NEVADA STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS



Regular Board Meeting March 14, 2024 Reno, NV

1. Meeting Call to Order

2.Pledge of Allegiance

3. Public Comment

4. Introductions

5. NRS 625 Waiver Requests

WAIVER REQUESTS Wednesday, March 14, 2024

APPLICANTS REQ	UESTING WAIVER OI	F NRS 625.183(4)(B)	
NAME	DISCIPLINE	то:	GRANT?
1. Daniel Addington	CHE	Robert Fyda, PE	
NRS 625.183, item 4, part b, "Two of under the direct supervision of a proj is applying for licensure"			

6. Non-Appearance Applications for Initial Licensure

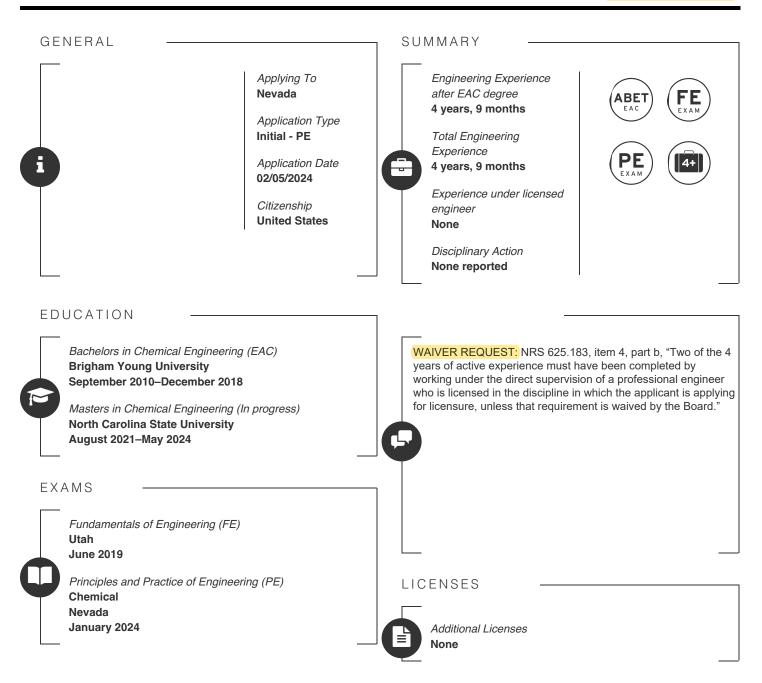
NEVADA STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS EDUCATION CREDIT GUIDELINES

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

Chemical

DANIEL ADDINGTON (19-984-67)

All work experience reviewed by two licensed professionals



WORK EXPERIENCE

Mission Support and Test Services Nevada (United States) Senior Engineer May 2019—February 2024 Verified by Jerry David Freter freterjd@nv.doe.gov Experience Summary Full-Time Engineering: 4 years, 9 months Post EAC degree: 4 years, 9 months Experience under licensed engineer: None

-TASKS

In May 2019, I started at MSTS as Chemical Engineer I. I worked at the JASPER nuclear facility where I was assigned the Gas Monitoring System, which is a system of electrochemical sensors around the facility that monitored specific gases present in the facility. While there, I qualified as both a system engineer and a JASPER-specific system engineer, where my responsibilities included maintaining cognizance of assigned systems at the JASPER facility while ensuring compliance with DOE and ASME requirements as well as the facility's safety basis.

In 2021, I was promoted to Engineer II around when I qualified as a facility design authority. As a design authority for the JASPER facility, my responsibility was to ensure configuration management was followed. As a design authority, I performed general calculations, updated facility P&IDs and drawings, reviewed facility changes for approval, and sat as design authority representative in safety basis update meetings.

In addition to the Gas Monitoring System, my assigned systems included a gas distribution system which supplied drive gas for JASPER experiments, a vacuum and ventilation system which evacuated large vessels to low pressure and safely ventilated gas after experiments, and the primary target chamber which housed the target material used in JASPER experiments. I oversaw fabrication of the primary target chamber where I verified welding and dimensional inspections of components to meet ASME and drawing-specific requirements.

In 2023, I was promoted to Senior Engineer around the time I transitioned to the Integrated Test Stand Project. There I have been acting as a technical reviewer for submittals for fabrication and construction of the test facility while interfacing with AMENTUM professional engineers of record, MSTS management, and a Los Alamos National Laboratory representative engineer to ensure compliance with design requirements.

REPRESENTATIVE PROJECTS

Project: Vacuum Pump Replacement

(Sep 2020 - May 2023)

For the vacuum and ventilation system at JASPER, I had to replace a degrading vacuum pump on our confinement vessel and an identical pump was not available. I evaluated not only the pump itself but used a holistic view of the system to see what other equipment would be affected by the change. I had to make sure that the pump was powerful enough to meet the required level of vacuum in the required time; however, the maximum flow rate had to remain below threshold values for in-line equipment. I defined critical characteristics of which my replacement pump had to meet, and my conclusion was suggesting to the engineering and facility managers how the pump I proposed was the best form, fit, and function to meet those requirements. Once procured, I helped construct a procedure for installation, and I monitored preventative maintenece of the item throughout the remainder of my tenure at the JASPER facility.

Project: Safety Basis Calculation

(Mar 2022 - Apr 2022)

For the gas distribution system at JASPER, I was assigned to perform a calculation to support JASPER's safety basis. The calculation was used to validate a design feature for the confinement vessel. The calculation set a threshold for the maximum amount of drive gas that would be considered safe and allowable for use in JASPER experiments. For this calculation, I had to demonstrate understanding of interfaces of connected systems and their design requirements. This calculation was reviewed and validated.

Project: Integrated Test Stand Construction (May 2023 - current) The Integrated Test Stand is a project which involves both the retrofit of an existing building and installation of new infrastructure for use as a testbed facility. I have been acting as technical reviewer for award to contract bids, reviewing submittals, dispositioning nonconformance reports, and acting as on-site engineer during construction. My responsibility includes ensuring compliance with design requirements and acting as a liason between MSTS, the subcontractors, Los Alamos, and the AMENTUM professional engineers of record.

Civil

OWEN BARTLETT (20-222-27) All work experience reviewed by two licensed professionals

GENERAL		SUMMARY	
Í	Applying To Nevada Application Type Initial - PE Application Date 02/09/2024 Citizenship United States	Engineering Experience after EAC degree 3 years, 8 months Total Engineering Experience 4 years Experience under licensed engineer 2 years, 7 months Disciplinary Action None reported	ABET EAC EXAM
EDUCATION — Bachelors in Civil Engineeri University of Nevada, Ren August 2015–May 2020 EXAMS Fundamentals of Engineerin Nevada July 2019 Principles and Practice of E Civil Nevada October 2021	o ng (FE)	NOTE: Graduated December 2019, in Spring 2020, the matriculation of his 2020. Applicant has 4 years of experies	s degree was May
		Additional Licenses None	

WORK EXPERIENCE

Tectonics Design Group Nevada (United States) Structural Designer January 2020–August 2022 Verified by Edgar Gabriel edgar@tdg-inc.com Experience Summary Full-Time Engineering: 2 years, 7 months Post EAC degree: 2 years, 3 months Experience under licensed engineer: 2 years, 7 months

TASKS

My engineering emphasis at Tectonics Design Group was in Structural Engineering. I was a Structural Designer for the company and worked closely with the licensed engineers at the company to ensure that all Structural Engineering requirements were met. These requirements primarily included creating design drawings and calculation packages that accounted for the pertinent jurisdictional code as well as structural code to prepare projects that would withstand all stresses and environmental factors the project would exhibit.

I started as an intern for Tectonics Design Group in 2016 and learned all necessary skills to be a successful engineer. These skills included applying knowledge gathered through school and internship work to provide safe and economical design procedures, design in compliance with the applicable codes, be able to check engineering design using Structural Engineering software like Risa-3d and Enercalc, ensure life safety and redundancy was provided in each design, and maintained constant coordination with the Registered Engineer.

-REPRESENTATIVE PROJECTS

WACC 3 [Sparks, NV], Concrete Tilt Up Warehouse with Panelized Roof System and Braced Frame, 01/03/2020-12/01/2020; I prepared design drawings, and design calculations per the pertinent code for a concrete tilt up warehouse building with a panelized hybrid roof system and braced frame. The concrete tilt up building included concrete shear walls, steel joists and girders, wood sheathed roof deck, continuous and spread footings, and a braced frame. I provided construction support to contractors, coordinated with the entire design team to help facilitate a job that is compliant with the specifications, and consulted with the client to ensure all needs were met. When field issues arose, I was able to provide my best engineering judgement for a sustainable fix. One sustainable fix that I designed was incorporating a steel plate in the panel corner connection due to embeds not aligning after tilting of the concrete panels. This plate design had to be able to undergo shear and moment forces that were caused by the shear walls and diaphragm.

Clasen Quality Chocolate Platforms [Sparks, NV], Steel Moment Frame Platforms for Manufacturing Equipment, 11/01/2020-08/01/2022; I prepared design drawings, design calculations per the pertinent code, and design calculations that considered the existing building composition with the new forces added from the platforms. Clasen Quality Chocolate required a lot of as-built drawing and calculation study to provide several platforms throughout their building that provided for their required dynamic loading of the existing slab and building. The forces I designed for were liquid forces within silos and tanks that created large moment forces and sloshing forces that were accounted for in my structural calculations. The building is still designing new platforms to this day, so I had to ensure that the platforms. I was in constant communication with the client to make sure that all their specific needs were met. The 3-d modeling that I created was very extensive and continually adjusted to provide a final design that took all design factors into consideration.

WORK EXPERIENCE

Sierra Developments, LLC Nevada (United States) Project Manager/Owner's Representative August 2022–October 2023

Verified by Jeff Lynch jeff@lynchinvest.com Experience Summary Full-Time Engineering: 1 year, 2 months Post EAC degree: 1 year, 2 months Experience under licensed engineer: None

TASKS

As project manager and owner's representative for Sierra Developments, LLC I ran the day-to-day operations of the development company including acquisition, management, engineering consultant coordination, and finances. Working with engineering consultants was one of my primary tasks as the company's main project included a lot of design factors to overcome. The obstacles included site shape, building/site layout, groundwater issues, etc.

I had to use my engineering judgement and skill to provide recommended solutions to the owner's and make engineering decisions to ensure site and building safety of the building's tenants for the entirety of the building's life. Engineering knowledge and coordination with engineering consultants accounted for majority of my time at the company.

REPRESENTATIVE PROJECTS

Panther Drive Industrial [Reno, NV], Concrete Tilt Up Warehouse with Panelized Roof System, 08/2022-10/2023; I worked as the project manager and owner's Representative for Sierra Developments, LLC to produce a +/- 58,300 sf warehouse. As project manager I had to work closely with Civil and Structural Engineering consultants to provide a building that met all site constraints (i.e. groundwater issues and site layout limitations) as well as understand all structural components to ensure a cohesive building was being produced. I had to incorporate all of the design consultants' suggestions and requirements including building height limitations, building height in relation to concrete thickness, increased roof nailing requirements for foregoing a braced frame, and power pole relocation. For example, I reviewed the entire Civil Engineering design and recommended a rotation of the building orientation on the site to minimize export quantities. I also reviewed the entire structural design and worked with the Structural Engineer to make sure that the building was square enough to not require a braced frame and instead be able to mitigate the seismic forces in the diaphragm nailing and concrete shear walls. Working with the engineering consultants, I was able to receive all entitlements for the building from all pertinent parties including City of Reno, NV Energy, TMWA, and NDOT.

WORK EXPERIENCE

Devcon Construction, INC Nevada (United States) Project Engineer October 2023–January 2024

Verified by Jake Wolf jwolf@devcon-const.com Experience Summary Full-Time Engineering: 3 months Post EAC degree: 3 months Experience under licensed engineer: None

TASKS

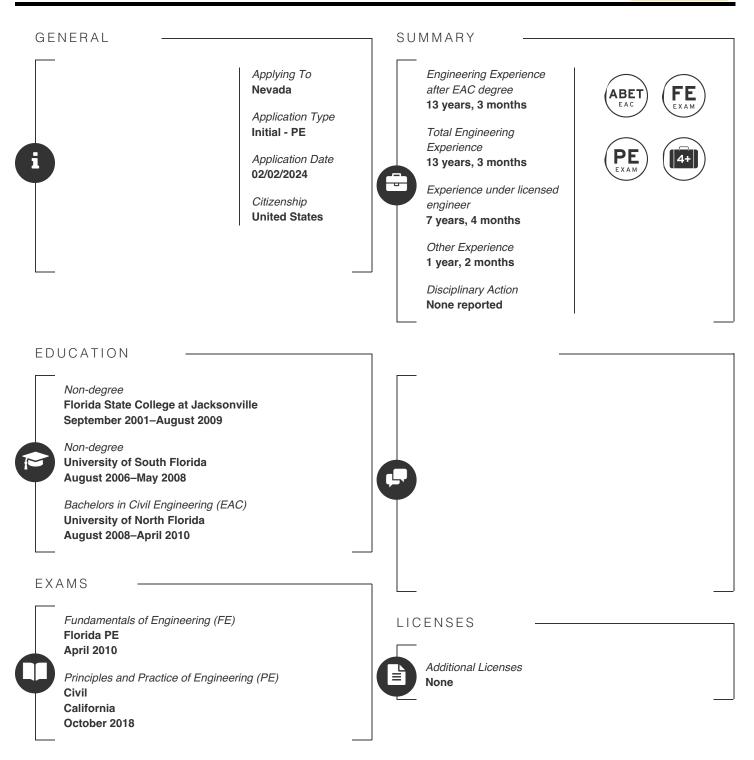
As a Project Engineer at Devcon Construction, INC., I play a crucial role in the successful execution of construction projects. I have to have a comprehensive understanding of all engineering elements required for each project. Understanding the engineering consultants' requirements and provided solutions allows me to use my best engineering judgement to recommend or not recommend different aspects of each project.

I am able to tap into my specialized engineering knowledge from school and previous work experience to ensure that all my construction projects provide an innovative design that includes redundancy, life safety considerations, cost, and comprehensiveness.

REPRESENTATIVE PROJECTS

75 Italy [Reno, NV], Concrete Tilt Up Warehouse with Panelized Roof System, 10/2023-1/2024; As project engineer of this +/-83,000 sf warehouse I have had to work closely with Civil and Structural Engineering consultants to provide a building that meets all needs of the client while is sustainable and permittable from a design perspective. I had to gather plans from all design disciplines and review every single detail to ensure that the project is complete. This requires me to use my engineering judgement every step of the way. I have provided alternatives to the engineering design components using my experience and knowledge that I have accrued over the years. One of the examples of this was understanding that a fire command center could be located within a building if proper fire rated walls are included (2-hr rating) and proper access is provided. This was not something shown by the Civil Engineer and using my engineering judgement allowed the client to save money.

All work experience reviewed by two licensed professionals



All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Blockbuster Video Florida (United States) Assistant Manager June 2000–May 2001 Verified by

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

DESCRIPTION

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

United States Marine Corps South Carolina (United States) Recruit May 2001—August 2001 Verified by

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

- DESCRIPTION

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Golder Associates Florida (United States) Junior Engineer July 2010–October 2010 Verified by Jesse C Brown jcbrown@golder.com Experience Summary Full-Time Engineering: 3 months Post EAC degree: 3 months Experience under licensed engineer: 3 months

TASKS

My primary duties were to conduct field investigations for soil and groundwater at contaminated sites. I collected soil and water samples for field and laboratory testing. I prepared field reports and analyzed lab data.

REPRESENTATIVE PROJECTS

Environmental Monitoring West Nassau Landfill August 2010

I measured air quality parameters at methane ground well and leachate risers. I searched for methane exceedances near noncompliant ground wells using flame ionization detection.

Environmental Monitoring Progress Energy

September 2010

I worked with a geologist and drill crew to evaluate the extent of petroleum contamination at a power generating plant. I performed drilling investigations, ground water and soil collections and field tests to evaluate petroleum contamination. I performed single-well aquifer performance tests on monitoring wells to estimate the hydraulic conductivity of a shallow aquifer.

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Golder Associates Alberta (Canada) Junior Engineer October 2010–May 2013

Verified by Darcy Ross Cowan darcy.cowan@amico.build Experience Summary Full-Time Engineering: 2 years, 7 months Post EAC degree: 2 years, 7 months Experience under licensed engineer: None

TASKS

From October 2010 to April 2011, I worked in a geotechnical engineering role on a large project team designing tailings dams. I evaluated geotechnical data from borehole records, laboratory tests and in situ testing then performed calculations and statistical analyses for soil characterization. I performed slope stability and settlement analyses of tailings dams, haul roads and large excavation slopes. I designed haul road pavement with granular materials using the strain-based method.

From May 2011 to May 2013, I primarily functioned in a project management role for mining dam designs in the Alberta oil sands. Approximately 20% of my time was dedicated to geotechnical engineering calculations and analyses. I prepared project plans, status reports and proposals. I co-chaired a tailings facility stewardship group for short-term and long-term planning of design and management. I coordinated field staff and integrated various technical disciplines within the design team.

REPRESENTATIVE PROJECTS

Tailings Dam Design Total Joslyn North Mine, geotechnical engineering Oct 2010 to Apr 2011

I worked on a large project team with multiple consultants designing tailings dams and mine infrastructure for an oil sands mine in northern Alberta. I conducted statistical analysis of geotechnical data for anisotropic clays and glacial tills and recommended geotechnical parameters for use in design analyses. I performed 2D slope stability analyses for tailings dams, haul roads and excavations and 3D settlement analyses for tailings dams. I designed mine haul roads using the strain-based method and KENPAVE software. I wrote and reviewed design memorandums and prepared technical presentations for the client.

Tailings Dam Design

Kearl East ETA Dyke Design, project management/geotechnical engineering May 2011 to May 2013

I worked on a project team designing a tailings management facility expansion consisting of an 8 km long tailings dam and tailings deposition strategies. I wrote and presented weekly and monthly project progress reports and developed project controls tools using the Earned Value method. I conducted statistical analysis of geotechnical data and recommended geotechnical parameters for use in design analyses. I conducted a site inspection of the existing tailings dam and performed 3D settlement analyses for the new tailings dam.

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

SLR Consulting (Canada) Ltd Ontario (Canada) Associate Engineer June 2013–October 2016 Verified by Darcy Ross Cowan darcy.cowan@amico.build Experience Summary Full-Time Engineering: 3 years, 4 months Post EAC degree: 3 years, 4 months Experience under licensed engineer: None

TASKS

For this period of time, I worked as an associate engineer. I worked with the SLR mining groups in the United States and Canada on projects across North America. I conducted geotechnical characterization of in situ soils of dam foundations and soil and rock dam fill materials from borrow sources. For new and existing dams, I conducted 2D slopes stability analyses using Slope/W limit equilibrium software, 2D seepage analyses using Seep/W and 2D settlement analyses using Sigma/W. I prepared engineering drawings, calculation packages and design reports for tailings dams, sediment control structures and water management ponds from the basic engineering phase through detailed design and construction.

REPRESENTATIVE PROJECTS

Dam Design

Rainy River Gold Project, geotechnical engineering 2013 to 2016

I was the owner's representative for geotechnical engineering on a gold mine project in northern Ontario, Canada. I reviewed designs for a tailings dam, mine waste stockpiles, water management dams, surface drainage channels and mine site roads. I recommended changes to improve the designs or address deficiencies. I prepared construction execution plans including calculating material quantities, designing laydown areas and evaluating potential aggregate sources.

Mine Closure Cost Estimate

Parsons Creek Aggregate, construction cost estimating

2014

Parsons Creek Aggregate prepares annual closure cost estimate updates based on the mining activities from the prior year and changes to the mining plan. I reviewed the areas impacted by mining over the previous year and changes to the mining plan to calculate the amount of area to be recovered and define the recovery method. I calculated the construction cost by selecting the construction equipment, using the Caterpillar Handbook and material quantities to calculate the hours each equipment was needed and applying hourly rates for each equipment. I wrote the closure cost estimate report for submission to the provincial regulator.

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

SLR International Corporation California (United States) Senior Engineer November 2016–October 2020 Verified by Tarik Hadj-Hamou thadj-hamou@srk.com Experience Summary Full-Time Engineering: 3 years, 11 months Post EAC degree: 3 years, 11 months Experience under licensed engineer: 3 years, 11 months

TASKS

From November 2016 to January 2018, I worked as an associate engineer. I worked with the SLR mining groups in the United States and Canada on projects across North America. For new and existing dams, I conducted 2D slopes stability analyses using Slope/W limit equilibrium software, 2D seepage analyses using Seep/W and 2D settlement analyses using Sigma/W. I prepared engineering drawings, calculation packages and design reports for tailings dams, sediment control structures and water management ponds from the basic engineering phase through detailed design and construction.

From January 2018 to October 2020, I worked as a senior engineer. In addition to projects in North America, I worked on projects in Brazil. My main responsibilities are to review geotechnical engineering calculations, analyses and drawings for mining dams that were prepared by other engineers. I evaluate designs for compliance with state, federal and international regulations and to meet engineering best practices. I recommend design changes or additional analyses to address deficiencies and make improvements, based on my regulations and my engineering experience. I evaluate dam monitoring instrumentation to identify changing conditions, trends and evaluate dam safety risks. I prepare mine closure cost estimates, including calculating material quantities, unit costs and construction equipment productivity using first principles

-REPRESENTATIVE PROJECTS

Dam Design

Magino Gold Project, geotechnical engineering

2016 to 2019

I worked on a team designing the tailings management facility, water management facility and surface water management structures for the Magino Gold project in northern Ontario, Canada. I conducted slope stability and seepage analyses for the tailings dam and water management dam. For the analyses, I developed the 2D models and the geotechnical parameters of friction angle, cohesion and permeability for the dam foundation and dam fill materials based on site investigation data, laboratory data and reference materials. I designed the dams based on national and provincial dam design criteria and engineering best practices. I calculated the seepage quantities using 2D transient analysis and reference values for geomembrane lined tailings facilities for the hydrotechnical engineers to design the seepage collection system.

Mine Closure Plan and Cost Estimate

Cote Gold Project, construction cost estimating 2017

I worked on a team preparing the closure plan and closure cost estimate for a proposed gold project in northern Ontario, Canada. I prepared closure development figures and calculated material quantities for the closure plan. I calculated the closure cost estimate changes based on the closure plan and construction execution plan updates.

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

SLR International Corporation California (United States) Senior Engineer November 2020–January 2024 Verified by Stephen Dietzko sdietzko@slrconsulting.com Experience Summary Full-Time Engineering: 3 years, 2 months Post EAC degree: 3 years, 2 months Experience under licensed engineer: 3 years, 2 months

TASKS

From November 2020 to present, I have been working as a senior engineer. I have worked on projects in Brazil, Canada and the United States. My main responsibilities are to review geotechnical engineering calculations, analyses and drawings for mining dams. I evaluate designs for compliance with state, federal and international regulations and to meet engineering best practices. I recommend design changes or additional analyses to address deficiencies and make improvements, based on my engineering experience. I evaluate dam monitoring instrumentation to identify changing conditions, trends and evaluate dam safety risks. I prepare mine closure cost estimates, including calculating material quantities, unit costs and construction equipment productivity using first principles and cost data references such as RSMeans and the Equipment Rental Blue Book.

REPRESENTATIVE PROJECTS

Dam Safety Audits

Vale Dam Audit Project, geotechnical engineering 2019 to present

I am part of a team conducting dam safety audits on behalf of the state prosecutor (MPMG) in Minas Gerais, Brazil. The audit entails site inspections, data collection and independent assessment of dam safety for 43 tailings, sediment and water management dams owned by Vale S.A. I conduct site inspections to evaluate dam conditions, have discussions with Vale S.A. to gather information on dam operations, and prepare reports with audit findings for MPMG and regulatory agencies based on Brazilian regulations and international best practices. I evaluate geotechnical characterization, dam designs, construction documentation, dam closure plans and risks to public safety. Based on my reviews, I recommend design changes and additional engineering analyses to address risks and deficiencies. I review geotechnical parameter selection, slope stability and seepage analyses conducted by dam designers, dam closure designers and for independent calculations and analyses conducted by SLR. I coordinate audit activities between the technical disciplines to ensure audits are conducted holistically, which requires review of hydrotechnical analyses and integration with the overall dam safety evaluations.

Mine Closure Plan and Cost Estimate Atlas Salt, construction cost estimating

2023

I prepared the closure cost estimate for a proposed salt mine in eastern Canada. I calculated material quantities based on the closure design and . I calculated the closure cost estimate changes using first principles, local labor and equipment costs and my knowledge of construction execution. I wrote a summary report of the cost estimate for inclusion in the closure plan.

CAROLINE ELLIOTT (22-589-66) All work experience reviewed by two licensed professionals

GENERAL —		SUMMARY	
1	Applying To Nevada Application Type Initial - PE Application Date 02/01/2024 Citizenship United States	Engineering Experience after EAC degree Total Engineering Experience 4 years, 3 months Experience under licensed engineer 2 years, 7 months Disciplinary Action None reported	E E E X AM
EDUCATION Bachelors in Natural Re University of Canterbu February 2014–April 2	iry	Degree was evaluated by NCEES and was equivalent to Education Standarddeficie General Education. The University of Can Washington Accord degree.	ent in 4 hours of
Fundamentals of Engine California April 2022	əəring (FE)		
Principles and Practice Civil Nevada December 2023	of Engineering (PE)	LICENSES	
		Additional Licenses None	_

WORK EXPERIENCE

GHD Limited, New Zealand Auckland (New Zealand) Graduate Water Engineer April 2018–December 2019 Verified by Anthony Thomas Miller Tony.Miller@ghd.com Experience Summary Full-Time Engineering: 1 year, 8 months Experience under licensed engineer: None

— TASKS

The Graduate program at GHD Limited is a two-year dedicated programme for college graduates that teaches them fundamental engineering design and communication skills, and exposes them to a variety of professional engineering experiences under the guidance of senior engineering mentors. I worked within the Northern Water Group in New Zealand under this programme, focusing on Stormwater design. I also worked closely with the Company's team of GIS specialists, coming one of their top engineering GIS users in the country.

The tasks and duties that I was responsible for included catchment delineation by hand based on contour maps as well as through the use of GIS analysis tools. I generated design storm hyetographs, hydrographs, and water quality volumes for these catchments. I also designed gravity pipelines and curb or grate inlets, drop manholes, and sumps. I designed many open channels in excel and using hydraulic modelling software. Often, I would model these components in HECHMS and/or XPSWMM to design detention basins that would attenuate post development flows. These tasks were learned across several different agencies with varying design guidelines.

I was brought onto different water teams across the country to help write master plan reports, as this skill integrated well with my GIS skills. I was able to apply my skills to wastewater master planning, and was taught pressure pipeline design skills as well so that I could help with master plans for water system applications. Due to my interest in groundwater studies, I also began learning from the hydrogeological engineers and environmental planners about well designs, assisting with CAD drafting and GIS mapping. By the end of my graduate program, and due to the wide variety of skills I developed, I was able to assist with preparing construction estimates, bid documents, and strategic plans too.

REPRESENTATIVE PROJECTS

Okahu Bay Stormwater Separation - I assisted my senior engineer with field visits to over 220 properties in Auckland's Okahu Bay. I sketched existing storm and sewer drainage conditions for each property, compared them to as-built records, and transcribed field notes observed by my senior engineer, to determine different classifications of storm collection. I then logged all the data into excel and formed a GIS database that was used for project planning for storm-sewer separation projects. I coordinated with our drafting team, providing them corrections and inputting their data into my GIS model. I also worked with our modeler to import/export the proposed storm and sewer networks from GIS into CAD. I was then tasked with using the GIS database and project classifications to prepare bid documents and construction cost estimates.

Nandi Airfield Paving - I designed stormwater drainage for a tarmac expansion programme designated for Nandi Airfield, Fiji. For the design, I performed a catchment delineation for the existing and expanded areas to determine peak flow runoff values. I also worked with my senior engineer on the hydraulic design of slot drain inlets and subsurface pipelines for the project. We used CAD to design and draft the proposed stormwater network.

Palmerston North City Council Stormwater Framework – I worked closely with the Council and our senior engineer to plan and write a stormwater guideline document. For this project, I read and recorded themes for various regulatory, design and technical stormwater documents from different New Zealand cities and regions. Using the common themes and working with the Council's planning zones, I helped write a working document for the Council to build their own new Stormwater Management Framework that could be published for future use by developers.

Drury West Wastewater Masterplan - I was tasked with delineating regional catchments and sub-catchments in GIS for Drury West and Opaheke, areas earmarked by Auckland City for future growth. I overlaid the catchments with a digital terrain model (DTM) to map out proposed gravity sewer transmission mains and pressurized force mains, and potential lift station locations. I then extracted longitudinal sections from the DTM based on the planned main alignments to determine valve locations and pipe lengths. Using City planning zones, I then estimated sewer demands to size the pipes and input the data into high level budgetary cost estimates. I produced maps and estimates for the proposed projects based on this work and helped write a masterplan report.

Woodhill Forest Water System – I worked from an existing conditions investigation report to form an options assessment to address various deficiencies identified for Woodhill Forest's private water system. This involved concept designs for new pipelines, replacement pipelines, and treatment, based on three different growth projections. For this work, I interpreted results

02/02/2024

from various hydrogeological tests, water quality samples, and on-site investigations, and compared them to diurnal and seasonal demands for various growth scenarios. I was also provided the opportunity to present our options to the client and form a PowerPoint presentation.

Christchurch City Well Head Security Plan – I drafted detailed designs for pipe fittings and appurtenances for retrofitting new wellheads to existing groundwater wells. I took design comments from my senior engineers and implemented them to improve and correct my designs. This was done for 12 different well heads across the City. I wrote a design report for each of the upgraded well heads that I worked on.

Western Corridor Wastewater Masterplan - Caroline performed catchment analysis over 2,640 hectares of Tauranga's Western Corridor, an area earmarked for accelerated development, to develop a wastewater transmission masterplan. This involved developing concept alignments and hydraulic design for 37,000 meters of gravity sewer mains and force mains, as well as identifying pump station locations and network alternatives. She also produced a series of maps and sewer profiles in GIS to communicate phasing plans to the client.

State Highway 2 Upgrades - I developed a 1D hydraulic model of a treatment swale for to 5,000 meters of road-widening for State Highway 2. The model required input of many cofferdams, including orifice outlets and weirs. Meticulous refinement of the design was required to treat the water quality volume for the highway while reducing potential for stagnation of water.

WORK EXPERIENCE

Lumos and Associates, Inc. Nevada (United States) Senior Project Coordinator June 2021 – January 2024 Verified by Justin Michael Sand jsand@lumosinc.com Experience Summary Full-Time Engineering: 2 years, 7 months Experience under licensed engineer: 2 years, 7 months

— TASKS

As a Project Designer at Lumos and Associates (June 2021 - June 2022), my primary responsibilities involved supporting senior designers, Professional Engineers, and Project Managers in design and drafting tasks. I utilized AutoCAD and GIS for construction plan production, mainly for private developments. My skills progressed from AutoCAD drafting to Civil 3D design, contributing to various aspects of development, including utilities design, site grading, site planning, drainage design and septic systems design. After six months, I was promoted to Senior Project Designer, where I continued similar tasks but with increased independence. This role involved delegating some tasks to junior staff, coordinating with sub-contracted engineering disciplines, making design decisions, and taking initiative in project planning.

In July 2022, I transitioned to the role of Senior/Project Coordinator, where I was able to focus on my interests in water engineering. Responsibilities included catchment analysis, storm and sewer modelling, GIS analysis, site grading, waterline design, treatment systems, and report writing. I developed runoff spreadsheets, reviewed calculations and designs, and ventured into 2D modelling using HEC-RAS for flood mapping and dam breach analyses. Additionally, I directed junior staff in producing construction plan sets in CAD. This role also involved direct coordination with clients, leading design meetings, and presenting at conferences such as the American Public Works Association Nevada conference. Notably, I showcased hydraulic designs I worked on for a dam rehabilitation project. Furthermore, I contributed to Lumos' strategic planning, participating in a proposal interview for the State of Nevada and attending client networking functions on behalf of the company. Currently in this role, my focus remains on advancing water resources engineering initiatives and fostering client relationships.

-REPRESENTATIVE PROJECTS

Tahoe Vista Rule 20: Dry-Utility Joint Trench Design

For this project, I designed a 2000-foot dry-utility joint trench along a State Highway in Tahoe Vista, Lake Tahoe. Collaborating closely with engineers from various disciplines, I designed several trench configurations in both horizontal and vertical planes to accommodate electrical, communications, and fiber conduits, while accounting for potential groundwater encounters. I used GIS to intersect a buffer zone for trench alignment with parcel data, extracting property notification lists for permitting. Additionally, I designed a horizontal directional drilling borehole alignment, sending and receiving pits, and HDPE pipeline casing for trenchless installation under a stream. I drafted all design and planning components in CAD to produce a construction plan set.

3708 Lake Tahoe Boulevard: Civil Design for Private Development

I undertook design of civil components for a 14-unit private development in South Lake Tahoe. This included site layout and grading using Civil 3D, which required me to coordinate closely with the architect and developer/owner. I also designed site utilities with Civil 3D Pipe Networks, including private sewer and water services that connected to public mains within a State highway. I calculated site runoff to then design for attenuation via infiltration areas and a bio-retention basin. All designs were translated into a construction plan set in CAD, with my involvement extending to permitting coordination with transportation agency representatives.

Trinity Rest Area Upgrade: Remote Nevada Rest Area Water Supply System

My involvement with this project included design of the water supply system for a remotely located rest area in the desert of Nevada. I performed an alternatives analysis and wrote a report to assess the supply options that would provide the best costbenefit to NDOT. This included a study of average day and peak hour demands, detailed investigations into water quality at the available resources, routing of alternative water sources, coordination with vendors for various treatment options, as well as a cost analysis and assessment of operations and maintenance requirements. I then progressed the selected alternative to a detailed design that included a treatment building process layout and floor plan for the various treatment components. I designed backwash basins for the system and incorporated ancillary process equipment into the system design.

