of active military, military veterans, and spouses of military veterans
- NAC 625.310 remove text related to state-specific exam for professional engineers

Regulations Proposed to be Updated:

Proposed edits to NAC 625.210

1. Citation with Edits

NAC 625.210 Application for licensure or certification; fees. (NRS 625.140, 625.390)

- 1. An applicant shall not give the Executive Director of the Board as a professional reference.
- 2. Each applicant must complete and transmit a National Council of Examiners for Engineering and Surveying Record that verifies his or her college and postgraduate education, work experience, references and license examinations to the Board.
- 3. Each applicant, with the exception of those outlined in section 4, must pay the following fee, as appropriate, at the time of application:
- (a) For each application for licensure as a professional engineer or professional land surveyor or for licensure in an additional discipline of engineering, \$25.
 - (b) For each application for certification as an engineer intern or a land surveyor intern, \$50.
 - 4. Application fees are waived for the following:
 - (a) Active military members and active military spouses.
 - (b) Military veterans and military veteran spouses.
- [Bd. of Reg'd Professional Eng'rs, § 625.210, eff. 8-16-78]—(NAC A 3-18-80; 5-13-82; 12-22-83; 12-9-86; A by Bd. of Reg'd Professional Eng'rs & Land Surv., 11-20-89; 7-10-92; A by Bd. of Professional Eng'rs & Land Surv. by R211-99, 5-10-2000; R115-12, 12-20-2012; R137-20, 4-14-2021)

2. Explanation

At its July 14, 2021, regular board meeting, NVBPELS voted to waive application fees for active military and active military spouses, and military veterans and military veteran spouses. This proposed change aligns with Nevada's desire to become the most military friendly state in the US.

3. Public Meetings

A **Public Workshop was held on March 27, 2023**, in the NVBPELS Las Vegas and Reno offices. Between the two offices, 31 people attended. There was **no public comment for this proposed regulation change**.

A Public Hearing was held on April 20, 2023 to provide a second opportunity for stakeholders/public to provide oral or written comment or testimony on proposed regulation changes. There was **no public comment for this proposed regulation change**.

4. Impacts to Business, Person, or Agency if Change is to Occur

There are no adverse effects related to the proposed changes. The beneficial effects are reduced costs to military and military spouses (active military and veterans). Adopting the change demonstrates support of the miliary and is in alignment with Nevada's initiatives to make it the most military friendly state in the US. The Small Business Impact Report and Small Business Impact Survey can be found on NVBPELS's website, https://nvbpels.org/business-impact-survey-results-2023/. There is no positive or negative economic impact and there are no cost savings to the state or NVBPELS.

Proposed edits to NAC 625.240

1. Citation with Edits

NAC 625.240 Licensure on basis of previous licensure in another jurisdiction; examinations; evaluation of applications; issuance of license. (NRS 625.140, 625.382)

- 1. An applicant who applies for licensure in this State on the basis of previous licensure in another state, territory, possession of the United States or country that is a signatory to the mobility agreements of the International Engineering Alliance must:
 - (a) Pay an application fee of \$125, with the exception of those identified in section 5, and:
 - (1) File the required application with the Board; or
 - (2) Transmit a National Council of Examiners for Engineering and Surveying Record to the Board;
 - [(b) Pass a short written examination on chapter 625 of NRS and the regulations and code of conduct of the Board; and]
 - (c) (b) Pass an oral examination if required by the Board.
- 2. After the oral examination, if applicable, the Board may require the applicant to pass another examination acceptable to the Board as a condition precedent to licensure.
- 3. The Executive Director of the Board may review and evaluate the applications submitted pursuant to this section to determine if the applications satisfy the criteria of a Model Law Engineer or Model Law Surveyor, as set forth by the National Council of Examiners for Engineering and Surveying. If the applicant satisfies these requirements, the Executive Director of the Board shall notify the Board and the Board may issue a license to practice professional engineering or land surveying to the applicant.
- 4. As used in this section, "mobility agreements" includes, without limitation, the APEC Agreement and the International Professional Engineers Agreement.
 - 5. Application fees are waived for the following:
 - (a) Active military members and active military spouses.
 - (b) Military veterans and military veteran spouses.

[Bd. of Reg'd Professional Eng'rs & 625.240, eff. 8-16-78]—(NAC A by Bd. of Reg'd Professional Eng'rs & Land Surv., 11-19-85; 11-20-89; A by Bd. of Professional Eng'rs & Land Surv. by R211-99, 5-10-2000; R115-12, 12-20-2012; R137-20, 4-14-2021)

2. Explanation

At its July 14, 2021, regular board meeting, NVBPELS voted to waive application fees for active military and active military spouses, and military veterans and military veteran spouses. In addition, the Board voted to remove the requirement of 1. (b) with an attestation of review of Chapters 625 of NRS and NAC in the application for licensure to expedite the licensure process for professional engineer endorsement licensure applicants. Eliminating the state exam for professional engineer applicants will eliminate the average lag time of 9 days between license approval and licensing.

3. Public Meetings

A **Public Workshop was held on March 27, 2023**, in the NVBPELS Las Vegas and Reno offices. Between the two offices, 31 people attended. There was **no public comment for this proposed regulation change**.

A Public Hearing was held on April 20, 2023, to provide a second opportunity for stakeholders/public to provide oral or written comment or testimony on proposed regulation changes. There was **no public comment for this proposed regulation change**.

4. Impacts to Business, Person, or Agency if Change is to Occur

There are no adverse effects related to the proposed changes. The beneficial effects are reduced costs to military and military spouses (active military and veterans). Adopting the change demonstrates support of the miliary

and is in alignment with Nevada's initiatives to make it the most military friendly state in the US. The Small Business Impact Report and Small Business Impact Survey can be found on NVBPELS's website, https://nvbpels.org/business-impact-survey-results-2023/. There is no positive or negative economic impact and there are no cost savings to the state or NVBPELS.

Proposed edits to NAC 625.310

1. Citation with Edits

NAC 625.310 Examinations: Generally. (NRS 625.140, 625.154, 625.193, 625.280)

- [—1. The Board will offer Nevada-specific examinations at least once each year. Specific information concerning times and places for scheduled examinations may be obtained from the office of the Board.]
- 2. 1. The Board will require the passing of the following examinations that are prepared by the National Council of Examiners for Engineering and Surveying which meet the requirements for licensure as an engineer:
- (a) The Fundamentals of Engineering, which is a national examination that covers the fundamentals of engineering, unless the requirement is waived by the Board; and
 - (b) The Principles and Practice of Engineering, which is a national examination that covers the principles and practice of engineering.
- 2. The Board will require the passing of the following examinations that are prepared by the National Council of Examiners for Engineering and Surveying which meet the requirements for licensure as a structural engineer:
- (a) The Fundamentals of Engineering, which is a national examination that covers the fundamentals of engineering, unless the requirement is waived by the Board; and
- (b) The Principles and Practice of Structural Engineering, which is a national examination that covers vertical and lateral components for design of buildings.
- 3. The Board will require the passing of the following examinations that are prepared by the National Council of Examiners for Engineering and Surveying which meet the requirements for licensure as a land surveyor:
- (a) The Fundamentals of Surveying, which is a national examination that covers the fundamentals of land surveying, unless the requirement is waived by the Board; and
 - (b) The Principles and Practice of Surveying, which is a national examination that covers the principles and practice of land surveying.
 - [4. The Board will require the passing of a short examination on this chapter and chapter 625 of NRS.]
- 5. In addition to the examination set forth in subsection 4, the Board will prepare and offer a 2-hour examination that covers the laws of this State and the procedures for the practice of land surveying. The Board will offer this examination at least once each year.
- 6. 4. The examination to become a structural engineer is a 16-hour examination which is composed of two parts, each of which lasts 8 hours 1
- [Bd. of Reg'd Professional Eng'rs, § 625.310, eff. 8-16-78]—(NAC A by Bd. of Reg'd Professional Eng'rs & Land Surv., 3-18-80; 12-9-87; 7-10-92; A by Bd. of Professional Eng'rs & Land Surv. by R211-99, 5-10-2000; R073-09, 10-15-2010; R115-12, 12-20-2012; R137-20, 4-14-2021)

2. Explanation

Removing the requirement for Nevada specific exams streamlines and expedites the licensing process enabling applicants to begin work in Nevada as soon as the applicant is approved to be licensed. The state-specific-exam for engineers (NAC 625.310(4.)) creates a lag time of approximately 9 days and for land surveyors (NAC 625.310(5.)) creates a lag time of approximately 218 days between license approval and licensing. It is to be noted that the delay is not due to any action/in- action on the part of NVBPELS, it is due to the applicant choosing to delay taking the state-specific exam. The state-specific exam for land surveyors is open-book and proctored virtually, on-demand.

In addition, NVBPELS proposes updating the structural exam requirement to clarify it is a national exam and is taken following the FE exam unless the FE exam is waived. The proposed change makes no fundamental changes, just provides additional language for clarity.

3. Public Meetings

A **Public Workshop was held on March 27, 2023**, in the NVBPELS Las Vegas and Reno offices, concurrently. Between the two locations, 31 people attended, and **26 people provided public oral or written comment or testimony in opposition to the proposed changes to regulations**. Following the Public Workshop, **6 additional written public comments in opposition** to the proposed change were received via email. There was **no public comment in support** of the proposed changes to regulations. Please see <u>Appendix A</u> for Public Workshop minutes, which contains written and oral public testimony, correspondence received by email postworkshop, and contact information of each person who provided public comment or testimony and their verbatim testimony for the March 27, 2023, Public Workshop.

A Public Hearing was held on April 20, 2023, to provide a second opportunity for stakeholders/public to provide oral or written comment or testimony on proposed regulation changes. There was **xxxxx public comment for this proposed regulation change**. Please see <u>Appendix B</u> for Public Hearing minutes, which contains written and oral public testimony and contact information of each person who provided public comment or testimony and their verbatim testimony for the April 20, 2023, Public Hearing.

Due to the lack of public support, and the public comments in opposition of removing NAC 625.310 (5.), the Board no longer supports removing the regulatory requirement for a state-exam for land surveyors that covers the laws of this State and the procedures for the practice of land surveying. **NVBPELS rescinds its proposed change to strike NAC 625.310 (5.)** and proposes the language be retained as currently written in the regulations.