Lovelock Correctional Center Wastewater Treatment Plant: Upgrade Assessment

I prepared a Preliminary Engineering Report that assessed different alternatives for upgrading Lovelock Correctional Center's four (4) Million Gallon wastewater treatment system. This included analysis of discharge patterns and microbial kinetics based on Data Monitoring Reports from NDEP. It required me to perform a cost-benefit analysis, concept level design, and operations and maintenance assessment for a lagoon system, sequencing batch reactor plant, and moving bed biofilm reactor plant. I progressed the selected design, a lagoon system, to detailed design. This included site grading in Civil 3D and design of the process pipes for the lagoons. I also designed a replacement headworks system which required detailed drafting and integration of various screening equipment. I designed the replacement lift station, including all appurtenances and valves, for a new force main. Truckee-Carson Irrigation District System Improvement Plan: Water Infrastructure Upgrade

My work involved analyzing over 390 miles of open distribution canals and thousands of delivery structures for the Truckee-Carson Irrigation District. This data informed the design of gravity pipelines at a conceptual level for proposed replacements. A conceptual hydraulic model was created, and canal data was exported to HEC-RAS for further analysis. Complex GIS data was summarized into tables for use in lining or piping options for canal upgrades.

Marlette Dam Rehabilitation: Hydraulic Modeling and Design

I used a 1D model to simulate routing of an 8,500 cubic feet per second probable maximum flood event through Marlette Dam's 12,000 acre-feet reservoir, primary outlet pipes, and spillway. I used a 2D model to simulate the Dam's emergency spillway overflow weir to determine its capacity and downstream flow path for conveyance of emergency discharge. I designed rip-rap for flow energy dissipation at the Dam outlets using several equations and comparing calculated sensitivities. I used federal guidelines documentation to calculate potential wave run-up against the Dam crest to ensure there is adequate freeboard to accommodate it. I wrote a design report and drafted a construction plan set in CAD for the proposed upgrades.

CAROLINE ELLIOTT (22-589-66) All work experience reviewed by two licensed professionals

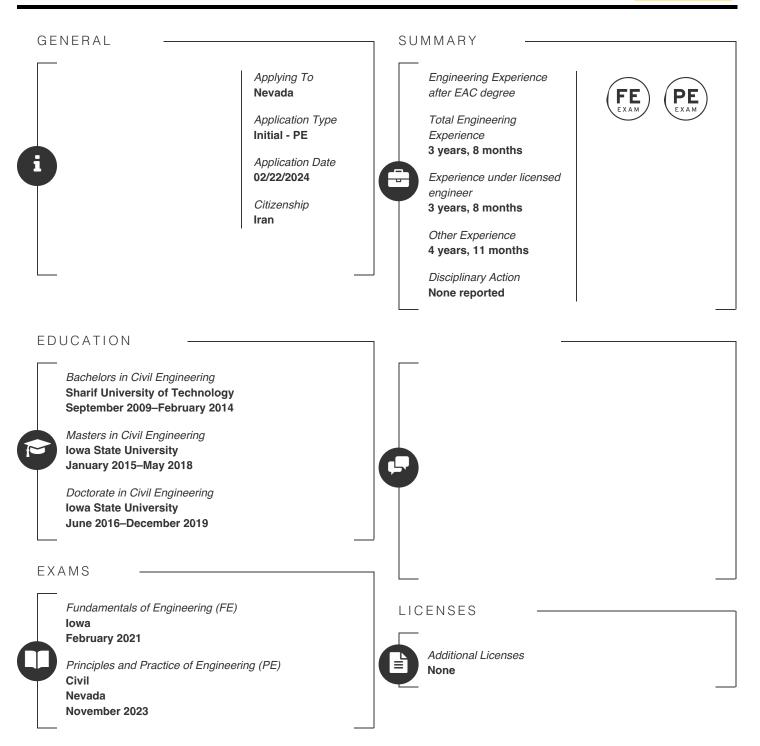
ADDITIONAL INFORMATION

Θ -TIME GAPS

Start Date	End Date	Explanation
January 2020	May 2021	Began traveling in January 2020, cut short by Covid-19 in April. Unemployed from April to December 2020. Worked as a ski instructor in Lake Tahoe from December 2020 to May 2021 before joining my current employer.

PARNIAN GHASEMI (20-663-55)

All work experience reviewed by two licensed professionals



WORK EXPERIENCE

Iowa State University Iowa (United States) Graduate Research Assistant January 2015–December 2019 Verified by Vernon R Schaefer vern@iastate.edu Experience Summary Full-Time Other: 4 years, 11 months Experience under licensed surveyor: None

- TASKS

As a Graduate Research Assistant at Iowa State University from 2015 to 2019 while working on my Masters and Doctoral degree, I undertook diverse responsibilities centered around advanced methodologies in pavement engineering. I worked on several government/private agency sponsored projects focused on pavement design, geotechnical aspects of pavement design, and pavement performance evaluation. For the design projects I collected field data, performed laboratory tests, analyzed the geotechnical and pavement engineering data and implement them along with the appropriate design methodologies (AASHTO 93, Pavement ME, Finite Element Analysis) in the design process. For projects centered on pavement performance evaluation I performed laboratory and field tests, analyzed the data and developed performance predictive models for the pavement structures.

REPRESENTATIVE PROJECTS

During my time at Iowa State University I have worked on several pavement design, pavement condition evaluation, and pavement performance prediction projects which I published my work in prestigious journals and conferences. Here is a recap of the aforementioned projects:

-Field Investigation of Stabilized Full Depth Reclamation (SFDR)- Sponsored by Minnesota DOT: In this project I investigated SFDR pavement sections in the State of Minnesota via laboratory testing which I performed in Iowa State University Asphalt lab. I analyzed the performance test results and provided design and maintenance recommendation to the DOT in a comprehensive report.

- Performance Modeling and Prediction, and Design Optimization of Hot Mix Asphalt in the State of Iowa-Sponsored by Iowa DOT: in this project I performed various laboratory performance testing on asphalt samples which were collected from different Interstate routes in the State of Iowa, after analyzing the performance data and material characteristics, I developed a predictive model for the performance of pavements in the state of Iowa and suggested an optimized design for a longer lasting pavement. The results are published and presented in multiple prestigious journals and conferences.

-Implementing an Inverse Optimization Approach for Evaluating Gantry Crane-way Pavement Performance sponsored by Union Pacific Railroad: In this project I implemented finite element analysis and optimization algorithm to evaluate pavement performance obtained from field measurements of pavement strain due to the crane load. I developed a model to assess the performance of concrete pavement and provided the findings in a comprehensive pavement evaluation and design report to be used by the agency.

– Performance Modeling and Prediction, and Design Optimization of Hot Mix Asphalt in the State of Minnesota-Sponsored by Mn DOT: In this study, I conducted diverse laboratory performance tests on asphalt samples sourced from various Interstate routes in Minnesota. Following the analysis of performance data and material characteristics, I created a predictive model for pavement performance in Iowa. Additionally, I proposed an optimized design aimed at enhancing pavement durability. The findings have been disseminated through publication in esteemed journals and presentations at multiple conferences.

WORK EXPERIENCE

Iowa State University Iowa (United States) Postdoctoral Research Associate March 2020—November 2020 Verified by Vernon Ray Schaefer vern@iastate.edu Experience Summary Full-Time Engineering: 8 months Experience under licensed engineer: 8 months

-TASKS

As a Postdoctoral Research Associate at Iowa State University I undertook diverse responsibilities centered around advanced methodologies in asphalt rheology. I performed laboratory tests, analyzed the pavement engineering data and implement them along with the appropriate design methodologies in the design process.

REPRESENTATIVE PROJECTS

-Developing a Machine Learning-based Framework for Identification of Bio-modified Asphalt Binder Fingerprints Based on Ion Mobility Mass Spectrometry (IMMS) and Small Angle X-ray Scattering (SAXS): In this project I performed laboratory testing on several modified and un-modified asphalt binders and separated their components into the main fractions and studies the molecular structures of each fractions. I analyzed the laboratory test results and using the obtained data I developed a framework for mapping asphalt binder molecular structure and its chemical composition and identified the optimum dosage of the bio-polymer additives for binder modification through statistical analysis and data science. I presented the results of my work at the Petersen Asphalt Research Conference

PARNIAN GHASEMI (20-663-55)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Sunland Asphalt/Solterra Materials Arizona (United States) Quality Assurance Supervisor January 2021–November 2022 Verified by Sathish Banda Sbanda@solterramaterials.com Experience Summary Full-Time Engineering: 1 year, 10 months Experience under licensed engineer: 1 year, 10 months

-TASKS

- -Building the Quality Assurance Laboratory from the scratch
- Performing daily Quality Control and Quality Assurance tests to ensure the product
- quality and creating daily QA/QC reports
- Managing the Quality Assurance Personnel
- Creating and managing Quality Control and Quality Assurance data bases
- Developing Machine Learning-based product performance predicting models
- Developing predictive time series using Python for pricing and demand forecast

REPRESENTATIVE PROJECTS

During my tenure as the Quality Assurance Supervisor at Sunland Asphalt/Solterra Materials from April 2022 to November 2022, I undertook a multifaceted role that involved establishing and overseeing the Quality Assurance Laboratory for asphalt mix. This encompassed constructing the laboratory from the ground up, demonstrating my capability in infrastructure development. On a daily basis, I conducted Quality Control and Quality Assurance tests and analyzed test results to uphold and enhance product quality, generating comprehensive daily QA/QC reports. My role extended to database management, where I created and maintained databases for Quality Control and Quality Assurance purposes. Beyond traditional approaches, I leveraged my expertise in data science by developing Machine Learning-based models to predict product performance, showcasing a forward-thinking approach to quality assurance. Additionally, I implemented predictive time series using Python for pricing and demand forecasts, contributing to strategic decision-making within the organization.

PARNIAN GHASEMI (20-663-55)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Kiewit Infrastructure Engineering Colorado (United States) Pavement Engineer November 2022–January 2024 Verified by Scot Mathew Schwandt scot.schwandt@kiewit.com Experience Summary Full-Time Engineering: 1 year, 2 months Experience under licensed engineer: 1 year, 2 months

- TASKS

- Designing optimal pavement sections for design-build projects
- Developing alternative technical concepts for pursuit projects
- Developing material and pavement design reports
- Implementing construction specifications for design build projects
- Providing recommendations for new pavement construction and rehabilitation projects

-REPRESENTATIVE PROJECTS

Since November 2022, I have been contributing to Kiewit Infrastructure Engineering as a Pavement Engineer, specializing in the design aspects of the following projects:

- Carolina Crossroads, South Caroline (Nov 2022-September 2023): my primary responsibilities in this project included evaluating client recommended pavement design section for the permanent pavement, crafting optimal pavement design for temporary pavement, developing alternative technical ,concepts, analyzing geotechnical data (soil strength parameter) to be used in pavement design, analyzing pavement field data (Falling Weight Deflectometer, Ground Penetrating Radar, Pavement Roughness) and evaluating the existing pavement condition for temporary trafficking and rehabilitation recommendations, implementing empirical pavement design methodology (AASHTO'93) and mechanistic-empirical pavement design methodology, developing a comprehensive pavement design report addressing structural and material design recommendation for new pavement construction as well as pavement rehabilitation.

- Southeast Connector Segment 1 North, Texas (June 2023- Present): My primary responsibility in this project included analyzing geotechnical data, pavement condition field test data, and implement them in providing a continuously reinforced concrete pavement (CRCP) design for interstate mainline, frontage roads, cross streets using proper pavement design methodology. Additionally, providing an optimized temporary pavement design and pavement rehabilitation design were also important parts of my responsibilities for this project.

-Eagle LNG, Jacksonville, FL (Jan 2023-March 2023): my main responsibility was providing pavement design recommendation for gravel road, asphalt concrete truck loop area, and concrete pavement containment area for the LNG facility. I analyzed the traffic and geotechnical data and used mechanistic empirical pavement design methodology as well as finite element analysis and designed the pavement sections.

-Bher Salton See Infrastructure, San Diego, CA (March 2023-October 2023): For this infrastructure facility, I designed asphalt pavement roads as well as gravel roads using site specific traffic information and subgrade soil information. I analyzed Falling Weight Deflectometer, and Ground Penetrating Radar field test results and implemented those in pavement design.

PARNIAN GHASEMI (20-663-55) All work experience reviewed by two licensed professionals

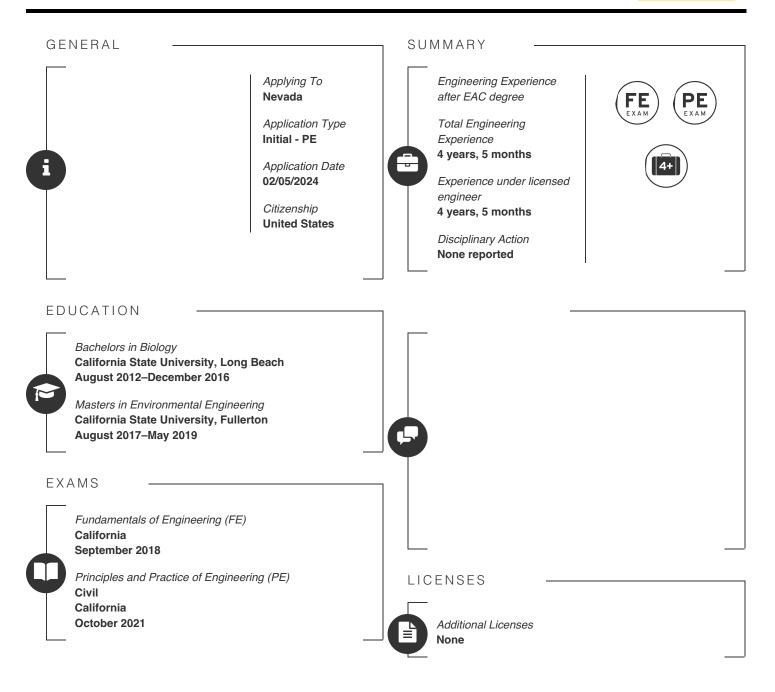
ADDITIONAL INFORMATION

0 -TIME GAPS

Start Date	End Date	Explanation
March 2014	December 2014	After graduating with B.S. in Civil Engineering I applied for Graduate Schools in the US, and between March 2014 and December 2014 I was waiting for my pending student F-1 visa to be issued.

AMEEN TOHMEH (19-481-97)

All work experience reviewed by two licensed professionals



WORK EXPERIENCE

Water Works Engineers California (United States) Staff Engineer August 2019–August 2022 Verified by Andrew John Borgic andrewb@wwengineers.com Experience Summary Full-Time Engineering: 3 years Experience under licensed engineer: 3 years

- TASKS

My experience at Water Works Engineers included various engineering services including but not limited to the planning, design, and management of water distribution and treatment projects. I prepared drawings, standard details, and specifications at varying levels of the design stage (30%, 60%, 100%) for water infrastructure projects. Additionally, I performed chemical feed calculations, such as Liquid Oxygen feed calculations, and treatment technology recommendations for groundwater treatment projects. I also sized different treatment processes in these groundwater treatment projects. Furthermore, at Water Works Engineers, I specialized in Program Management, specifically for disaster recovery. I prepared several RFP packages on behalf of the client. This included preparing design packages, standard details, and specifications for several projects under the overall disaster recovery program. I also created new specifications for Advanced Metering Infrastructure technology for the disaster recovery program. In addition, I developed a multi-year long water quality monitoring program aimed at monitoring and ensuring previously contaminated water systems remained clear of contaminants.

-REPRESENTATIVE PROJECTS

Cal Water - Palos Verdes Peninsula Water Reliability Project – (2019-2020) – Palos Verdes, CA, USA o I performed construction management and quality assurance services for Cal Water's largest construction project to date, the Palos Verdes Peninsula Water Reliability Project. The Palos Verdes Peninsula Water Reliability Project is a \$60M project which consists of the construction of approximately 7 miles of water main and a 7,200 GPM booster pump station to supply drinking water to the Peninsula's 90,000 residents. I also reviewed the project plans, specifications, standard details, and performed onsite inspections to ensure compliance with the design and applicable regulations. Additional duties I performed was writing daily reports and completing submittal reviews. I also coordinated and scheduled testing and inspections, as well as reviewed testing and inspection reports.

Paradise Irrigation District (PID) - Disaster Recovery Management Services - (2019-2022) – Paradise, CA, USA o I provided engineering services and support to Recovery Team efforts for the Town of Paradise following the unprecedented damaged resulting from the Camp Fire of 2018. I performed extensive water quality data analysis, as well as developed a longterm water quality monitoring program for the District. For several of the Program's construction management projects, I performed submittal & RFI reviews. Specifically, I provided construction management support to the Meter Installation and Service Lateral Replacement Phase 2 (MISLR) project, an \$18M project. For this project, I was responsible for reviewing submittals and RFIs, crew coordination, and data management. Additional duties that I performed included the preparation of standard details, specifications, and bid documents of the MISLR project and PID's advanced metering infrastructure (AMI) system.

City of Torrance - North Well Field Project Phase III Design Build Project - (2019-2020) – Torrance, CA, USA • The North Torrance Well Field project expanded the City's pumping and treatment capacity and was designed to enable additional groundwater extractions during a drought or emergency. I provide construction management services to the designbuild contractor which includes the design of three 3,000 GPM wells, a 2.5 MG prestressed concrete tank, chemical feed systems, and a 9,000 GPM booster pump station. I performed structural observations of the 2.5 MG prestressed concrete tank, recorded tank construction progress, and created daily reports.

WORK EXPERIENCE

Black & Veatch California (United States) Design Engineer September 2022–February 2024 Verified by Kevin Vaughan Reel reelk@bv.com Experience Summary Full-Time Engineering: 1 year, 5 months Experience under licensed engineer: 1 year, 5 months

- TASKS

My experience at Black & Veatch has included performing an extensive array of engineering services to clients across multiples states in the United States. I have performed preliminary design (30%) engineering for water conveyance projects, including an 84-inch diameter pipeline as well as a 120-inch diameter conveyance pipeline. Under the preliminary design, I was responsible and performed utility investigations along 6 miles of pipeline. Specifically, within this task, I coordinated ground penetrating radar investigations, as well as potholing activities. Additionally, I also provided feedback, created markups following these utility investigations, and prepared pothole plans. Furthermore, I prepared alignment refinements for the pipeline as well as assisted in the development of plan and profiles for this pipeline project. Additional services I have performed at Black & Veatch include constructability and design reviews for final design specifications and drawings for a water quality and resiliency project. This included a thorough review of the design specifications and drawings, as well as providing comments and analysis to the design team.

-REPRESENTATIVE PROJECTS

Metropolitan Water District of Southern California I Pure Water Southern California Conveyance Reach 1 Design Services; Carson, CA, USA I 2023-Present Lead Engineer.

Serving as a Lead Engineer on the Pipeline Design Team, my duties include pipeline design, trenchless design, field investigations, and hazardous materials conditions investigations. The Pure Water Southern California (Program) conveyance system will convey purified water from a new 150 million gallon per day (mgd) advanced water purification facility (AWPF) at the Los Angeles County Sanitation Districts' Joint Water Pollution Control Plant (JWPCP) in the city of Carson, over 40 miles, in a new 84-inch diameter backbone pipeline to as far north as the San Gabriel Canyon Spreading Grounds in the city of Azusa. Purified water would then be conveyed eastward through San Gabriel Valley Municipal Water District's existing Azusa Pipeline and/or a new pure water pipeline to the city of La Verne to connect with Metropolitan's existing water reatment and distribution facilities. Up to six pump stations would be required throughout the conveyance system. The purified water could be used to recharge regional groundwater basins through spreading facilities and injection wells, satisfy industrial demands that currently rely on imported water, and augment existing water supplies at two of Metropolitan's water treatment plants. Under the preliminary design for this project, I was responsible and performed utility investigations along 6 miles of pipeline. Specifically, within this task, I coordinated ground penetrating radar investigations, as well as potholing activities. Additionally, I also provided feedback, created markups following these utility investigations, and prepared pothole plans. Furthermore, I prepared alignment refinements for the pipeline as well as assisted in the development of plan and profiles for this pipeline project. I was also responsible for the preliminary selection of trenchless pipeline segments and associated launching/receiving pits.

Southern Nevada Water Authority | Horizon Lateral Program; Henderson, NV, USA | 2022-

2023

Design Engineer.

I served as a Design Engineer on the pipeline team providing design services for the system's pipelines. Black & Veatch Corporation was selected by the Southern Nevada Water Authority (SNWA) to perform preliminary and final design services for the Horizon Lateral Program, a \$2.6-billion-dollar water conveyance system that will improve overall system capacity, redundancy, reliability and strengthen water delivery service for its customers. The system is expected to convey potable water, up to 375 million gallons per day (MGD) and includes up to 36 miles of pipelines up to 120 inches in diameter and up to eight miles of tunneling through hard rock and soft ground. There also will be two large pumping stations, one or two small pumping stations, multiple rate of flow control stations (ROFCS), interconnections with an existing transmission lateral, and new reservoir. I performed several engineering services under the preliminary design of this project. Specifically, I analyzed and identified constructability risks associated with specific segments of the pipeline and incorporated these into a risk register. I also assisted in the preparation of the drawing package during pre-design, which included developing TOCs (included numbering and titling of the

drawing sets). I also performed coordination between the different design teams (varied by discipline) involved in this project in developing the drawings sets. I was also responsible for researching and developing equipment matrices and their accompanying white papers.

AMEEN TOHMEH (19-481-97) All work experience reviewed by two licensed professionals

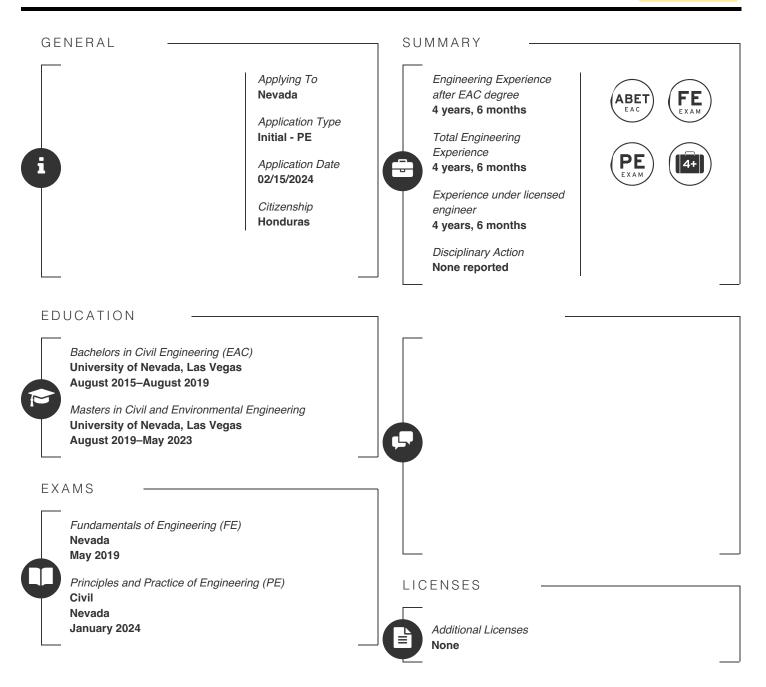
ADDITIONAL INFORMATION

0 -TIME GAPS

Start Date	End Date	Explanation
January 2017	July 2017	This period of time was between my Bachelor of Science Degree (graduation) and the start of my Master of Science program.

BANY UMANZOR (19-292-88)

All work experience reviewed by two licensed professionals



WORK EXPERIENCE

HDR Inc Nevada (United States) Water/Wastewater EIT August 2019—February 2024 Verified by Donald E Pelisssier Donald.Pelissier@hdrinc.com Experience Summary Full-Time Engineering: 4 years, 6 months Post EAC degree: 4 years, 6 months Experience under licensed engineer: 4 years, 6 months

TASKS

In this role I have been practicing as an Engineer Intern. My responsibilities vary from helping with design, performing calculations, and making decisions for water and wastewater projects. When helping with design, I am responsible for determining the hydraulics of a system, analyzing pipe design parameters, determining pipeline placement, and determining equipment selection. Often, I meet with the project manager or project engineer to discuss design constraints or changes that are needed to improve the project. Additionally, I am tasked with performing calculations for the projects I have been involved in. This varies from trust block calculations, thrust restraint calculations, pipe thickness calculations, air valve sizing calculations, hydraulics calculations, and pump sizing calculations. Lastly, I am entrusted to help with coordinating important decisions for projects by setting up important meetings with the project team in which we discuss different designs during a projects preliminary stage.

REPRESENTATIVE PROJECTS

CCWRD Master Plan Expansion: The Clark County Water Reclamation District tasked HDR with designing an expansion to their current wastewater treatment plan for full build-out. My role in this project was helping a professional engineer with designing different project components, including the bar screening and solids handling buildings, primary clarifier design, grit basin design, aeration basin design, odor control bed capacity design, and tertiary treatment (UV and Ozone) design. I performed clarifier calculations to determine the number of clarifiers and size needed for the increased flow. I was involved in designing the grit basin chambers where water from the bar screens would enter. This included an introduction to CFD modeling and equipment selection. Additionally, I was involved in designing and equipment selection of the diffused air system for the aeration basins and sludge calculations. Lastly, I was integral in helping obtain equipment data sheets from manufacturers for all phases of this project.

CCWRD Preliminary/Primary Design: A continuation of the CCWRD Master Plan Expansion. HDR was awarded the preliminary and primary design of the master plan. In this project I was involved with geotechnical design considerations for the screenings building, clarifiers, and grit basins. I attended design meetings with the geotechnical subcontractor where we discussed differential settling of the buildings and the effect it would have to the interconnecting pipes. I was involved with coordinating design calls, taking meeting notes, and drafting exhibits for different designs. Later in the project I was responsible for helping a licensed engineer design the odor control system, grit basin hydraulics, primary clarifiers, and sludge handling.

CCWRD Jones Sewer Project: The CCWRD Jones Sewer Project was intended to increase capacity of the Jones Boulevard and Sunset Road intersection in Las Vegas, Nevada. This project was my first sewer pipeline project in which I worked under a licensed engineer to design the horizontal and vertical pipe alignment, performed flow calculations to determine pipe sizing, coordinated with client and stakeholders for the placement of new sewer facilities, and determined best connections to existing sewer facilities.

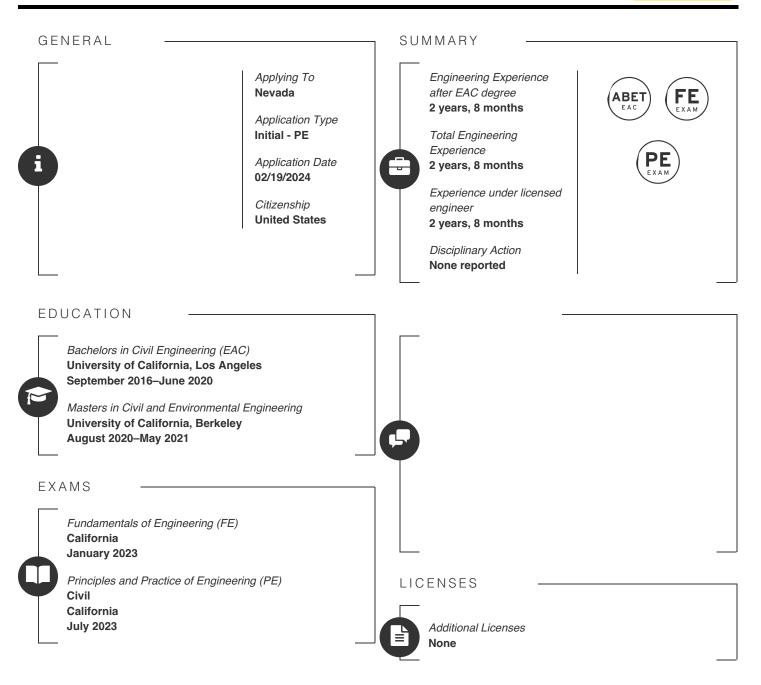
LVVWD Rome Pipelines Project: The Las Vegas Valley Water District tasked HDR with designing 3 different pipelines of varying diameter, A 36-inch pipeline, 42-inch pipeline, and a 48-inch pipeline. The purpose of this project was to provide water to the developing Centennial area in Las Vegas, Nevada. I was responsible for helping design the vertical and horizontal alignment for all pipes, determined the best connection to existing facilities, calculated pipe design components (air valves, thrust mitigation, and pipeline thickness), and facilitated communication with the client. In this project I learned a lot about designing potable water pipes.

SNWA Garnet Valley Water System: The Southern Nevada Water Authority tasked HDR with designing a water system for Northeast Las Vegas for an industrial area (APEX). I was involved early on in the interview phase of this project where we presented the client with different design alternatives. Once awarded, I became responsible for system hydraulics, pump station and pipeline calculations, preparing design reports for the client, and determining the best alignment for the pipeline. I built a model in InfoWater Pro, and AFT Fathom for this system.

SNWA Sloan and Lamb Improvements: HDR was tasked with increasing the capacity of SNWA's Sloan and Lamb pump stations. I was involved with gathering as-builts, building a hydraulic model to be used for transient analysis, and equipment procurement.

MICHAEL BAILEY UY (21-779-96)

All work experience reviewed by two licensed professionals



WORK EXPERIENCE

Keller North America California (United States) Engineer June 2021–February 2024 Verified by James Robert Gingery james.gingery@keller-na.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

- Develop idealized soil profiles from lab and field data for use in designing ground improvement systems.

- Calculate settlements and bearing capacities for spread footings and mat foundations, considering pre- and post- ground-improvement scenarios.

- Compute liquefaction-induced settlements based on SPT and CPT tests
- considering pre- and post- ground-improvement scenarios.

- Select the most appropriate ground improvement method for the project, considering subsurface conditions, site constraints, and budget, overseen by the project's registered professional engineer. For various systems like aggregate piers, stone columns, compaction grout, deep soil mixing, and deep dynamic compaction, determine optimal design parameters including: treatment depth, area replacement ratio, element spacing, grout take/mix design, etc. to fulfill project performance criteria.

- Prepare reports and design drawings for the respective governing bodies detailing the derivation of design properties; results of the respective engineering calculations; and QA/QC procedures for ensuring that the ground improvement system is constructed according to our design.

- Assist in preparing as-built reports to show extents of constructed work and prove that the prescribed performance criteria are met.

- Provide direction to field crews under the discretion of the ground improvement design engineer of record regarding nonconformance, remedial work, varying subsurface conditions compared to design.

- Provide recommendations regarding best practices to ensure the integrity of our work during utility excavations and other grading operations, including guidance on how to safely navigate around our ground improvement systems.

REPRESENTATIVE PROJECTS

777 Airport Road, Burlingame, California - Life Science - Deep Soil Mixing

- Develop idealized soil profiles based on laboratory testing and field boring logs for use in design.
- Select the most appropriate ground improvement method to achieve the settlement criteria.
- Determine the layout, treatment depth, area replacement ration, and 28-day compressive strength
- Calculate the post-construction static settlement of the building.
- Calculate the post-improvement Vs30 and post-improvement site class.
- Calculate the geotechnical bearing capacity and crushing capacity of the soilcrete.

- Prepare reports and design drawings for the respective governing bodies detailing the derivation of design properties; results of the respective engineering calculations; and QA/QC procedures for ensuring that the ground improvement system is constructed according to our design.

ACLS Millbrae Station, Millbrae, California – Life Science – Aggregate Piers, Deep Soil Mixing

- Develop idealized soil profiles based on laboratory testing and field boring logs for use in design.
- Select the most appropriate ground improvement method to achieve the settlement criteria.
- Determine the layout, treatment depth, area replacement ratio, and 28-day compressive strength
- Calculate the post-construction static settlement of the building.
- Calculate the bearing capacity for foundation elements for each ground improvement system.

- Prepare reports and design drawings for the respective governing bodies detailing the derivation of design properties; results of the respective engineering calculations; and QA/QC procedures for ensuring that the ground improvement system is constructed according to our design.

- Provide direction to field crews under the discretion of the ground improvement design engineer of record regarding nonconformance, remedial work, varying subsurface conditions compared to design.

Cerritos Community College: Health Science Building Renovation/Student Services and Administration Building, Cerritos,

02/19/2024

California - Education - Compaction Grouting, Deep Soil Mixing

- Develop idealized soil profiles based on laboratory testing and field boring logs.
- Select the most appropriate ground improvement method to achieve performance criteria.
- Determine the layout, treatment depth, area replacement ratio, and 28-day compressive strength for the soil mixing system.
- Determine treatment depth, grout take, and element spacing for the compaction grout system.
- Calculate the post-construction static and seismic settlement of the buildings.
- Calculate the bearing capacity for foundation elements for each ground improvement system.

- Prepare reports and design drawings for the respective governing bodies detailing the derivation of design properties; results of the respective engineering calculations; and QA/QC procedures for ensuring that the ground improvement system is constructed according to our design.

Cypress Commerce Center, Cypress, California - Industrial - Deep Dynamic Compaction, Mass Soil Mixing

- Develop idealized soil profiles based on laboratory testing and field boring logs for use in design.
- Select the most appropriate ground improvement method to achieve the settlement criteria.
- Determine the layout, drop height, number of drops, drop spacing required to achieve the settlement criteria.
- Determine treatment depth, cross section geometry, and 28-day compressive strength for the mass mixing system required.
- Calculate pre- and post-construction seismic settlements based on CPT test results.

- Prepare reports and design drawings for the respective governing bodies detailing the derivation of design properties; results of the respective engineering calculations; and QA/QC procedures for ensuring that the ground improvement system is constructed according to our design.

- Provide recommendations regarding best practices to ensure the integrity of our work during utility excavations and other grading operations, including guidance on how to safely navigate around our ground improvement systems.