4. Impacts to Business, Person, or Agency if Change is to Occur

There are no adverse effects related to the proposed changes. The beneficial effects are reducing the time between license approval and licensing, essentially speeding new workers to work in Nevada. The Small Business Impact Report and Small Business Impact Survey can be found on NVBPELS's website, https://nvbpels.org/business-impact-survey-results-2023/. There is no positive or negative economic impact and there are no cost savings to the state or NVBPELS.

Section 2 Regulations for Removal

In response to Governor Lombardo's Executive Order 2023-003, NVBPELS has identified eleven regulations that could be repealed to improve or reduce regulations. The proposed regulations to be repealed are listed below in order of priority:

- 1. NAC 625.230
- 2. NAC 625.330
- 3. NAC 625.620
- 4. NAC 625.625
- 5. NAC 625.460
- 6. NAC 625.635
- 7. NAC 625.660
- 8. NAC 625.668
- 9. NAC 625.690
- 10. NAC 625.765
- 11. NAC 625.795

Regulations Proposed to be Repealed:

Proposed repeal of NAC 625.230 - Priority #1

1. Citation

[NAC 625.230 Applications for licensure in multiple categories or disciplines. (NRS 625.140)

- —1. An applicant who applies for licensure in more than one discipline of engineering or in both the categories of professional engineer and land surveyor nust:
- (a) File a separate application for each additional category or discipline requested and pay the application fee for each additional application filed; and
 (b) Complete and transmit separate National Council of Examiners for Engineering and Surveying Records that verify his or her college and postgraduate education, work experience, references and license examinations to the Board for each category or discipline for which he or she is applying.
- 2. If an applicant who is not a professional engineer concurrently applies for initial licensure in two or more disciplines of engineering, the Board will not approve the application unless the applicant submits evidence of significant experience, or education and experience, in each of the disciplines.
- 3. The Board generally will not approve an application in an additional discipline of engineering unless the applicant possesses a minimum of 10 years of education and experience.
- 4. The Board may accept a second baccalaureate degree in an approved curriculum in partial satisfaction of the requirements for licensure in an additional discipline of engineering if the applicant clearly shows that he or she possesses significant experience in the additional discipline, but in no case will the Board grant such a license within 6 years after the applicant received his or her first baccalaureate degree.
- -5. An applicant who applies for licensure on the basis of comity in more than one discipline of engineering may be granted licensure in the additional disciplines if the applicant clearly shows in the application that he or she possesses the required education and experience and his or her claims of proficiency are substantiated by an examination offered by the Board.
- $[Bd. of Reg'd Professional Eng'rs \S 625.230, eff. \$-16-78] (NACA by Bd. of Reg'd Professional Eng'rs \& Land Surv., 7-10-92; A by Bd. of Professional Eng'rs & Land Surv., 5-10-2000; R073-09, 10-15-2010; R115-12, 12-20-2012; R137-20, 4-14-2021)]$

2. Explanation

This regulation is outdated and does not conform to current Board practices. An NCEES Record details all experience of an applicant and a single record can be used when applying for licensure in more

than one engineering discipline. It is an unnecessary barrier to require a separate application/NCEES Record for a secondary discipline.

3. Public Meetings

A **Public Workshop was held on March 27, 2023**, in the NVBPELS Las Vegas and Reno offices. Between the two offices, 31 people attended. There was **no public comment, against or for,** the proposed regulation repeal.

A Public Hearing was held on April 20, 2023, to provide a second opportunity for stakeholders/public to provide oral or written comment or testimony on proposed regulation changes. There was **no public comment, against or for, this proposed regulation repeal**.

4. Impacts to Business, Person, or Agency if Change is to Occur

There are no adverse effects related to the proposed changes. The beneficial effects are a reduction in regulations. The Small Business Impact Report and Small Business Impact Survey can be found on NVBPELS's website, https://nvbpels.org/business-impact-survey-results-2023/. There is no positive or negative economic impact and there are no cost savings to the state or NVBPELS.

Proposed repeal of NAC 625.330 - Priority #2

1. Citation

[NAC 625.330 Examinations: Notice and duty to appear. (NRS 625.140)

- 1. If the Board schedules an examination for an applicant, the Board must send to that applicant a notice of the time and place to appear before the Board for the examination.
- 2. An applicant who is sent a notice shall appear before the Board in accordance with the schedule established by the Board.
- [Bd. of Reg'd Professional Eng'r § 625.330, eff. 8-16-78] (NAC A by Bd. of Professional Eng'rs & Land Surv. by R211-99, 5-10-2000; R115-12, 12-20-2012; R137-20, 4-14-2021)]

2. Explanation

NVBPELS proposes that this regulation be considered for repeal. If an applicant chooses not to appear for an examination scheduled by the Board, the only harm will be to the applicant. This regulation is not necessary, it is common sense and does need to be stated in a regulation.

3. Public Meetings

A **Public Workshop was held on March 27, 2023**, in the NVBPELS Las Vegas and Reno offices. Between the two offices, 31 people attended. There was **no public comment, against or for,** the proposed regulation repeal.

A Public Hearing was held on April 20, 2023, to provide a second opportunity for stakeholders/public to provide oral or written comment or testimony on proposed regulation changes. There was **no public comment, against or for, this proposed regulation repeal**.

4. Impacts to Business, Person, or Agency if Change is to Occur

There are no adverse effects related to the proposed changes. The beneficial effects are a reduction in regulations. The Small Business Impact Report and Small Business Impact Survey can be found on NVBPELS's website, https://nvbpels.org/business-impact-survey-results-2023/. There is no positive or negative economic impact and there are no cost savings to the state or NVBPELS.

Proposed repeal of NAC 625.620 - Priority #3

1. Citation

NAC 625.620 Fictitious names. (NRS 625.140)

Any licensee or firm which conducts business under an assumed or fictitious name or designation and which does not show the real name of the firm or names of the persons engaged or interested in the business shall file with the Board a certificate of fictitious name in the form required by chapter 602 of NRS within 30 days after the first use of the name or designation.

[Bd. of Reg'd Professional Eng'rs § 625.620, eff. 8-16-78] (NAC A by Bd. of Professional Eng'rs & Land Surv. by R077-09 & R078-09, 10-15-2010)]

2. Explanation

This regulation is outdated and proposed to be repealed. The Board's online firm registration process requests the same information that would be included in a "certificate of fictitious name". The Board requires a Nevada Business License as part of its firm registration and in obtaining a Nevada Business License, a firm would be required to file a certificate of fictitious name in the form required by chapter 602 of NRS with the Nevada Secretary of State's Office.

3. Public Meetings

A **Public Workshop was held on March 27, 2023**, in the NVBPELS Las Vegas and Reno offices. Between the two offices, 31 people attended. There was **no public comment, against or for,** the proposed regulation repeal.

A Public Hearing was held on April 20, 2023, to provide a second opportunity for stakeholders/public to provide oral or written comment or testimony on proposed regulation changes. There was **no public comment, against or for, this proposed regulation repeal**.

4. Impacts to Business, Person, or Agency if Change is to Occur

There are no adverse effects related to the proposed changes. The beneficial effects are a reduction in regulations. The Small Business Impact Report and Small Business Impact Survey can be found on NVBPELS's website, https://nvbpels.org/business-impact-survey-results-2023/. There is no positive or negative economic impact and there are no cost savings to the state or NVBPELS.

Proposed repeal of NAC 625.625 - Priority #4

1. Citation

[NAC 625.625 Notice of change in licensee's employer, category or discipline. (NRS 625.140)

- If any information on file with the Board concerning a licensee's:
- (a) Employer; or
- (b) Category or discipline of engineering or land surveying,
- → changes, the licensee shall submit written notice of the change to the Board within 30 days. The notice must include any change of the contact information of the licensee's principal place of business.
- -2. As used in this section, "contact information" means the address, telephone number and electronic mail address of the licensee's principal place of business.

(Added to NAC by Bd. of Reg'd Professional Eng'rs & Land Surv., eff. 10-11-91; A by Bd. of Professional Eng'rs & Land Surv. by R137-20, 4-14-2021)]

2. Explanation

This regulation is outdated and recommended for repeal. The intent of 1. (a), contact information, is already addressed in NAC 625.615, and any change relating to discipline of engineering or land surveying is information that is collected at the time of license renewal and no additional notification is required.

3. Public Meetings

A **Public Workshop was held on March 27, 2023**, in the NVBPELS Las Vegas and Reno offices. Between the two offices, 31 people attended. There was **no public comment, against or for,** the proposed regulation repeal.

A Public Hearing was held on April 20, 2023, to provide a second opportunity for stakeholders/public to provide oral or written comment or testimony on proposed regulation changes. There was **no public comment, against or for, this proposed regulation repeal**.

4. Impacts to Business, Person, or Agency if Change is to Occur

There are no adverse effects related to the proposed changes. The beneficial effects are a reduction in regulations. The Small Business Impact Report and Small Business Impact Survey can be found on NVBPELS's website, https://nvbpels.org/business-impact-survey-results-2023/. There is no positive or negative economic impact and there are no cost savings to the state or NVBPELS.

Proposed repeal of NAC 625.460 - Priority #5

1. Citation

 $[NAC-625.460-Inactive \, status; \, Requirements \, for \, renewal \, of \, identification \, card. \, (NRS \, 625.140, 625.398)$

The identification card issued to a licensee who has changed his or her status to inactive status pursuant to NAC 625.420 expires on the same date as his or her license would expire if the licensee were on active status. To renew the identification card, a licensee who has changed his or her status to inactive pursuant to NAC 625.420 must comply with the requirements of NAC 625.430 in the same manner as a licensee who is on active status.

— (Added to NAC by Bd. of Professional Eng'rs & Land Surv., eff. 11-14-97)]

2. Explanation

This regulation is outdated and proposed to be repealed. The Board's online license renewal system (put into operation in 2015) clearly states the license expiration date, whether a licensee chooses

active or inactive status at time of license renewal. The second sentence is already covered by NAC 625.420.

3. Public Meetings

A **Public Workshop was held on March 27, 2023**, in the NVBPELS Las Vegas and Reno offices. Between the two offices, 31 people attended. There was **no public comment, against or for,** the proposed regulation repeal.

A Public Hearing was held on April 20, 2023, to provide a second opportunity for stakeholders/public to provide oral or written comment or testimony on proposed regulation changes. There was **no public comment, against or for, this proposed regulation repeal**.

4. Impacts to Business, Person, or Agency if Change is to Occur

There are no adverse effects related to the proposed changes. The beneficial effects are a reduction in regulations. The Small Business Impact Report and Small Business Impact Survey can be found on NVBPELS's website, https://nvbpels.org/business-impact-survey-results-2023/. There is no positive or negative economic impact and there are no cost savings to the state or NVBPELS.

Proposed repeal of NAC 625.635 - Priority #6

1. Citation

[NAC 625.635 Representation of parties; qualifications of attorneys. (NRS 625.140)

- -1. A party may, in any proceeding before the Board, represent himself or herself or be represented by an attorney or any other person he or she designates.
- 2. If a party chooses to be represented by an attorney, the attorney must be admitted to practice and in good standing before the highest court of any state. If the attorney is not admitted and entitled to practice before the Supreme Court of Nevada, he or she must associate with an attorney who is so admitted and entitled to practice.
- (Added to NAC by Bd. of Professional Eng'rs & Land Surv., eff. 11-14-97)]

2. Explanation

It is proposed that this regulation be repealed. The regulation states the obvious and it does not need to be in regulation, especially in consideration, as stated in item 1, a party can be represented by any person he/she designates.

3. Public Meetings

A **Public Workshop was held on March 27, 2023**, in the NVBPELS Las Vegas and Reno offices. Between the two offices, 31 people attended. There was **no public comment, against or for,** the proposed regulation repeal.

A Public Hearing was held on April 20, 2023, to provide a second opportunity for stakeholders/public to provide oral or written comment or testimony on proposed regulation changes. There was **no public comment, against or for, this proposed regulation repeal**.

4. Impacts to Business, Person, or Agency if Change is to Occur

There are no adverse effects related to the proposed changes. The beneficial effects are a reduction in regulations. The Small Business Impact Report and Small Business Impact Survey can be found on NVBPELS's website, https://nvbpels.org/business-impact-survey-results-2023/. There is no positive or negative economic impact and there are no cost savings to the state or NVBPELS.

Proposed repeal of NAC 625.660 - Priority #7

1. Citation

[NAC 625.660 Responsibility for compliance with standards of practice. (NRS 625.140, 625.250)

Responsibility for adherence to the minimum standards of practice for engaging in the practice of land surveying rests with the professional land surveyor in responsible charge of the work. Failure on the part of any Nevada professional land surveyor to comply with these minimum standards may be considered by the Board as evidence of gross negligence, professional incompetence or misconduct in the practice of land surveying.

-(Added to NAC by Bd. of Reg'd Professional Eng'rs & Land Surv., eff. 7-18-88; A 7-10-92; A by Bd. of Professional Eng'rs & Land Surv., 11-14-97)]

2. Explanation

This regulation is proposed to be repealed. A licensed professional should not need to be reminded in regulation that being in responsible charge of work means adhering to the statutes and regulations relating to their profession and the work performed.

3. Public Meetings

A **Public Workshop was held on March 27, 2023**, in the NVBPELS Las Vegas and Reno offices. Between the two offices, 31 people attended. There was **no public comment, against or for,** the proposed regulation repeal.

A Public Hearing was held on April 20, 2023, to provide a second opportunity for stakeholders/public to provide oral or written comment or testimony on proposed regulation changes. There was **no public comment, against or for, this proposed regulation repeal**.

4. Impacts to Business, Person, or Agency if Change is to Occur

There are no adverse effects related to the proposed changes. The beneficial effects are a reduction in regulations. The Small Business Impact Report and Small Business Impact Survey can be found on NVBPELS's website, https://nvbpels.org/business-impact-survey-results-2023/. There is no positive or negative economic impact and there are no cost savings to the state or NVBPELS.

Proposed repeal of NAC 625.668 - Priority #8

1. Citation

[NAC 625.668 Positional certainty: Horizontal and vertical positions of monuments, (NRS 625.140, 625.250)

When conducting a land boundary, topographic, control or geodetic survey, a professional land surveyor shall ensure that the horizontal and vertical positions of the monuments established by the surveyor comply with the requirements for positional certainty set forth in NAC 625.666.

— (Added to NAC by Bd. of Professional Eng'rs & Land Surv., eff. 11-14-97)]

2. Explanation

This regulation is proposed to be repealed. The regulation restates what is written in NAC 625.666 and therefore it is redundant and is not necessary.

3. Public Meetings

A **Public Workshop was held on March 27, 2023**, in the NVBPELS Las Vegas and Reno offices. Between the two offices, 31 people attended. There was **no public comment, against or for,** the proposed regulation repeal.

A Public Hearing was held on April 20, 2023, to provide a second opportunity for stakeholders/public to provide oral or written comment or testimony on proposed regulation changes. There was **no public comment, against or for, this proposed regulation repeal**.

4. Impacts to Business, Person, or Agency if Change is to Occur

There are no adverse effects related to the proposed changes. The beneficial effects are a reduction in regulations. The Small Business Impact Report and Small Business Impact Survey can be found on NVBPELS's website, https://nvbpels.org/business-impact-survey-results-2023/. There is no positive or negative economic impact and there are no cost savings to the state or NVBPELS.

Proposed repeal of NAC 625.690 - Priority #9

1. Citation

[NAC 625.690 Location of corners, boundaries and monuments. (NRS 625.140, 625.250)

- 1. The professional land surveyor shall make a final analysis and reach a conclusion as to the most probable location of corner positions and boundary lines.
- 2. A professional land surveyor shall set monuments pursuant to the provisions of NRS 625,380 and all applicable local ordinances.
- (Added to NAC by Bd. of Reg'd Professional Eng'rs & Land Surv., eff. 7-18-88; A 7-10-92; A by Bd. of Professional Eng'rs & Land Surv., 11-14-97)]

2. Explanation

This regulation is proposed to be repealed. Item 1 states the obvious—that is the duty of a professional land surveyor. Item 2 is already stated in NRS 625.380.

3. Public Meetings

A **Public Workshop was held on March 27, 2023**, in the NVBPELS Las Vegas and Reno offices. Between the two offices, 31 people attended. There was **no public comment, against or for,** the proposed regulation repeal.

A Public Hearing was held on April 20, 2023, to provide a second opportunity for stakeholders/public to provide oral or written comment or testimony on proposed regulation changes. There was **no public comment, against or for, this proposed regulation repeal**.

4. Impacts to Business, Person, or Agency if Change is to Occur

There are no adverse effects related to the proposed changes. The beneficial effects are a reduction in regulations. The Small Business Impact Report and Small Business Impact Survey can be found on NVBPELS's website, https://nvbpels.org/business-impact-survey-results-2023/. There is no positive or negative economic impact and there are no cost savings to the state or NVBPELS.

Proposed repeal of NAC 625.765 - Priority #10

1. Citation

[NAC 625.765 Establishment of final location of points. (NRS 625.140, 625.250)

When conducting a construction survey, a professional land surveyor shall establish the final location of points within positional certainties which ensure that the proposed fixed works may be properly constructed.

— (Added to NAC by Bd. of Professional Eng'rs & Land Surv., eff. 11-14-97)]

2. Explanation

This regulation is proposed to be repealed. This regulation is not necessary. Positional certainty related to construction surveys is addressed in other regulations.

3. Public Meetings

A **Public Workshop was held on March 27, 2023**, in the NVBPELS Las Vegas and Reno offices. Between the two offices, 31 people attended. There was **no public comment, against or for,** the proposed regulation repeal.

A Public Hearing was held on April 20, 2023, to provide a second opportunity for stakeholders/public to provide oral or written comment or testimony on proposed regulation changes. There was **no public comment, against or for, this proposed regulation repeal**.

4. Impacts to Business, Person, or Agency if Change is to Occur

There are no adverse effects related to the proposed changes. The beneficial effects are a reduction in regulations. The Small Business Impact Report and Small Business Impact Survey can be found on NVBPELS's website, https://nvbpels.org/business-impact-survey-results-2023/. There is no positive or negative economic impact and there are no cost savings to the state or NVBPELS.

Proposed repeal of NAC 625.765 - Priority #11

1. Citation

[NAC 625.795 Duties regarding geographic information systems. (NRS 625.140, 625.250)

- 1. When contributing information to a geographic information system, a professional land surveyor must include for use as metadata a statement describing the positional certainty of each type of information contributed to the system by the professional land surveyor.
- 2. When advising the developers of a geographic information system, a professional land surveyor must make recommendations concerning the appropriate methods for:
- (a) Conducting a survey for the development of the system; and
- (b) Compiling data for the contribution of additional information to the system after it is developed.
- 3.— A professional land surveyor shall comply with the provisions of NAC 625.651 to 625.795, inclusive, when conducting surveys to collect information that will be included in a geographic information system.
- 4. As used in this section:
- (a) "Geographic information system" means a collection of computer hardware, software and data that is used for the collection, management, manipulation, analysis and display of information that includes a positional component.
- (b) "Metadata" means data that describes information used to describe an object.
- (Added to NAC by Bd. of Professional Eng'rs & Land Surv., eff. 11-14-97)]

2. Explanation

This regulation is recommended to be repealed. The regulation is outdated and no longer applicable/necessary.

3. Public Meetings

A **Public Workshop was held on March 27, 2023**, in the NVBPELS Las Vegas and Reno offices. Between the two offices, 31 people attended. There was **no public comment, against or for,** the proposed regulation repeal.

A Public Hearing was held on April 20, 2023, to provide a second opportunity for stakeholders/public to provide oral or written comment or testimony on proposed regulation changes. There was **no public comment, against or for, this proposed regulation repeal**.

4. Impacts to Business, Person, or Agency if Change is to Occur

There are no adverse effects related to the proposed changes. The beneficial effects are a reduction in regulations. The Small Business Impact Report and Small Business Impact Survey can be found on NVBPELS's website, https://nvbpels.org/business-impact-survey-results-2023/. There is no positive or negative economic impact and there are no cost savings to the state or NVBPELS.