Marina Shores, Long Beach, California – Mixed Use – Aggregate Piers

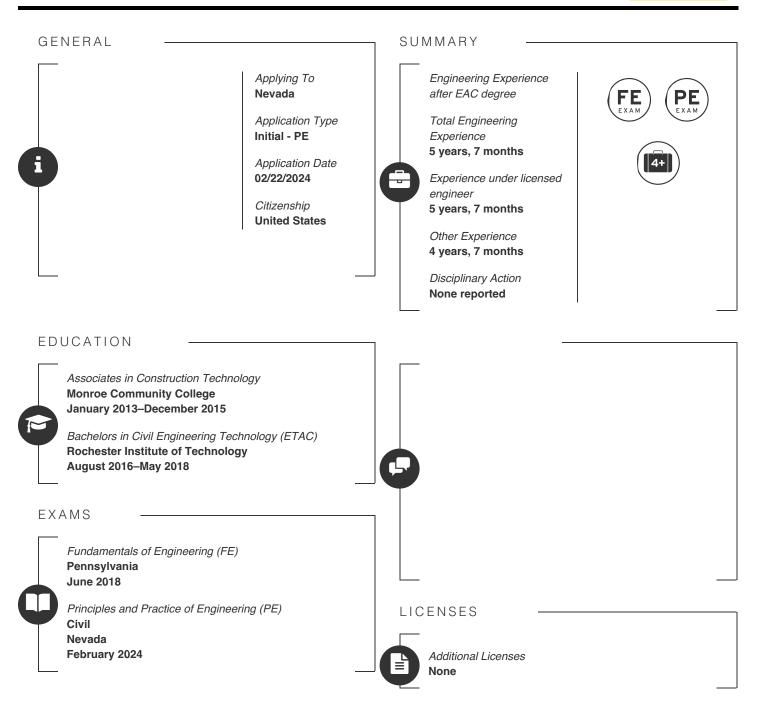
- Develop idealized soil profiles based on laboratory testing and field boring logs for use in design.
- Determine the layout, treatment depth, and area replacement ratio for the aggregate pier system
- Calculate the post-construction static and liquefaction-induced settlement of the building.

- Prepare reports and design drawings for the respective governing bodies detailing the derivation of design properties; results of the respective engineering calculations; and QA/QC procedures for ensuring that the ground improvement system is constructed according to our design.

More projects available upon request.

DOUGLAS WEBBER (19-349-60)

All work experience reviewed by two licensed professionals



DOUGLAS WEBBER (19-349-60)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

self employed New York (United States) Carpenter May 2008—December 2012

Verified by

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

DESCRIPTION

WORK EXPERIENCE

Ravi Engineering & Land Surveying, P.C. New York (United States) Structural Engineer May 2018–December 2023 Verified by Timothy Floyd Wade twade@ravieng.com Experience Summary Full-Time Engineering: 5 years, 7 months Experience under licensed engineer: 5 years, 7 months

-TASKS

I have worked at Ravi Engineering & Land Surveying as a structural engineer since receiving my bachelor's degree in May 2018. I have acted as responsible in charge for a magnitude of structural projects while also supporting other engineers within the company. I have worked directly with the structural department manager, Timothy Wade, P.E.. I am responsible for providing structural designs for clients beginning at the conceptual design phase and seeing the project through all the way until the construction phase has been completed. Other tasks include providing structural evaluations and analyses of existing structures and occasionally providing structural inspections. Where structural deficiencies are discovered in existing buildings I provide structural repairs or reinforcement designs.

All structural projects I have worked on are non-residential buildings. While the majority of projects have been structural steel, reinforced concrete, or masonry framed, I have also designed several wood framed and heavy timber structures.

I am responsible for coordinating with the architectural and mechanical designs and providing structural design solutions meeting the requirements of the current applicable building codes, ASCE 7, AISC, ACI, TMS, and NDS.

I am responsible for supporting my structural designs through the construction phase. These tasks include but are not limited to reviewing shop drawings, answering RFIs, attending construction meetings, and site visits to review urgent matters to ensure the projects construction moves forward as scheduled.

-REPRESENTATIVE PROJECTS

Structural Design

State University of New York College at Plattsburgh - Renovate Memorial Hall

This project included a complete renovation of an existing structural steel and reinforced concrete framed athletics facility originally constructed in the 1960's with a building footprint of approximately 32,000 square feet and four levels. I was responsible in charge for completing the following structural engineering work for this project.

May 2018 - July 2023

I completed an evaluation of the existing building structure by reviewing the as-built drawings and determined the gravity loads and the lateral load paths. I analyzed each of the buildings steel deep pile groups to determine if the existing foundation system had adequate capacity to support the proposed renovations and offered guidance to the architect to revise the design where necessary to not overstress the existing foundation systems. I determined the dead, live, snow, wind, and seismic loadings in accordance with ASCE 7-10 and IBC 2015. I designed for the removal of the existing 2,700 square foot indoor reinforced concrete pool structure. In place of the removed pool, I designed a reinforced concrete slab on reinforced concrete grade beam system to support a workout area at the first floor level and structural steel framing system with slab on metal form deck to support a new indoor gymnasium at the second floor level. I designed the structural steel framing with moment connections to resist lateral forces as well as anchored the new framing and slab system to the exterior walls to replace the floor diaphragm which was previously removed.

I designed for the modification of existing reinforced concrete moment frames by reinforcing the existing columns with carbon fiber and installing new steel moment beams with epoxy anchors into the columns, below the existing concrete moment beams, in order to lower the floor at this area.

I designed structural reinforcement of the existing two-way concrete slab system at new mechanical penetrations and new steel roof dunnage systems to support new rooftop equipment. I designed additional floor infills, balcony extensions, and other reinforcement of the existing structural systems to meet the proposed architectural and mechanical modifications.

Structural Design

Buffalo Sewer Authority - Babcock Pump Station RTC

This project included structural modifications to update an existing subterranean storm water pump station facility located beneath a public roadway.

November 2019 – September 2021

I was responsible in charge for the structural modifications. I analyzed the capacity of the structures two-way reinforced concrete

02/22/2024

"roof" slab which is approximately 3' below the roadway considering ACI-318 and AASHTO and designed new reinforced concrete beams spanning above and anchored to the structure to provide reinforcement for new manhole openings in the "roof" slab. I considered AASHTO HS-20 loading in my calculations. I calculated the shear flow between the new beams and the existing slab and designed U-bars epoxy grouted into the existing roof slab to create a composite system.

I analyzed an existing steel crane rail inside the structure to determine its allowable capacity as per AISC crane rail requirements and assign a maximum allowable load rating. I designed a new 13' tall aluminum framed bar screen for filtering debris out of storm water prior to entering the pumps.

Structural Design

SUNY Upstate Medical University - Interventional Radiology

Renovate an isolated area of the existing eight floor level hospital and provide structural framing to support proposed medical equipment.

April 2021 - Currently in Construction

I am responsible in charge for the structural design for this project. I evaluated the medical equipment manufacturer's equipment drawings and specifications for three different procedure rooms. Each room has new above ceiling mobile imaging equipment with vertical impact loads as high as 1,800 pounds and horizontal impact loads nearly 500 pounds. I designed structural steel and slotted channel framing (Unistrut) support systems as well as reinforcements of the existing building's structural steel framing members. The equipment specifications indicate stringent support deflection limitations therefore, I calculated the cumulative deflections and designed new structure and reinforcements of the existing structure to meet these limitations.

I designed a new 1,000 square foot above roof steel dunnage system to support a new 35 kip mechanical roof top unit required to provide ventilation suitable for operating rooms.

DOUGLAS WEBBER (19-349-60) All work experience reviewed by two licensed professionals

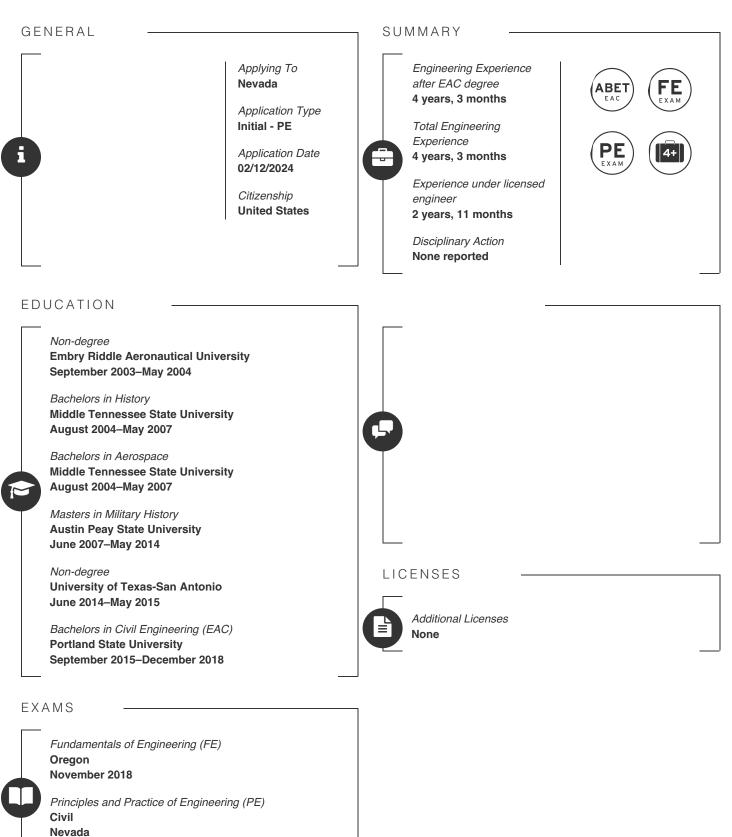
ADDITIONAL INFORMATION

0 -TIME GAPS

Start Date	End Date	Explanation
January 2016	July 2016	Reference Monroe Community College Transcripts. I attended classes at Monroe Community College during the 2016 spring and summer semesters.

JONATHAN WINGATE (18-496-56)

All work experience reviewed by two licensed professionals



October 2023

WORK EXPERIENCE

Huddleston-Steele Engineering Tennessee (United States) Engineer-in-Training March 2019—May 2021 Verified by Christopher Blair Maguire Cmaguire@hsengr.com Experience Summary Full-Time Engineering: 2 years, 2 months Post EAC degree: 2 years, 2 months Experience under licensed engineer: 2 years, 1 month

TASKS

My primary task consisted of using AutoCAD to make construction plans for residential developments and occasionally schools. Calculations required in the residential developments included roadway/sidewalk slope that complied with the ADA, pipe sizing to meet certain storm requirements, gutter spread limitations, RCP sizes that still permitted enough cover, minimum round-a-bout radius to allow emergency vehicles to turn around, etc. In addition to meeting minimum lot size per jurisdictional requirements, I also had to ensure the minimum building footprint size was met. This was especially difficult at corner lots where setbacks along a road/street were typically larger than rear and side setbacks. Alterations had to be made in these circumstances. Calculations for schools were slightly different. A standard blueprint for the building itself was used for most of the schools and lot sizes were not a factor since the site was typically not partitioned. In most cases the schools were built at least 100 feet from the roadway. My job was to ensure grading and drainage from the building to the existing roadway prevented any driving/walking

guarantee sewage could connect from the school to existing pipes near the roadway. All developments, residential and commercial, would be surveyed prior to plans being created. It was my job to import these points into AutoCAD and ideally design a grading and drainage plan that was as balanced as possible so as to prevent excessive cut/fill. I was also required to design detention ponds for drainage management. Based on expected storm duration and the native material, calculations would be performed to prevent water from leaving the site quicker after the site was disturbed. Weirs were

baths from exceeding ADA maximum slopes, to ensure drainage did not flow too guickly into a detention pond/offsite and to

-REPRESENTATIVE PROJECTS

designed and installed in every detention pond.

Sundale Subdivision, Rutherford County, TN, Mar 2019-May 2021, Residential Subdivision, Approximately 20-25 residential lots. This was an addition to an existing subdivision of the same name. I initially worked out the grading requirements to allow a tie in to the existing road. I also needed to tie into existing utilities such was water, sewer, drainage, etc. I calculated the amount of runoff that would end up in various parts of the roadway. I would then calculate the size of the pipes needed to carry the water downstream in addition to slope demands to keep gutter spread within tolerances. I designed the crests and dips of the roadways to account for existing terrain and ADA slope maximums while also taking into account cover requirements over utilities. After submitting the plans to the appropriate jurisdiction, I then reviewed comments and made changes as required.

Rooker's Bend Subdivision, Rutherford County, TN, June 2019-May 2021, Residential Subdivision, Approximately 15-20 residential lots. I started this subdivision from scratch and it tied into an existing feeder road. Since the water, sewer and drainage would tie into the utilities under this feeder road, I needed to calculate the minimum slope requirements for the utilities to the most upstream point, further taking into account cover requirements for the roadway. In addition to cover requirements over utilities, I designed the roadways to contour with the existing terrain while ensuring ADA slope maximums were not exceeded. Per local ordinances, all new developments required a detention pond to be built onsite. I was required to design a detention pond that would ensure runoff did not leave the site after development faster than before development. In addition to calculating the volume of the pond, itself, I also designed a weir box(es) to be placed at each outlet. After being reviewed by the jurisdiction, I reviewed their updates and made changes accordingly.

Three to four unnamed elementary schools. Williamson County, TN. July 2019-May 2021. The schools were on much larger sites than typical residential subdivisions, so the initial priority was to design a grading plan that would keep cut/fill, exports/imports to a minimum. The school was always at least 50 feet from the feeder road so the roadway would ideally contour to the existing terrain. This was not always a possibility due to the required placement of utilities, a detention bond, ADA restrictions, etc. A detention pond was required on this site. On some schools the direction of flow would break sending runoff into two different directions. When this occurred, I would design two individual ponds based on the amount of runoff each would receive. All of the schools wanted sidewalks leading to the main building so any students walking to school would not have to share the roadway with buses and other vehicles. I designed sidewalks that met ADA slope requirements in both directions that would also direct runoff in the

same direction as the general flow path.

Traveller's Trace Subdivision, Residential Subdivision, Rutherford County, April 2020-May 2021, Approximately 15-20 residential lots. A lot of the engineering performed on this site was similar to that of "Rooker's Bend" (see above). I designed the roadways, calculated the pipe sizes to accommodate the run off, designed a detention pond, etc. In addition to these items, I also needed to include a postal kiosk somewhere onsite. There were no restrictions on the location so I needed to place it wherever it would (1) provide minimum space requirements per USPS standards, (2) would allow postal/residential vehicles the ability to maneuver in and out of the area while also providing the minimum number of parking spaces based on number of residents in the development and (3) place the kiosk in a location that would have minimal impacts on adjoining lot(s).

Smyrna Ready Mix, Concrete Plant, Lebanon, TN, June 2020-December 2020. I designed the site layout that would work best with as built facilities. I ran water quality calculations and determined the pressure requirements for the main water line extension. I assisted a licensed engineer with the design of an underground water detention apparatus as there was not enough space onsite for an above ground detention pond. I designed the grinder pump.

WORK EXPERIENCE

GeoTek Nevada (United States) Staff Professional November 2021 – February 2023 Verified by Matthew Russo hrdept@geotekusa.com Experience Summary Full-Time Engineering: 1 year, 3 months Post EAC degree: 1 year, 3 months Experience under licensed engineer: None

TASKS

I was hired to participate in the company EIT program. This program prepared EITs to become Project Managers while they worked towards their PE license. I would rotate to a different department every three months, work on certifications within that department, and gain some experience that would allow me to better understand the various nuances each department had to offer and to allow me to see how each division played into the a project as a whole. I started out in the lab where material would be sampled, prepared for compaction derive proctors via experimentation. I also stored concrete cylinders and after the appropriate cure time would break them and record their strength. I was next placed in the soils department. Using a nuclear gauge and the proctors obtained from the lab, I would determine whether compaction was sufficient. I also observed some grading and achieved the GA status by obtaining ICC Soils and NAQTC Sampling and Density certifications. My next rotation was in office where I compiled final reports and submitted them to the respective Project Manager(s). The type of report depended on jurisdiction and/or QAA requirements. Also, while in the office, I compiled and completed grading reports, verified pad certifications, ensured permit fees were tracked, and a litany of other items a project manager has to monitor to see a task move from it's infancy to the final report. My final rotation was spent in materials. Prior to entering this rotation, I had already attained the ICC Reinforced Concrete and Masonry certifications. I trained on how to inspect these items and before the end of rotation became Clark County approved as a Special Inspector in both. I remained in materials for a second rotation where I achieved Structural Steel and Prestressed Concrete certifications.

REPRESENTATIVE PROJECTS

GeoTek Laboratory, November 2021-March 2022, Las Vegas, NV. As part of this rotation, I spent three months in the lab learning how soil is processed and its various attributes are determined. Each sample had its own requirements so it was important for me to read each work order thoroughly to determine which tests needed to be ran. Sometimes the required tests were not ordered until the soil type was established. Using ASTMs and other instructions, I would process each sample using the methodology laid out within them. Tests included determining soil type based on percentage passing through various sieves, ascertaining shrink or swell, verifying specific gravity, etc. After determining these items, I would then calculate the proctor that verified ideal compaction and water content. Other tasks included reviewing the break requirements for concrete cylinders. After the appropriate cure time had been achieved, I would analyze the breaking of the cylinders and log each breaking strength in addition to the type of break. The main projects worked on during this time were for DR Horton and Harmony Homes but there were smaller clients who I processed work for, as well.

Soils Field Work, March 2022-May 2022, Las Vegas, NV. During this rotation, I would travel around the Las Vegas Valley and perform compaction testing on retaining wall backfill, pipe bedding and haunches, and soil lifts as they were brought to grade. Each site had its own compaction requirements. Occasionally, one site would have multiple, separate requirements. Therefore, it was very important that I properly analyzed the soils report, reviewed the proctor sheet and determined what soil type required what compaction percentage and water content. Sometimes the only requirement was to prod the soil and verify it was firm and unyielding. More often than not, a compaction test using the nuclear gauge was required per the soils report. I would input the proctor information and perform the test per the respective ASTM or other instruction. I would then analyze the output and if the minimum requirements were not met, I would recommend to the contractor either more water be added, wait for the surplus water to evaporate and/or perform additional compaction. These tasks were performed at many projects in the area. Towards the end of this rotation I also began grading training and achieved Grading Level A status with Clark County.

GeoTek Office, May 2022-September 2022, Las Vegas, NV. During this rotation, I learned about the administrative side of being an engineer and/or project manager. My primary task was to prepare final reports and submit them to the project manager for review and then approval. There were four main jurisdictions and each one had its own requirements. I would analyze each reporting requirement and gather the appropriate documentation to ensure the specifications were met. I reviewed inspection reports and verified the data matched in each report and that information reported was in accordance with structural plans. When

there were discrepancies, I would request clarification from the field inspectors and/or occasionally perform a site visit to ensure all of our information was up to date. In addition to report compilation, I would also verify pad certifications were processed, request site visits from the soils department, upload finished work to the appropriate jurisdiction and compile lengthy soils reports.

Materials Field Work, September 2022-February 2023, Las Vegas, NV. During this rotation, I would travel around the Las Vegas Valley and perform inspections on concrete, masonry and post installed mechanical & epoxy anchors. Upon arriving on a site, I would review required documentation and verify permit, QAA, approved plans and other pertinent items were readily available onsite. I would then review approved plans and ensure work performed was in accordance with the plans. If there were discrepancies, or questionable concerns, I would recommend to superintendents or foreman the best way to correct the items. If upon further analyzation it was deemed the issues had not been corrected, a Non-Compliance Report would be issued. I was primarily attached to two projects during this time. They were the North Vegas Police Department and Northeast Career and Technical Academy where I made engineering observations involving masonry, reinforcement, non-shrink grout and other items on the QAA documents.

WORK EXPERIENCE

Universal Engineering Sciences Nevada (United States) Engineer in Training April 2023—February 2024 Verified by Samuel Palmer spalmer@teamues.com Experience Summary Full-Time Engineering: 10 months Post EAC degree: 10 months Experience under licensed engineer: 10 months

-TASKS

I was hired as a Field Level Engineer-in-Training (EIT). Since I already had office experience, my supervisors wanted me to acquire more field experience while working towards my PE and then afterwards I would likely become a full time project manager. My tasks included going to various construction sites around the Las Vegas Valley and ensure construction practices were in accordance with plans. I would arrive on a site and first verify that all paperwork was in order. Stamped plans, a QAA agreement, a valid permit and a QAA binder were all required to be onsite. If any item was missing, I would issue a Non-Compliance Report (NCR). I would then verify work was performed per the approved plans. In the event the plans were not entirely clear, I would have to make an engineering decision to determine what the EOR's intent was. For example, if an isolated footing was labeled "F1.0" but another unlabeled footing had the same dimensions, reinforcement and served the same purpose, I could use intuition and conclude that this was also supposed to be a "F1.0" footing. If still in doubt, though, I would write a NCR and suggest the EOR submit a Request for Information (RFI). It was also my responsibility to know which jurisdiction had what requirements. For example, the afore mentioned RFI would require a special stamp if the jurisdiction of the project was in Clark County. If the jurisdiction was in the City of Las Vegas, a stamp form the EOR would suffice. I would also supervise the construction of concrete cylinders, masonry prisms and shotcrete panels, all of which are tested in our lab for minimum strength requirements. Most recently I became certified to observe and verify the correct installation of post installed mechanical anchors.

-REPRESENTATIVE PROJECTS

Various Grading Sites, April 2023, Las Vegas, NV. I spent this month training on various grading sites in the area. Some locations included the N. Las Vegas Rail Terminal and the Davis Residence. Upon determining the appropriate permit and approved plans were onsite, I would read the soils report(s) and verify items such as (1) amount of excavation required, (2) types of soil to be used [native, import, Type II, etc.], (3) the number of compaction tests required, their location, frequency, percentage compaction needed and so on. I would then remain onsite and take compaction tests as required. At the end of the day, I would write a Grading Report, making sure the elevations were a continuation of the most previous report(s).

Jones & Torino Warehouse, May 2023, Las Vegas, NV. I was attached exclusively to this site for a month because tilt up panels were being assembled and stacked in such a way their reinforcement could not be verified. During my first couple of days onsite, I needed to verify the panels that were already assembled were in compliance with the approved plans. Since reinforcement was installed on both faces of a panel, each one would have to be lifted via a crane so I could see its underside. After the already assembled panels were verified, I would monitor the construction of the remaining panels throughout the day, ensuring their correct assembly upon each one's completion. Approximately once per week, work would shift from panel assembly to placing concrete on the panels inside forms. During this time I would supervise an ACI technician as he/she tested the concrete and would write an NCR if any item was out of compliance.

Custom Model Homes: Davis Residence, Ascaya Lot 147A, Lot 11 - Summerlin Village, etc. Jun 2023-present. As needed, I would visit sites of custom model homes and ensure their assembly was per the approved construction documents and jurisdictional requirements. These projects often presented unique challenges as there usually is not a permanent trailer onsite nor a superintendent consistently present. I would regularly have to hunt for the pertinent paperwork that is required to be on all sites, typically having to reach out to the project manager for guidance. When a superintendent or foreman was not available, it would be entirely up to me to read and interpret the plans to ensure the work was being performed as intended. The work supervised on sites such as these included installing reinforcement, observing concrete placement, monitoring masonry construction and overseeing post-installed anchorage.

Post-tension slabs Residential/Commercial lots, June 2023-present, Las Vegas, NV. At various post tensioned lots, I would verify the work performed in one of the two stages of post tensioning was correct. The first stage was the pre-slab inspection. I would confirm reinforcement, slab-on-grade (SOG) cables and embeds were properly in place according to the approved plans. The

second stage was observing the stressing of the cables after the appropriate cure time/concrete strength achieved. After verifying the stressing jack was calibrated, I would observe the stressing of each cable. I would then compare the initial length to the stressed length and verify this difference was within the tolerances laid out in the plans. If a cable was not long enough, I would request additional stressing until the cable was within tolerances. I would then ensure cables were cut, capped with plastic caps and grout holes appropriately sealed.

Warehouses/Large Commercial Structures, June 2023-present, Las Vegas, NV. As needed, I would report to structures such as these and ensure the multitude of work performed was in accordance with jurisdictional regulations, codes and approved construction documents. The names of some of these sites included but were not limited to Vantage, Cheyenne & Commerce (warehouse) and Uncommons (commercial/residential). One element I monitored not already discussed above was the construction and grouting of masonry walls. I would verify CMU walls did not exceed 5'-4" in a single lift and would recommend installation of cleanouts in the first course if they did. During grout pours, I would often oversee the construction and proper storage of masonry prisms.

Certifications achieved with this employer include: ACI Masonry Field, ACI Post-Installed Anchors & ICC Commercial Building Inspector.

Electrical

GAVIN AU (17-985-15) All work experience reviewed by two licensed professionals

DISCIPLINE: ELECTRICAL

GENERAL		SUMMARY —	
EDUCATION	Applying To Nevada Application Type Initial - PE Application Date 02/16/2024 Citizenship United States	Engineering Experience after EAC degree 6 years, 1 month Total Engineering Experience 6 years, 1 month Experience under licensed engineer 6 years, 1 month Disciplinary Action None reported	HABET EAC EXAM EXAM
University of Nevada, Reno August 2013–December 2017 EXAMS Fundamentals of Engineering (FE) Nevada December 2017 Principles and Practice of Engineeri Electrical & Computer Nevada August 2023	ing (PE)	LICENSES	

WORK EXPERIENCE

Tri Sage Consulting Nevada (United States) Associate Engineer January 2018–December 2022 Verified by Richard Joseph Salgo richard.salgo@Qualuscorp.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 was hired with Tri Sage Consulting as a contractor for NV Energy's System Protection department. My responsibilities there included conducting short circuit studies using ASPEN OneLiner. The results of these studies were used to program distance, overcurrent, sync check, breaker failure, under/overvoltage, and differential microprocessor relays using the Schweitzer Engineer Laboratories software AcSELerator QuickSet.

After completing my tasks at NV Energy, I was relocated back to Tri Sage's office. Most of the work conducted at Tri Sage consisted of substation design. I was involved in Protection and Control design, Physical design, conducted my own electrical studies, and performed my own drafting. The substation work including the following: protective relaying, supervisory control and data acquisition, metering, ground grid design, lightning protection, foundation design, structure design, equipment specification, battery sizing, station service sizing, and conduit design. I had an integral role in standards development for AutoCAD drafting, material lists, lighting protection, grounding protection, and voltage drop calculators. I completed numerous quality control reviews for other engineers' protection and control designs, physical designs, calculations, and protective relaying settings.

REPRESENTATIVE PROJECTS

The greenfield Mason Valley substation was developed to increase reliability to the Northern Nevada grid and to serve increased local electrical loads. The substation is in Yerington, NV and consists of four transmission lines, six 60kV power circuit breakers, two 120kVx60kV/24.9kV power transformers, two 24.9kV main breakers, two 24.9kV transfer breakers, and four 24.9kV feeder breakers.

1/2018 - 7/2018

I was tasked to conduct a short circuit study and develop the protective relay settings for the greenfield Mason Valley substation. The project consisted of relay settings for four primary and backup 60kV line protection relays, six breaker protection relays, two primary and backup transformer differential relays, two main breaker relays, two transfer breaker relays, and four feeder breaker relays. I developed the settings to coordinate with adjacent substations, which in certain cases, required modifications to settings to improve operation speed and to ensure proper sequencing. I also designed end-to-end tests to simulate transmission line faults which was used to test proper function of the communication aided pilot protection between the Mason Valley substation and the remote ends.

Dove substation, located in McCarran, NV is an existing NV Energy owned substation which called for the addition of a new 120kV line terminal. The new line terminal required the modification of existing bus and structures, three 120kV coupling capacitive voltage transformers, one 120kV breaker, one new breaker protection panel, and one new line protection panel. Four breaker existing breaker protection panels and one line protection panels were added to modernize the existing protection schemes in the substation.

1/2019 - 10/2019

I was tasked to design the protection and control aspects of the Dove line terminal addition. I was responsible for designing removals and additions of the protective relays and a new circuit breaker. The project required the integration of new standard protection schemes into an older existing substation. I was responsible for making modifications to the existing protection schemes, communication devices, creating a bill of materials, and drafting which resulted in approximately 350 design drawings. Drawing types included single line diagrams, AC and DC schematics, panel elevations and layouts, wiring diagram, communication schemes, bills of materials, and supervisory data and acquisition control, indication, and analog points. In addition, I was also responsible for discussing technical aspects of the project with the client, participating in numerous design meetings, reviewing submittals, and scheduling.

Miller substation, located in Las Vegas, NV is an existing NV Energy substation which required a two-part upgrade. The first part of design was to install a new 69kV breaker for a new feeder, a new line/breaker protection panel, a transfer breaker protection

02/19/2024

panel, replace two existing underrated disconnect switches, install one new line disconnect switch, and install a new automation/communication panel. The second part was to install four new 69kV circuit breakers, five 69kV disconnect switches, and replace and install a new 69kV bus differential protection panel.

1/2021 - 8/2021

I was tasked to complete both the protection and control design as well as the physical design for the two-part Miller substation project. My role in this project was to design all protection and control elements of the project. A large challenge I faced was the design of the transfer breaker panel which is used to act as electrically adjacent circuit breakers in the event of a line outage. My design of the transfer breaker protection utilized two protective relays and one breaker failure relay, required switch statuses to control the operation of breaker failure trips, block close, and breaker failure initiate contacts, status inputs from all breakers, selector switches, and multiple protection settings groups. In addition, I was also responsible for the physical design of the substation, which included the designs of foundations, steel structures, plan views, elevations, grounding, conduit, and highly detailed material lists.

WORK EXPERIENCE

Qualus Nevada (United States) Engineer III December 2022–February 2024 Verified by Karen Ann Schlichting karen.schlichting@qualuscorp.com Experience Summary Full-Time Engineering: 1 year, 2 months Post EAC degree: 1 year, 2 months Experience under licensed engineer: 1 year, 2 months

TASKS

My work with Qualus began in December of 2022. This change in work occurred due to the acquisition of Tri Sage Consulting by Qualus. My responsibilities are very similar to my time with Tri Sage Consulting. I am still involved in Protection and Control design, Physical design, conducting my own electrical studies, and performing my own drafting. The substation work includes the following: protective relaying, supervisory control and data acquisition, metering, ground grid design, lightning protection, foundation design, structure design, equipment specification, battery sizing, station service sizing, and conduit design. I still have an integral role in standards development for AutoCAD drafting, material lists, lighting protection, grounding protection, and voltage drop calculators. I am performing numerous quality control reviews for other engineers' protection and control designs, physical designs, calculations, and protective relaying settings. In addition, I am being transitioned into lead engineering roles for projects, acting as the sole designer for all my own projects, and assisting other engineers to understand client standards, design approaches, protection schemes, physical design, software, and electrical studies. Using the knowledge I have acquired from design and quality control work, I have been assisting with bidding for new projects including understanding the full scope of work, estimating hours, and estimating costs.

REPRESENTATIVE PROJECTS

North Valmy substation, located in Valmy, NV, currently consists of 345kV, 120kV, and 24.9kV voltages. Due to a new line terminal addition at North Valmy substation to support a new solar farm, the 120kV/24.9kV transformer was removed and replaced with a new line terminal. A new transformer was then installed at the greenfield substation called Jackalope. Jackalope is a radially fed substation consisting of a single line terminal, one 120kV breaker, one 120kV/24.9kV breaker, and five 24.9kV distribution breakers. The project also includes the addition of a 345kV line terminal at North Valmy substation for another solar farm which consists of two new 345kV breakers for the line terminal, two more new 345kV transformer breakers to sectionalize the 120kV and 345kV buses from one another, and a new control enclosure to house all new protective relaying, communication devices, batteries, and load centers.

01/2022 - 01/2024

I designed both the protection and control design as well as the physical design for Jackalope substation. Design elements for the protection and control design included single lines, AC and DC schematics, panel elevations, wiring diagrams, communication routing diagrams, cable schedules, SCADA points lists. The physical design included design work for the substation layout, elevation views, steel structures, foundations, conduit layout and details, and grounding layout and details. In addition, I also was tasked with performing electrical studies such as current transformer saturation, AC and DC load center sizing, voltage drop, battery sizing, station service transformer sizing, grounding for personnel safety, and lighting studies. I was also responsible for a large portion of the correspondence with the client for all technical aspects of the project.

For the 120kV line terminal addition at North Valmy substation, I performed the quality control check for the protection and control and physical design sets as well as the electrical studies similar to the Jackalope substation. The quality control check was performed at the 30%, 60%, and 90% project milestones, as well as backchecking client comments to ensure a safe and cohesive design.

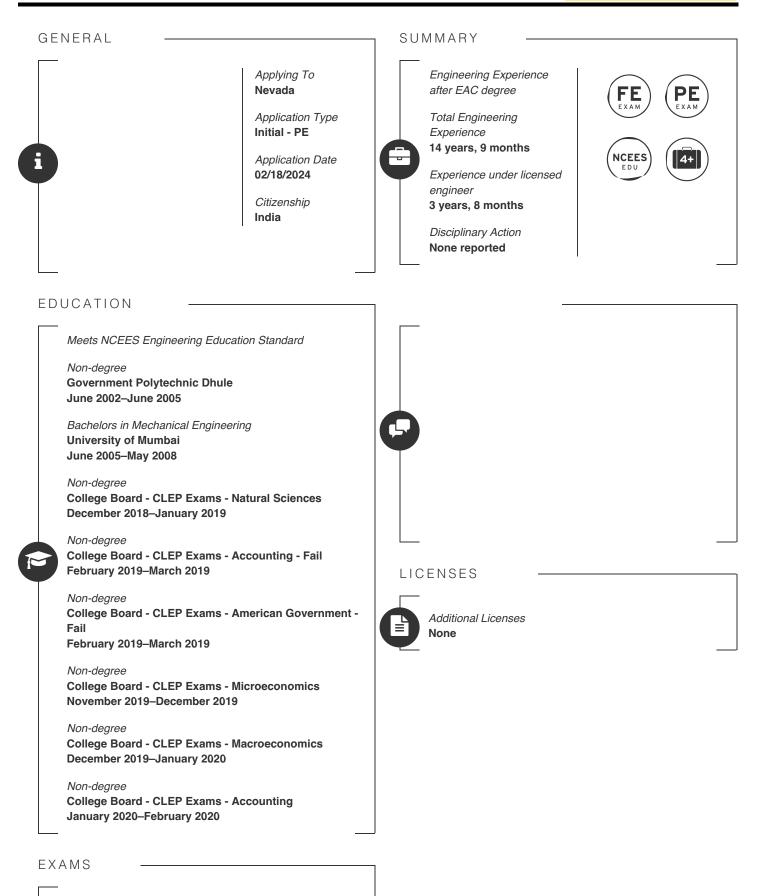
For the 345kV line terminal addition at North Valmy substation, I was tasked to create the protection and control aspect of the design and perform the drafting resulting in a design package of 418 sheets. I was responsible for developing a design to accommodate protection and communication between the substation yard, existing control enclosure, and new control enclosure. This was particularly challenging as I encountered major voltage drop issues and CT saturation due to extremely long conductor lengths. I developed custom wiring to cure the voltage drop issues, sometimes involving upsizing conductors to non-standard sizes or including buck/boost transformers to bring voltages to healthy levels to meet IEEE standards for reliable trip/close coil and AC motor operations. Electrical studies similar to Jackalope were performed including current transformer saturation, AC and DC load center sizing, voltage drop, battery sizing, and station service transformer sizing.

Fire Protection

SANDIP KHAIRNAR (16-953-71)

All work experience reviewed by two licensed professionals

DISCIPLINE: FIRE PROTECTION



AUS May 2023 Principles and Practice of Engineering (PE) Fire Protection AUS October 2023

WORK EXPERIENCE

Tata Consulting Engineers Ltd Maharashtra (India) Assistant Manager - Mechanical August 2008—May 2015 Verified by AMOL SURYAN alsuryan@tce.co.in Experience Summary Full-Time Engineering: 6 years, 9 months Experience under licensed engineer: None

-TASKS

- 1) Provide guidance and direction on fire protection engineering designs
- 2) Prepare detailed prescriptive fire protection design basis and specifications for infrastructure and industrial projects
- 3) Check the code compliance for existing facilities
- 4) Review of detailed fire protection drawings and calculation for accuracy as well as code compliance
- 5) Coordinating with internal/external team members to ensure a smooth implementation of the fire protection design.
- 6) Preparation and review of design basis, technical specifications, tender drawings, shop drawings, vendor documents reviews, techno-commercial bid analysis and purchase recommendations to clients
- 7) Comparison and detailed analysis for prequalification reports of contractors
- 8) Prepare hydraulic calculations on Automatic sprinkler systems
- 9) Arrange and attend technical meetings with local fire authorities (AHJ), clients, insurance companies and contractors
- 10) Document important correspondence, minutes of meetings with client, consultants and vendors/contractors
- 11) Participate in Office Safety programs, meetings, Safety Walks, Safety Audits and Mock Fire Drills

REPRESENTATIVE PROJECTS

1) Godrej & Boyce Ltd. Plant at Khalapur, Maharashtra, India

Role : Fire Protection Design Engineer

I have prepared schematic design of sprinkler and standpipe system for all the building in the plant

2) Tata Advanced Systems Ltd: Helicopter Plants near Hyderabad, India

Role : Fire Protection Design Engineer

I have prepared schematic and detailed design and specifications of sprinkler and standpipe system for all the buildings in the plant

3) New Holland Fiat India Pvt. Ltd. Tractor Plant at Chakan, Pune, India

Role : Fire Protection Design Engineer

I have prepared schematic and detailed design and specifications of sprinkler and standpipe system for all the buildings in the plant

4) Torrent Pharmaceuticals Ltd. Plants at Indrad and Dahej, India

Role : Fire Protection Engineer

I have check existing fire protection systems for code compliance and prepared the detailed report for all deficiencies and recommendations. I have prepared schematic and detailed design and specifications of sprinkler and standpipe system for all the buildings in the plant.

5) Bank Note Press Mill India Pvt. Ltd: Plant at Mysore, India

Role : Fire Protection Design Engineer

I have prepared schematic and detailed design and specifications of sprinkler and standpipe system for all the buildings in the plant

6) Hindustan Petroleum Corporation Ltd: LPG Plant at Solapur, India

Role : Fire Protection Design Engineer

I have prepared schematic and detailed design and specifications of sprinkler, fixed spray system and standpipe system for all the buildings in the plant

7) NOVA Helicopter Manufacturing Facility at SEZ, Hyderabad, India (NFPA Standards)

Role : Fire Protection Design Engineer

I have prepared schematic and detailed design and specifications of sprinkler and standpipe system for all the buildings in the plant

8) John Deere India Pvt. Ltd: Tractor Mfg. Plant near Indore, India

Role : Fire Protection Design Engineer

I have prepared schematic and detailed design and specifications of sprinkler and standpipe system for all the buildings in the plant

9) Mahindra & Mahindra Ltd: Tractor Mfg. Plant near Hyderabad, India

Role : Fire Protection Design Engineer

I have prepared schematic and detailed design and specifications of sprinkler and standpipe system for all the buildings in the plant

10) Imsofer India Pvt. Ltd: Chocolate Plant near Baramati, India

Role : Fire Protection Design Engineer

I have prepared schematic and detailed design and specifications of sprinkler and standpipe system for all the buildings in the plant

11) MRF Ltd: Tire Manufacturing Plants Hyderabad and Trichy, India

Role : Fire Protection Design Engineer

I have prepared schematic and detailed design and specifications of sprinkler and standpipe system for all the buildings in the plant

WORK EXPERIENCE

Nesma and Partners contracting company Riyadh (Saudi Arabia) Mechanical Engineer June 2015–October 2016 Verified by AFZAL AHMED FAROOQUI Afzal.Farooqui@nesmapartners.com Experience Summary Full-Time Engineering: 1 year, 4 months Experience under licensed engineer: None

TASKS

- 1) Worked from project PMO office for design and engineering supports in fire engineering to all 5 project sites
- 2) Review of design/shop drawings from Consultant/drafting agency, raise/answer "Request for Information" (RFI)
- 3) Comply drawings with third party consultant comments (JENSEN HUGHES) on fire fighting, fire alarm and life safety drawings
- 4) Coordinate with the procurement team to prepare the material submittals as per the tender BOQ and specification
- 5) Sprinkler/Hose System Hydraulic Calculations in Elite "Fire" software
- 6) Review RCP, Plans, elevations and Architectural room layout sheets

REPRESENTATIVE PROJECTS

Ministry of National Guard – National Guard Health Affairs (NGHA)

- Construction of 5 specialized hospitals for NGHA at Five sites around the Kingdom of Saudi Arabia
- Maternity Hospital KAMC-CR, Riyadh (300 beds)
- King Abdullah Specialized Children's Hospital, KAMC-WR, Jeddah (350 beds)
- ENeuroscience and Trauma Care Center, Jeddah (176 beds)
- Taif Specialized Hospital, Taif (300 beds)
- AI Qassim Specialized Hospital, AI Qassim (300 beds)
- Role : Fire Protection Design Engineer
- 1) Review of design/shop drawings from Consultant/drafting agency, raise/answer "Request for Information" (RFI)
- 2) Comply drawings with third party consultant comments (JENSEN HUGHES) on fire fighting, fire alarm and life safety drawings
- 3) Coordinate with the procurement team to prepare the material submittals as per the tender BOQ and specification
- 4) Sprinkler/Hose System Hydraulic Calculations in Elite "Fire" software
- 5) Review RCP, Plans, elevations and Architectural room layout sheets

WORK EXPERIENCE

CESCO Doha (Ad Dawḩah) (Qatar) Technical Engineer **February 2017—June 2017** Verified by ali chalapurath mohamed ali.mohamed@cesco.com.qa Experience Summary Full-Time Engineering: 4 months Experience under licensed engineer: None

TASKS

- 1) Working as a Technical Engineer for design and engineering supports for firefighting systems
- 2) Sprinkler/Hose System Hydraulic Calculations in Elite "Fire" software
- 3) FM200/NOVEC System design, hydraulic Calculations in "Tyco" Software
- 4) Proactively provide guidance and direction on firefighting systems shop drawings
- 5) Preparation of Method Statements, Training Manuals, O&M Manuals

REPRESENTATIVE PROJECTS

1) Waldrof Astoria Hotel (4 Basements + Ground+ Mezzanine+ 43 Floors) Doha Qatar

Role :Fire Protection Design Engineer

Tasks : Performed Sprinkler and standpipes hydraulic Calculations, Prepared Method statements for sprinkler and standpipe Testing and commissioning.

2) Al Bayt Stadium (FM200 package) Al Khor Qatar

Role :Fire Protection Design Engineer

Tasks : Performed Sprinkler and standpipes hydraulic Calculations, Prepared Method statements for sprinkler and standpipe Testing and commissioning.

3) Panorama Residence and Suits Abraj Quartier (AQ-07) The Pearl Qatar (Basement + Ground + 40 Floors) Role :Fire Protection Design Engineer

Tasks : Performed Sprinkler and standpipes hydraulic Calculations, Prepared Method statements for sprinkler and standpipe Testing and commissioning.

4) Viva Bahriya – 08, The Pearl Qatar (Penthouse+ Basement+Ground+20 Floor+2 Roof) Role :Fire Protection Design Engineer Tasks : Performed Sprinkler and standpipes hydraulic Calculations, Prepared Method statements for sprinkler and standpipe Testing and commissioning.

WORK EXPERIENCE

Jensen Hughes Ar Rayyān (Qatar) Fire Protection Consultant July 2017 – March 2021 Verified by Aaron Francis Vanney avanney@jensenhughes.com Experience Summary Full-Time Engineering: 3 years, 8 months Experience under licensed engineer: 3 years, 8 months

TASKS

My primary responsibilities encompassed the review of Fire Protection and Life Safety designs, a crucial component of hospitals risk mitigation programs, covering a substantial portfolio of existing facilities. This entailed overseeing fire and life safety designs for ten healthcare facilities and more than 150 non-healthcare facilities within Hamad Medical Corporation in Qatar. In addition to design review, my role involved daily construction inspections, addressing inquiries related to fire protection, providing training to client teams, active participation in technical and Facilities Management Services (FMS) meetings, witnessing the testing and commissioning of FLS systems, and offering consistent support to Hamad Medical Corporation's Safety Management Services (SMS) and Healthcare Facility Development teams.

Apart from above, I have performed buildings fire risk assessments for high rise residential and office buildings.

REPRESENTATIVE PROJECTS

Projects : Ten existing hospital Risk Mitigation Program (RMP) projects: Al Khor Hospital in Al Khor Qatar, Al Wakra Hospital located in Al Wakra Qatar, Cuban Hospital located in Dukhan Qatar, Heart Hospital in Doha Qatar, NCCCR in Doha Qatar, Old Women's Hospital in Doha Qatar, Psychiatry Hospital in Doha Qatar, Hamad General Hospital in Doha Qatar, Rumailah Hospital in Doha Qatar, Bone and Joint Center in Doha Qatar.

Role : Fire Protection Consultant

Tasks:

1) Automatic Sprinklers System and smoke control system design reviews for code compliance

2) Construction and routine inspections for Fire Protection Systems

- 3) Witnessing testing and commissioning of fire protection systems
- 4) Training fire safety officers and fire safety technicians for routine and construction inspections
- 5) Addressed numerous fire code queries by facility managements and safety officers

6) Review designs of Clean agent fire suppression system done by other designers.

Apart from above, I have performed buildings fire risk assessments for high rise residential and office buildings.

WORK EXPERIENCE

Hamad Medical Corporation (Seconded) Ar Rayyān (Qatar) Fire Protection and Life Safety Consultant April 2021—March 2022 Verified by Thoubeek Rameez Abdul Ravub v-tnisthar@hamad.qa Experience Summary Full-Time Engineering: 11 months Experience under licensed engineer: None

TASKS

My responsibilities included ensuring strict compliance with established Codes and Standards. I provided technical support to the HMC Team, conducting design reviews, routine inspections of FLS systems, and implementing corrective actions to enhance and maintain fire life safety conditions. These actions aligned with the requirements set forth by the NFPA, Joint Commission International (JCI), Qatar Civil Defense Department (QCDD), safeguarding the well-being of patients, visitors, staff, and healthcare assets from potential fire and life safety risks. Additionally, I was responsible for preparing and presenting technical papers to Senior Management periodically, advocating for specific designs and strategies. I also scrutinized the adequacy of designs generated by other parties, ensuring they met safety criteria, compliance with Codes and Standards, and technical quality. This included confirming that the buildings or facilities under design had sufficient dimensions to house all required equipment. Furthermore, I acted as a liaison between AMC and other contractors, HMC Facility Management, HMC Safety Department, and HMC Design and Project Management. I attended project and hospital facility management meetings to guarantee that fire and life safety measures were not compromised in any way.

REPRESENTATIVE PROJECTS

1) Project : National Blood Donation Center at Plot Q in Hamad Campus, HMC , Qatar

Role : Fire Protection Consultant

Tasks : Perform fire protection systems reviews for design, shop drawings, calculations, material submittals, method statements. Witness testing and commissioning of installed fire protection and life safety Systems.

2) Project : New Al Waab Dialysis in Al Waab Area Qatar

Role : Fire Protection Consultant

Tasks : Perform fire protection systems reviews for design, shop drawings, calculations, material submittals, method statements. Attending all design meetings with project designer and project managers.

3) Project : New Al Maha Hospital in Al Wakra Area, Qatar

Role : Fire Protection Consultant

Tasks : Perform fire protection systems reviews for design, shop drawings, calculations, material submittals, method statements. Attending all design meetings with project designer and project managers. Witness testing and commissioning of installed fire protection and life safety Systems.

WORK EXPERIENCE

Egis Ar Rayyān (Qatar) Fire Protection and Life Safety Operations Manager April 2022—January 2024 Verified by Metin TINAY Metin.TINAY@egis-group.com Experience Summary Full-Time Engineering: 1 year, 9 months Experience under licensed engineer: None

TASKS

In this role, I hold complete responsibility and accountability for the operational requirements of fire and life safety systems within HMC facilities. My role involves ensuring strict compliance with established Codes and Standards.

I provide technical support to the HMC Team, including conducting design reviews, routine inspections of FLS systems, and implementing corrective actions. These actions aim to enhance and maintain fire life safety conditions, aligning with the requirements set forth by the NFPA, Joint Commission International (JCI), Qatar Civil Defense Department (QCDD), and to safeguard the well-being of patients, visitors, staff, and healthcare assets and properties from potential fire and life safety risks. Additionally, I am responsible for preparing and presenting technical papers to Senior Management periodically to advocate for specific designs and strategies. My role also involves scrutinizing the adequacy of designs generated by other parties to ensure they meet the necessary criteria for safety, compliance with Codes and Standards, and technical quality. This includes confirming that the buildings or facilities under design have sufficient dimensions to house all the required equipment.

Furthermore, I act as a liaison between AMC and other contractors, HMC Facility Management, HMC Safety Department, and HMC Design and Project Management. I attend project and hospital facility management meetings to guarantee that fire and life safety measures are not compromised in any way.

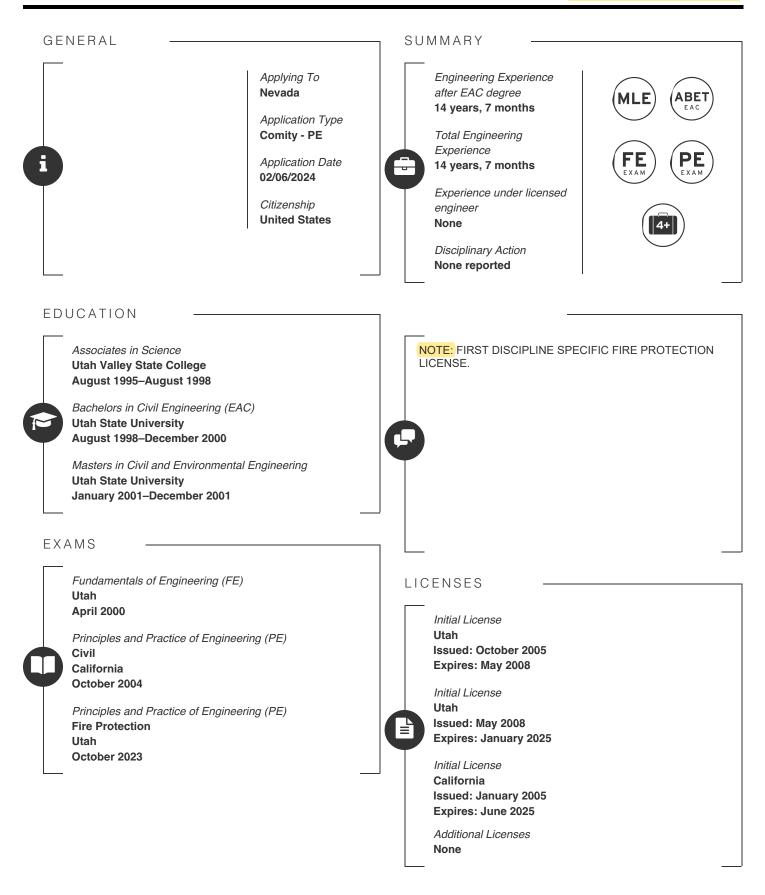
-REPRESENTATIVE PROJECTS

1) Project : Peritoneal Dialysis building at FBJ Kidney Center Role : Fire Protection Consultant Tasks: Perform fire protection systems design Reviews. 2) Project : Building BSL3 and BLS2 labs at HMGH and Ras Laffan Hospitals Role : Fire Protection Consultant Tasks: Perform fire protection systems design Reviews, Construction inspections, witness functional testing of fire protection systems, witnessing AHJ inspections 3) Project : Retrofitting of MCRC Hospitals at Medical City Role : Fire Protection Consultant Tasks: Perform fire protection systems design Reviews, Construction inspections, witness functional testing of fire protection systems, witnessing AHJ inspections 4) Project : CCTV implementation projects for all HMC facilities in Qatar Role : Fire Protection Consultant Tasks: Perform fire protection systems design Reviews, Construction inspections, witness functional testing of fire protection systems, witnessing AHJ inspections 5) Project : Activation of Fire Water Supply for Al Wakra Dialysis Role : Fire Protection Consultant Tasks: Prepare detailed Scope of work for Design and Build contractor, Perform fire protection systems design Reviews, Construction inspections, witness functional testing of fire protection systems, witnessing AHJ inspections

CHRISTOPHER KIMBALL (16-900-75)

All work experience reviewed by two licensed professionals

DISCIPLINE: FIRE PROTECTION



WORK EXPERIENCE

California Department of Water Resources California (United States) Civil Engineer January 2002–October 2003 Verified by Christopher Kimball (Self) Experience Summary Full-Time Engineering: (0%) Experience under licensed engineer: None

-TASKS

The following is a description of the engineering activities I performed while with the CA Department of Water Resources (DWR):

• I performed a significant amount of research on the subsidence of peat soils, dredging, levee design and repair, and flood control measures for projects in the San Joaquin Delta.

· I developed preliminary plans for levee repairs as well as dredging operations.

• I reviewed proposals and work performed by consultants in relation to flood mitigation and hydrology in the San Joaquin Delta. This included learning and reviewing hydraulic models that were created of the region.

• I was involved with the writing and review of an Environmental Impact Report (EIR) for a large flood control project in the San Joaquin Delta.

REPRESENTATIVE PROJECTS

As an engineer in training I worked under Gwen Knittweis on a large flood control project in the San Joaquin Delta of California. From January 2022 thru October 2003 this included the following activities:

• I learned and used HEC-RAS, a hydrology simulation model developed by the US Army Corps of Engineers, to model proposed modifications to the Delta region and how it would affect flooding probabilities in the region.

• I was involved in a task group that wrote a draft environmental impact report (EIR) titled the "North Delta Flood Control and Ecosystem Restoration Project". I represented DWR in the task group but members of USACE and several consultants were also involved.

• I met with numerous stakeholders to understand the issues and concerns on all sides of the problems. I also visited the project sites numerous times to take measurements and collect other data. This information was used in developing the floor control plan and in putting together the EIR.

• I did significant research in how to maintain channels by means of dredging and also how to best control subsidence of the peat soils on the islands to best limit the effects of flooding.

• I did significant research on the proper design and maintenance of levees and established areas along the delta where levees were in need of repair and drafted plans to perform the required improvements.

• I developed cost estimates for the levee repairs, the dredging activities, and subsidence remediation that was used to help establish required funding for the proposed flood control measures.

CHRISTOPHER KIMBALL (16-900-75)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

U.S. Bureau of Reclamation California (United States) Civil Engineer October 2003–September 2005 Verified by Christopher Kimball (Self) Experience Summary Full-Time Engineering: (0%) Experience under licensed engineer: None

- TASKS

Responsible for the structural design of a wide variety of projects including the retrofit of power plants, new buildings, and repairs to concrete and earthen dams. Prepared construction documents, drawings, and detailed project specifications for solicited work. Reviewed designs performed by the Technical Services Center, Area offices, and private consultants. Participated in several value engineering studies.

-REPRESENTATIVE PROJECTS

I worked under several more experienced engineers on numerous projects until I was able to obtain my P.E. license at the end of my tenure there. I was responsible to visit project sites, determine what the issues were, develop a formal design including plans, calculations, and specifications and then to put together a cost estimate for the projects. I was then involved with the contractor selection process and would review the progress as construction began through completion.

WORK EXPERIENCE

Salt Lake City Corporation Utah (United States) Structural Plan Review Engineer October 2005–July 2007 Verified by Christopher Kimball (Self) Experience Summary Full-Time Engineering: (0%) Experience under licensed engineer: None

- TASKS

The following is a description of the engineering activities I performed when working with Salt Lake City Corporation:

• I reviewed structural plans designed by others to ensure their design meets the design and detailing requirements of the International Building Code, ASCE 7, and other referenced design standards.

• I was responsible for reviewing the structural calculations to verify that the correct design criteria (i.e., dead and live loads, snow loads, wind loads, seismic loads, geotechnical parameters, etc.) are considered, that the calculations were performed correctly, that the calculations match the plans, and that the analysis was performed in accordance with the appropriate code and associated design standard(s).

• I was asked to perform structural assessments of multiple city-owned buildings as well as one building that the city was looking to purchase. I performed these evaluations as outlined in ASCE 31 and in accordance with standard engineering practice.

REPRESENTATIVE PROJECTS

The following is a sampling of what I was involved with while working at Salt Lake City Corporation:

• It was my responsibility to review the construction documents for projects submitted for a building permit to ensure that the structural design conformed to the requirements of the adopted building codes. I first needed to learn the building codes more indepth than I had as a design professional. After learning the codes well I was able to become an excellent reviewer and was asked to teach numerous code classes to design professional, contractors, and other building official organizations. Understanding the details that must be provided on the plans per the code and its referenced standards became imperative. I also learned how to navigate structural calculation packages from different organizations to ensure that items noted on the plans were adequate.

• City Creek Center; Salt Lake City, UT; Plan Review Engineer (2005-2007); This was the main project I was hired for at the City. It is a large multi-use project that covers three city blocks (20+ acres) in downtown Salt Lake City. I served as the city's main peer reviewer of the structural design for the project, which included a performance-based design approach as the overall project did not conform to the limitations of the building code.

WORK EXPERIENCE

Kimball Engineering Utah (United States) Owner/Principal April 2007–June 2009

Verified by Christopher Kimball (Self) Experience Summary Full-Time Engineering: (0%) Experience under licensed engineer: None

- TASKS

Provided structural and complete plan review services to local jurisdictions throughout Utah, Arizona, Nevada, and Wyoming. Often provided training with regards to the structural building code requirements for both new and existing buildings to building official, design professional, and contractor organizations.

-REPRESENTATIVE PROJECTS

I established this business over time as I worked as a structural plans examiner for Salt Lake City Corporation. At the time I was the only licensed engineer performing plan reviews of projects submitted for a building permit so numerous other cities reached out to me to assist in reviewing their projects on the side. I performed structural plan reviews of numerous projects located throughout Utah as well as some in Arizona and Nevada. I also provided structural code training to numerous organizations over this time.

CHRISTOPHER KIMBALL (16-900-75)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

West Coast Code Consultants, Inc. Utah (United States) Vice President June 2009—January 2024 Verified by Hilda Chavez hildac@wc-3.com Experience Summary Full-Time Engineering: 14 years, 7 months Post EAC degree: 14 years, 7 months Experience under licensed engineer: None

TASKS

The following is a description of the engineering activities I perform on behalf of West Coast Code Consultants, Inc. (WC3):

• I review structural plans designed by others to ensure their design meets the design and detailing requirements of the International Building Code, ASCE 7, and other referenced design standards.

• I am responsible for reviewing the structural calculations to verify that the correct design criteria (i.e., dead and live loads, snow loads, wind loads, seismic loads, geotechnical parameters, etc.) are considered, that the calculations were performed correctly, that the calculations match the plans, and that the analysis was performed in accordance with the appropriate code and associated design standard(s).

• I carefully review the construction documents for buildings to ensure they conform with the fire and life safety requirements of the International Building Code, International Fire Code, International Mechanical Code, National Electrical Code, and numerous standards referenced by each. When performing fire and life safety reviews I review the architectural sheets to ensure that the allowable heights and area provisions have been met, that means of egress provisions comply with the building code, and that fire-resistive construction is appropriate for the occupancy and type of construction. I am responsible for reviewing both the civil and architectural sheets to ensure that adequate fire department access, fire hydrants, and adequate fire flow are provided. I also review the mechanical and electrical sheets to ensure that provisions are in place to reduce hazards within the building.

• I review fire protection system plans and supporting documentation to ensure that the design has been performed in accordance with the adopted building and fire codes as well as the applicable NFPA standards. As an example, for fire sprinkler systems I review the plans, hydraulic calculations, seismic calculations, and material cut sheets.

REPRESENTATIVE PROJECTS

The following is a sampling of projects I have been involved with while working at West Coast Code Consultants, Inc. (WC3):

• Redwood Materials; Storey County, NV; Lead Fire Protection Engineer (2022-present); This facility is used to store, process, and recycle lithium-ion batteries. I developed the detailed hazardous materials inventory statements and detailed fire and life safety code reports for numerous buildings on the campus.

• Vantage – Phase 1; South San Francisco, CA; Lead Fire Protection Engineer (2021-present); Phase 1 includes two biotech laboratory buildings with an overall square footage of 343,000 ft². I provided detailed fire and life safety reviews of these buildings to ensure the proposed design complies with the applicable provisions of the fire and buildings codes as well as referenced fire & life safety design standards. I have also provided a peer review of the proposed smoke control designs which include both passive and pressurized systems.

• 95 State Street; Salt Lake City, UT; Peer Review Engineer (2018-2022); This exciting project consists of a 25-story high rise office tower including two churches at the lower levels, a large lobby, a fitness center, conference rooms, and over 515,000 additional square feet of leasable office space. I was the chair of the seismic peer review committee as well as the structural plan review engineer on behalf of the city. My involvement included a review of the site-specific geotechnical design criteria, a review of the analysis considering the MCE and the design level earthquake, that the performance criteria complied with the TBI Guidelines, and that all seismic detailing complied with the requirements of the building code and referenced design standards.

• Park & Market; San Diego, CA; Peer Review Engineer (2018); This is a large mixed-use project encompasses an entire City block in downtown San Diego. It includes a 34-story residential high rise, 4 stories of below grade parking, and over 50,000ft² of

office space. I was a member of the peer review team for this project to ensure that the performance-based design provided for an adequate level of performance.

• Hayward 21st Century Library; Hayward, CA; Plan Review Engineer (2015-2019); I was responsible to ensure the design documents for this 57,600+ square foot three-story library complied with the requirements of the building and fire codes as well as their referenced standards. This included a detailed review of the proposed smoke control system for the atrium included within the building.

• Blythe Solar Power Project; Blythe, CA; Delegated Chief Building Official (2014-2021); This is a 485 MW solar power project located on 4,070 acres in the California desert. As the delegate building official on behalf of the California Energy Commission, I performed the plan review for the overall project and oversaw the inspections during construction to ensure the overall project complied with the requirements of the building and fire codes in addition to all referenced design standards.

• Apple Campus 2; Cupertino, CA; Plan Review Engineer (2013-2019); This incredible project consists of a 4-story, 2.8 million square foot office, research, and development building located on a 175-acre site with its own central plant. I was involved from the very beginning, performing the project proposal, attending meetings, and serving as the main plan review engineer and providing comments on the design documents to ensure compliance with the building codes for each phase of construction.

• Cove Fort Geothermal; Beaver County, UT; Plan Review Engineer (2012-2013); This is a 25MW geothermal power plant that provides power to more than 13,000 homes. I reviewed the design documents to ensure that appropriate fire department access and fire protection systems were in place in accordance with the adopted fire codes.

• City Creek Center; Salt Lake City, UT; Plan Review Engineer (2010-2012); This is a large multi-use project across three city blocks (20+ acres) in downtown Salt Lake City. I began working on the project as an engineer with the city and continued to assist the city as a consultant with West Coast Code Consultants, Inc. I served as the city's main peer reviewer of the structural design for the project, which included a performance-based design approach as the overall project did not conform to the limitations of the building code.

CHRISTOPHER KIMBALL (16-900-75) All work experience reviewed by two licensed professionals

ADDITIONAL INFORMATION

0 -TIME GAPS

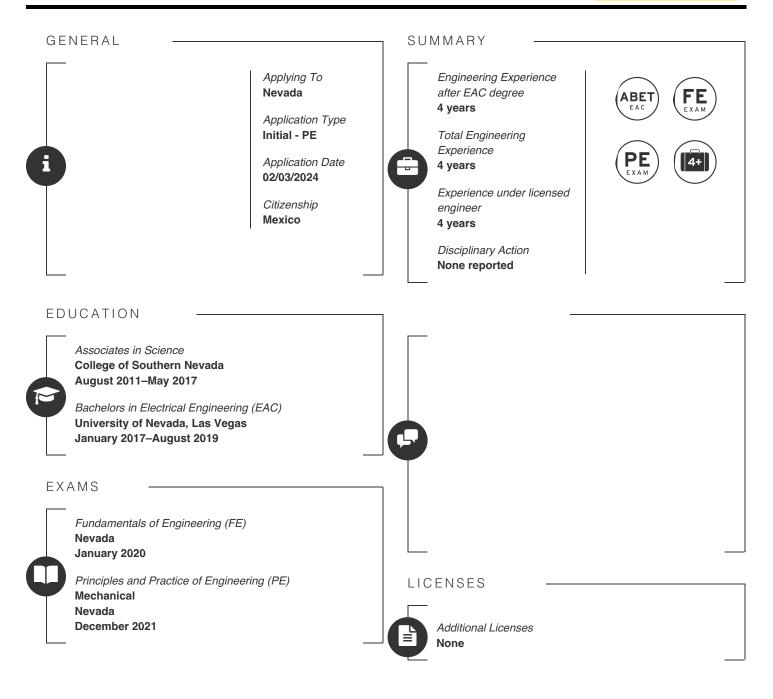
Start Date	End Date	Explanation
June 1992	July 1995	I graduated high school in 1992 and then left on a church mission to Argentina for two years.

Mechanical

ALFREDO MARQUEZ RIVERA (19-767-73)

All work experience reviewed by two licensed professionals

DISCIPLINE: MECHANICAL



ALFREDO MARQUEZ RIVERA (19-767-73)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Lawyer Mechanical Services Nevada (United States) Project Engineer January 2020 – February 2023 Verified by John Kotek jkotek@lmses.com Experience Summary Full-Time Engineering: 3 years, 1 month Post EAC degree: 3 years, 1 month Experience under licensed engineer: 3 years, 1 month

TASKS

As a project engineer my engineering duties included the following:

I reviewed engineering plans and specifications to make sure our equipment was meeting the specified loads listed on the schedule. I worked on design build projects where I made recommendations for equipment that met a desired cooling/heating and electrical load. I assisted engineers in their designs by making the appropriate recommendation based on the size of their building and type of building (casinos, hospitals, schools, etc.). I provided engineering selections to engineers for our equipment using specialized software based on those recommendations. I made load and mixed air calculations where need be. I acted as a technical backup to the sales engineers/ account managers by answering questions from design engineers.

REPRESENTATIVE PROJECTS

Project Name: NOVVA - Project Quasar

Project Scope: Provide Chilled Water (CW) Computer Room Air Conditioning (CRAC) units to new Novva Data Center opening in Las Vegas.

Location: 6115 Nicco Way, Las Vegas, NV 89115

Dates: (2022 - 2023)

Exact Engineering: I provided the engineer with the appropriate equipment recommendations to meet the appropriate loads and tight conditions required in a data center. I designed the job in our specialized computer equipment selection software. I answered all the questions the engineer had regarding cooling capacities, GPM's, and issues with Pressure Independent Control Valves (PICV). I provided the engineer with my selections based on my analysis, which subsequently ended up on the final set of plans. I reviewed the engineering plans and specifications to further assure our equipment was meeting all the necessary loads and conditions.

ALFREDO MARQUEZ RIVERA (19-767-73)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Trane Technologies Nevada (United States) Applications Specialists February 2023–January 2024 Verified by Karl Rapp karl.rapp@trane.com Experience Summary Full-Time Engineering: 11 months Post EAC degree: 11 months Experience under licensed engineer: 11 months

TASKS

As an application specialist my engineering duties include the following:

I review engineering plans and specifications to make sure our equipment is meeting the specified loads listed on the schedule. I work on design build projects where I make recommendations for equipment that meets a desired cooling/heating and electrical load. I assist engineers in their designs by making the appropriate recommendation based on the size of their building and type of building (casinos, hospitals, schools, etc.). I provide engineering selections to engineers for our equipment using specialized software based on those recommendations. I make load and mixed air calculations where need be. I act as a technical backup to the sales engineers/ account managers by answering questions from design engineers.

REPRESENTATIVE PROJECTS

Project Name: Barclay's - Henderson

Project Scope: The project required providing an HVAC solution to a building designed for a banking institution. Owners were looking to provide a Heat Pump or Heat Recovery VRF System. However, due to budget constraints an alternative solution that consisted of replacing the proposed solution with multiple one-to-one mini splits was proposed. Location: 2280 Corporate Circle / Henderson, NV 89074

Dates: (2023 - 2023)

Exact Engineering: I reviewed the engineering plans and specifications to make sure our equipment was meeting the specified loads and conditions on the original heat pump VRF system. I made the recommendation for a one-to-one mini split solution that would satisfy the budgetary limitations of the owners, as well as provide the proper cooling loads to the space. I designed the proposed one-to-one mini split solution on our specialized proprietary software. I provided the engineer with my equipment selections which subsequently ended up on the schedule. I also recommended the proper placement of several mini splits which were seeing their derate / cooling capacity being affected by the required long lengths, which was not an issue in the original heat pump VRF system.