Section 3 Mandatory Meeting and Report

Consistent with Chapter 233B of the Nevada Revised Statutes, a Small Business Impact Survey was emailed to all licensees whose email addresses are registered with the Board and emailed to all persons who have requested in writing that they be placed upon a mailing list, which is maintained by the Board for this purpose. Based on the survey results, a Small Business Impact Report was drafted and distributed to all interested parties along with the Notice of Public Workshop. The Small Business Impact Report and Small Business Impact Survey can be found on NVBPELS's website, https://nvbpels.org/business-impact-survey-results-2023/.

A **Public Workshop was held March 27, 2023,** and a **Public Hearing was held April 20, 2023**, to provide key industry stakeholders the opportunity to: (i) vet NVBPELS's recommended changes; (ii) solicit input as to the merits of those changes and (iii) identify other regulatory changes stakeholders feel are worthy of consideration.

Please see <u>Appendix A</u> for Public Workshop minutes, which contains written and oral public testimony, correspondence received by email post-workshop, and contact information of each person who provided public comment or testimony and their verbatim testimony for the March 27, 2023, Public Workshop.

Please see <u>Appendix B</u> for Public Hearing minutes, which contains written and oral public testimony and contact information of each person who provided public comment or testimony and their verbatim testimony for the April 20, 2023, Public Hearing.

Appendix A

Public Workshop Meeting Minutes
Post-Workshop Public Comment
Public Comments Contact Information



NEVADA STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS Regulations Workshop Meeting Minutes Held at 1755 E Plumb Lane, Suite 258, Reno, NV 89502 and 241 W Charleston Blvd., Suite 130, Las Vegas, NV 89102 on Monday, March 27, 2023 at 12:00 pm

1. Call to order

Ms Mamola began the meeting by thanking everyone in attendance and called the meeting to order at 12:01 pm. She said this meeting is a public workshop for receiving public comment on the board's recommendations as set out an attachment A and B in response to Governor Lombardo's executive order 2023-003. It's also for public comment to identify any other regulatory changes that workshop participants feel are worthy of consideration by the board.

2. Introduction of workshop process

Ms Mamola introduced the rules of engagement for the workshop and said that public comment is limited to 5 minutes. She said that Derek Vogel will serve as timekeeper. She instructed everyone who intends to make public comment that they will need to complete a public comment form and hand it to Mr Vogel before coming up to the microphone. Mr Vogel will note the time on the form.

Ms Mamola informed everyone that we will alternate between Las Vegas and Reno for each regulation proposed to be amended or appealed, beginning with the regulation that most people are here for. She said she would then go back to the other regulations proposed for repeal or update.

3. Public comment

There was no public comment.

4. Public comment on proposed repeal and amendments of Nevada Administrative Code chapter 625 as set out in Attachments A and B

The proposed repeal and amendments to Chapter 625 of the Nevada Administrative Code will provide for the following:

1) <u>Eliminate license application fees for active military and active military spouses, and military veterans and military veterans' spouses</u>

Ms Mamola reviewed the category and asked if there were any public comments. There were no comments.

2) Eliminate state specific exams

Ms Mamola asked if there were public comments on NAC 625.310, which the board proposes to remove Nevada specific exams to streamline and speed the licensing process.

Bob LaRiviere – Bob LaRiviere, land surveyor for the record, previous board chair and member of this board for nine plus years. I've always found the best way to work with people as a middle ground. My solution is I'm not for, I'm not against. What I would like to do is find a middle of ground of what I did 30 years ago in the state of California is a take home exam. That way everybody could take it, do a take home exam, be tested on our statutes of 278 and 625, and I see nothing wrong with the take home exam. Thank you.

Ms Mamola thanked Mr LaRiviere and read the following comment sent via email from **Robert McMillan**, a licensed land surveyor from California:

Dear Executive Director Mamola,

Please read this into the record at today's public hearing and register my comments in extreme opposition to the possibility of elimination of the Nevada State Specific Professional Land Surveyor Exam. I have been licensed as a Professional Land Surveyor in California since 1996. I am currently considering pursuing licensure in Nevada, with the intent to relocate to the Silver State. The actual practice and the laws that govern the practice of land surveying in Nevada are similar to those in California, however, Nevada is different enough that I, as a licensee, would feel very uncomfortable with the reduction of professional competency of licensees that would be caused by the elimination of the Nevada State Specific Professional Land Surveyor Exam. I understand that some people are concerned with the time between candidates being approved for examination in Nevada, and them actually taking the Nevada State Specific Professional Land Surveyor Exam, however, that is not attributable to any bureaucratic, legislative or regulatory delays created by the Nevada Board. The responsibility for the

delay is entirely up to the candidates. The delay in scheduling is a matter of candidate choice. In fact, the Nevada Board has streamlined the process of exam application approval so much that a candidate's application can be approved and the candidate can schedule the examination in as little as 24 hours, and results are available within 3 days. The current Nevada State Specific Professional Land Surveyor Exam is an open book exam with a passing rate of approximately 85%. Eliminating this exam would result in those 15% of candidates who are incapable of passing the open book exam to become licensed as Land Surveyors in Nevada. This would unleash their incompetence on the citizens of Nevada, jeopardizing the largest and most sacred investment that most people ever make - their homes. The Nevada Board website features the following quote: "Licensed professionals are regulated and have an obligation to adhere to ethical standards and protect health, safety, welfare of the public." To eliminate the Nevada State Specific Professional Land Surveyor Exam would be an unconscionable breach of ethics and dereliction of duty by the Nevada Board and Governor to the people of Nevada.

Sincerely,

Robert McMillan

Ms Mamola then asked for public comment from Las Vegas and Murray Blaney welcomed speakers to the microphone.

Mr Burn – Good afternoon board, my name's Paul Burn, PLS 11174, since January of 1995. I've been practicing here ever since. That's about 28 years. I'm also licensed in other states, which I'll get to in a minute. Given the governor's regulations, I'm in support of almost all of the and commend the board on their work on these streamlining, however, I'm solidly against the action to remove the state specific exam for comity PLS, this is in NRS 625.240.2.B and NAC 625.310.4 and 5, which I understand that's where we are now. My reasons are land surveying is very unique science and differences between states vary greatly. I also have a license in California and Colorado and have practiced in each with important differences in each land surveying. Differences are found in history, boundary determination and mapping to name a few. Surveyors in other states within our region have difficulty with mapping. Without understanding our laws in NRS 625.N78, they should at a minimum have to be familiar and show that by passing a state exam. NCEES uses the analogy of the three-leaged table. The leas represent education, experience and exams. Here in Nevada just two years ago, the state exam for surveyors changed to open book. Even though I wasn't totally in favor of that, it happened and that raised the pass rate from percents in the forties to approximately 83%. I would think that would be sufficient to demonstrate a mindset of making it easier to successfully accommodate comity. I brought with me in closing one of many emails that I get often that this came, Thursday, March 23rd to me from one of my attorney clients. And it's not unusual and I want to read it to you word for word. Paul. Hope you're doing well. We are looking to carve out the drive-through pad from the AP and above, which is attached to this email. The client hired in Alice State Surveyor who said this can't be done by record of survey, but it looks like the property is already within a commercial subdivision. I am hoping to get the work moved to you quys. Would you be able to confirm this would be by record of survey and provide an information, quote, retiming and cost? If I am wrong, please let me know. Thank you. From my attorney client, we have, as we're all aware very unique mapping law here, which the testing forces a review. I know that you have some alternatives in mind, but the actual state exam is totally important for anyone who shows up with a PLS from another state and asks for comity in our state. It seems to me that it is the minimum requirement to become a PLS here. Thank you.

Mr Hancock – Good afternoon, Gary Hancock, city surveyor for the city of North Las Vegas. I'm going to try, I don't want to repeat a lot of this stuff because I agree with everything that both, Robert, which you read in and Paul have said 100%, just want to add a couple words. I do disagree with the proposal to eliminate this state specific exam, eliminating the state specific exam jeopardizes the health and the safety, and will have a negative impact on the public. I think it's very important that we vet who actually gets licensed, specifically for that reason. That is in statute that we are here to protect the health and the safety and you know, just signing something to say, yes, I've read the statutes, I don't think is good enough. Anybody can and it will happen. Unfortunately, there are people out there, they'll, hey, I'll just sign it and go on. And now I'm licensed. The exam already is open book and available during any time in the week, that's not prohibitive at all to me. That's, I don't know how you could speed that up any further than that, one of the things I know that they've talked to, you know, take home exam. I'm not sure if I'm in favor of a take home exam. This was my kind of idea on that one, and I'm not opposed to this completely, is have an internet exam that is timed and is at least, instead, hey, take this home and take three weeks to look up the specific statutes to answer the questions. I think that's a little much, go ahead and have something that is timed. I'm not one who's completely in favor of memorizing statute. I'm in statute all the time. I'm rereading statute all the time. I get a question from the outside and I'm

reviewing it. I'm also asking, towards other surveyors, what's your opinion on this and how do you read it? So, you're always back into statute. So I'm not asking people to memorize, which they don't have to. Thing is you have to be familiar enough to actually look it up. So, we need to know, we need to vet who is actually being licensed to know that they have that ability to do it. And with the pass rate where it is with open book, I think we're actually doing that already. And I don't see, by eliminating the exam with how it is currently set up, or even just modifying it a little bit, we'll really actually change and speed any of that up at the moment. Thank you.

Mr Wittie – Good afternoon. My name's Frank Wittie. I'm a Nevada PLS since 2011. PS number 21292. I'm the current NALS treasurer and I am the GPS coordinator for City of North Las Vegas. I am here to express my opposition to the proposed elimination of the Nevada State specific exam. I've reviewed the governor's executive orders 2023-003 and 004, and the board's minutes to address the same. In my professional opinion, the board has misinterpreted the orders by proposing the elimination of the Nevada State specific exam. The orders are requesting that the licensing process be sped up not eliminated. And if we were to eliminate the exam, we would be the only state to not have a state specific exam. That's not a state I want to be in. Thank you.

Mr Hulslander – Hello, my name's Jonas Hulslander, LSIT, Nevada Resident. I'm grateful for your time and consideration for my concerns regarding this proposal, the repeal of NAC 625.310. And I firmly believe that repealing this state's specific exam would negatively affect our profession in Nevada. It's widely acknowledged that among the Western states that there are significant gaps between the national exam and the public land survey system. And therefore, until NCEES can bridge this gap, it's crucial to maintain a state specific exam. And I believe that it's in our best interest of the entire profession to explore alternative solutions, in line with the governor Lombardo's executive order that will expedite incoming surveyors while safeguarding the integrity of our state surveyors. Thank you again for your time and attention to this matter.

Mr Phan – Good afternoon. My name is Eric and I'm a Nevada surveyor number 22408. I'm associated with the Aerotech mapping in town. I've been surveying for 20 years plus, between California and Nevada, the reason I'm here, I just want to state my statement as opposed to the board regard to eliminate the Nevada's state Pacific exam. For me, my opinion is that that's the only scale or the only hold back that we allowed to, I mean, for the system to investing the individual that who can qualify to do the work. I mean, technically surveying is very unique and, I'm proud to be part of that this profession. And, I don't want to make it any more kind of like handed out to me is, it's almost like now you're taking away, it's almost like handed out to anybody walking down the street. So, would you like to have a surgeon doctorate without taking a specific exam and going and surgery on you? I don't think that you want to do that. So that's what my take on it. Thank you.

Mr Blaney said that concludes comment from Las Vegas.

Ms Mamola then invited speakers in the Reno office and began by reading a letter from **Nancy Almanzan**:

Dear Ms. Mamola,

The Nevada Association of Land Surveyors (NALS) Board of Directors has reviewed Nevada State Board of Professional Engineers and Land Surveyors (BP ELS) proposed changes to the Nevada Administrative Code (NAC) 625 in response to the Nevada Governor's Executive Order 2023-003. In the interest of public safety, NALS strongly opposes the removal of the state-specific exam requirement. While we wholeheartedly support reciprocity and mobility of licensure, it is critical for those practicing have an understanding of the standards of practice, regulations, and laws for the creation of legal boundaries in the state of Nevada. The state-specific exam ensures that those seeking licensure meet that minimum competency. Professions such as Land Surveying are highly technical, and laws vary from state to state. We understand that the FS and PS provide the assessment of minimum competency for initial entry into the profession, but they do not address individual state laws and regulations. Requiring the statespecific examination provides this safequard and protects the public. Since the state-specific examination is open book and can be administered immediately upon application, maintaining this protection does not create a barricade or hardship to those seeking reciprocity. Therefore, to safeguard life, health, and property and to ensure public welfare, we urge the State Board to not proceed with the proposal to change the current requirements for Licensure pursuant to NAC 625.310. Representatives of NALS are available to discuss our position, should you have any questions.

Sincerely,

Nancy Almanzan, PLS

Ms Almanzan – Thank you, Patty. My name is Nancy Almanzan. I'm a licensed land surveyor in Nevada PLS 1363. I'm the current state president of the Nevada Association Land Surveyors and also the director from Nevada to the National Society of Professional Surveyors Professional Licensure According to the NCEES website, under the Surveying licensure section states that professional licensure ensures that individuals practice in a manner that protects the health, safety, and welfare of the public by satisfying minimum qualifications and education work experience and exams. Removal of the Nevada State specific exam unprecedented and will weaken the minimum competency of the Nevada surveying profession and have negative impacts on the public. I oppose the board's proposed proposal to eliminate the Nevada specific exam for professional land surveyors. In addition, I have comments from our executive director of the National Society of Professional Surveyors. The National Society of Professional Surveyors is the National Association representing professionally licensed land surveyors from all 50 states and territories. We work with our affiliate associations to provide quidance in keeping the health, safety and welfare of the public foremost in our duties of the surveying profession. NSPS has reviewed the proposed Nevada State Board of Professional Engineers and land surveyors proposed change to the Nevada Administrative Code 6 25. In response to the Nevada Governor's Executive Order, 2023-003, we offer the following comments. The surveying profession is dissimilar to other license professions. Each state has statutory law and procedural rules that provide specific quidance for preparing a boundary survey. The state's specific exam is a critical part of assessing a candidate's competency. In regards to said laws and rules, this state's specific testing requirement must be in addition to the technical competencies typically tested by the National Council of Examiners for Engineers and surveying standard exams consisting of the fundamentals of surveying and the practical survey by keeping the state specific exam in place. This requirement supports surveyors duties to provide professional services that coincide with protecting the health, safety, and welfare of the public we serve.

We also work with our affiliates to help educate those professionals who seek licensure by providing educational materials and training. Each state affiliate can guide the potential candidate with key information that highlights the unique laws and rules to recognize the successful completion of the state specific exam, also is our understanding that the state specific examination for Nevada is open book for each candidate. NSPS sees this as an opportunity for testing state law and rural competency is the best possible environment to encourage applicants to successfully pass the exam. In the interest of health, safety and public and welfare of the public NSPS strongly opposes the removal of the state specific exam requirement as proposed by the executive order. And signed by Timothy Birch, PLS the director of Executive Director of NSPS. Thank you.

Mr Keenan – Good afternoon, everyone. My name is Trent Keenan. I'm Nevada PLS 16802. Been licensed since December of 2004. I'm also licensed in Arizona, California, Utah, and Washington, where I took a and passed the state specific exam to practice in each one of those states. I'm here today on behalf of the Western Federation Professional Surveyors Board of Directors, where I'm currently the secretary Treasurer on the board. West Fed has reviewed this Nevada State Board of Professional Engineers and Lance Surveyors proposed changes to the Nevada administrative code NAC 625 in response to the executive order 2023-003 issued by the Nevada governor. The Westford West Fed Board opposes the elimination of the state specific examination requirement in the interest of public safety. While the West Fed Board supports the idea of reciprocity and mobility of licensure for its members, it is crucial for the practitioners to comprehend the standards and practices, regulations, and laws for creating boundaries in each state that they practice. The state's specific examination ensures that all aspiring licensees meet the minimum competency level. Land surveying is highly specialized profession and laws vary from state to state. And of course, while the FS and the PS offer the minimum competency of evaluation for initial entry into the profession, they do not address individual state laws. The state specific examination requirement is necessary to quarantee the public protection since the state specific examination is open and immediately available upon application. Retaining this requirement does not create a hindrance or hardship for individuals seeking licensure to practice in Nevada. Therefore, to protect the public health safety and ensure the welfare, the West Fed Board urges the state and the state board to not proceed with the proposed changes to the existing licensure requirements under NAC 625.310. Thank you.

Mr Carrington – Hello, my name is Robert Carrington. I'm a land surveyor in the state Nevada PLS number 9103 prior, and during my career I also served as a city surveyor for the city of Henderson. So I'm uniquely qualified to speak about the laws of the state of Nevada because I made sure that surveyors complied with them. First of all, I do agree with all the comments today about the removal of the state specific exam, it does prove minimum competency. It at least requires surveyors to review those statutes and then further on as they develop their career to follow the statutes and regulations of local governments, and that's what I'd say. Thank you.

Mr Calkins – Good afternoon, Las Vegas. Good afternoon. Byron Calkins, great Basin College Land Surveying Department. I'm one of the instructors there. If you go to GBC, their website, if you go to the land surveying page, under degree plan, we have six or seven bullet points. These are objectives that a student would earn if earning this degree. And I'm just going to read the bullet list. Yep. Okay. So, land surveying GEOMATIC program objectives graduates with a BS with an emphasis and land surveying and geomatics will be able to proficiently apply sound measurement methods, mathematics, science, and

surveying tools to collect, analyze, edit spatial information and professional applications, demonstrate competency in fundamentals and applications of land surveying and the acquisition and management of spatial data. Develop a sound background in the humanities social sciences, the arts to function in a multicultural and diverse environment. Provide fundamentals in business management to enable graduates to understand business environments and decision making processes, convey spatial information and graphical textual and verbal forms as an individual or a member of a collaborating group and professional team prepared to take and pass the fundamentals of land surveying examination developed by the National Council of Examiners and Engineering and Surveying and NCEES enter interprofessional employment in land surveying geomatics in the state of Nevada or other states or other countries, covered by we have the North American Free Trade Agreement. I have to update that. Obviously, we're no longer practicing under that. The statutes believe it's and then finally, satisfy the educational requirements for licensure required by NRS 625.257 as a professional land surveyor in Nevada and recognize the benefit of lifelong learning by participating in continuing education as students or as instructors. Thank you very much.

Mr C deBaca – Also, hello to Las Vegas. Hello, my name is Carl deBaca. My license number in Nevada is 7633. I was licensed in 1987. As a side note, I was licensed in 1988 in California after taking and passing a 50 question take home test, which they ceased offering in 1988, maybe minutes after I took the test. I have been an active participant in professional societies, including the Nevada Association of Land Surveyors, the California Land Surveyors Association, and the National Society of Professional Surveyors. Since 1990, I have served the profession of Land surveying in a number of capacities, including being the 2016 President of NALS. I have edited both the California surveyor and the Nevada Traverse magazines and have acted as the liaison from NALS to this board. And I have acted as the liaison from CLSA to the California Board of Professional Engineers, land Surveyors and geologists, for those reasons, I think that makes me uniquely qualified to comment on some of this stuff. In addition to those things, I also have served for many years on the curriculum advisory committee for Great Basin College, and I served as an adjunct professor there. So, I believe the proposed change to eliminate the state's specific examination and the licensing criteria is the result of the conflation of two completely separate issues. The first and most obvious is the problem with a declining number of professional surveyors and by association Nevada licensees. This is a national and demographic problem, and I don't believe that the proposed change will contribute to a resolution of this problem in any way. The second issue is a nationwide movement embraced and recently expressed by our governor to tear down barriers to occupational licensing. This is a very honorable endeavor and one that I support completely, however, there's a world of difference between occupational licensing and professional licensing and the high standards that boards of regulation hold professional licensed land surveyors to in order to safeguard the health and safety of the public. In the case of the reciprocity applicant, the board can look at both the educational background and experience, but is there any quarantee that his knowledge of the public land survey system and Nevada laws and regulations is sufficient in the absence of an exam? In the case of a new applicant, the average college course on the public land survey system is not by itself sufficient to quarantee minimal competency any more than a single college course on route surveying that most civil engineering schools used to offer would quarantee that an engineer would be minimally competent to practice surveying, the exam in some form is a necessary component to ensure the public is protected and to prevent an inevitable increase in enforcement cases and an increase in malpractice related

litigation. I believe that there are other options available to streamline the licensing process for reciprocity applicants. Thank you.