ALFREDO MARQUEZ RIVERA (19-767-73) All work experience reviewed by two licensed professionals

ADDITIONAL INFORMATION

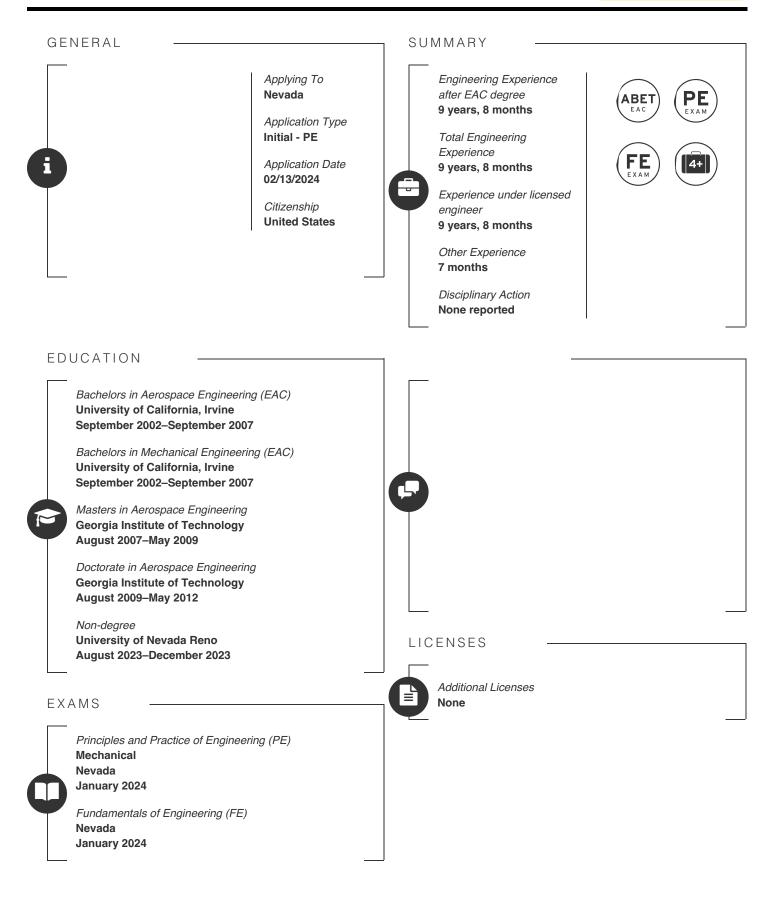


TIME GAPS				
Start Date	End Date	Explanation		
June 2010	July 2011	Took a leap year to decide what it was that I really wanted to do.		

CATHERINE PHAN (24-011-20)

All work experience reviewed by two licensed professionals

DISCIPLINE: MECHANICAL



WORK EXPERIENCE

Dynamic Concepts LLC Alabama (United States) Engineer/Scientist V November 2012—February 2014 Verified by Emmett James McDonald emmett.mcdonald@axientcorp.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

This was my first full-time industry job post-graduation. In this role I would consider myself a junior engineer with a Ph.D. I worked under the guidance of senior engineers that were in charge of the projects wherein we were responsible for generating design loads for aerospace structures. I was responsible for modifying existing in-house simulation tools for application to other project analyses, and developing new in-house tools if ones did not exist for the project. My role was to calculate engineering design loads for use by structural designers. I was required to prepare finite element structural and aerodynamic force models, perform structural dynamic simulations, and post-process structural internal loads data for the customer for design limit loads as well as fatigue analysis. My work was reviewed by senior engineers.

REPRESENTATIVE PROJECTS

Project: Aerospace Vehicles Structural Design Loads

Scope: This work encompasses calculating early-stage design loads of aerospace vehicle structural components.

Location: Huntsville, Alabama

Dates: 11/2012-2/2014

What I did: I worked directly under the principal engineers at the consulting company sub-contracted to calculate design loads. For one rocket booster vehicle system, I calculated design loads for the booster, interfaces, and tank weld locations. I pre-processed aerodynamic loads data and finite element models, performed dynamic loads simulations, and enveloped design loads for the structural designer of the booster and tanks and I calculated load reversals for fatigue analysis. For another aircraft-structural interface-rocket integrated vehicle system, I calculated design loads related to the structural interface between the aircraft and rocket. I pre-processed finite element models, performed dynamic loading simulations, and enveloped interface design loads and ground clearance metrics of the dynamic event for the structural designers.

WORK EXPERIENCE

The Aerospace Corporation California (United States) Senior Member of the Technical Staff February 2014–June 2017 Verified by Alvar M Kabe alvar.m.kabe@aero.org Experience Summary Full-Time Engineering: 3 years, 4 months Post EAC degree: 3 years, 4 months Experience under licensed engineer: 3 years, 4 months

-TASKS

I first joined as a Member of the Technical Staff in February 2014, and got promoted to Senior Member of the Technical Staff around April 2017 within the Spacecraft Dynamics Group/Structural Dynamics Department. I was responsible for supporting work related to predicting the structural dynamic behavior and internal loads of predominantly spacecraft but also the launch vehicles of several government spacecraft launch programs. I was responsible for learning our internal dynamics simulation tools and using it to perform independent loads verification and validation for spacecraft missions prior to flight. For each mission I owned a subset of the multiple dynamic scenarios we had to simulate. I reviewed contractors' presentations to understand their methodologies. I presented my work for internal review within our team and the project manager. I communicated directly with many other engineers across disciplines to get the right inputs to my dynamics simulation. As I was first learning our tools, I was responsible for the less severe load events and progressed to calculating the most severe load events. I created my own post-processing tools to present engineering data. I compared my independent calculations to the contractors and explained any significant differences. Post-flight, I was responsible for checking that our predicted structural responses were not exceeded in flight and made updates to our methodology accordingly. I also learned our internal tools for post-processing mode survey test data and used it to calculate the modes and damping of a spacecraft.

I successfully obtained and maintained a Secret Level Security Clearance. While working in my main role I put in extra hours to collaborate with members in the Structures Department and Material Science Departments conducting research on a novel durable redundant sandwich composite joint, where I was responsible for developing finite element models to predict debond crack growth.

-REPRESENTATIVE PROJECTS

Project: Independent structural spacecraft/launch vehicle loads certification.

Scope: This collection of work encompasses supporting independent loads certification for spacecraft missions.

Location: El Segundo, California

Dates: 2/2014 - 4/2017. This was my main project that I worked full-time on.

What I did: I calculated internal loads and dynamic response extremums for spacecraft and launch vehicles. I coupled spacecraft and launch vehicle finite element models from separate contractors, and performed independent dynamic simulations for different dynamic loading events such as atmospheric flight loads (maximum buffet and maximum dynamic pressure events), booster engine thrust oscillations, post lift-off acoustics, engine cut-offs, and strap-on engine jettison. I performed statistical calculations of random load events and combined them with other loads to produce statistically enveloping loads for downstream structural margin of safety checks. I updated buffet forcing functions based on post-flight spacecraft interface accelerometer data to improve future loads analysis predictions. I coded post-processing tools to present engineering data comparing my results to contractors. I worked on loads verification for more than 10 spacecraft missions while at Aerospace Corporation.

Project: Sandwich Composite Joint Study

Scope: I collaborated with members in the Structures Department and Materials Science Department to research the damage tolerance of a durable redundant sandwich composite joint as part of an effort to understand its performance and design parameters for potential aerospace structural application.

Location: El Segundo, California

Dates: 1/2015-1/2016. I worked on this project a couple hours a week.

What I did: I developed finite element models of sandwich composite test specimens with pre-existing debonds and ran simulations to predict the compressive failure loads at which debond cracks grew. I reviewed load, displacement, and strain gauge test data, video of the tests, and inspected the failed test coupons to understand the failure mechanisms. I ran a parametric design sensitivity study using finite element analysis to see how the joint efficiency changed with changes to the joint's insert length. I co-authored a conference paper as a first author and presented our findings at AIAA SciTech Forum in January 2016.

Project: Spacecraft Mode Survey Evaluation

Scope: This project supported evaluating structural modes, natural frequencies, and damping from mode survey test data of a spacecraft.

Location: El Segundo, California

Dates: A couple months project somewhere in the time frame of January-June 2017.

What I did: I post-processed mode survey accelerometer test data to compute mode shapes, natural frequency, and damping coefficients of a spacecraft structure. I also assessed the quality of the test data.

Project: Spacecraft Design Review

Scope: This project supported reviewing the design of a spacecraft and its planned tests

Time: This project was a couple weeks worth of work somewhere in the time frame of January-June 2017.

Location: El Segundo, California

What I did: I reviewed the design presentation package of a small spacecraft including the planned tests for the spacecraft. I provided review comments for clarification as part of an external review process.

WORK EXPERIENCE

Hyperloop One California (United States) Lead Senior Engineer-Vehicle Dynamics June 2017–October 2018 Verified by John Edward Shew john.shew@mayasim.com Experience Summary Full-Time Engineering: 1 year, 4 months Post EAC degree: 1 year, 4 months Experience under licensed engineer: 1 year, 4 months

TASKS

Note: Hyperloop One has had several name changes. It has also been known as Virgin Hyperloop One, Virgin Hyperloop. I use Hyperloop One throughout my work experience descriptions.

I worked in a small diverse team of engineers called the System, Loads, Analysis, and Methods group that comprised of structural analysists, dynamicists, aerodynamists, and other specialized analysts that worked on modeling and simulating the behavior of our magnetic levitation vehicle system. I was the specialist in my area of vehicle structural dynamics and loads and was relied on in the company to develop our dynamic analysis and loads methodology. I was responsible for developing our in-house multiphysics dynamics simulation tool. I was mainly responsible for modeling the rigid body dynamics and flex body dynamics parts of the simulation. I developed loads generation processes, and defined processes for structural analysts to follow for substructure model coupling. I was responsible for generating loads for different sub-system teams that worked on structural design of the primary structures on the vehicle side and track-side, and designers for the electromagnetic engines and power electronics, and was responsible for generating passenger comfort and system performance metrics. I was responsible for comparing different software analysis packages and choosing which one met our dynamics simulation needs.

REPRESENTATIVE PROJECTS

Project: DevLoop 500-meter Hyperloop Demonstration Test Track - Test Runs

Scope: During this project we were speed testing our maglev demonstration vehicle

Location: Moapa, Nevada

Duration: June 2017 - October 2018. We tested occasionally throughout this duration of this time, and I supported part time. My main focus was working on the Passenger Product Vehicle Project listed next.

What I did: When I first joined Hyperloop One, they were conducting test runs of their already built maglev demonstration vehicle. I worked with the lead dynamics engineer on the project to learn their in-house simulation and post-processing tools. I reviewed sensor data (accelerometer and gap sensors) during an increasing speed test run campaign. I helped review anomalous runs and worked with a small team of analysts to understand discrepancies in the test run data and simulation data.

Project: Passenger Product Vehicle and Infrastructure Design

Scope: For this project we underwent a concept design review of a passenger vehicle prototype.

Timeline: June 2017-October 2018

What I did: I helped create a dynamics model to study different design concepts for a magnetic levitation passenger vehicle. I ran simulations and generated engineering data on system performance, rider comfort metrics, gap clearance, and power consumption to different track tolerance conditions. I led a dynamics software evaluation and vetted multiple options, and selected which dynamics software that best fit our needs. I developed our structural dynamics analysis workflow, developed test models and unit tested our processes for our in-house simulation tools.

Between October 2018- February 2019 I went on Maternity Leave

02/14/2024

CATHERINE PHAN (24-011-20)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Hyperloop One California (United States) Maternity Leave October 2018 – February 2019

Verified by

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

- DESCRIPTION

WORK EXPERIENCE

Hyperloop One Verified by Experience Summary California (United States) John Edward Shew **Full-Time** Vehicle Dynamics Specialist john.shew@mayasim.com Engineering: 2 years, 5 months February 2019-July 2021 Post EAC degree: 2 years, 5 months Experience under licensed engineer: 2 years, 5 months TASKS Between 2/2019-4/2019, I was a Lead Senior Engineer-Vehicle Dynamics. Between 4/2019-7/2021, I was promoted to Vehicle Dynamics Specialist. Gaps in time while working at Hyperloop One are due to maternity leave and have been broken into separate work experience time periods. During 2/2019-7/2021, I was responsible for further developing and maintaining our in-house dynamics simulation tool for generating loads for different component designers as we iterated until our detailed design cycle. I was responsible for guiding and supporting component testing related to the aspects of dynamics, vibrations, and verifying our models. I was responsible for calculating loads for our commissioning test campaign that were used for design. REPRESENTATIVE PROJECTS Project: Passenger Product Vehicle and Infrastructure Design (Continued) Scope: For this project we underwent preliminary and detailed design review of a passenger vehicle prototype Timeline: February 2019-July 2021 What I did: I communicated across multiple teams and disciples to bring together inputs from different designers responsible for the route, track, vehicle, controls, engines, and power electronic systems so that I could create an in-house simulation tool that could predict the performance and loads of the integrated vehicle system. I created a mass and inertia tracking workflow to calculate the integrated vehicle's mass and inertia through different design iterations. I wrote code that modeled the rigid body and flexible body dynamics, and unit tested it versus multiple independent methods. I worked with experts in aerodynamic and electromagnetic engineers to develop models for our simulation that represented their systems. During each design iteration, I coupled finite element models from multiple engineers internal and external to the company for our simulation, ran our set of load scenarios, and post processed extremum loads (structural and electrical) for different component designers. I reviewed preliminary, and detailed design reviews for primary structural components on the vehicle side and track side as well as functional components on the vehicle for their load assumptions and vibration loads for their qualification tests. I reviewed budget requests for our team and requested budget for external consultants, and testing. I solicited, reviewed, and selected expert consultants for us to work with. I led a mode survey and mass inertia test campaign of our vehicle and test track, selected the external consultants, and supervised their on-site test of the track and noted differences between our finite element model and as-tested configurations. I developed sensor requirements and planned a set of sensor measurements as part of our commissioning tests.

CATHERINE PHAN (24-011-20)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Hyperloop One California (United States) Maternity Leave August 2021 – November 2021

Verified by

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

- DESCRIPTION

WORK EXPERIENCE

Hyperloop One California (United States) Mechanical Engineer IV **November 2021 – March 2023**

Verified by Timothy Wayne Stone timothystonepe@gmail.com Experience Summary Full-Time Engineering: 1 year, 4 months Post EAC degree: 1 year, 4 months Experience under licensed engineer: 1 year, 4 months

-TASKS

Between 4/2019-3/2022 I was promoted to Vehicle Dynamics Specialist. Between 3/2022-3/2023 I was a Mechanical Engineer IV (The title change was a result of a complete reorg of the company in which the company wanted to level everyone's title to more industry standard)

I was responsible for maintaining and updating our in-house dynamics simulation tools for generating loads and integrated system performance metrics throughout several more different project investigations. I mentored and supervised junior dynamics and modeling engineers in updating and using our tools. I was responsible for supporting loads request data from vehicle chassis, suspension, track, and test rig designers. I also was responsible for investigating a new vehicle layout and to provide dynamics and stability analysis to understand the new layouts performance ability.

REPRESENTATIVE PROJECTS

Project: Cargo Pilot Project

Scope: This work supported the Concept Design phase of an autonomous cargo magnetic levitation vehicle.

Location: Los Angeles, California

Duration: October 2021-Jan 2023

What I did: I worked with a team of engineers under the guidance of the VP of Engineering to evaluate multiple concepts from different design constraints for an autonomous cargo vehicle. I proposed and investigated new mechanical design concepts. I modified our existing in-house tools to help calculate engineering data to help make decisions on feasibility of our design, as well as generate loads for suspension design and track design. I created a tool for estimating unique track design parameters for maneuvering switches and turns. I found and elevated early design issues and proposed solutions.

Project: Electromagnetic Bogie

Scope: This was a project to develop a new electromagnetic bogie.

Location: Los Angeles, California

Duration: January 2023-March 2023

What I did: I laid out an early concept design of an electromagnetic bogie system. I calculated the placement of engine actuators for various vehicle track configurations to promote stability of the vehicle. I calculated metrics to study the stability of different mass and inertia configurations. I modified our in-house tools to show the feasibility of this new system. I reviewed other peoples models for correctness and consistent assumptions.

Project: Electromagnetic Engine Components Test Rig Design

Scope: Additional test rigs were being designed for the already built electromagnetic levitation and propulsion engines. This effort

02/14/2024

was to support developing test requirements and design requirements for the test rigs.

Location: Los Angeles, California

Duration: January 2023-March 2023

What I did: I wrote component test requirements related to showing dynamics and system performance and reviewed test requirements for further qualifying our built levitation and propulsion engines. I guided decisions to alleviate unnecessary testing that would have caused very expensive and complex mechanical design for not much additional gain in performance measurement.

7. Approval of January 24, 2024, Board Meeting Minutes

NEVADA STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS Minutes of the Regular Board Meeting Held at 241 W Charleston Blvd Suite 130, Las Vegas, NV 89102 on Wednesday, January 24, 2024, at 8:30am

Board members participating were Chairman Angelo Spata, PE; Vice Chair Brent Wright, PE/SE; Thomas Matter, public member; Karen Purcell, PE; Michael Kidd, PLS; Robert Fyda, PE; Greg DeSart, PE; Jay Dixon, PE; and Matthew Gingerich, PLS.

Also participating were Patty Mamola, board staff; Chris MacKenzie, board legal counsel; Murray Blaney, board staff; Jasmine Bailey, board staff; and Derek Vogel, communications.

1. <u>Meeting conducted by Chair Angelo Spata, call to order and roll call of board members to</u> <u>determine presence of quorum—board members Brent Wright, Michael Kidd, Karen Purcell,</u> <u>Thomas Matter, Angelo Spata, Matt Gingerich, Robert Fyda, Greg DeSart, Jay Dixon.</u>

Mr Spata called the meeting to order, and a quorum was determined.

2. <u>Pledge of Allegiance.</u>

3. <u>Public comment.</u>

4. Introductions.

Board members and staff introduced themselves.

Mr Spata read the board's purpose and mission.

The purpose 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 and our mission is founded on the board's purpose, the board's mission is to uphold the value of professional engineering and land surveying licensure by assessing minimum competency for initial entry into the profession and to insure on going standard of professionalism by facilitating compliance with laws regulations and code of practice and to provide understanding and progression in licensure by openly engaging with all stake holders.

5. <u>Consideration of initial licensure applicant requests to waive certain requirements of Nevada</u> <u>Revised Statutes and Nevada Administrative Code Chapter 625.</u>

Ms Purcell recommended approval of the request to waive NRS 625.183 (4)(b) made by Jesse Reek

applying for electrical engineering licensure.

24-01 A motion was made by Ms Purcell, seconded by Mr Fyda to approve the waiver request. The motion passed unanimously.

Mr DeSart recommended approval of the requests to waive NRS 625.183 (4)(b) and NRS 625.390 (2) (a) made by John DeWolff applying for environmental engineering licensure, with the caveat that three (3) additional months of supervision under a licensed PE (ENVE) be completed in good standing before licensure is granted.

24-02 A motion was made by Mr DeSart, seconded by Mr Wright to approve the waiver requests with the recommendations as noted. The motion passed unanimously. Mr Fyda abstained from the vote.

6. <u>Board approval of non-appearance applications for initial licensure.</u> <u>Refer to Addendum A for</u> <u>list of applicants.</u>

The Board reviewed twenty-nine applications in the board packet for initial licensure and recommendations were made.

24-03 A motion was made by Mr Kidd, seconded by Mr Matter to approve the applications for initial licensure contained in the board packet with recommendations noted. The motion passed unanimously.

The Board reviewed nine additional applications in the supplement to the board packet for initial licensure and recommendations were made.

24-04 A motion was made by Ms Purcell, seconded by Mr Fyda to approve the applications for initial licensure contained in the board packet with recommendations noted. The motion passed unanimously.

7. Discussion and possible action on approval of November 16, 2023, board meeting minutes.

24-05 A motion was made by Mr Matter, seconded by Ms Purcell to approve the November 16, 2023, board meeting minutes. The motion passed unanimously.

8. <u>Discussion and possible action on approval of December 14, 2023, interim board meeting</u> <u>minutes.</u>

24-06 A motion was made by Mr Gingerich, seconded by Mr DeSart to approve the December 14,

2023, board meeting minutes. The motion passed unanimously.

9. Discussion and possible action on financial statements:

a. <u>October 2023</u>

b. November 2023

c. <u>December 2023</u>

Ms Mamola reviewed the October, November, and December 2023, financial statements as presented in the board packet and provided clarifications for the board.

24-07 A motion was made by Ms Purcell, seconded by Mr Kidd to approve the October, November, and December 2023, financial statements. The motion passed. Mr Matter was not present for the vote (he stepped out of the room at 9:00am).

10. Discussion and possible action on compliance reports by board staff.

a. Board staff report on complaints being investigated.

Mr Blaney reported on the status of the seven (7) open compliance case files. There were no questions from board members.

b. Consideration of probation reports:

Dooley Riva, PE #18231 Jason Caster, PLS #19338 Lazell Preator, PE #14982 Robert Mercado, PLS #10352 Timothy Prockish, PE #12931

Buckley Blew, PLS #24520 Lynn Affleck, PE #7676 Douglas Fellenz, EI #OT8691 Armando Monarrez, PE #19652 Mark Johnson, PE #19830

Mr Blaney reported on the status of licensees currently on probation. He noted that Mr Preator is not in compliance with the terms of his stipulated agreement with the board. Mr Blaney said Mr Affleck and Mr Fellenz have fulfilled the terms of their respective Decision and Orders, will be released from probation with the board upon board acceptance of their probation reports. He added that Mr Johnson recently completed the NAWT training as required by his stipulated agreement.

11. Discussion on Board Counsel Report.

Mr MacKenzie gave a brief overview of the items he is working on. There were no questions from the

board.

9:30 am

12. Formal hearing and possible disciplinary action related to complaint number 20230019, Lazell Preator, PE, license number 14982.

Deputy Attorney General Chricy Harris introduced herself for the record.

Ms Harris asked if Mr Preator was present or connected online.

Ms Mamola confirmed that Mr Preator was not present and not connected virtually or by telephone.

Ms Harris said we received an update yesterday from Mr Preator via email. In his email submitted to board staff, he provided that he would not be able to attend today's disciplinary hearing. He is currently outside of Las Vegas and due to current storms, he has determined that it would not be safe for him to travel. Also in the email, he made representations that amount to admissions of the alleged facts on the complaint. He's also clarified in his email that he understands that he's violated the terms of his suspension and that he also understands that he cannot work as an engineer until such time as he's able to meet with the board. So based on those representations, and serving as board counsel for this particular item, she recommended that the board continue this disciplinary hearing matter to a time that works not only just for the board but for Mr Preator. Ms Harris added this continuance is to give him the opportunity to make appearances because even though we have admissions of the allegations of fact in the complaint, he may not necessarily be in agreement with whatever discipline the board should impose. Ms Harris said we will need a motion to grant the continuance and then it was her recommendation for board counsel to re-notice to the respondent the agreed upon date.

Ms Purcell asked for an update on the current status of Mr Preator's Nevada license.

Mr MacKenzie said the lift of the stay of his suspension based on the board's decision and order of February 2023, ended Preator's probation January 14th of this year. He added Mr Preator has not applied to renew his license, which expired on December 31, 2023, so Preator's license is currently expired.

Mr Wright asked for clarification of the staff process for Mr Preator applying for the renewal of an expired license.

Ms Mamola said because his license was in suspended status prior to its expiration, the licensing system has a hard stop and will not allow a renewal application to proceed. If an application for a suspended license is mailed in, it would be routed to compliance for their review.

Mr MacKenzie said it may be best that he to contact Mr Preator and explore another stipulated agreement based on the emailed admission and see if we can fashion something for the board to consider in the future.

Mr Spata asked if proposing a stipulated agreement would involve a board liaison.

Mr MacKenzie said yes, a board liaison would review and make recommendation on a proposed stipulated agreement for Mr Preator.

24-08 A motion was made by Mr Wright, seconded by Mr Kidd to grant a continuance and allow board counsel to consult with the respondent on a possible settlement agreement. The motion passed unanimously.

Mr MacKenzie said with the continuance being granted the hearing would not proceed today. He thanked the witness who was attending in-person and those witnesses connected virtually for their willingness to give testimony, and that they would be contacted by staff regarding details of any future hearing.

13. <u>Discussion and possible action on stipulated agreement for Andrew Hammond, PE, PLS,</u> <u>license number 21191, complaint number 20220009.</u>

Mr MacKenzie introduced facts and the proposed terms of the stipulated agreement as shown in the board materials. He added that when presented with this proposed stipulated agreement, Mr Hammond quickly said he would refund all the money to the complainant, and with that, he provided proof. Mr MacKenzie said the stipulated agreement was revised to reflect payment had been made. With that change, Mr Hammond signed the stipulated agreement and it's before the board for its consideration. Mr MacKenzie asked if the board had questions or comments.

Mr Gingerich said he agreed with the stipulated agreement, particularly with review of the work. He asked if any issues of competency with prior work is discovered what would be the course of action.

Mr MacKenzie said a complaint has not been brought to the board for consideration for any other work, so if an issue were discovered there would be potential for the board to consider additional corrective or disciplinary action after the facts are known.

24-08 A motion was made by Mr Kidd, seconded by Ms Purcell to approve the stipulated agreement for Andrew Hammond, PE/PLS, license number 21191, complaint number 20220009 as presented. The motion passed unanimously.

14. Discussion and possible action on administrative report by board staff.

a. Approved licensees report.

Ms Mamola reviewed the approved licensee report as presented in the board packet and answered questions from board members.

b. Action items related to 2021-2025 Strategic Plan.

Ms Mamola asked if there were any questions relating to the strategic plan. There were none.

c. Items related to National Council of Examiners for Engineering & Surveying (NCEES).

Ms Mamola reminded board members of the upcoming zone meeting in Bozeman, MT, beginning on Thursday May 16, 2024, at 6PM and concluding early afternoon on Saturday May 18, 2024. She added that Ms Purcell, Mr Kidd, and Mr Matter were designated as the funded delegates from Nevada. Ms Mamola said the other board members should register directly through the notification email from NCEES. She said that staff can assist with registration and travel as needed.

15. Discussion and possible action on board committee reports.

a. Administrative Procedures Oversight Committee, Chair Brent Wright.

i. Discussion and possible action on draft personnel policy employee handbook.

Mr Wright said the committee had met on January 17, and recommended further revisions to the draft policy which Mr MacKenzie has made. He said the up-to-date version is in the meeting materials for board consideration. Mr Wright asked for board comments on the current draft.

Mr Gingerich suggested edits to the bottom of page 3 – last bullet point, replace "to" with "or" – and an edit to the continued section at the top of page 4 – replace "company" with "State Board".

Ms Mamola said the edits were noted and the document would be revised. (ACTION Item)

24-09 A motion was made by Mr Wright, seconded by Mr Fyda to approve the personnel policy employee handbook with the edits noted. The motion passed unanimously.

ii. <u>Discussion and possible action on recruitment process, timeline, and job announcement for</u> <u>filling the vacant Executive Director position.</u>

Mr Wright said APOC had discussed this agenda item and Ms Purcell volunteered to work with Ms

Mamola to draft a job announcement, description, and outline the form and timeline of the process. He said the materials are in the board packet for review and asked if board members had any questions or comments.

Mr Kidd asked if headhunter assistance had been considered in the recruitment process.

Mr Spata said it was considered by the committee, but it would be something that could be explored after the board sees the response from the initial recruitment efforts.

Ms Mamola and Ms Purcell outlined the method and timeline of advertising and screening applications that would be received.

Mr Wright suggested that the preference of the new executive being based in Reno be removed to allow the option of basing out of the Las Vegas satellite office. (ACTION Item)

Mr DeSart said sending the job announcement to wider industry professional associations may expand the reach for candidates. (ACTION Item)

24-10 A motion was made by Mr Wright, seconded by Ms Purcell to approve the recruitment process, timeline, and job announcement for filling the vacant Executive Director position. with the adjustments made as discussed. The motion passed unanimously.

iii. Consideration of board appointment of an interim executive director.

Mr Spata said APOC had discussions defining the role of the interim director until a permanent replacement is appointed. He said there needed to be a separation of the personnel functions from the task driven operations, and the committee agreed to appoint a board member liaison to manage human resources elements. Mr Spata added that Ms Purcell agreed to fulfill that role. He said the daily operations of the board would be managed by the interim appointee, with Ms Purcell having oversight of human resources elements such as salary, reviews, and staff personnel issues.

Ms Purcell said the board had selected her to do a staff assessment via one-on-one interviews and follow-up emails to help decide what the board is to look for in a new executive director. She said the information was used in drafting the announcement and job description for recruitment, in edits for the personnel policies, and that it would be beneficial for her to meet with the new director when hired to go over her findings.

Mr DeSart said that it was his understanding from the APOC meeting that the staff assessment by Ms Purcell was going to be shared for board consideration in this meeting's board packet. He added that he believed the board should see a copy and have the ability to review and assess the findings. Mr MacKenzie said the staff assessment can be considered a performance review, and personnel reviews in public setting have a set of requirements of open meeting law that need to be met. He added staff personnel review, other than the executive director, is not a function of the board, and including any memo relating to staff assessment for board review without the appropriate noticing to all involved has the potential to violate the rules that govern that process. Mr MacKenzie said the focus of the review was to establish what the board is looking for in an executive director going forward, in getting feedback from staff of things that work and things that may be considered to be changed.

Mr Spata said we need to also balance board members becoming part of that staff review process and now being managers, seven managers of our staff, which right now we currently have delegated to an executive director. Part of this recommendation is to delegate that to Ms Purcell. He added, we need put some trust in that and her professionalism in addressing personnel issues. But if something rose to the effect that we needed to make public notice and notify personnel, again, that would probably be a recommendation coming from Ms Purcell's assessment, which I am not hearing at this time.

Mr DeSart said he understood the concern relating to open meeting laws and agreed that the board doesn't want to have board members act as eight managers of staff, but added for the board to make informed decisions, he thought it would be reasonable for the board to have access to the information that was gathered.

Mr Gingerich asked if it were possible for the board to have a closed session.

Mr MacKenzie said no, the board would have to give the required formal notice and have a separate meeting. He added that any memo relating to the assessment would become a public record.

Mr DeSart asked if it would become public record if it's issued as confidential information to the board.

Mr MacKenzie said a private meeting with counsel can be held if there is potential liability or litigation pending. He added that the assessment intent was to identify what the board is looking for in recriting an executive director, but if it crossed over into other issues that would be considered a personnel matter which are dealt with by the executive director.

Mr Spata said until a permanent executive director is in place, personnel issues would be the purview of the board liaison Ms Purcell.

Mr MacKenzie said having a designated liaison to handle any issues is best until a permanent executive director is in place. Involving the board as a whole is problematic. Mr MacKenzie asked Ms Harris, Deputy Attorney General, for her opinion.

Ms Harris said she shared in Mr MacKenzie's concerns. It is best to have, once everything is fleshed out, someone in the executive director's role to handle personnel matters specifically. She added it gets really complicated when you involve the board because everything that you review, all discussions that the board would have are subject to public records requests. Ms Harris said there are certain aspects you may want to keep, that's confidential, you also may want to avoid creating the possibility of litigation related to handling personal matters. Ms Harris said these are items that are just best vested in the executive director.

Mr Spata said the recommendation is for a board liaison handle those matters in the interim. He said Ms Purcell has been designated until a new executive director is in place.

Mr DeSart said he was satisfied with the explanation, and would leave this to whoever the board selected as the permanent executive director to initiate whatever has been started.

24-11 A motion was made by Mr Wright, seconded by Mr Kidd, that APOC recommend Mr Blaney as interim director with operation responsibilities and any human resource related issues will be under the purview of the board liaison Ms Purcell. The motion passed unanimously.

b. Legislative Committee report, Chair Greg DeSart.

Mr DeSart said the committee met last week, January 16, and for the most part the committee discussed proposed regulation changes to contracts and PLS standards of practice and also LCB changes based on the Governor Lombardo directives. He added the committee is recommending approval of the changes that are included in agenda items 16a and 16b of the agenda.

Mr Spata asked, with the number of regulations that are being proposed for change, is there any outreach planned to inform licensees of the pending changes.

Mr DeSart said it hadn't been addressed directly by the committee, but that it is a good idea. Mr DeSart said there is an APWA conference coming up in the spring and he would be willing, as he has done in the past, to present on the regulation updates. He added that it might be beneficial to have a PLS board member join to present on the PLS standards of practice revisions –maybe Mr Gingerich could cover the northern Nevada APWA and Mr Kidd the southern Nevada APWA. (ACTION Item)

Ms Mamola said there was also a five-state survey conference coming up at the end of March that she and Mr Gingerich are planning to attend and talk about the regulation updates. (ACTION Item)

c. Professional Association Liaison Committee, Chair Matt Gingerich.

Mr Gingerich said the committee had met January 16, and the main topic of discussion were updates

from the professional association on their activities. Mr Gingerich noted how active Dr James is in promoting the engineering profession and his involvement in Future Cities. He added kudos to Mr Spata for his involvement as well as serving as a judge in the Future Cities competition.

d. Public Outreach Committee, Chair Karen Purcell.

Ms Purcell said the committee had not met since the last board meeting but would meet before the March board meeting. (ACTION Item) Ms Purcell said that the committee would be available to assist LegComm related to regulation updates.

e. PLS Standards of Practice Subcommittee of the Legislative Committee, Chair Matt Gingerich.

Mr Gingerich said the sub-committee last met on December 5, 2023, to consider public feedback and make revisions to the PLS regulation updates, which are being considered by the board today.

Ms Mamola said even though the PLS regulations have been moved forward to the board, it is advisable to keep the committee active just a bit longer, until the board receives the draft language from LCB.

Mr Gingerich asked if the board would be involved in the datum changes.

Ms Mamola said only in a support role. She added it was her understanding that the lead would likely be NDOT.

16. <u>Discuss proposed regulation changes, process for updating, and schedule for updating, see</u> <u>Attachment A for list of regulations.</u>

a. Regulation changes to contracts and PLS Standards of Practice.

Ms Mamola said the regulation changes, as presented, have been fully vetted many times through the PLS standards of practice subcommittee, as well as the legislative committee. She added they have gone through the required statutory public process, and if everyone is in agreement with the language, the next step following board approval today, would be staff forward the packet to the Legislative Council Bureau for legal language drafting. (ACTION Item)

Ms Mamola said, as Mr DeSart mentioned earlier, the legislative committee is recommending approval of the language as presented.

Mr Gingerich said several comments were received from the small business impact survey, and draft language was also sent to the legislative committee of the Nevada Association of Land Surveyors for

feedback. He said good input was received and was incorporated in revised text for the final draft presented to the board today.

24-12 A motion was made by Mr Gingerich, seconded by Mr Fyda to approve the proposed regulation changes to contracts and PLS Standards of Practice as presented. The motion passed unanimously.

b. <u>Legislative Counsel Bureau language proposed for board regulation changes related to</u> <u>Governor Lombardo's Executive Orders 2023-003 and 2023-004–LCB files: R 077-23, R079-23,</u> <u>R126-23, R105-23.</u>

Ms Mamola gave and overview of the changes to regulations as a result of Governor Lombardo's executive orders issued in early 2023.

Mr DeSart highlighted an addition to the language drafted by the LCB in NAC 625.310. He explained the addition of the text "...and other structures" to section 1(b). Mr DeSart added that the legislative committee is recommending the board approve the regulation changes as presented.

A motion was made by Mr DeSart, seconded by Mr Kidd to approve the regulation changes to Governor Lombardo's Executive Orders 2023-003 and 2023-004—LCB files:
 R 077-23, R079-23, R126-23, R105-23 as presented. The motion passed unanimously.

Ms Mamola said with board approval today, staff would prepare the agenda and posting for a public hearing to adopt the regulation changes – which will either be scheduled with the March board meeting or as a separate special board meeting. (ACTION Item)

17. <u>Discussion and possible action on information provided by government liaison</u> <u>representative from McDonald Carano related to Nevada's legislative and regulatory matters</u> <u>and any associated board matters.</u>

Ms Fisher said the legislative interim committees are now up and running, with a growth and infrastructure committee going on as we speak this morning and they're hearing presentations predominantly on various utilities throughout the state. She reported the governor has a new chief of staff, Ryan Cherry, who we know well and have worked a lot with over the years. Ms Fisher reported she recently met with the assembly majority leader and the chair of assembly commerce and labor, which is where all of the board bills would go. They both encouraged her to let any clients with potential bills for the 2025 session to start the process early. Ms Fisher added if there was anything coming out of the LegComm, we would need to start work on it very soon.

Mr DeSart offered his congratulations on her upcoming retirement, and that she would be missed.

Ms Mamola and Mr MacKenzie added their congratulations, and thanked Ms Fisher for her guidance over the many regulation updates and legislative sessions.

Ms Fisher said a transition plan has been developed and Lindsay Knox (Reno office) and Cassidy Wilson (Las Vegas office) would tag-team taking care of the board's government affairs going forward.

18. Discussion and possible action on status of Board and staff assignments.

Mr Spata said that Ms Mamola had provided him with a list of executive director action items that she could help with before her final day. He requested that Mr Blaney and Ms Mamola review those items and work with Ms Purcell to prioritize their completion. Items with a longer time frame would be identified and be considered for Ms Mamola if the board wants to retain her as consultant in the future. (ACTION Item)

19. Discussion and possible action on meeting dates.

Ms Mamola asked Mr MacKenzie if he had any conflict with the January 16, 2025, Las Vegas board meeting date, as she would like to confirm the date to avoid conflicts with major city-wide conferences in January.

Mr MacKenzie said he doesn't have his client dates set yet but will confirm as soon as he does.

20. <u>Discussion and identification of topics for future meetings including possible proposed</u> <u>amendments to the Nevada Professional Engineers and Land Surveyors Law, Nevada Revised</u> <u>Statutes and Nevada Administrative Code Chapter 625.</u>

Ms Purcell asked that an agenda item be added in March to discuss who the board is going to support for upcoming western zone elected officer positions.

Ms Mamola said staff have noted to invite candidates to the March board meeting to just provide some context and under the NCEES business agenda item the board can then discuss who they may want to support. (ACTION Item)

Mr Spata asked how the process of comity MLE and non-MLE would be handled until a new executive director is in place, and whether that process would be something that APOC would need to address.

Ms Mamola said the current review process would remain with Mr Blaney inserted as the interim director. She said he is familiar with the application review process and can maintain it until a permanent replacement is in place.

21. Public comment.

There was no public comment.

22. Adjournment.

Mr Spata thanked the board members for their participation and adjourned the meeting at 10:45am.



Addendum A - January Initials

LNAME	FNAME	ABREV	COMMENTS
Bhindora	Arjun	CE	Board approved; 1/24/24
Bugarin Villegas	Diana	CE	Board approved; 1/24/24
Carey	Dylan	CE	Board approved; 1/24/24
Dewan	Aimee	CE	Board approved; 1/24/24
Fiso	Daniel	CE	Board approved; 1/24/24

LNAME	FNAME	ABREV	COMMENTS
Hallis	Grayson	CE	Board approved; 1/24/24
Hoffman	Marshal	CE	Board approved; 1/24/24
Khorrami	Maral	CE	Board approved; 1/24/24
Majlesi	Borna	CE	Board approved; 1/24/24
Mendive	Myles	CE	Board approved; 1/24/24

LNAME	FNAME	ABREV	COMMENTS
Meyer	Morgan	CE	Board approved; 1/24/24
Meyer	lan	CE	Board approved; 1/24/24
Nicholas	Hannah	CE	Board approved; 1/24/24
Poudel	Roshan	CE	Board approved; 1/24/24
Swafford	Zachary	CE	Board approved; 1/24/24

LNAME	FNAME	ABREV	COMMENTS
Ditmars	James	EE	Board approved; 1/24/24
Reek	Jesse	EE	Board approved; 1/24/24; Waiver Requests: NRS 625.183(4)(B)
DeWolff	John	ENVE	Board approved 1/24/24 with condition he complete add'l 3 months of supervised experience. Can license mid March 2024; Waiver Requests: NRS 625.183(4)(B) and NRS 625.390(2)(A);
McKenna	Elizabeth	ENVE	Board approved; 1/24/24
Avissato	Michael	FPE	Board approved; 1/24/24

LNAME	FNAME	ABREV	COMMENTS
Pouryazdanpanah Kermani	Emad	FPE	Board approved; 1/24/24
Ramakrishnan	Prashanth	ME	Board approved; 1/24/24
Thomas	Ryan	ME	Board approved; 1/24/24
Osborn	Carolyn	MINE	Board approved; 1/24/24
Bala	Mohammed	SE	Board approved; 1/24/24

LNAME	FNAME	ABREV	COMMENTS
Barber	Michael	SE	Board approved; 1/24/24
Brock	Andrew	SE	Board approved; 1/24/24
Lee	Mark	SE	Board approved; 1/24/24
Liu	Jianwei	SE	Board approved; 1/24/24
Monzon	Eric	SE	Board approved; 1/24/24

LNAME	FNAME	ABREV	COMMENTS
Patki	Chaitanya	SE	Board approved; 1/24/24
Ramler	Bailey	SE	Board approved; 1/24/24
Sidiqui	Faizan	SE	Board approved; 1/24/24
Singhal	Meera	SE	Board approved; 1/24/24
TenBrook	Stephen	SE	Board approved; 1/24/24

LNAME	FNAME	ABREV	COMMENTS
Wang	Yuandong	SE	Board approved; 1/24/24
Ye	Sheng	SE	Board approved; 1/24/24
Yin	Yingyue	SE	Board approved; 1/24/24

8. Approval of February 8, 2024, Interim Board Meeting Minutes

NEVADA STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS Minutes of the Interim Board Meeting Held virtually via Zoom, Thursday, February 8, 2024, at 9:15AM

Board members participating were Vice-Chair Brent Wright, PE/SE; Thomas Matter, Public Member; Michael Kidd, PLS; Robert Fyda, PE; Karen Purcell, PE; and Jay Dixon, PE. Board members Angelo Spata, PE; Matthew Gingerich, PLS; and Greg DeSart, PE, were excused. Also participating were Murray Blaney, Operations/Compliance; Chris MacKenzie, Board Legal Counsel; and Jasmine Bailey, Licensing Specialist.

1. <u>Meeting conducted by Chair Angelo Spata, call to order and roll call of board members to</u> <u>determine presence of quorum—board members Brent Wright, Michael Kidd, Thomas Matter,</u> <u>Karen Purcell, Matt Gingerich, Robert Fyda, Greg DeSart, Jay Dixon.</u>

Mr Wright called the meeting to order, and a quorum was determined.

2. <u>Pledge of Allegiance.</u>

3. <u>Public Comment.</u>

There was no public comment virtually or via email.

4. <u>Consideration of initial licensure applicant requests to waive certain requirements of Nevada</u> <u>Revised Statutes and Nevada Administrative Code Chapter 625.</u>

There were none to be considered.

5. <u>Board approval of non-appearance applications for initial licensure.</u> Refer to Addendum A for <u>list of applicants.</u>

The board reviewed ten applications for initial licensure in the board packet.

A motion was made by Mr Matter, seconded by Mr Fyda to approve the applications for initial licensure contained in the board packet. The motion passed unanimously.
 Mr Spata, Mr DeSart and Mr Gingerich were not present for the vote.

6. Public comment.

There was no public comment virtually or via email.

7. <u>Adjournment.</u>

Mr Wright thanked the meeting attendees and adjourned the meeting at 9:21am.

Respectfully,	Murray Blaney
	Operations/Compliance

Interim Board Meeting February 8, 2024 Page 2 of 2

Addendum A - February Initials

LNAME	FNAME	ABREV	COMMENTS
Bickett	Jeffrey	CE	Board approved; 2/8/24
Carroway	Cooper	CE	Board approved; 2/8/24
Carter	Christopher	CE	Board approved; 2/8/24
Falkensammer	Leopold	CE	Board approved; 2/8/24
Rademacher	Eric	CE	Board approved; 2/8/24
Prinz	Jeff	PLS	Board approved; 2/8/24
Ojo	Тауе	SE	Board approved; 2/8/24

LNAME	FNAME	ABREV	COMMENTS
Piriak	Robert	SE	Board approved; 2/8/24
Valov	Joshua	SE	Board approved; 2/8/24
		65	
Wahr	Andrew	SE	Board approved; 2/8/24

9. Financial Statements

9.a. January 2024

Profit & Loss Budget - YTD Budget

July 2023 - January 2024

	TOTAL			
	ACTUAL	BUDGET	OVER BUDGET	% OF BUDGET
Income				
4000 REVENUE	717,706.50	632,750.00	84,956.50	113.43 %
Total Income	\$717,706.50	\$632,750.00	\$84,956.50	113.43 %
GROSS PROFIT	\$717,706.50	\$632,750.00	\$84,956.50	113.43 %
Expenses				
5100 PAYROLL EXPENSES	353,099.15	409,075.00	-55,975.85	86.32 %
5110 PAYROLL TAXES	23,163.52	35,787.43	-12,623.91	64.73 %
6001 OPERATING EXPENSES	290,185.80	365,875.06	-75,689.26	79.31 %
Total Expenses	\$666,448.47	\$810,737.49	\$ -144,289.02	82.20 %
NET OPERATING INCOME	\$51,258.03	\$ -177,987.49	\$229,245.52	-28.80 %
NET INCOME	\$51,258.03	\$ -177,987.49	\$229,245.52	-28.80 %

Profit and Loss YTD Comparison

	TOTAL	
	JAN 2024	JUL 2023 - JAN 2024 (YTD
Income		
4000 REVENUE		
4201 Application Fees		
4202 PE Comity Application	15,500.00	83,000.00
4203 PLS Comity Application		2,000.00
4204 PE Initial License Application	700.00	4,225.00
4205 PLS Initial License Application		150.00
4206 PE Reinstatement Application	1,600.00	10,800.00
4207 PLS Reinstatement Application		600.00
4208 EI Certification Application	1,600.00	6,200.00
Total 4201 Application Fees	19,400.00	106,975.00
4250 Renewals & Exam Fees		
4251 PE/PLS Renewals	11,050.00	413,225.00
4252 Renewal Late Fees	4,800.00	12,800.00
4253 PE License Fees	11,125.00	53,175.00
Total 4250 Renewals & Exam Fees	26,975.00	479,200.00
4300 Other Revenue		
4301 Replacement Certificate/Pocket	40.00	225.00
4303 Interest Income	7,763.52	52,325.00
4304 Discipline Pd to NV Gen Fund		8,106.50
4307 Firm Registration	7,400.00	70,900.00
Total 4300 Other Revenue	15,203.52	131,556.50
Total 4000 REVENUE	61,578.52	717,731.50
Total Income	\$61,578.52	\$717,731.50
GROSS PROFIT	\$61,578.52	\$717,731.50
Expenses		
5100 PAYROLL EXPENSES		
5102 Employee Health Insurance	5,338.84	33,967.17
5103 Employee IRA/SEP	11,001.47	20,157.02
5105 Payroll Service Fees	239.62	1,332.40
5107 Salaries	39,988.97	295,092.56
5108 Board Salaries		2,550.00
Total 5100 PAYROLL EXPENSES	56,568.90	353,099.15
5110 PAYROLL TAXES		
5111 FICA	2,479.31	17,413.85
5113 Medicare	579.85	4,278.90
5114 Modified Business Tax		684.80
5116 SUINV		13.56
5117 SUI	384.21	772.41
Total 5110 PAYROLL TAXES	3,443.37	23,163.52

Profit and Loss YTD Comparison

	TOTAL	
	JAN 2024	JUL 2023 - JAN 2024 (YTD
6001 OPERATING EXPENSES		
6006 Office Supplies	18.24	8,526.76
6007 Equipment/Furniture	109.95	109.95
6010 Equipment Purchases	68.18	3,107.22
6011 Equipment Leasing	275.60	1,955.69
6012 Software		
6012.1 Deferred Exp-Software Upgrades		8,000.00
6012.5 Software	54.99	3,174.25
Total 6012 Software	54.99	11,174.2
6015 Website Hosting	1,740.00	13,260.00
Total 6007 Equipment/Furniture	2,248.72	29,607.1
6101 Insurance		
6102 Workers Comp	1,197.81	1,297.8
6103 General Liability		1,629.7
Total 6101 Insurance	1,197.81	2,927.5
6201 Postage		
6202 Postage		5,088.7
6202.5 E-Postage		2,600.0
6205 Postage Renewals		1,294.0
Total 6201 Postage		8,982.7
6301 Board Meetings		
6302 Travel - Out of State	487.61	611.6
6303 Travel - In State		11,779.0
6304 Board Meeting Expenses		893.9
Total 6301 Board Meetings	487.61	13,284.6
6501 Professional Services		
6502 Legal		
6503 Board Meetings	6,910.30	32,355.9
6504 Regulations/Legislation	195.00	195.0
6504.5 Regulations/Legislation		715.0
Total 6504 Regulations/Legislation	195.00	910.0
6505 Discipline	1,932.50	8,533.7
Total 6502 Legal	9,037.80	41,799.7
6508 Accounting Fees	977.50	22,046.2
6509 Government Liaison Services	011.00	22,040.2
6509.1 Def Exp-Government Liaison		4,000.0
6509.5 Government Liaison	2,000.00	10,000.00
	2,000.00	10,000.00

Profit and Loss YTD Comparison

	TOTAL	
	JAN 2024	JUL 2023 - JAN 2024 (YTD)
Total 6509 Government Liaison Services	2,000.00	14,000.00
6510 Database/Website Design		
6510.1 Deferred Exp-Website Update		1,071.66
6510.2 Deferred Exp-Database Update	5,280.00	22,080.00
6510.5 Database/Website Design		937.50
Total 6510 Database/Website Design	5,280.00	24,089.16
6511 Public Outreach	600.00	6,850.00
6514 Contract Labor		100.00
6514.1 Def Exp-Contract Labor		2,770.63
6514.5 Contract Labor	595.72	1,562.36
Total 6514 Contract Labor	595.72	4,432.99
6515 IT Support	1,637.00	15,239.36
Total 6501 Professional Services	20,128.02	128,457.48
6601 Program Services		
6604 NCEES		
6606 Registration		650.00
6607 Travel		8,846.20
Total 6604 NCEES		9,496.20
6615 Bank Fees	44.95	490.69
6616 Merchant Services Fees	12,199.35	34,471.37
6630 LAS Office Support		1,403.92
6640 Workshops		
6640.5 Workshops		333.02
Total 6640 Workshops		333.02
Total 6601 Program Services	12,244.30	46,195.20
6700 Other		
6702 Discipline Pd to NV Gen Fund		-3,950.00
6704 State Administrative Fees		, ,
6705 Attorney General		157.04
6709 Email - EITS		417.00
6710 Leg. Counsel Bureau	900.00	900.00
Total 6704 State Administrative Fees	900.00	1,474.04
Total 6700 Other	900.00	-2,475.96
6801 Training & Conferences		
6802 Travel - Out of State		1,637.41
6804 Registration		2,864.00
Total 6801 Training & Conferences		4,501.41
6900 Other Expenses		
6901 Taxes and Licenses	158.68	474.20
Total 6900 Other Expenses	158.68	474.20

Profit and Loss YTD Comparison

	Т	OTAL
	JAN 2024	JUL 2023 - JAN 2024 (YTD)
Non State Owned Office Bldg.		
6002 Rent		
6002.1 Sub-Lease		-750.00
6002.2 Rent		44,778.33
Total 6002 Rent		44,028.33
6004 Utilities	86.20	775.78
6005 Telephone/Internet	139.39	4,900.54
Total Non State Owned Office Bldg.	225.59	49,704.65
Total 6001 OPERATING EXPENSES	37,608.97	290,185.80
Total Expenses	\$97,621.24	\$666,448.47
NET OPERATING INCOME	\$ -36,042.72	\$51,283.03
NET INCOME	\$ -36,042.72	\$51,283.03

Balance Sheet

As of January 31, 2024

	TOTAL
ASSETS	
Current Assets	
Bank Accounts	
1001 ASSETS	2,647,626.38
Total Bank Accounts	\$2,647,626.38
Other Current Assets	
1305 Prepaid Expense	23,867.66
1310 Prepaid Lease/Deposit	5,005.00
Total Other Current Assets	\$28,872.66
Total Current Assets	\$2,676,499.04
TOTAL ASSETS	\$2,676,499.04
LIABILITIES AND EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
2000 Accounts Payable	3,146.74
Total Accounts Payable	\$3,146.74
Other Current Liabilities	
2001 Payroll Liabilities	34,177.25
4100 Deferred Revenue	805,573.69
Total Other Current Liabilities	\$839,750.94
Total Current Liabilities	\$842,897.68
Total Liabilities	\$842,897.68
Equity	
3510 Website Phase 2	30,000.00
3520 Data System Upgrade	175,000.00
3530 Electronic/Digital Pathway	175,000.00
3900 Retained Earnings	1,402,318.33
Net Income	51,283.03
Total Equity	\$1,833,601.36
TOTAL LIABILITIES AND EQUITY	\$2,676,499.04

Balance Sheet Detail

As of January 31, 2024

	TOTAL
ASSETS	
Current Assets	
Bank Accounts	
1001 ASSETS	0.00
1051 First Indep. Bank - Operating	406,866.49
1052 First Indep. Bank - Payroll	77,814.81
1053 First Indep. Bank - Petty Cash	2,527.94
1054 First Indep. Bank - MMA	508,809.48
1055 First Indep. Bank - 24mo CD	558,247.87
1056 First Indep. Bank - 18mo CD	278,338.89
1057 First Indep. Bank - 12mo CD	272,487.19
1058 First Indep. Bank - 24mo FlexCD	542,533.71
Total 1001 ASSETS	2,647,626.38
Total Bank Accounts	\$2,647,626.38
Other Current Assets	
1305 Prepaid Expense	23,867.66
1310 Prepaid Lease/Deposit	5,005.00
Total Other Current Assets	\$28,872.66
Total Current Assets	\$2,676,499.04
TOTAL ASSETS	\$2,676,499.04
LIABILITIES AND EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
2000 Accounts Payable	3,146.74
Total Accounts Payable	\$3,146.74
Other Current Liabilities	
2001 Payroll Liabilities	0.00
2002 Accrued Benefits	34,177.25
Total 2001 Payroll Liabilities	34,177.25
4100 Deferred Revenue	805,573.69
Total Other Current Liabilities	\$839,750.94
Total Current Liabilities	\$842,897.68
Total Liabilities	\$842,897.68
Equity	
3510 Website Phase 2	30,000.00
3520 Data System Upgrade	175,000.00
	175,000,00
3530 Electronic/Digital Pathway	175,000.00
3530 Electronic/Digital Pathway 3900 Retained Earnings	
	1,402,318.33
3900 Retained Earnings	175,000.00 1,402,318.33 51,283.03 \$1,833,601.36

9.b. February 2024

[not available at time board packet was published]

10. Compliance Officer Report

10.a. Compliance Report

10. a. Compliance Investigations

Currently there are eight (8) cases to report on:

- 1. 20220007 Gross negligence, incompetency, or misconduct in engineering. Investigation complete.
- 2. 20230015 Gross negligence, incompetency, or misconduct in land surveying. Under investigation.
- 3. 20230016 Gross negligence, incompetency, or misconduct in land surveying. Investigation complete.
- 4. 20230018 Failure to act as faithful agent to client. Under investigation.
- 5. 20230019 Failure to comply with an order of the Board. Investigation complete.
- 6. 20240002 Gross negligence, incompetency, or misconduct in land surveying. Investigation complete.
- 7. 20240003 Failure to act as faithful agent to employer. Investigation complete.
- 8. 20230005 Practicing on a suspended license. Investigation complete.

1. 20220007 – Gross negligence, incompetency, or misconduct in engineering.

Summary:

Complaint filed by a public entity against a civil engineer alleging the stamping and signing of false and manipulated information, and the submittal of testing information for which the engineer was not in responsible charge.

Status:

Case under board counsel review.

2. 20230015 – Gross negligence, incompetency, or misconduct in land surveying.

Summary:

Complaint filed against a PE/PLS and a PLS from the same firm. The allegations relate to a boundary line adjustment performed on two neighboring properties and the resulting impact on a third party's irrigation easement.

Status:

Under investigation.

3. 20230016 – Gross negligence, incompetency, or misconduct in land surveying.

Summary:

Relates to a PLS performing an ALTA survey. A trailing surveyor was unable to re-trace the information in the survey and a complaint was filed with the board.

Status:

Case under board liaison review.

4. 20230018 – Failure to act as faithful agent to client.

Summary:

Complaint filed against a CE providing inspection and testing services on a project in Las Vegas. It is alleged the engineer failed to provide the final reports in a timely manner after being paid in full for services rendered.

Status:

Under investigation.

5. 20230019 – Failure to comply with an order of the Board.

Summary:

An engineer was subject to an order of the board suspending their license. Post the date of suspension it appears that the licensee has been practicing on the suspended license. Status:

Case under board counsel review.

6. 20240002 – Gross negligence, incompetency, or misconduct in land surveying.

Summary:

A complaint filed against a land surveyor for alleged gross negligence and trespass while performing boundary research on a property neighboring the complainant. Status:

Under board liaison review.

7. 20240003 – Failure to act as faithful agent to employer.

Summary:

A complaint filed by an employer against a mechanical engineer who while working remotely is alleged to have been providing professional services for another engineering firm. Status:

Under board liaison review.

8. 20240005 – Practicing on a suspended license.

Summary:

An engineer whose license was under suspension, offered and took payment for engineering services that were not deliverable.

Status:

Under board liaison review.

10.b. Probation Reports

10. b. Probation reports

Probation Summary:

Name	Case #	Status/Action	Date Ending
Dooley Riva	20190001	Good Standing	October 10, 2029
Lazell Preator	20190008 & 20200003	Non-compliant	to be advised
Robert Mercado	20230005	Under review	June 1, 2025
Jason Caster	20210004	Good Standing	February 1, 2025
M Armando Monarrez	20210011	Good Standing	February 1, 2025
Mark Johnson	20220004	Good Standing	August 15, 2025
Buckley Blew	20230004	Good Standing	August 15, 2026
Andrew Hammond	20220009	Good Standing	February 1, 2026

Payment Summary:

Name	Case #	Paid	Remaining	Final Due Date
Dooley Riva	20190001	\$20,800.00	\$3,950.00	September 12, 2024
Lazell Preator	20190008 & 20200003	\$6,569.50	\$3,200.00	October 15, 2023
Jason Caster	20210004	\$6,127.50	\$1,000.00	July 29, 2024
Andrew Hammond	20220009	\$7,000.00	\$1,700.00	May 12, 2024

Robert "Dooley" Riva, PE 018231

Case Number: 20190001 Violation of NRS 625.520, NRS 625.565, NAC 625.510, and NAC 625.610

Mr Riva allowed his license to lapse on December 31, 2009, and continued to practice professional engineering with an expired license until self-reporting to the Board on January 10, 2019.

Mr Riva admitted, during the investigation in this matter, that he stamped, signed, and put false expiration dates for his license on the plans that he had submitted to reviewing agencies, as well as to his clients.

Mr Riva has maintained his California Professional Engineering license throughout this period from December 31, 2009, to the present. Mr Riva's California license is currently in good standing. A third-party competency review of a sampling of the thirty-seven (37) identified Nevada projects, that Mr Riva stamped while unlicensed has been completed, and his work was found to be competent.

NRS 625.410 states that the Board may take disciplinary action against a licensee for practicing after the license of the professional engineer has expired or has been suspended or revoked. NRS 625.520 also states that it is unlawful for any professional engineer to practice in a discipline of professional engineering in which the Board has not qualified him and for any person to use an expired license. Accordingly, NRS 625.565 makes it unlawful for any person to impress any documents with the stamp of a professional engineer after that person's license has expired. In addition, NAC 625.610 requires that licensees include the date of expiration of his or her license on the stamp or seal. Moreover, under NAC 625.510, licensees must be honest and impartial, and serve their employers, clients, and the public with devotion. Mr Riva has violated the aforementioned provisions by continuing to practice professional engineering for nine (9) years after the expiration of his license and knowingly falsifying expiration dates when signing and stamping plans for submission to building departments for permits.

NRS 625.410(5) authorizes the State Board to take disciplinary action against a licensee for a violation of any provision of NRS Chapter 625 or NAC Chapter 625. Further, pursuant to NAC 625.640(3)(b)(2) this matter may be resolved without a formal hearing by Stipulated Agreement.

Mr Riva and the State Board hereby stipulate to the following terms for the above-referenced violation(s):

1. Mr Riva's license shall be reinstated and suspended for ten (10) years immediately following entry of this Agreement, but with the suspension stayed and probation imposed for the duration of that time period.

2. The stay of Mr Riva's license suspension may be lifted by the State Board upon notice and the opportunity for Mr Riva to be heard should Mr Riva fail to abide by the terms hereof.

3. Mr Riva's successful completion of probation is expressly conditioned upon his full compliance with the following conditions of probation:

a. Mr Riva shall pay all of the State Board's legal and investigative costs associated with this matter, in the total amount of Two Thousand Three Hundred Fifty and No/100 Dollars (\$2,350.00), which includes One Thousand Three Hundred Fifty and No/100 Dollars (\$1,350.00) in legal fees and One Thousand and No/100 Dollars (\$1,000.00) for the cost for a third-party competency review of a sampling of the thirty-seven (37) projects stamped by Mr Riva while practicing without a license. This payment is due to the State Board within thirty (30) days of the State Board's acceptance and execution of this First Revised Stipulated Agreement.

b. Mr Riva shall pay an administrative fine to the State Board in the amount of Fifteen Thousand and No/100 Dollars (\$15,000.00), plus Two Hundred and No/100 Dollars (\$200.00) for each of the thirty-seven (37) projects lawfully stamped by Mr Riva, for a total of Twenty-Two Thousand Four Hundred and No/100 Dollars (\$22,400.00). Two Thousand Six Hundred Fifty and No/100 Dollars (\$2,650.00) of this amount is due to the State Board within thirty (30) days of the Board's acceptance and execution of this First Revised Stipulated Agreement. The balance thereof shall be due in five (5) equal annual installments of Three Thousand Nine Hundred Fifty and No/100 Dollars (\$3,950.00). The first (1st) due on or before one year of the State Boards acceptance and execution of this First Revised Stipulated Agreement, and the remaining four payment due on or before each subsequent anniversary thereof, through the fifth (5th) anniversary of the State Boards acceptance and execution of this First Revised Stipulated Agreement.

c. Mr Riva shall undertake and assume all costs associated with reviewing and re-stamping the drawings associated with the aforementioned projects that are on file with the appropriate building departments and provide the Board with sufficient proof thereof.

d. Mr Riva registering in, paying for, and completing an advanced level ethics course with Texas Tech University Murdough Center for Engineering Professionalism, and providing proof of completion thereof to Board staff within one (1) year of the date of full execution of this First Revised Stipulated Agreement.

LAST PROBATION REPORTS DUE October 1, 2029

Print Form								
PROBATIONER	Robert Dooley Riva	l			PE/PLS #:	018231		
EMPLOYER:	EMPLOYER: Riva Engineering & Consulting							
PROBATION RE	EPORT SUMITTED F	OR THE PER	IOD OF:	2023-11-1	6 THROUG	GH 2024-1-15		
CLIENT:								
NAME:	BRENT JOHN	SON						
ADDRESS	: bjohnson	@chaseintern	ational.co	m				
CITY:			STATE:		ZIP CODE:			
PROJECT:								
NAME:	JOHNSON R	ESIDENCE						
LOCATION		190	DALL CO	JRT				
CITY:	CARSON	CITY	STATE:	NV	ZIP CODE:	89448		
SIZE:	5500 SF	START DA	ATE:	7.19.23	END DATE	: NA		
STATUS O	F PROJECT: DE	SIGN DEVEL	OPMENT	IS 100% C	OMPLETE, CD'	S 40% COMPLETE		
FEE PAID	BY CLIENT:			\$18,800				
SCOPE OF WOR	રK:							
	DESIGN DEV	ELOPMENT &	& CONSTF	RUCTION D	OCUMENTS			
DESCRIBE IN D PROJECT.	ETAIL YOUR INVOL	VEMENT IN T	HIS PRO.	JECT AND	HOW YOU HAN	DLED THIS		
PROVIDE FRAMING PLANS AND STRUCTURAL DETAILING, COORDINATION WITH ARCHITECT AND CONTRACTOR, ISSUE FOR TEAM REVIEW								
DESCRIBE IN DETAIL HOW YOU IMPROVED ON THIS PROJECT IN THE AREAS FOR WHICH YOU ARE ON PROBATION.								
MY NV LICENSE IS NOT EXPIRED								
SIGNATURE:	Cobert D. Riva				DATE Januar	y 25, 2024		

Lazell Preator, PE 014982

Case Numbers: 20190008 and 20200003 Violations: NRS 625.410(2), NRS 625.540, NRS 625.560, NAC 625.510, NAC 625.530, and NAC 625.540

Previous 2018 Complaint and Stipulated Agreement

Before setting forth the facts for the two complaints at issue, the following summation of a previous Stipulated Agreement is relevant. A Stipulated Agreement was entered by and between the State Board and Mr Preator on November 8, 2018 ("2018 Stipulated Agreement'"), regarding previous Complaint number 20180006. In the 2018 Stipulated Agreement, Mr Preator acknowledged violations of NRS Chapter 625 in which his conduct constituted gross negligence, incompetence, or misconduct in the practice of professional engineering and failure to exercise due care and oversight in submitting the plan set to the office of the Deputy Building and Safety Director for the City of Las Vegas.

The facts pertaining to the 2018 Stipulated Agreement involved the filing of a complaint alleging the submission of plans containing the forged signatures of two senior building officials in an attempt to obtain a building permit.

Specifically, on March 7, 2018, the office of the Deputy Building and Safety Director for the City of Las Vegas received a plan set. The plan set included an irregular and misspelled signature of the City Engineer, Allen Pavelka, with his name signed "Alan" as opposed to the proper spelling "Allen." The plan set further included a signature of a retired Director of Building and Safety, Chris Knight. Mr Preator asserted that he relied on a third party, Jorge Guzman, to acquire said signatures, and that said third party, unbeknownst to Mr Preator, obtained or affixed the forged signatures. Although Mr Preator denied forging the signatures at issue, he admitted that he is responsible for documents that he seals and signs and that he is responsible to use due care and oversight to manage originals and copies of all documents he has signed and sealed.

In the 2018 Stipulated Agreement, Mr Preator's Nevada license was placed on probation for twelve (12) months. As part of his probation, Mr Preator was required to pay certain fines, costs, and fees, and require that he write a Whitepaper on Responsible Charge. The probation under the 2018 Stipulated Agreement has since been completed.

Case No. 20190008 - "Forgery Case"

In regard Case No. 20190008, a complaint has been submitted against Mr Preator by the Executive Director for the State Board on behalf of a professional land surveyor, alleging fraudulent stamping and signing of legal descriptions.

Specifically, On December 18, 2017, Mr Preator submitted two legal descriptions for a project on Du Fort Avenue to the City of Henderson. The complainant land surveyor inadvertently discovered the two legal descriptions while reviewing projects on the City of Henderson website in August 2019. The two legal descriptions were produced for Preator Consulting by the land surveyor. However, Preator Consulting had not paid for the work, and thus, the land surveyor had not completed the work, as he had not signed or dated the two legal descriptions. The two legal descriptions were, hand signed, dated and submitted to the city on December 18, 2017.

In an effort to explain how the legal descriptions at issue were fraudulently signed, Mr Preator asserts that he relied on the same third-party blamed in the 2018 Stipulated Agreement, i.e., Jorge Guzman, to obtain the stamp and signature of the land surveyor before submitting the legal descriptions now at issue. Mr Preator again asserts that Jorge Guzman must have forged the surveyor's signature before submitting the legal descriptions to the City of Henderson. Although Mr Preator denied forging the signatures at issue, he admits that he is responsible for documents that he submits and that he is responsible to use due care and oversight to manage originals and copies of all said documents.

Mr Preator has not been able to provide any information or documentation regarding his working relationship with Mr Guzman, or any evidence that Mr Guzman exists.