Mr Higgins said he has a letter from his firm that he wants entered into the record. Ms Mamola said that the letter would be entered without reading it out loud.

Dear Mr. Kidd,

Wallace Morris Kline Surveying, LLC (WMK) is a Nevada based land surveying only firm with over fifty employees and eleven (11) Nevada licensed professional land surveyors. The following comments are made regarding the proposed elimination of the Nevada State specific exam for professional land surveyors.

We have reviewed the Nevada Governor's Executive Orders 2023-003 and 2023-004, together with the minutes from the February 9, 2023 Interim Board meeting, which passed the motion to eliminate the state exams for licensing engineers and land surveyors as proposed by staff in the supporting documents for the board meeting.

WMK commends the work by the Nevada State Board of Professional Engineers and Land Surveyors (Board) in recent years of streamlining the process for reciprocity and testing. We encourage the Board to include the accomplishments already completed and proven successful in its report to the Office of the Governor and the Director of the Legislative Counsel Bureau.

WMK supports the expedited process, now in place for those seeking initial licensure or by reciprocity. However, the elimination of the state specific exam jeopardizes the mission of the Board, as stated in Nevada Revised Statute 625.005, "is to safeguard life, health and property and to promote the public welfare by providing for the licensure of qualified and competent professional engineers and professional land surveyors."

All 50 states and the District of Columbia require examination in order to demonstrate specific knowledge within each state. Executive Order 20233-004, Section 3 states:

"To the extent an occupation or profession is currently licensed in Nevada but is not subject to licensure requirements in the majority of states (26 or more), licensure shall be presumed to be unnecessary and that board shall provide a recommendation for phasing out such a licensing requirement by July 1, 2023."

6525 West Warm Springs Road, Suite 100, Las Vegas, Nevada 89118, Ph: 702.212.3967 Fx: 702.212.3963

Eliminating the state exams for licensing engineers and land surveyors is in direct conflict with this portion of the executive order. The National Council of Examiners for Engineering and Surveying (NCEES) promotes the path to licensure through three (3) steps, Education, Experience and Exams. Elimination of the Nevada State specific exam for professional land surveyors weakens 1/3 of this pathway.

Statutes and code vary greatly between states and specifically between eastern states, Texas and the Public Land Survey System (PLSS). Nevada now has an open book exam for the state specific exam for land surveyors. It is our understanding that the pass rate has increased dramatically since the open

book was introduced. This has further advanced the licensing process, while maintaining an applicant's responsibility to be familiar with Nevada statutes, administrative code, the PLSS, water law, etc.

WMK will continue to support the Board, professional associations and our Nevada community. We believe an open dialogue between the Board and the professional community is warranted, prior to major decisions like this being made. We make the following recommendations:

- Remove the proposed elimination of the Nevada State specific exam for professional land surveyors.
- Immediately create a legislative sub-committee to address this specific issue. Include the formation of this sub-committee within the Board's report to the Office of the Governor and the Director of the Legislative Counsel Bureau. Also note that findings of the sub-committee's work will be provided in a subsequent report.
- Create legislative sub-committee, with a majority being Nevada licensed professional surveyors.
- Provide requisite public meeting notice(s) and start meetings as soon as practicable.

WMK will provide a representative if asked, should a legislative sub-committee be formed. Thank you for considering our comments. Please contact us with any questions you may have.

Sincerely,

Kevin Wallace, PLS Principal/CEO, Craig L. Morris, PLS Principal/COO, Jason Kline, PLS Principale/President, Tex J. Brooks, PLS Principal, Matthew Burrell, PLS Principal, Jason Higgins, PLS Principal, Craig Matsueda, PLS, Kurt Orban, PLS, Lance West, PLS

Mr Higgins – Members of the board. Thank you for the opportunity to be here. My name is Jason Higgins, Nevada, PLS 13601. I'm also licensed in Arizona. I've served our professional community on numerous boards, including a state president of the Nevada Association of Land Surveyors in 2019. I've served on the Nevada Board of Engineers and Land Surveyor subcommittee on the Nevada specific exam review for Land surveyors and currently serve on the standards of practice subcommittee. I've review reviewed the proposed changes outlined in materials provided for this public workshop. The governor's executive orders 2023-003 and 004. I support the proposed changes included herein with the exception of the elimination of any state specific exam currently required. I provide the following comments regarding the elimination of the state specific exam for Land surveyors. One, the Nevada Board of professional Engineers and Land surveyors is to be commended for the proactive work accomplished in recent years to streamline the process of licensure. Gone are the days when it would take months to have an application approved exams given twice a year and results would take weeks or longer to find out. Once an application is approved, a candidate may sit for examination the next business day, allowing issuance of licensure within weeks or even days from initial application. The barrier of someone seeking reciprocity has in effect been removed. The board has also made the Nevada specific exam for land survey's and open book exam. This has increased the pass rate from less than 50 to over 80%. The board has satisfied the governor's request without elimination of the Nevada State specific exam. I believe the board's proactive approach to getting applicants licensed in an expedient manner provides a great story to tell in its report to the office of the governor and the director of the legislative general counsel bureau. The Nevada specific exam for land surveyors tests for minimum competency on the public land survey system and the following chapters of Nevada law NRS 116 Common Interest Communities, 278 Planning

and zoning, 327 Nevada Coordinate System, 329 Perpetuation of Corners, 533 Adjudication of vested water rights, 534 underground water and wells, 625 professional engineers and land surveyors and also NAC 625 being the same. These statutes and codes are unique to Nevada and have been the foundation of the Nevada specific exam since its beginning. Removal of the exam lowers the minimum competency requirement below minimum. How can the board, public or other professionals rely upon professional and surveyors that have not met the minimum competency to provide these professional services? I encourage the board to consider the following. Remove the proposal to eliminate the state specific exams. Immediately create a legislative subcommittee to include Nevada license land surveyors include the subcommittee creation in the board's report to the governor's office of the governor and the director of the legislative council. Then provide subsequent reports as needed to continue to show the board's proactive work beyond the requirements and request in the executive orders. This approach satisfies or exceeds compliance with the governor's executive orders while providing an opportunity for dialogue with the professional community. Thank You.

Mr Phillips – Good afternoon. My name is Greg Phillips. I'm a Nevada Professional Land Surveyor Certificate 17616. I am past president of Nevada Associational Land surveyors and the other west Fed delegate from Nevada. I'm here today to oppose elimination of the Nevada State specific exam for professional and surveyors in my opinion this proposal will jeopardize the health and safety of the public. There's been a lot of good comments today and I'm sure there's going to be quite a few more. So, I will follow up with a written statement with more detail on my specific concerns. Thank you.

Mr Moore – Hello, good afternoon. My name is Justin Moore, Nevada Professional Land Surveyor 22362. And I am in opposition, imagine that as everyone here seems to be, all 50 states including, Washington, DC have a state specific examination for that reason, because every state is different, a universal or a regional licensure would, excuse me, it's not effective going state to state. Each state has different regulations, different codes, and a professional needs to be competent in those state and local codes, statutes. And I just am in opposition. Thank you.

Mr Jefferson – Good morning. My name is Brett Jefferson. I'm a fellow of the National Society of Professional Lance Surveyors, a trustee to the NSPS Foundation, past area director for NSPS and a past NSPS Governor. I'm a past president of the Nevada Association of Land Surveyors as well as the Southern chapter. I'm also a past adjunct professor in the Land Surveying Associate Program at CSN, where I taught surveying 101 boundary control and legal principles and writing and interpreting legal descriptions. I'm a professional land surveyor licensed to practice in Nevada, California, and Arizona. I was first licensed in Nevada in 1989. I was required to pass a state specific exam. I then applied to California and successfully passed their state exam in 1990 and subsequently applied to Arizona and pass their state specific exam. In 1991, I did not view the requirement to pass a state-specific exam as a barrier to licensure or to expand my practice to other states. It was a process to measure my professional competence and I accepted it and in fact embraced it. I reached out to those states for study material recommendations and I studied before I sat for the exams. Neither did I feel that it was anything unfair or unnecessary contained in these exams. They ensured that I was minimally competent to practice in those states as well as the unique problems and challenges that are prevalent to surveying in those states. The qualifications and examination standards set by the Nevada Board of Professional and Surveyors, for ethical, professional and technical competency are intended to protect Nevadans in their

businesses, public and private developments, real property investments and incorporated cities and counties. Lowering the proven knowledge by eliminating the state specific exam will obviously reduce that level of protection. If the knowledge component contained in the state specific exam is no longer tested for the state board sacrifices the security provided by the exam, which will likely lead to increased complaints and litigation filed by damaged agencies, governments, and citizens. As a result, the purpose of the board to safeguard life, health and the property and promote the public welfare through the state specific exam has accomplished these goals for decades. The result of eliminating the exam will lower the minimum competence bar the board's mission to uphold the value and of the professional of land surveying licensure by assessing minimum competency for initial entry into the profession. The state's specific exam for land surveying in Nevada has been the gold standard in the Western states for literally decades. Other states have emulated Nevada's exam the board and now should be complimented on the relevancy of the exam. The board should also be complimented for streamlining the state specific exam process. It is an open book exam. Zoom proctors can be scheduled with the examinees within 24 hours of application. The streamlining of the exam process by the board has now facilitated an expedient state specific exam timeline. That eliminates time as a barrier to obtaining a PLS license. The fact that 15 to 20% of applicants fail the state specific exam is a critical argument to this issue. There are individuals that are the individuals that are of concern that elimination of the exam would become licensed. The protection of agencies, governments, and of citizens would be reduced. The exam is doing its job. Perhaps even more importantly, to note that the public does not and will not ever know which professional land surveyors have been tested versus those land surveyors that have not been tested for Nevada state specific laws. These things will not come to fruition until damages have occurred. Complaints have been filed and litigation instituted. I urge the board and our PLS representatives to take testimony today into consideration and not lower the minimum competency standards for Nevada PLS candidates by eliminating the state specific exam. Thank you for your time regarding and thank you for this opportunity to speak on this very important issue. Thank you.

Mr Denman – Good afternoon. Just want to take a minute to thank the board for allowing us to be here, it's an honor to be in the building, just an honor for the representation they give to our profession and the livelihood that is brought to all of us and to be in the same room with all of you. So, my name is Eric Denman. I'm a Nevada PLS 14900. Been a PLS for over 20 years and currently serving as the Vice President of the Southern Chapter of the Nevada Association of Lance Surveyors. I believe the board has taken practice steps to streamline the licensing process over the last decade with the most recent step in making the Nevada State Specific Exam open book. The board is to be commended for these accomplishments. However, elimination of the state specific exam for Land Surveyors goes a step too far. Each and every state in our nation has different laws, regulations, and codes applicable to their respective states. Whether an initial applicant or someone seeking reciprocity, minimal competency is an essential to licensure. Elimination of the state's specific exam lowers the bar where minimal competency cannot be reached. I also find the elimination of the state's specific exam as a conflicting concept from the board that recently implemented a requirement for continuing education for Nevada licensed surveyors focused on the same state specific material. If it's important enough to require continuing education, which it definitely is, then it remains important for new licensees to this great state to be tested on the same specific exam to maintain competency. Thank you for your time.

Mr Enke – Good morning, Todd Enke, PLS 19734, second generation surveyor. My dad is a licensed surveyor in California where I grew up, I strive to get a California surveyor's license, after obtaining my Nevada one, I realized how hard I had to study to be proficient in that. One of my goals is to, again, a California surveying license, but I understand how different the rules are from continually talking to my dad, who is the city surveyor for City of Tracy, that's my goal law. And I, for me to be a competent surveyor in our state or any other state, I believe knowing the laws and rules and regulations of those states is important. Thank you.

Mr Trotter – Hi everyone, Shane Trotter, Nevada PLS 24870. I'm here to express my opposition to the proposed elimination of the Nevada State Specific Exam for professional land surveyors. And the one thing I have to add is, I am a land surveyor that was licensed with a bachelor's degree in land surveying in geomatics as well as, I was an adjunct professor at GBC, and just to kind of give you guys an idea or example, when I graduated from GBC I took the national exam. I studied about 30 minutes for it and, and passed the test on my first try, with the education, knowledge and experience that I was given as a student of GBC. I studied several hours for the Nevada State specific exam, reading and becoming familiar with the laws and I barely passed the state specific exam. So I think it's important to keep an exam, and I think that the board has done a good job of streamlining it. Making it open book is fair because we all as professionals reference the law, and, I think it's important to keep the exam. Thank you.

Mr Wright – Hi there. My name is Stewart Justin Wright. I'm licensed in Arizona originally and in Nevada second as a reciprocity applicant here in 2009. I'm opposing the removal of the state specific exam, when I moved here from the state of Arizona, I was familiar with the Arizona law because I had taken their state specific exam and I had learned how to navigate the laws in regards to subdividing land according to their laws. When I moved to Nevada and applied for reciprocity, I took their state exam as well, studied for the exam. I learned quickly that the laws that applied in Arizona were significantly different than the laws in Nevada, and I think that's important. And in my case, I feel like the test did its job, so I'm opposed to it. I also believe that the test should be testing us on ethics. And, I think that if we don't have a benchmark for ethics, so we don't test people on ethics, how are we going to offer continued education on ethics and how are we going to ask people to apply continuing education when it comes to ethics, when we don't even test them as a baseline when it comes to the ethical values. And finally, I'd just like to state that I think that the exam also touches on the public land survey system and others from other states. The move here may not be familiar with the public land survey system, and I think that we need to touch base on the public land survey system. And I think the idea was to try to test people on their weaknesses when they come to our state and work under our laws.

Mr West – Lance West, Nevada PLS 18232. Also licensed in the state of Oklahoma. Currently to become a PLS in Nevada, you have to have a land surveying degree, but we don't differentiate if that comes from a PLS state or some other state. By removing the state specific, you have no way to know if that applicant has met the minimum competency requirements yesterday, someone compared driving a car from one state to another and how the laws are different. And comparing that to the survey laws. If I break a law in another state driving a car that affects me, I pay the price. If I don't know the law of surveying in another state that not only affects me, but countless other people as well. That's all I have. Thank you.

Mr Matsueda – Hi, I'm Craig Matsueda from Las Vegas, Nevada PLS 17022. Also licensed in California, licensed number 6820. I would like the record to show that as a licensed surveyor in the state of Nevada, I oppose the elimination of the state's specific exam currently required for in Nevada. From a mapping perspective, there are specific regulations in the Nevada revised statutes that are unique to Nevada and are essential to the minimum proficiency requirements for Nevada licensure. My main concern in eliminating the state specific exam presumes and I emphasize presumes a minimum proficiency regarding state statutes rather than currently an applicant has to demonstrate to the public that he or she has knowledge and possesses a minimum proficiency in regarding Nevada statutes by passing an exam. I strongly feel that knowledge of and possession of minimum proficiency requirements of state specific regulations to practice land surveying in the state of Nevada should be demonstrated and I emphasize demonstrated by passing an exam and not presumed prior to licensure. Thank you.

Mr Wooten – Good afternoon. My name is Jonathan Wooten, PLS number 18146, licensed in Nevada and also Arizona. I'm here today to object to the board's recommendation to remove the requirement for the state specific exam. I feel that the state exam is a necessary step in the licensing process to ensure the minimum competency to practice land surveying in accordance with the laws and regulations specific to the professional work of land surveying in this state, without testing the applicant for licensure, I believe that we're failing to protect the profession of land surveying in the state and also, failing to promote the ethical obligations. Land surveyors are charged with to protect the public safety and welfare. And I also believe that it's the duty of this board to ensure that you're providing licensure to qualified and competent professional land surveyors as stated in NRS 625.005. And I strongly urge the board to not eliminate the requirement for the state specific exam.

Mr Hamlin – Hello, I'm Cole Hamlin. I'm not a PLS, but as a person who's working towards licensure, I think my perspective is important. I'm opposed to removing the state specific exam because I believe it is important for a state licensed professional to be competent in state statute. I also feel that the state exam is not a hurdle, but a necessary step in becoming a professional, a licensed professional.

Mr Ariotti – Hello, my name is Nicholas Arriotti, Nevada PLS 22373. I would like to say that I strongly disagree with the removal of the state specific exam, and I would like to support every comment made here today as being something that I would like to say myself. So, thank you.

Mr Perazzo – Hello Las Vegas. My name is Pete Perazzo, PLS 14634. I was licensed in the year 2000. I sat for the test and also the state specific, which I failed. I got passed on the federal level. So I started survey in 1985, sat for the test 15 years later and failed the state specific, I'm not proud of that, but working eight years with the Bureau Land management gives you a perspective that you don't have at other agencies. I then went to the state DOT where there was a few PLSs, but very few in the field, none of which had PLSS backgrounds. Other comments I will send by email, but I'm in opposition to the change. Thank you.

Mr Callahan – Silas Callahan, I am not a surveyor. I am an engineer, but I want to express my opposition as an engineer. I rely on land surveyors that know the laws and removing that test is a detriment to that, that's all I have.

Ms Mamola asked if there are any more comments related to NAC 625.310. There were no comments, and she moved on to the next category.

3) Repeal regulations that are outdated, unnecessary, and/or redundant

There were no comments.

5. <u>Public comment on any other regulatory changes that workshop participants feel are worthy of consideration by the Board.</u>

There were no comments.

6. Closing public comment.

There were no comments.

7. Adjournment

Ms Mamola thanked everyone for their participation and adjourned the workshop at 1:05 pm.

Received via email - 4.4.2023

NRS 625 requires an applicant to demonstrate to the Board of Engineers and that they have sufficient education and experience to meet the minimum requirements for licensure in the state. According to statute, that means an acceptable four year college degree and passing the Fundamentals of Surveying and the Principals and Practices of Land Surveying Exam, as well as the Nevada State Specific Exam (2) hours). The Fundamentals and Principals exams test according to national requirements for surveying and are computer based exams administered and graded by NCEES. These exams are only designed to determine "Minimum Competence" as a surveyor. Nevada registrants need to demonstrate they have the skills tested by the national exams, but they also need to demonstrate that they have a good understanding of the requirements for surveying in Nevada as presented in NRS 625, 328, 329, NAC 625 and 329, as well as the rules for surveying in the Public Land Surveying System. This makes Nevada a unique state in which to survey and the state specific exam is designed to determine that the applicant is at least minimally competent to survey within the borders of Nevada. If an applicant is approved to take the test, they can access it and take it within 24 hours of being approved. I don't know how an applicant can demonstrate knowledge of Nevada statutes without taking at least the 2 hour exam that tests their knowledge in these areas. Even applicants for comity, would need to demonstrate understanding of Nevada laws and public land surveying procedures.

Elimination of the State Specific Exam, would be a detriment to public health and safety in Nevada, which is the reason that as engineers and land surveyors we need to demonstrate our competence for licensure.

Please keep the requirement for this exam in place. It is important to the health and safety of all Nevadans.

Respectfully submitted,

George G. Lindesmith Nevada PLS 6306 Nevada WRS 704

April 4, 2023

Nevada Board of Professional Engineers and Land Surveyors 1755 E. Plumb Lane Suite 258 Reno, NV 89502

RE: Proposed Change to NAC 625.310

Dear Board members,

My name is Carl C.de Baca, Licensee No. 7633. I was licensed in the Silver State in 1987. I have been an active participant in professional societies, including the Nevada Association of Land Surveyors, the California Land Surveyors Association and the National Society of Professional Surveyors since 1990. I have served the profession of Land Surveying in a number of capacities including being the 2016 president of NALS, editor of both the California Surveyor and Nevada Traverse magazines, and have acted as a liaison to both this board and the California BPELSG over the years. I have also served for many years on the Great Basin College LSG Curriculum Advisory Committee and have been an adjunct professor for that program. I believe all this makes me uniquely qualified to comment on the proposed changes to NAC 625.310(B)5.

I suggest that the proposed change to eliminate the state-specific examination from the licensing criteria is the result of the conflation of two completely separate issues and will not adequately address either one. The first and most obvious issue is the problem with the declining number of professional surveyors and by association of Nevada licensees. This is a national demographic problem and the proposed change will not contribute to a resolution of this problem.