NRS 625.410(2) provides authority for the State Board to administer discipline in Nevada for any gross negligence, incompetency, or misconduct in the practice of professional engineering as a professional engineer. NRS 625.410(5) provides authority for the State Board to administer discipline in Nevada for a violation of any provision of NRS Chapter 625. A licensee violates NRS 625.540 by unlawfully practicing land surveying. Specifically, it is unlawful to present or attempt to use, as his or her own, the license or stamp of another person and to impersonate any other licensee of the same or a different name. Additionally, it is a violation of NRS 625.560 to sign a description unless the person holds an unsuspended and unrevoked license as a professional land surveyor.

NRS 625.410(5) provides authority for the State Board to administer discipline in Nevada for a violation of any regulation adopted by the Board. A licensee violates NAC 625.510 by failing to uphold and advance the honor and dignity of the profession by maintaining high standards of

ethical conduct regarding honesty. It is a violation of NAC 625.530 for a licensee to fail to act in professional matters as a faithful agent. A licensee violates NAC 625.540(1) by failing to take care that credit for engineering or land surveying work is given to those to whom credit is properly due and violates NAC 625.540(4) by failing to not maliciously injure the professional reputation, business prospects or practice of another engineer or land surveyor.

Based on the foregoing, Mr Preator stipulates that he violated NRS 625.410 (2), in that his conduct constituted gross negligence, incompetence, or misconduct in the practice of professional engineering. Mr Preator stipulates that he violated NRS 625.540 by unlawfully practicing land surveying by presenting the license or stamp of another person and by impersonating another licensee. Likewise, Mr Preator stipulates that he violated NRS 625.560 by signing a description without a license as a professional land surveyor.

Further, Mr Preator stipulates that he violated NAC 625.510 by failing to uphold and advance the honor and dignity of the profession by maintaining high standards of ethical conduct regarding honesty. In addition, Mr Preator stipulates that he violated NAC 625.530 by failing to act in professional matters as a faithful agent. Finally, Mr Preator stipulates that he violated NAC 625.540 by failing to take care that credit for land surveying work was given to those to whom credit was properly due and by failing to not maliciously injure the professional reputation, business prospects or practice of another engineer or land surveyor.

Case No. 20200003 - "Faithful Agent Case"

In regard Case No. 20200003, a complaint has been submitted against Mr Preator alleging misconduct and failure to meet terms of a contract.

Specifically, on February 2, 2018, the complainant contracted with Mr Preator to provide civil engineering for an auto body repair shop construction project, and paid Mr Preator a \$7,100 retainer. Per the contract, Mr Preator was to begin working on the project within two days of receiving the retainer. Between February 2018 and February 2020, no work product was provided to the client nor to the professionals and contractors working on the client's behalf. There were various interactions and requests for updates on the status of the project. Mr Preator asserts that, during the project, he was unable to speak with the architect on the project, from whom Mr Preator asserts that he received differing site plans. Nevertheless, Mr Preator informed the client that various items were under review by planning authorities, even though they were never actually submitted.

NRS 625.410(2) provides authority for the State Board to administer discipline in Nevada for any gross negligence, incompetency, or misconduct in the practice of professional engineering as a professional engineer. NRS 625.410(5) provides authority for the State Board to administer discipline in Nevada for a violation of any regulation adopted by the Board. A licensee violates NAC 625.510 by failing to uphold and advance the honor and dignity of the profession by maintaining high standards of ethical conduct regarding honesty. It is a violation of NAC 625.530 when a licensee fails to act in professional matters as a faithful agent.

Based on the foregoing, Mr Preator stipulates that he violated NRS 625.410(2), in that his conduct constituted gross negligence, incompetence, or misconduct in the practice of professional

engineering. Further, Mr Preator stipulates that he violated NAC 625.510 by failing to uphold and advance the honor and dignity of the profession by maintaining high standards of ethical conduct regarding honesty. Finally, Mr Preator stipulates that he violated NAC 625.530 by failing to act in a timely and professional matters as a faithful agent.

Pursuant to NAC 625.640, a disciplinary matter may be resolved without a formal hearing by a Stipulated Agreement. To that end, to resolve Complaint Numbers 2019008 and 20200003, Mr Preator and the State Board resolve this matter on the following basis:

(1) Mr Preator's Nevada license shall be suspended for thirty-six (36) months following entry of this Agreement, pursuant to NRS 625.410 (2) and NAC 625.530, but with the suspension stayed and probation imposed for the duration of that time period.

(2) The stay of Mr Preator's suspension may be lifted by the State Board upon notice and the opportunity to be heard should Mr Preator fail to abide by the terms hereof.

(3) Mr Preator's successful completion of probation is expressly conditioned upon his full compliance with the following conditions of probation:

(a) Mr Preator shall pay a fine of Five Thousand and Noll 00 Dollars (\$5,000.00) for the Forgery Case and a fine of Two Thousand and No/I 00 Dollars (\$2,000.00) for the Faithful Agent Case, for a total fine of Seven Thousand and No/100 Dollars (\$7,000.00), within six (6) months of acceptance and execution of this Agreement by the State Board.

(b) Mr Preator shall pay the professional land surveyor in full under his contract therewith for work on the Du Fort project.

(c) Mr Preator shall pay for cost of hiring a Nevada licensed professional land surveyor to review, re-stamp and sign the Du Fort legal descriptions.

(d) Mr Preator shall immediately notify client and the relevant public entity via letter, with copy to the Board, of the necessity of the Du Fort legal descriptions to be re- submitted with lawful stamping and signature.

(e) Mr Preator shall reimburse in full the deposited amount the complainant paid for the Autobody Repair Shop project.

(f) Mr Preator shall pay the State Board Two Thousand Seven Hundred Sixty-Nine and 50/100 Dollars (\$2,769.50) as reimbursement of administrative expenses in this matter.

(g) Mr Preator registering in, paying for and completing an entry level ethics course with Texas Tech University Murdough Center for Engineering Professionalism, and providing proof of completion thereof to Board staff.

(h) Mr Preator shall provide to the State Board staff, within thirty (30) days of execution of this agreement by the State Board, a list of projects that were submitted for governmental review in 2017 and 2018, and provide project names, clients, and to which agencies submissions were made. These submissions will be reviewed by State Board staff to determine and identify any other possible statutory and/or regulatory violations.

(i) Mr Preator shall submit detailed bi-monthly probation reports to the Executive Director of the Nevada Board, which shall report any work completed in Nevada during the previous two (2) month period. A report shall be filed even if no work is performed in Nevada during the previous two (2) month period. The first report shall be due within two (2) months of the effective date of this Stipulated Agreement. Each report shall include client contact information and a copy of the contract executed for any work in Nevada, including the scope of work detail.

(j) Mr Preator shall provide proof of the completion of thirty (30) professional development hours that are required on a biennial basis for license renewal, pursuant to NAC 625.430 and NAC 625.480.

LAST PROBATION REPORTS DUE to be determined.

Lazell Preator, PE 014982

Case Numbers: 20190008 and 20200003 Violations: NRS 625.410(2), NRS 625.540, NRS 625.560, NAC 625.510, NAC 625.530, and NAC 625.540

As of February 20, 2024, the following probation report has not been received:

- Nevada work performed Nov 14, 2023 – Jan 31, 2023. (reports due April 1, 2023)

Robert Mercado, PLS 010352

Case Number: 20210001 and 20230005 Violation of NRS 625.410(5), NRS 625.340, NAC 625.425, NAC 625.545, and NRS 625.410 (8)

Case No. 20210001 - "Faithful Agent Case"

On September 10, 2020, Sundance Surveying, Inc was hired to provide surveying and mapping services for a vacant property located in Las Vegas. As part of the contract, Mr Mercado was to file a Record of Survey Map with the Clark County Recorder's Office. Although the contract did not contain an anticipated date of completion, Mr Mercado informed his client that the work would only take a few weeks. Mr Mercado completed the survey on October 11, 2020, and emailed the survey map to his client on October 12, 2020. The survey map was not recorded at that time. On October 16, 2020, Mr Mercado was paid in full for his work.

Thereafter, the client made numerous attempts to contact Mr Mercado regarding the status of the recordation of the survey map, but he was unresponsive. As a result of Mr Mercado's unresponsiveness, coupled with his failure to have the survey map recorded, a complaint was filed on January 12, 2021. When contacted by the State Board, the complainant stated that she filed the complaint in an effort to prompt Mr Mercado to record the survey map and her only objective in filing the complaint was to ensure the survey map was recorded.

On January 14, 2021, the State Board staff left a voicemail for Mr Mercado regarding the complaint. On January 19, 2021, Mr Mercado responded to staff's voicemail and informed the State Board that, although the survey map had not yet been recorded, he intended to file it with the Clark County Recorder's Office on January 22, 2021. Mr Mercado did not file the survey map with the Clark County Recorder's Office on January 22, 2021, as promised. On two more occasions (January 26, 2021, and February 1, 2021), Mr Mercado assured the State Board staff that the survey map would be recorded, however, in each instance, Mr Mercado failed to make good on his promises. During this time, Mr Mercado provided a number of explanations for the delay in filing the survey map, which have not proven to be credible. As of February 5, 2021, the survey map was still not recorded.

On February 5, 2021, the State Board staff requested that Mr Mercado submit a formal response to the Complaint no later than March 8, 2021. The State Board staff followed up with Mr Mercado on multiple occasions in that regard. On March 8, 2021, Mr Mercado informed the State Board staff that he would be submitting his formal response to the complaint by the end of the day, but he did not.

On March 8, 2021, nearly 150 days after the survey was completed, the survey map was recorded with the Clark County Recorder's Office. The survey was stamped, signed, and dated by Mr Mercado on March 7, 2021.

On March 9, 2021, Mr Mercado submitted his formal response to the complaint. The State Board staff still determined that Mr Mercado's actions were in violation of various provisions of NRS Chapter 625 and NAC Chapter 625

It is a violation of NAC 625.425 for a land surveying firm to engage or offer to engage in the practice of professional engineering without first registering with the State Board and paying the annual fee of Fifty and No/100 Dollars (\$50.00).1 It is a violation of NAC 625.545 to fail to provide a written contract to each client which sets forth the scope of work, costs, and anticipated date of completion of the work.2 It is a violation of NRS 625.340 to fail to file a survey map with the county recorder in the county in which the survey was made a record of survey relating to land boundaries and property lines within ninety (90) days of the creation of such survey.3 It is a violation of NAC 625.530 for a licensee to fail to act in professional matters as a faithful agent.

Based on the foregoing, Mr Mercado stipulates that he violated NAC 625.425 by failing to register Sundance Surveying, Inc. with the State Board for the past ten (10) years. Further, Mr Mercado stipulates that he violated NAC 625.545 by failing to include the anticipated date of completion in his written contract with his client. Also, Mr Mercado stipulates that he violated NRS 625.340 by failing to file the survey map with the Clark County Recorder within ninety (90) days of the creation of such survey map. Finally, Mr Mercado stipulates that he violated NAC 625.530 by failing to act in professional matters as a faithful agent of his client in connection with his performance of the services therefor.

Pursuant to NAC 625.640, a disciplinary matter may be resolved without a formal hearing by a Stipulated Agreement. To that end, to resolve the complaint, Mr Mercado and the State Board resolve this matter on the following basis:

(1) Mr Mercado shall pay an administrative fine of \$1,500.00 for his violations of NAC 625.545, NRS 625.340 and NAC 625.530 within 90 days of the board's approval of the stipulated agreement.

(2) Mr Mercado shall reimburse the State Board \$2,271.00 for administrative expenses in this matter.

(3) Mr Mercado shall prepare and submit a whitepaper within 90 days of the board's approval of the stipulated agreement on the following topics:

- a) Elements necessary for a valid written contract for providing professional land surveying

services in the State of Nevada (NAC 625.545).

- b) Applicable deadlines and requirements for the timely recordation of records of surveys (NRS 625.340).

(4) Mr Mercado's Nevada license shall be suspended for twenty (24) months following entry of this agreement, but with the suspension stayed and probation imposed for the duration of that time period.

Case No. 20230005 - "Failure to Comply with Stipulated Agreement Case"

The board initiated a complaint against Mr Mercado for failing to comply with the stipulated agreement for the above referenced complaint executed on July 14, 2021. The terms of the settlement required filing bi-monthly probation reports for work performed in Nevada, submitting a white-paper, reimbursement of board legal fees, and payment of an administrative fine.

Mr Mercado failed to meet the milestone dates for submissions required by the agreement. Board staff offered extended milestone dates and a payment plan for the fees and fine, which were acceptable to by Mr Mercado. Mr Mercado continued to not meet the terms of the stipulated agreement despite the accommodations made for extending the milestones and the payment plan.

The board notified Mr Mercado, via written notice, to appear at a hearing on January 20, 2022, to provide Mr Mercado the opportunity to explain his continued failure to meet the terms of the stipulated agreement. Mr Mercado acknowledged receiving the notice to appear but failed to appear or participate virtually. Based on the presentation of facts at the hearing, and a non-showing of Mr Mercado, the board entered a Decision and Order, dated February 8, 2022, lifting the stay of suspension on Mr Mercado's license.

Due to Mr Mercado's continued failure to satisfy the terms of the July 14, 2021, Stipulated Agreement, even after the February 8, 2022, Decision and Order by the board to lift the stay on his license suspension, the board filed a second complaint which was heard on May 11, 2023, after due notice was provided to Mr Mercado.

At the May 11, 2023, hearing, Mr Mercado admitted and acknowledged that he had continually failed to abide by the terms of the stipulated agreement by failing to make timely payments of fees and fines, not submitting the white-paper as specified, and not meeting submittal dates for bi-monthly probation reports, and that he also no-showed to the January 20, 2022, hearing. Mr Mercado paid the over-due fees and fines, submitted the delinquent whitepaper, and provided all required bi-monthly probation reports on May 9, 2023, two days prior to the May 11, 2023, hearing.

Upon hearing the matter and deliberation, the board ordered the following:

(1) Mr Mercado's Nevada Professional Land Surveying license was suspended through July 24, 2025, but the suspension is stayed, and probation imposed for the duration of the stayed suspension.

(2) Mr Mercado is to submit detailed bi-monthly probation reports to board staff for any Nevada work complete during the previous two-month period.

(3) The stay of Mr Mercado's license suspension may be lifted by the board, upon due notice and the opportunity to be heard, should Mr Mercado fail to abide by the terms above.

LAST PROBATION REPORTS DUE June 1, 2025

Robert Mercado, PLS 010352

Case Numbers: 20230005 Violations: NRS 625.410(8)

As of February 20, 2024, the following probation report has not been received:

- Nevada work performed Nov 12, 2023 – Jan 11, 2024. (reports due February 15, 2024)

Jason Caster, PLS 019338

Case Number: 20210004 Violation of NRS 625.410(2), NRS 625.565(2) and NAC 625.545

On or about February 25, 2021, the State Board received a complaint against Mr Caster. The complaint alleged incompetence and failure to provide a written contract. In July 2019, Mr Caster was hired to perform a boundary survey on a property and requested, through email, that Mr Caster locate property corners, stake them, and create an exhibit. Mr Caster completed the boundary survey in August 2019. In September 2019, the client requested Mr Caster to perform a topographic map and encumbrance survey. The survey was completed in October 2019. In June 2020, the project had been through the design and review process and subsequently permitted.

During construction, it was discovered that Mr Caster's survey was "busted" horizontally by approximately 6 feet and vertically by 7 inches. In June 2020, Mr Caster was made aware of the error. Subsequently, the client, through his company, filed a court action for damages against Mr Caster. In February 2021, Mr Caster filed for bankruptcy.

Mr Caster planned to use the boundary survey as the basis and control for the topographic survey, but Mr Caster did not perform the topographic map himself. Rather, Mr Caster had an employee of his company that is not a Professional Land Surveyor do the field work and create the map. Mr Caster failed to notice the errors in the topographic survey, and Mr Caster's failure to maintain responsible charge of the work performed resulted in the errant map being released to the client.

No formal contract was executed between Mr Caster and the client. Mr Wagner and Mr Caster exchanged emails for surveying services, including the scope of the project, cost, and time frame. Mr Caster indicated to client that a contract for the work would be forthcoming, but no contract was ever presented to the client. Additionally, Mr Caster did not disclose to the client that he did not have professional liability insurance until after the damage was done.

Based on the foregoing, Mr Caster stipulates that he violated NRS 625.410(2) and NRS 625.565 (2), as Mr Caster is grossly negligent in fulfilling his obligation as demonstrated by not being in responsible charge of his employee's work. Mr Caster further stipulates that he violated NAC 625.545 by failing to provide an appropriate written contract to a client prior to completion of work he performed.

Pursuant to NAC 625.640, a disciplinary matter may be resolved without a formal hearing by a Stipulated Agreement. To that end, to resolve the complaint, Mr Caster and the State Board resolve this matter on the following basis:

1. Mr Caster's Nevada license shall be suspended for three (3) years following entry of this Agreement, pursuant to NRS 625.410 (2) and NAC 625.530, but with the suspension stayed and probation imposed for the duration of that time period.

2. Mr Caster shall submit detailed bi-monthly probation reports to the Executive Director of the State Board, which shall report any work completed in Nevada during the previous two (2) month period. The first report shall be due within two (2) months of the effective date of this Stipulated Agreement. Further, when stamping any work in Nevada, Mr Caster shall have his work reviewed by another Nevada licensed surveyor, and the cost therefor shall be paid by Mr Caster. When submitting his bi-monthly probation reports to the Executive Director, said reports shall include an attestation of review from the Nevada licensed surveyor for any work listed in the probation report that required a stamp by Mr Caster. A probation report shall be filed even if no work was performed in Nevada during the previous two (2) month period.

3. Mr Caster's successful completion of probation is expressly conditioned upon his full compliance with the following conditions of probation:

(a) Mr Caster shall pay a fine of Five Thousand and No/100 Dollars (\$5,000.00), payable in ten (I0) quarterly payments of Five Hundred and No/I 00 Dollars (\$500.00) apiece, the first due three (3) months from the date of acceptance and execution of this Agreement by the State Board, and the final due thirty (30) months from the date of acceptance and execution of this Agreement by the State Board.

(b) Mr Caster shall pay the State Board Two Thousand One Hundred Twenty-Seven and 50/100 Dollars (\$2,127.50) as reimbursement of legal and administrative expenses expanded by the State Board in this matter, within six (6) months of acceptance and execution of this Agreement by the State Board.

(c) Mr Caster shall provide to the State Board staff, within thirty (30) days of execution of this agreement by the State Board, an attestation that he has reviewed the current statutes under NRS Chapter 625 and regulations under NAC Chapter 625.

(d) Mr Caster shall prepare a White Paper and submit it to the Executive Director of the State Board within sixty (60) days of the State Board's approval of this Stipulated Agreement, for State Board review and approval, on the meaning of being in responsible charge of land surveying, as it is defined under Nevada law.

LAST PROBATION REPORTS DUE February 1, 2025

Print Form							
PROBATIONE	R:Jason E. Caster] PE/PLS #:	19338				
EMPLOYER:	Multnomah County]				
PROBATION F	REPORT SUMITTED FOR THE PER	RIOD OF: Dec 1, 2023	THROUGH	H: Jan 31, 2024			
NAME:							
ADDRES	S:						
CITY:		STATE:	ZIP CODE:				
PROJECT:							
NAME:							
LOCATIO							
CITY:		STATE:	ZIP CODE:				
SIZE:	START D/	ATE:	END DATE:				
STATUS	OF PROJECT:						
FEE PAII	FEE PAID BY CLIENT:						
SCOPE OF W	ORK:						

DESCRIBE IN DETAIL YOUR INVOLVEMENT IN THIS PROJECT AND HOW YOU HANDLED THIS PROJECT.

I did not perform any work in the State of Nevada during this time period.						

DESCRIBE IN DETAIL HOW YOU IMPROVED ON THIS PROJECT IN THE AREAS FOR WHICH YOU ARE ON PROBATION.

Page 1 of 1

SIGNATURE: Jason E. Caster

Digitally signed by Jason E. Caster

Date: 2024.01.31 10:20:46 -08'00'

DATE: February 1, 2024

M Armando Monarrez, PE 019652

Case Number: 20210011 Violation of NAC 625.530(1) and NAC 625.545

In 2017, Mr Monarrez's current client was contracted with the then President of CVL, to provide civil engineering services for a project in Henderson, Nevada. This project was a master improvement plan that included services such as hydraulic and hydrologic calculations, precise grading and wall plan, sewer plans, and technical drainage study. The contract for this project provided, "[i]f the site plan should change after CVL has commenced work, any revision required will be considered extra to the contract, subject to renegotiation of our fees."

In 2018, when the engineering work was well underway, the President of CVL passed away. CVL was then purchased by Mr Monarrez.

On or about February 12, 2019, Mr Monarrez sent an email to the client stating that part of the original design for the Hills project would no longer work and that he (Mr Monarrez) had revised the design plan.

On or about February 13, 2019, Mr Monarrez sent an email to the client, informing them that his designs could save a significant amount of money. In addition, this email stated, among other things, that "Typically Value Engineering is rewarded at 50/50 between owner and engineer of all cost savings."

On or about May 17, 2019, Mr Monarrez sent a letter to the client titled, "The Hills Value Engineering Agreement" (hereinafter "The Change Order"). The Change Order included a term that stated, "CVL will be compensated with 30% of all construction costs savings from Cut, Blasting, Fill, Over-excavation, Import, Export, and Rock wall construction." The Change Order also included a term that stated, "Growth Construction shall make payments of \$50,000 / month until the full compensation (30% of savings) has been paid, or prior to the recordation of the Final Map." The Change Order stated that compensation would be based on the differences between a contractor's bid price on the original design and the revised design.

On or about May 18, 2019, the client sent Mr Monarrez an email that rejected Mr Monarrez's proposed Change Order, stating, "we are NOT in agreement regarding the attached change order."

In the following months, despite the client's rejection, CVL sent invoices pursuant to the requested but rejected Change Order.

Violations and Disciplinary Actions

Pursuant to NAC 625.545, it is a violation for a licensee to perform work for a client before the licensee enters into a written contract with the client. Here, no written contract existed between Mr Monarrez and the client with regard to Mr Monarrez receiving a certain percentage of the costs saved, and no written contract existed for CVL to invoice the client \$50,000 per month. Even if Mr Monarrez believed a verbal agreement existed between him and the client, NAC 625.545 is clear that a written contract must exist before a licensee performs work for a client. Thus, Mr Monarrez's actions were in violation of NAC 625.545, as he performed work without a written contract and sent invoices pursuant to his proposed Change Order that was not accepted by the client.

Further, pursuant to NAC 625.530, it is a violation for a professional engineer to fail to act as a faithful agent or trustee for each client in the professional engineer's relations with his or her clients. As noted previously, the client had rejected Mr Monarrez's proposal for the Change Order, but Mr Monarrez continued to submit invoices pursuant to the Change Order over several months. Such behavior is not acting as a faithful agent for a client in the professional engineer's relationship. Accordingly, Mr Monarrez's actions violated NAC 625.530.

Based on the foregoing, Mr Monarrez stipulates that he violated NAC 625.545 and NAC 625.530(1).

Pursuant to NAC 625.640, a disciplinary matter may be resolved without a formal hearing by a Stipulated Agreement. To that end, to resolve the complaint, Mr Monarrez and the State Board resolve this matter on the following basis:

1. Mr Monarrez's Nevada license shall be suspended for twenty-four (24) months following entry of this Agreement, but with the suspension stayed and probation imposed for the duration of that time period. The stay of Mr Monarrez's suspension may be lifted by the State Board, upon notice and the opportunity to be heard, should Mr Monarrez fail to abide by the terms hereof. Mr Monarrez's successful completion of probation is expressly conditioned upon his full compliance with the following conditions of probation:

(a) Mr Monarrez shall submit detailed bi-monthly probation reports to the Executive Director of the State Board, which shall report any work completed in Nevada during the previous two (2) month period. A report shall be filed even if no work is performed in Nevada during the previous two (2) month period. The first report shall be due within two (2) months of the effective date of this Stipulated Agreement. Each report shall include client contact information and a copy of the contract executed for any work in Nevada, including the scope of work detail.

(b) Mr Monarrez shall pay an administrative fine of Two Thousand and No/100 Dollars (\$2,000.00) within six (6) months of acceptance and execution of this Agreement by the State Board.

(c) Mr Monarrez shall pay the State Board Three Thousand Sixteen and No/100 Dollars (\$3,016.00) as reimbursement of legal expenses expended by the State Board in this matter, within six (6) months of acceptance and execution of this Agreement by the State Board.

(d) Mr Monarrez shall, within one (1) year of the effective date of this Stipulated Agreement, successfully complete an intermediate level ethics course with Texas Tech University, Murdough Center for Engineering Professionalism, and submit proof of completion to the Board within sixty (60) days of completion of the course.

(e) Within thirty (30) days of license renewal, Mr Monarrez shall provide proof of completion of thirty (30) professional development hours that are required on a biennial basis for license renewal, pursuant to NAC 625.430, NAC 625.470 and NAC 625.480.

LAST PROBATION REPORTS DUE February 1, 2025

PROBATION REPORT

(MUST BE TYPED)

PROB	ATIONER	: M. Armando Mo	narrez		PE/PLS #: (019652
EMPL	OYER:	CVL Nevada, Ir	IC.]		
PROB	ATION RE	EPORT SUMITTE	D FOR THE PEF	RIOD OF: 11/20/2023	THROUGH	l: 01/19/2024
CLIEN	IT					
1		Clark County Wat	er Reclamation D	District		
/	ADDRESS	: 5857 E. Flamin	go Rd.			
(CITY:	.as Vegas		STATE: NV	ZIP CODE:	89122
PROJ	ECT					
1		20104 – Collectic	n System Rehabi	litation		
L		NOF PROJECT:	Clark County N	levada Service Area		
(as Vegas		STATE: NV	ZIP CODE:	89122
S	SIZE:	All over Valley	START D	01/25/21 ATE:	END DATE:	10/31/23
ę	STATUS OF PROJECT: CVL working on Bid Documents					
F	FEE PAID BY CLIENT: \$19,932					
SCOP	E OF WOI	чк.				

Prepare contract documents including plans and specifications for rehabilitation of approximately 300 sewer pipe assets and 200 sewer manholes all over the CCWRD service area. The tasks include project management, pre-design report, dewatering evaluation, CCTV, potholes, survey, drawings, and specifications.

DESCRIBE IN DETAIL YOUR INVOLVEMENT IN THIS PROJECT AND HOW YOU HANDLED THIS PROJECT.

I am the project manager and stamping engineer. I perform all project management tasks, coordinate with subconsultants, submit invoices, review pothole data, review CCTV, coordinate with CCWRD representatives, perform QC on the plans, write the specifications for the project, and responsible for the success of the project in the engineering design phase.

DESCRIBE IN DETAIL HOW YOU IMPROVED ON THIS PROJECT IN THE AREAS FOR WHICH YOU ARE ON PROBATION.

I do not performed tasks that are outside the scope of work without having a written change order/additional service request. I do not invoice for any tasks for which I do not have a written contract or change order for.

SIGNATURE: NO.

PROBATION REPORT

(MUST BE TYPED)

PROBATIONEI	R: M. Armando I	Monarrez		PE/PLS #: 0 ⁻	19652	
EMPLOYER:	CVL Nevada	, Inc.]		
PROBATION R		TED FOR THE PEF	RIOD OF: 11/20/2023	THROUGH:	01/19/2024	
CLIENT						
NAME:	Ascaya Inc					
ADDRES	S: 1 Ascaya Blv	′d				
CITY:	Henderson		STATE: NV	ZIP CODE:	9012	
PROJECT						
NAME:	Ascaya Canyo	n				
LOCATIO	N OF PROJEC	T: APN:178-33-3	14-016			
CITY:	Henderson		STATE: NV	ZIP CODE: 8	9012	
SIZE:	132.77 acres	START D	12/01/21 ATE:	END DATE:	01/31/24	
STATUS	OF PROJECT:	Preparing Civil Pla	ns for Final review at COF	1		
FEE PAID	BY CLIENT:	\$13,303				

SCOPE OF WORK:

Perform Engineering Services for up to 80 Condominium unit project in the hillside including, assistance with Zone Change, Tentative Map, Survey, Drainage Study, Traffic Study, Water Network Analysis, Water Master Plan, Civil Improvement Plans, and Final Map.

DESCRIBE IN DETAIL YOUR INVOLVEMENT IN THIS PROJECT AND HOW YOU HANDLED THIS PROJECT.

I am the project manager and stamping engineer for the civil engineering tasks. I coordinate the progress with the design team including sub-consultants. I update the client with the progress of the project and review the changes the architect makes to make sure we are staying in compliance. I personally prepared the grading design, utility design, and QC the plans, survey, and drainage study.

DESCRIBE IN DETAIL HOW YOU IMPROVED ON THIS PROJECT IN THE AREAS FOR WHICH YOU ARE ON PROBATION.

I do not performed tasks that are outside the scope of work without having a written change order/additional service request. I do not invoice for any tasks for which I do not have a written contract or change order for.

SIGNATURE:

DATE: 01/31/24

PROBATIONE	R·M Armando I	Monarrez			PE/PLS #:	019652	
					<i>ı.c</i>	019032	
EMPLOYER:	OYER: CVL Nevada, Inc.						
PROBATION R	EPORT SUMIT	TED FOR THE PEF	RIOD OF:	11/20/2023	THROUGI	H: 1/19/2024	
CLIENT							
····- []	
NAME:	Ascaya Inc						
ADDRESS	S: 1 Ascaya Blv	/d					
CITY:	Henderson		STATE	NV	ZIP CODE:	89012	
PROJECT							
NAME:	Ascaya Genera	al Services					
LOCATIO	N OF PROJEC	T: 1 Ascaya Blvd.					
CITY:	Henderson		STATE	. NV	ZIP CODE:	89012	
	640 acres		12/	/01/21		12/31/24	
SIZE:		START D	ATE:		END DATE:		
STATUS (OF PROJECT:	Perform tasks on T	- & M as re	equested by Cli	ient		
	BY CLIENT:	\$2,750					
		φ2,750					
SCOPE OF WO		is requested by Clie	nt Such a	onvicos may in	cludo roviciona	to proviously	
		gs, perform site insp					
DESCRIBE IN E PROJECT.	DETAIL YOUR I	NVOLVEMENT IN	THIS PRO	JECT AND HC	W YOU HANE	DLED THIS	
		gs, perform field insp ovement plans and			client and con	tractors. I also	
DESCRIBE IN E		OU IMPROVED ON	I THIS PR	OJECT IN THE	AREAS FOR	WHICH YOU ARE	
		re outside the scop e for any tasks for w					

SIGNATURE: Mort

DATE: 01/31/24

Mark Johnson, PE 019830

Case Number: 20220004 Violation of NRS 625.410(2).

In July 2018, a client contracted with Mr Johnson's employer to provide engineering services for a single-family home and work barn located in Gardnerville, NV. These services included the site layout, design of the engineered septic system, mapping of the existing site, submittal to Douglas County, and follow-up. There was an estimated cost for these services, but the actual charges would be based on "time and materials."

Mr Johnson, as the professional engineer in charge on behalf his employer, requested the client commission and provide a Geotechnical Report for the property. SC received this report in late August 2018. This geotechnical report noted that "local groundwater levels are expected to fluctuate during flood irrigation, changes in precipitation, seasonal variations."

The septic tank was installed in July 2019. Soon after the installation, the farmland in the immediate area of the client's home was predictably flood irrigated. Within a week, water was found to have entered into the septic tank as a result of pipes in the system being compromised due to the tank "floating" i.e. vertical displacement, due to the rise in surrounding ground water.

Following discovery of this failure, Mr Johnson recommended a system design change, requiring installation of the tank above-ground (change from gravity flow to pump system). The client agreed to this recommendation.

After installation of the revised septic tank layout, the client learned that the above- ground tanks could have been located anywhere. The client reported that, had she known this, she would have placed the tanks next to the large leach field mound, instead of directly outside her bedroom window, where the revised installation was sited by Mr Johnson. The client questioned whether Mr Johnon's employer would bear responsibility for the extra expense incurred for the reinstallation of the above- ground septic tank system.

Mr Johnson's employer agreed to absorb the engineering fees for the above-ground system, but not the additional expense associated with the removal and reinstallation of the septic tank.

During the investigation, Mr Johnson admitted that he did not anticipate that the flood irrigation would have any impact on the groundwater level.

VIOLATIONS and DISCIPLINARY ACTION

Pursuant to NRS 625.410, in relevant part, the State Board may take disciplinary action against a licensee for "[a]ny gross negligence, incompetency or misconduct in the practice of professional engineering as a professional engineer or in the practice of land surveying as a professional land surveyor." NRS 625.410(2). Here, Mr Johnson had the information that local groundwater levels would fluctuate during flood irrigation, changes in precipitation, and seasonal variation. Mr Johnson, however, failed to factor the known ground water variability into the in- ground septic tank design.

Based on the foregoing, Mr Johnson stipulates that he was grossly negligent in the engineering of the client's septic system, and thus in violation of NRS 625.410(2).

NRS 625.410(5) provides authority for the State Board to administer discipline in Nevada for a violation of any NRS Chapter 625 statute and/or any regulation adopted by the State Board. Further, pursuant to NAC 625.640, a disciplinary matter may be resolved without a formal hearing by a Stipulated Agreement.

To that end, to resolve Complaint Number 20220004 now pending, Mr Johnson and the State Board resolve this matter on the following basis:

1.) Mr Johnson's Nevada license shall be suspended for twenty-four (24) months following entry of this Agreement, but with the suspension stayed and probation imposed for the duration of that time period.

2.) Mr Johnson shall submit, to the State Board, a complete list and description of his projects from July 01, 2018 to December 31, 2022 that involved septic design undertaken by Mr Johnson. The State Board will then randomly select three (3) of those projects to be subjected to an independent third-party peer review to evaluate Mr Johnson's septic competency as a civil engineer. The third-party engineer shall be selected by the State Board, and Mr Johnson shall be responsible to pay for the services thereof upon presentment of the service's invoice. The third-party engineer shall have no conflict of interest relating to Mr Johnson, his employer, or the client.