The second issue is a nationwide movement, embraced and recently expressed by our governor to tear down barriers to occupational licensing. This is an honorable endeavor and one which I completely support. However, there is a world of difference between occupational and professional licensing, which requires the high standards that Boards of Regulation hold professional surveyors to in order to protect the health and safety of the public.

In the case of reciprocity applicants, the Board can look at both the educational background and experience of the candidate but is that any guarantee that his or her knowledge of the PLSS and Nevada laws and regulations is sufficient, in the absence of an exam?

In the case of the new applicant, the average college course on the PLSS is not sufficient, by itself, to guarantee minimal competency, any more than a single college course on route surveying that most civil engineering schools used to offer would guarantee that an engineer would be minimally competent to practice surveying.

An exam, similar to those required in all the other surrounding states, is a necessary component to ensure that the public is protected and to prevent an obvious and inevitable increase in enforcement cases and an increase in malpractice-related litigation.

It seems to me that the Board has other options available to streamline the licensing process, without foregoing examination, at least for reciprocity applicants.

Respectfully submitted.

Carl R. C.de Baca PLS 7633

Cul Cs Baca

April 4, 2023

Patty Mamola Executive Director Nevada State Board of Professional Engineers and Land Surveyors

Subject: Nevada Governor's Executive Order 2023-003: Proposed Changes to NAC 625

Dear Ms. Mamola,

ann allicensed Professional Surveyor in the State of Nevada, a member of the Nevada Association of Land Surveyors and I have reviewed the Nevada State Board of Professional Engineers and Land Surveyors (8ºPLS) proposed changes to the Nevada Administrative Code (NAC) 625 in response to the Nevada Covernor's Executive Order 2073-003. In the Interest of public safety, I strongly apposes the removal of the state-specific exam requirement.

I wholeheartedly support reciprocity and mobility of licensure, it is critical for those practicing to have an understanding of the standards of practice, regulations, and laws for the creation of legal boundaries in the state of Nevada. The state specific exam ensures that those seeking licensure meet that minimum competency.

Professions such as Land Surveying are highly technical and laws vary from state to state. I understand that the FS and PS provide the assessment of minimum competency for initial entry into the profession, but they do not address individual state laws and regulations. Requiring the state-specific examination provides this safeguard and protects the public.

Since the state-specific examination is open book and can be administered immediately upon application, maintaining this protection does not create a barricade or hardship to those seeking reciprocity.

Therefore, to safeguard life, health, and property and to ensure public welfare, I urge the State Board to not proceed with the proposal to change the current requirements for Licensure pursuant to NAC 625.310.

Should you have any questions, you can reach me at kalmeterwoodrodgers.com

Sincerely,

Kevin Almeter, P.L.S.

Nevada Certificate No. 19052

April 4, 2073

Potty Mamola Executive Director Nevada State Board of Professional Engineers and Land Surveyors

Subject: Nevada Governor's Executive Order 2023-003: Proposed Changes to NAC 625

Dear Ms. Mamola,

I am a licensed Professional Surveyor in the State of Nevada, a member of the Nevada Association of Land Surveyors and I have reviewed the Nevada State Board of Professional Engineers and Land Surveyors (BPELS) proposed changes to the Nevada Administrative Code (NAC) 625 in response to the Nevada Governor's Executive Order 2023-003. In the interest of public safety, I strongly opposes the removal of the state-specific exam requirement.

I wholeheartedly support reciprocity and mobility of licensure, it is critical for those practicing to have an understanding of the standards of practice, regulations, and laws for the creation of legal boundaries in the state of Nevada. The state-specific exam ensures that those seeking licensure meet that minimum competency.

Professions such as Land Surveying are highly technical and laws vary from state to state. I understand that the FS and PS provide the assessment of minimum competency for initial entry into the profession, but they do not address individual state laws and regulations. Requiring the state-specific examination provides this safeguard and protects the public.

Since the state-specific examination is open book and can be administered immediately upon application, maintaining this protection does not create a barricade or hardship to those seeking reciprocity.

therefore, to safeguard life, health, and property and to ensure public welfare, Lorge the State Board to not proceed with the proposal to change the current requirements for Dicensure pursuant to NAC 625.310.

I took and passed the State Specific Survey Exam to obtain my Nevada Land Surveyors Ilcense via comity. It is imperative that this requirement continues to protect the public as it educates future Nevada Land Surveyors. It will also help to avoid bad survey practices, future litigation, and help to reduce the Nevada State Board of Professional Engineers and Land Surveyors Lime investigating future violations.

Should you have any questions, you can reach me at <u>mlong@woodrodgers.com</u> or Ph. 916.869.3286.

Sincerely,

Nevada Certificate No. 11186 Licensed In CA, NV, AZ, UT, OR, ID Certified Federal Surveyor No. 1566

Received via email - 4.4.2023

Members of the Board,

I am writing this letter as a written objection to the removal of the Nevada State Specific Land Surveyors exam for new and reciprocity licensees. As I stated in my testimony at the Workshop last week, I was originally licensed in Arizona in 2005. In 2008, I sought reciprocity in Nevada as I moved with my family to Henderson, NV. I was shocked when I studied for the Nevada State Specific Exam at the difference in the laws between Arizona and Nevada, particularly in regards to Land Divisions in NRS 278.

The State-Specific Exam requires new licensees and reciprocity licensees to study the Statutes applicable to Land Surveying in our state. The National Exams required prior to licensure through NCEES do not cover this material. This exam is the best and most efficient way to make sure that new licensees know and understand our laws.

In addition, the State Specific Exam also tests new licensees on many of the basics of working within the Public Land Survey System PLSS. Many states within the United States are not PLSS states. Those applying for reciprocity from one of those states that do not have PLSS experience would not be trained to perform boundary survey work in our state. The Nevada State Specific is the only place where this can be tested for reciprocity licensees.

The State-Specific Exam was carefully crafted to test new licensees on information that they will need to know prior to working as a professional in our state. It is designed to protect the public welfare and also protect new licensees from unknowingly breaking laws and getting themselves in trouble.

I believe we will see an uptick in court cases and disciplinary actions by the board if we remove this examination in our state. Finally, another result of this policy will result in municipalities and utility agencies facing a heavier burden in reviewing submittals from Land surveyors who are not completely educated on this material. This will result in higher taxes and higher utility fees all of which would have a negative impact on Nevada Residents.

Please reconsider your position on this matter. I believe there are other avenues that can be explored to accomplish the Governor's mission to streamline development in our state without sacrificing the quality of our workmanship and our reputation as Nevada Eicensed Land Surveyors.

Respectfully, Stewart 'Justin' Wright Nevada Professional Land Surveyor, PLS 1919/ Arizona Registered Land Surveyor, RLS 43351 Certified Federal Land Surveyor, CFFDS Certificate No. 1660

Received via email - 4.5.2023

Members of the Board,

It is my understanding that under Governor Lombardo's Executive Orders No. 2023-003 and 2023-004, the state specific exams under the purview of the Nevada Board of Professional Engineers and Land Surveyors are proposed to be eliminated.

Please note that we are opposed to this. Although all options for expediting the licensure process should be examined, I believe that the state-specific exam is important for engineers and surveyors, due to the ethics requirements that are not reflected in other states, and especially with the surveyor exam, this is our state's opportunity to identify criteria and minimum standards of care that apply specifically within Nevada and should not be eliminated. Just as Nevada does not require a seismic section for civil engineers, it is my understanding there are specifics covered in the state-specific survey exam that help set a standard of care that we have come to expect from the surveyors providing information to us in Nevada, and the thought of eliminating is a concern.

Thank you for your consideration.

Tom Brady

Name	Email	Organization
Paul Burn	pburn@gcwengineering.com	Self
Eric Phan	ericphan@atmlv.com	Aerotech Mapping, Inc
Jonas Hulslander	jonas.hulslander@gmail.com	Self
Frank Wittie	wittief@cityofnorthlasvegas.com	Self
Gary Hancock	hancockg@cityofnorthlasvegas.com	Self
Silas Callahan	scallahan@dowl.com	DOWL
Peter Petrazzo	absolutelypete@gmail.com	Self
Nicholas Ariotti	nariotti@egradig.com	EG Radig Inc
Cole Hamlin	ichamilike@gmail.com	Self
Jon Wooten	jon.wooten@lvvwd.com	Las Vegas Valley Water District
Craig Matsueda	cmatsueda@wmksurveying.com	Wallace Morris Kline Surveying
Lance West	lwest@wmksurveying.com	Wallace Morris Kline Surveying
Justin Wright	justin.wright@lvvwd.com	Las Vegas Valley Water District
Shane Trotter	shane@db-ls.com	Self
Todd Enke	todd@rci-nv.com	Nevada Association of Land Surveyors
Eric Denman	edenman@gcwengineering.com	Nevada Association of Land Surveyors
Brett Jefferson	bkjefferson@civilscience.com	Self
Justin Moore	justin@odysseyreno.com	Odyssey Engineering
Greg Phillips	gphillips@lumosinc.com	Nevada Association of Land Surveyors
Jason Higgins	jhiggins@wmksurveying.com	Wallace Morris Kline Surveying
Carl CdeBaca	CCDeBaca@ReyEngineers.com	Nevada Association of Land Surveyors
Byron Calkins	byron.calkins@gbcnv.edu	Great Basin College
Robert Carrington	robert@db-ls.com	Nevada Association of Land Surveyors
Trent Keenan	trent@dbackls.com	Nevada Association of Land Surveyors
Nancy Almanzan	nancy.almanzan@swgas.com	National Society of Professional Surveyors
Bob Lariviere	blariviere@cfareno.com	CFA Inc
George Lindesmith	gglindesmith@yahoo.com	Self
Kevin Almeter	kalmeter@WoodRodgers.com	Self
Michael Long	mlong@woodrodgers.com	Self
Tom Brady	bradyt@cityofnorthlasvegas.com	Self

Appendix B

Public Hearing Meeting Minutes
Post-Hearing Public Comment
Public Comments Contact Information

7. Government Liaison Report

8. Bill Draft Requests
Prosed by Legislature to
Amend NRS Chapter 625,
329 and 327 Related of
Regulatory Boards

9. Public Comment

10. Adjournment