3.) Mr Johnson shall pay an administrative fine of Five Thousand and No/100 Dollars (\$5,000.00) within ninety (90) days of acceptance and execution of this Agreement by the State Board. A payment plan may be granted by State Board staff if requested by Mr Johnson and deemed warranted by State Board staff.

4.) Mr Johnson shall pay legal and investigative costs to the State Board a total of Two Thousand One Hundred Six and 50/100 Dollars (\$2,106.50) within ninety (90) days of acceptance and execution of this Agreement by the State Board.

5.) Mr Johnson shall, within one (1) year of the effective date of this Stipulated Agreement, successfully complete a NAWT Designer Course, and submit proof of completion to the State Board within sixty (60) days of completion of the course.

6.) Mr Johnson shall pay the client restitution in the amount of \$15,816.40 pursuant to NRS 625.460(1)(e), within ninety (90) days of acceptance and execution of this Agreement by the State Board.

LAST PROBATION REPORTS DUE August 15, 2025

PROBATION REPORT

(MUST BE TYPED)

Print Form								
PROBATIONER: Mark Johnson, P.E. PE/PLS #: 019830								
EMPLOYER: Stanka Consulting LTD								
PROBATION REPORT SUMITTED FOR THE PERIOD OF: Nov 27, 2023 THROUGH: Jan 26, 2024								
CLIENT:								
NAME: Peter M Beekhof Jr								
ADDRESS: 1456 Industrial Way								
CITY: Gardnerville STATE: NV ZIP CODE: 89410								
PROJECT:								
NAME: Carson Valley RV Storage								
LOCATION OF PROJECT: 1716 Timber Ct								
CITY: Gardnerville STATE: NV ZIP CODE: 89410								
SIZE: 1.92 START DATE: Nov 27, 2023 END DATE: Jan 26, 2024								
STATUS OF PROJECT: Ongoing								
FEE PAID BY CLIENT: \$552.50								
SCOPE OF WORK:								
Construction is ongoing on the project. My scope at this point is answering constructability questions from the client (who is also the contractor).								
DESCRIBE IN DETAIL YOUR INVOLVEMENT IN THIS PROJECT AND HOW YOU HANDLED THIS PROJECT.								
I have been the civil project engineer for the project since the engineer originally in charge of the project left our office. I have been working closely with Douglas County and the client/contractor to ensure the product is constructed according to standards and delivered in a timely manner.								
DESCRIBE IN DETAIL HOW YOU IMPROVED ON THIS PROJECT IN THE AREAS FOR WHICH YOU ARE ON PROBATION.								
The scope of this project did not include any work for which I am on probation.								
SIGNATURE: Mark Johnson Draw and the second								

Print Form						
PROBATION	ER: Mark Johnson, P.E.		PE/PLS #: 019830			
EMPLOYER:	Stanka Consulting LTD]			
PROBATION CLIENT:	REPORT SUMITTED FOR	R THE PERIOD OF: Nov 27, 2023	THROUGH: Jan 26, 2024			
NAME:	KR Frathouse LLC					
ADDRE	SS: 542 Lander St					
CITY:	Reno	STATE: NV	ZIP CODE: 89509			
PROJECT:						
NAME:	1703 N. Virginia Tenant I	mprovement building				
LOCAT	ION OF PROJECT: 1703	N. Virginia St				
CITY:	Reno	STATE: NV	ZIP CODE: 89503			
SIZE:	0.084	START DATE: Nov 27, 2023	END DATE: Jan 26, 2024			
STATUS OF PROJECT: Ongoing						
FEE PAID BY CLIENT: \$260.00						
SCOPE OF V	VORK:					
The project is period involve	currently in review before t ed revisions to civil plans ba	the City of Reno to obtain a building ased on comments from City of Ren) permit. Scope of work in this to staff.			
DESCRIBE IN PROJECT.	N DETAIL YOUR INVOLVE	MENT IN THIS PROJECT AND HC	W YOU HANDLED THIS			
I have been the civil project engineer for the project since the engineer originally in charge of the project left our office. I have been working closely with City of Reno and the client and the Project Manager to ensure the civil revisions are accepted by City of Reno to ensure timely issuance of the permit.						
DESCRIBE IN DETAIL HOW YOU IMPROVED ON THIS PROJECT IN THE AREAS FOR WHICH YOU ARE ON PROBATION.						
The scope of this project did not include any work for which I am on probation.						
	Mark Johnson	Digitally signed by Mark Johnson Div on «Mark Johnson or Stanka Consulting LTD ourEngineering	ATE: February 13, 2024			
SIGNATURE		ema∘⊫mark@etankaconsulting.com c=US Date 2024 02 13 12 08 20 -07 00				

Print Form	
PROBATIONE	R:Mark Johnson, P.E. PE/PLS #: 019830
EMPLOYER:	Stanka Consulting LTD
PROBATION F	REPORT SUMITTED FOR THE PERIOD OF: Nov 27, 2023 THROUGH: Jan 26, 2024
NAME:	Carson Luxury Housing LLC
ADDRES	S: 2655 Peavine Creek Rd
CITY:	Reno STATE: NV ZIP CODE: 89523
PROJECT:	
NAME:	Stafford Way Apartments
LOCATIO	DN OF PROJECT: 515, 535, 545 Stafford Way
CITY:	Carson City STATE: NV ZIP CODE: 89701
SIZE;	0.626 START DATE: Nov 27, 2023 END DATE: Jan 26, 2024
STATUS	OF PROJECT: Ongoing
FEE PAII	D BY CLIENT: \$975.00
SCOPE OF W	ORK:
	olves the construction of three, four-unit apartment buildings and appurtenant utilities, site office has prepared the civil plans.
DESCRIBE IN PROJECT.	DETAIL YOUR INVOLVEMENT IN THIS PROJECT AND HOW YOU HANDLED THIS
updated the civic coordination w	e civil project engineer since the original engineer on this project left our office. I have vil plans based on Carson City comments and in coordination with the client. Further ith the fire sprinkler design company has also been required due to a proposed revision to the upply line layout.
	DETAIL HOW YOU IMPROVED ON THIS PROJECT IN THE AREAS FOR WHICH YOU ARE
The scope of t	his project did not include any work for which I am on probation.
SIGNATURE:	Mark Johnson Details spread WWW advance Di on WWW contrasts or Bank Granuling 1/10, our Engineering Data of the Contrast of the Contrast Data of the Contrast of the Contrast DATE: February 13, 2024

Print Form]
PROBATIO	NER: Mark Johnson, P.E.
EMPLOYER	EXAMPLE STATES S
PROBATION CLIENT:	REPORT SUMITTED FOR THE PERIOD OF: Nov 27, 2023 THROUGH: Jan 26, 202
NAME;	Richard Sumner
ADDRE	SS: PO Box 874402
CITY: PROJECT:	Wasilla STATE: AK ZIP CODE: 99687
NAME:	1955 Piute Creek Rd Driveway
	DN OF PROJECT: 1955 Piute Creek Rd
CITY:	Washoe County STATE: NV ZIP CODE: 89510
SIZE:	136.11 START DATE: No. 1
STATUS	OF PROJECT: Ongoing END DATE: Jan 26, 2024
FEE PAID	BY CLIENT: \$65.00
SCOPE OF WO	RK:
period involved a	lved the construction of a driveway approximately 1,000 ft long up a hillside to an area uture house. The project involved grading and construction of retaining walls. The retaining ned by a geotechnical engineer. The project is nearing completion. The work in this time answering the client's question regarding culvert construction. ETAIL YOUR INVOLVEMENT IN THIS PROJECT AND HOW YOU HANDLED THIS
Washoe County	roject engineer since the beginning of the project. I have obtained the SUP required by and the grading permit. I have worked closely with the Project Manager, the client and o deliver a project that meets all applicable standards and is constructable given the site
DESCRIBE IN DE DN PROBATION.	TAIL HOW YOU IMPROVED ON THIS PROJECT IN THE AREAS FOR WHICH YOU ARE
The scope of this p	project did not include any work for which I am on probation.
IGNATURE: Ma	rk Johnson Destriggede Van dense Di privat under of Bank Generigs 10 evidences Der Wird of States Generigs 10 evidences Der Wird of States Generigs Devidences
of 1	(Please print circuit 4 in the second

(Please print, sign, date, then scan and email report to board@boe.state.nv.us)

Buckley Blew, PLS 024520

Case Number: 20230004 Violation of NRS 625.410 (2), 625.340, NRS 625.350(2)(a); and NRS 329.140(1).

Mr Blew self-reported a disciplinary action imposed against his California professional land surveyor license by the California Board of Professional Engineers, Land Surveyors, and Geologists (the "California Board") in his license renewal application.

CALIFORNIA BOARD DISCIPLINARY ACTION

The California Board action against Mr Blew was based on the following:

A) California Business and Professions Code ("Code") § 8780(d) and § 8762(b)(4) and (c) for failing to file a record of survey within ninety (90) days of his survey of the following properties:

- 555 and 575 Market Street, San Francisco
- 1281 W. National Drive, Sacramento
- 1520 and 1620 W. National Drive, Sacramento
- 1534 N. Market Blvd. and 4201 Sierra Point Drive, Sacramento
- 1700 W. National Drive, Sacramento
- 3200-3298 Orange Grove Avenue, Sacramento
- 1401 Civic Court, Concord

B) Under Code § 8780(b) for negligence in the practice of land surveying, in that Mr Blew did not meet the standard of care for a licensed land surveying when he failed to file a record of survey for the aforementioned properties. In addition, for the properties located at 1520 and 1620 W. National Drive, Sacramento, at 1534 N. Market Blvd. and 4201 Sierra Point Drive, Sacramento, and at 1700 W. National Drive, Sacramento, Mr Blew was disciplined under Code § 8780(b) for negligence in the practice of land surveying, in that Mr Blew did not meet the standard of care for a licensed land surveying when he failed to set monuments.

C) Under Code § 8780(d) and § 8765(d) for failing to file a corner record for 8845 Washington Blvd., Roseville. In addition, Mr Blew was disciplined under Code § 8780(b) in that he was negligent in his practice of land surveying regarding 8845 Washington Blvd., Roseville.

D) Under Code § 8780(b) in that he was negligent and/or incompetent in the practice of land surveying in that the establishment of boundaries shown on Mr Blew's ALTA/NSPS maps indicated a practice of using a minimum of unreferenced control points and using "record" information from a single direction to establish boundary lines. This practice is reasonably foreseeable to lead to gaps and overlaps in boundaries. Based on the above Mr Blew stipulated with the California Board to the following violations: (1) failure to file a timely record of survey; (2) negligence in the practice of land surveying; (3) failure to file a corner report; and (4) incompetence in the practice of land surveying. Pursuant to the California Board Stipulation and Order, Mr Blew's license was revoked, but the revocation was stayed pending the successful completion of three (3) years probation, reimbursement of investigative costs in the amount of Twelve Thousand Six Hundred Thirteen and 75/100 Dollars (\$12,613.75), completion and passage of the California Laws and Board Rules examination, passage of a Board approved ethics course within one (1) year, and completion and passage of two (2) college-level Board approved land surveying courses.

NEVADA BOARD DISCIPLINARY ACTION

NRS 625.410 states that the Nevada State Board may take disciplinary action against a licensee for discipline by another state or territory if at least one of the grounds for discipline is the same or substantially equivalent to any ground under Nevada law.

The State Board does not have statutory authority to take disciplinary action against licensees for mere negligence. Thus, Mr Blew's cause for discipline due to his negligence does not constitute a violation of NRS 625.410(6).

Mr Blew's cause for discipline for failure to file a timely record of survey, however, is substantially equivalent to NRS 625.340, in which professional land surveyors shall "within 90 day after the establishment of points or lines, file . . . a record of survey relating to land boundaries and property lines." In addition, NRS 625.350 states that a record of survey must show, among other things, "[a]ll monuments found, set, reset, or replaced, describing their kind, size and location and giving other data relating thereto." NRS 625.350(2)(a).

Mr Blew was also disciplined for failing to file a corner record. This cause for discipline is substantially equivalent NRS 329.140, in which a "a surveyor shall complete, sign and record or cause to be recorded . . . a written record of the establishment or restoration or a corner The survey information must be recorded within 90 days after the survey is completed." NRS 329.140(1).

Finally, Mr Blew was disciplined for negligence and/or incompetence. NRS 625.410 states that the Board may take disciplinary action against a licensee for "[a]ny gross negligence, incompetency or misconduct in the practice of professional engineering as a professional engineer or in the practice of land surveying as a professional land surveyor." NRS 625.410(2).

Thus, since at least one of the grounds for discipline in California is substantially similar to a ground for discipline in Nevada, the State Board may take disciplinary action against Mr Blew.

NRS 625.410 states that the State Board may take disciplinary action against a licensee for discipline by another state or territory if at least one of the grounds for discipline is the same or substantially equivalent to any ground under Nevada law.

Pursuant to NAC 625.640(3)(b)(2), a disciplinary matter against a licensee may be resolved without a formal hearing by Stipulated Agreement. As such, Mr Blew and the State Board hereby stipulate to the following terms for the above-referenced violation(s):

1. Mr Blew's license shall be revoked following entry of this Agreement, but with revocation stayed and probation imposed for a term of three (3) years.

2. The licensee shall submit detailed bi-monthly probation reports to the Executive Director of the State Board, which shall report any work completed in Nevada during the previous two (2) month period. A report shall be filed even if no work was performed in Nevada during the previous two (2) month period. The first report shall be due within two (2) months of the effective date of this Stipulated Agreement. Each report shall include a copy of the contract executed for any work in Nevada, including the scope of work detail.

3. Mr Blew shall provide the State Board with proof of fulfilling the California Stipulated Agreement obligations.

LAST PROBATION REPORTS DUE August 15, 2026

Print Form						
PROBATIONE	R:Buckley Blew		PE/PLS #:	024520		
EMPLOYER:	Blew & Associates, P.A.					
PROBATION I	REPORT SUMITTED FOR THE PEF	RIOD OF: Nov 20,2023	THROUGH	Jan 19, 2024		
CLIENT:						
NAME:	NA			36		
ADDRES	SS: NA					
CITY:	NA	STATE: NA	ZIP CODE:	IA		
PROJECT:		2				
NAME:	NA					
LOCATIO	ON OF PROJECT: NA					
CITY:	NA	STATE: NA		A		
SIZE:	NA START DA	ATE: NA	END DATE:	NA		
STATUS OF PROJECT: NA						
FEE PAI	D BY CLIENT: NA					
SCOPE OF W	ORK:					
NA						

DESCRIBE IN DETAIL YOUR INVOLVEMENT IN THIS PROJECT AND HOW YOU HANDLED THIS PROJECT.

NA

DESCRIBE IN DETAIL HOW YOU IMPROVED ON THIS PROJECT IN THE AREAS FOR WHICH YOU ARE ON PROBATION.

NA		
SIGNATURE:	DATE: 2/15/2024	Ì

Andrew Hammond, PE/PLS 021191

Case Number: 20220009 Violation of NRS 625.410 (2), and 625.530 (1)(5).

In or around January 2019, the complainant (client) reached out to Element Engineering (Mr Hamond's firm) via Yelp in search of a professional to help adapt and engineer house plans that had been found online. Mr Hammond replied to the inquiry via Yelp and indicated he could complete the house plans in about four (4) to five (5) weeks.

The client engaged Mr Hammond for the project in late 2019. The project included various tasks, such as surveying, site plan, grading plan, septic, structural design and calculations, and electrical plan. At the end of December 2019, the client made a 50% down payment on the house plans for the initial survey and topography. In late 2019, Mr Hammond recommended a lot merger and was retained in or around July 2020 to perform that service. Throughout his engagement with the client, Mr Hammond communicated timelines and completion dates, but failed to meet these communicated deadlines. Mr Hammond did not make the initial submission for permits until August 22, 2021. Washoe County rejected this initial submittal as incomplete with requirements noted. Mr Hammond then had to resubmit the project three (3) more times due to further comments from Washoe County. By the time the client submitted the Complaint, Mr Hammond still had not obtained the permits for his plans. Regarding the lot merger, Mr Hammond erroneously submitted a Boundary Line Adjustment (BLA) to Washoe County in February 2021. Washoe County rejected this BLA and advised Mr Hammond that a Reversion to Acreage (RTA) map was required. In March 2021, Mr Hammond submitted an RTA, but did not make a payment to Washoe County for RTA review. In May 2021, Washoe County emailed Mr Hammond regarding RTA submittal errors and payment for review of the RTA. In June 2021, Washoe County sent an example RTA map for reference and information for Mr Hammond to correct his March 2021 submittal. In July 2021, Mr Hammond submitted payment for RTA application and review. In August 2022, Washoe County approved the RTA map for recording after correcting errors that Mr Hammond made on the RTA map, such as including unneeded signature lines for utility companies that did not serve the client's property. On or about January 10, 2023, Mr Hammond refunded the Seven Thousand and No/100 Dollars (\$7,000.00) that the client paid Mr Hammond for services.

VIOLATIONS and DISCIPLINARY ACTION

Pursuant to NAC 625.530(1), a professional engineer or land surveyor shall "[a]ct in professional matters as a faithful agent or trustee for each employer or client." Here, Mr Hammond failed to act as a faithful agent. Over thirty (30) months have passed from the start

of work, but no permit had been issued at the time the Complaint was filed. Mr Hammond promised the client completion deadlines, but continually missed them. Mr Hammond had never done an RTA map and admits that the timeline to complete it was unreasonable.

Pursuant to NAC 625.530(5), a professional engineer or land surveyor shall "[u]ndertake only those engineering or land surveying assignments for which he or she is qualified and engage or advise the employer or client to engage specialists and cooperate with them whenever the employer's or client's interests are served best by such an arrangement." Here, Mr Hammond erroneously submitted a boundary line adjustment rather than a reversion to acreage map. The time taken and the assistance required by the Washoe County staff indicates Mr Hammond's underqualification for the assignment undertaken. Relating to the engineering, his submissions for permitting required extra comments and review from Washoe County. Mr Hammond submitted his plans four (4) times over the course of one (1) year.

Based on the foregoing, Mr Hammond stipulates that he violated NRS 625.410(2) and NAC 625.530(1) by failing to meet deadlines he promised his client and, thus, prolonging the project. In addition, Mr Hammond stipulates that he violated NAC 625.530(5) by undertaking a project for which he was unqualified, and not seeking to engage specialists to assist.

NRS 625.410(5) provides authority for the State Board to administer discipline in Nevada for a violation of any NRS Chapter 625 statute and/or any regulation adopted by the State Board. Further, pursuant to NAC 625.640, a disciplinary matter may be resolved without a formal hearing by a Stipulated Agreement.

To that end, to resolve Complaint Number 20220009 now pending, Mr Hammond and the State Board resolve this matter on the following basis:

1.) Mr Hammond's Nevada license shall be suspended for twenty-four (24) months following entry of this Agreement, but with the suspension stayed and probation imposed for the duration of that time period.

a.) On a bi-monthly basis, Mr Hammond shall submit, to the State Board, a probation report to include any copies of executed contracts for any project or client that Mr Hammond retains during the period of his probation.

b.) Mr Hammond has reimbursed the complainant a total amount of Seven Thousand and No/100 Dollars (\$7,000.00) for design and mapping fees paid to Mr Hammond (One Thousand Nine Hundred Fifty and No/100 (\$1,950.00) for mapping and Five Thousand Fifty and No/100 Dollars (\$5,050.00) for house design), which is satisfactory in lieu of an administrative fine.

c.) Mr Hammond shall pay legal and investigative costs to the State Board a total of One Thousand Seven Hundred and No/100 Dollars (\$1,700.00) within ninety (90) days of acceptance and execution of this Agreement by the State Board.

d.) Within ninety (90) days of acceptance and execution of this Agreement by the State Board, Mr Hammond shall have any land surveying services that he has performed since November 1, 2022, reviewed by a licensed Nevada Professional Land Surveyor selected by the State Board. Further, any additional land surveying services that Mr Hammond performs in Nevada through the end of the term of his probation hereunder, shall be reviewed by a licensed Nevada Professional Land Surveyor selected by the State Board. The selected Professional Land Surveyor shall be independent of, and have no conflict of interest with, Mr Hammond, and will provide the State Board an assessment of competency for every professional land surveyor project done by Mr Hammond during the above-designated time period. Mr Hammond shall bear the cost and expense of the selected Professional Land Surveyor's services.

LAST PROBATION REPORTS DUE February 1, 2026

Andrew Hammond, PE/PLS 021191

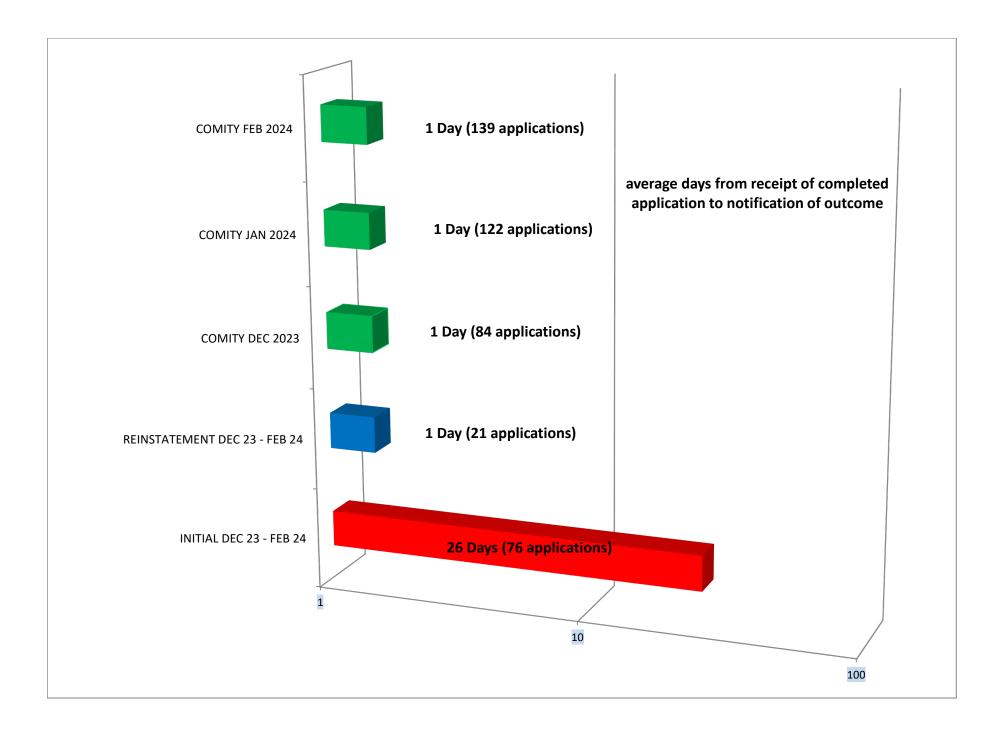
Case Number: 20220009 Violation of NRS 625.410(2) and NAC 625.530 (1)(5)

The first probation reports for Mr Hammond will be included for review in the May 9, 2024, board meeting packet.

11. Board Counsel Report

12. Administrative Report

12.a. Approved Licensees Report



12.b. 2021-2025 Strategic Plan



STRATEGIC PLAN UPDATE Executive Summary Approved November 12, 2020

UPDATED Fall 2020

EXECUTIVE SUMMARY STRATEGIC PLAN UPDATE ~ SEPTEMBER 11, 2020

The Nevada Board of Professional Engineers and Land Surveyorsdeveloped a comprehensive Strategic Plan in March 2017. The plan was created using a 10-30 year planning horizon based on the boards's core ideology consisting of a core purpose and core values.

Because the Strategic Plan had been developed in 2017, the board felt it was timely to reconsider its contents. The Board met September 11, 2020 to comprehensively review its Strategic Plan and consider any needed updates to that plan.

At the September 11, 2020 Strategic Planning Session, the board reaffirmed that the goals developed in the current Strategic Plan based on a 10-30 year planning horizon were still relevant. The session then focused on review and refresh of strategies. It was agreed that tactics and action items would be driven by the strategies and developed by the board and its committees at future meetings.

This document restates the board's goals for its updated Strategic Plan and captures the board's strategies for the next 3-5 year planning horizon.

EXECUTIVE SUMMARY PURPOSE ~ MISSION ~ CORE VALUES

Purpose

The purpose 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.

Mission

Founded on the board's purpose, the board's mission is to uphold the value of professional engineering and land surveying licensure by assessing minimum competency for initial entry into the profession, and to ensure ongoing standard of professionalism by facilitating compliance with laws, regulations, and code of practice; and to provide understanding and progression in licensure by openly engaging with all stakeholders.

Core Values

The board's core values are:

Integrity

Transparency

The core values were identified by board members and staff during the strategic planning sessions as guiding principles in the performance of their duties. A commitment was made to deliver on these values and provide governance that is ethical, honest, and consistent, and to function on a daily basis with accessibility and openness that is without obstruction.

3-5 YEAR PLANNING HORIZON ~ OUTCOME-FOCUSED GOALS AND STRATEGIES ~

The following thinking represents the organization's goals for the next 3-5 years. These **Goals** are outcome-oriented statements that represent what will constitute the Nevada board's future success. The achievement of each goal will move the organization towards the realization of its Envisioned Future. The **Strategies** reflect the broad range of direction that will be undertaken to change the existing conditions in order to achieve the goal – they drive **Tactics** -- the type of work and initiatives that will need to be undertaken to achieve the goal.

Strategies considered at the the September 11, 2020 strategic planning session discussion were presented for board consideration November 12, 2020. New or updated strategies are in bold text.

Outcome-Focused Goals

1. Outreach

The general public, prospective licensees and other key stakeholders have a greater understanding that engineering and surveying licensure are essential to safeguarding public health, safety and welfare.

2. Licensure

The demonstrated value of licensure results in continued growth in the number, quality and diversity of licensed engineers and surveyors practicing in Nevada.

3. Regulation

Nevada regulations are compatible with and reflective of the current state of practice in engineering and surveying and are in alignment with Nevada's economic development strategy.

4. Operational Excellence

The Nevada Board's efficient and effective use of technology and streamlined systems, processes and procedures result in high levels of satisfaction by all stakeholders.

Goal 1: Outreach

The general public, prospective licensees and other key stakeholders have a greater understanding that engineering and surveying licensure are essential to safeguarding public health, safety and welfare.

Strategies

- 1. Increase legislators understanding of criticality of services provided by the board and professional engineers/professional land surveyors
- 2. Evolve technical capability and expand social media presence
- 3. Increase visibility of the Board
- 4. Sustain appropriate allocation of resources for effective content development

Goal 2: Licensure

The demonstrated value of licensure results in continued growth in the number, quality and diversity of licensed engineers and surveyors practicing in Nevada

Strategies

- 1. Increase/stress the importance of licensure to university level students
- 2. Increase the public's knowledge about the value of licensure
- 3. Increase kids' knowledge of what engineers/land surveyors do
- 4. Continuously work to improve the process and portability of licenses
- 5. Provide options to meet land surveyor educational requirements
- 6. Increase knowledge of the quality of experience required for licensure to potential licensees

7. Maintain relevancy of engineering licensure, specifically as it relates to emerging technologies

Goal 3: Regulation

Nevada regulations are compatible with and reflective of the current state of practice in engineering and surveying and are in alignment with Nevada's economic development strategy.

Strategies

- 1. Maintain currency and applicability of statutes and regulations
- 2. Increase relationships with key stakeholders
- 3. Increase awareness of new/emerging technologies in relation to statutes and regulations

Goal 4: Operational Excellence

The Nevada Board's efficient and effective use of technology and streamlined systems, processes and procedures result in high levels of satisfaction by all stakeholders.

Strategies

- 1. Maintain effective staff capacity
- 2. Maintain business plan for resource allocation to support board goals
- 3. Maintain effective office and administrative processes
- 4. Build a data collection strategy to ensure we have data needed for effective decision making
- 5. Increase transparency and communication with stakeholders of board functions, operations, and initiatives

12.c. NCEES

12.c.i. Candidates for NCEES Western Zone Officer Elections

SCOTT SAYLES—

CANDIDATE FOR NCEES WESTERN ZONE ASSISTANT VICE PRESIDENT

The recent delegation of US Engineering State Board Members to the United Kingdom, in which I had the honor to participate, underscored the significance of NCEES and reaffirmed its mission. Expanding beyond the nomination letter sent to the Western Zone Nominations Committee Members prior to the cut off I am honored to declare my candidacy for the role of Assistant Vice President of the NCEES Western Zone. With a deep-rooted commitment to the advancement of the engineering and surveying profession and a proven record of leadership, I am eager to contribute my skills and vision to uphold the NCEES mission. In a rapidly evolving landscape, I believe in the power of collaboration, advocacy, and fostering professional development to safeguard the health, safety, and welfare of the public. Join me on this journey as we work together to shape the future of the Western Zone.

MY VISION:

To embody NCEES mission advancing licensure for engineers and surveyors to safeguard the health, safety, and welfare of the public.

QUALIFICATIONS:

- **Cross Discipline:** Although not a surveyor, I have spent almost 2 cumulative years in the field with a survey crew. I started with my grandfather (surveyor) and joined him and my father before joining a company during summers. I can understand some of the concerns of surveyors. In addition, I bring an understanding of other national boards such as ACEC, ASCE, ASHE and NCARB.
- Volunteering: Currently on the NCEES Education Committee and other groups to advance higher learning. (please see below for more information)
- **Knowledge:** I have listened to the issues, challenges, and opportunities facing the engineering and surveying profession and ready to assist the Western Zone Vice President and all the Western Zone members.
- **Commitment**: I have discussed internally with my family and office, and I will have adequate time availability.

KEY FOCUS AREAS:

- Advocacy: Committed to advocating for the interests of engineers & surveyors in the Western Zone, ensuring everyone's voice is acted on.
- **Collaboration:** Foster collaboration and communication among NCEES members to address challenges and drive positive change.
- **Professional Development:** Promote programs that enhance the professional development of engineers, keeping them informed about industry trends.

WHY SCOTT:

• **Proven leadership skills:** I have managed 100+ projects, collaborated with communities on outreach, and received numerous projects partnering awards. Also, recently unanimously voted in as the Vice Chair of the AZ Board of Technical Registration board.

- A record of successful collaboration: I have and continue to chair a 50+ person ACEC-AZ conference committee (1,600+ conference attendees) that requires working with different personalities and finding win/win solutions and ideas yearly.
- Enthusiastic about advancing the engineering profession: I have volunteered with the future city competition for years, Vice President in a foundation that provides scholarships for engineering, and donate time and resources to local ACEC, ASCE, ASCE-BTR, and University of Arizona (UofA) events for scholarships. Recently awarded the UofA Bear Down Award from the College of Engineering for performing noteworthy or meritorious service on behalf of the university.

A BIT MORE ABOUT SCOTT

Hobbies: Disc Golf (strategic thinking/precision), Hiking (adventure/lifestyle), Technology and Gaming (problem-solving and innovation)

Volunteering:

- ACEC-AZ (Industry Advocacy)
- Future Cities (Youth & STEM)
- Sayles Advancement in Education Foundation (Youth Development)
- UofA Alumni Engineering Council (Academic Excellence)
- UofA Alumni Civil Industrial Council (University & Engineering)
- Scout Troop 474 Committee (Leadership & Community)

I eagerly anticipate reconnecting with everyone at the upcoming Western Zone meeting. Please feel free to reach out to me if you have any questions or would like to discuss further.

Sincerely,

Scott Sayles, PE, Candidate for NCEES Western Zone Assistant Vice President

WARNING - This email originated from outside the State of Nevada. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Greetings Patty,

I am excited and honored to announce that the Oregon Board has nominated me for the position of NCEES Western Zone Assistant Vice President. I have spent much of my career in service to the profession of engineering and engineering education and welcome the opportunity to serve in this capacity as well.

I have been a professor in the Civil Engineering Department at Oregon Tech for nearly twenty years. For ten of those years, I was chair of that department. During my chairmanship, the department received the prestigious ASCE Walter LeFevre award for promoting licensure, ethics, and professionalism.

I became a registered professional engineer in Oregon in 2007 and shortly afterward began my service to NCEES. I joined the FE Exam Development Committee in January 2010 and since that time have written and reviewed hundreds of FE questions that have been attempted by tens of thousands of examinees. I have also written and edited portions of the supplied FE Reference Handbook, served on the FE Civil PAKS Committee, and served twice on the FE Civil Cut Score Committee.

I was appointed to the Oregon State Board of Examiners for Engineering and Land Surveying in 2017 and was president of the Board from 2022 to 2024. Being on the Board has allowed me to serve on other NCEES committees as well: the Committee on Education (2017-2021), EPP (2021-2023), and EPE (2023-present).

My professional society is the American Society for Engineering Education in which I have served in numerous roles including Section Chair, Division Chair, Zone Chair, and Program Chair as well as serving on the national board of directors for two years. I have been recognized with various awards from this society including the Pacific Northwest Outstanding Teacher Award, the national Best Zone Paper Award, and the Wadlin Distinguished Service Award.

I am passionate about serving and promoting the engineering profession and I look forward to working with the Western Zone and NCEES to advance testing and licensure.

Sean St.Clair, PE, PhD

Candidate for NCEES Western Zone Vice President 2024-25

With a proven track record of excellence and a passion for advancing the profession, Aaron is determined to drive positive change and foster collaboration within the National Council of Examiners for Engineering and Surveying (NCEES).

Q About Aaron Blaisdell, PLS:

- Survey Director at PACE Engineers in Kirkland, Washington, a multi-disciplinary firm with offices in Oregon and Washington
- Boasts 25 years of survey experience, 20 as a Professional Licensed Surveyor
- Currently licensed in Washington, Oregon, Idaho, and Alaska
- Actively engaged in the NCEES Exam Policies & Procedures (EPP) Committee, Western Zone Leadership Development Committee, and NCEES Survey Education Awards Committee
- Previous service on the NCEES Committee on Examinations for Professional Surveyors (EPS), Survey Exam Development Committee, and the NCEES Public Outreach Task Force
- Has demonstrated leadership at the Washington State Board as Chair, Vice-Chair, and on the Survey Practice Committee, Exam Qualifications Committee, Onsite Wastewater Committee, and Executive Committee



() Vision for the Western Zone: Aaron will work hard to provide a forum for active discussions amongst member boards that serves to:

- Enhance communication channels between NCEES and member boards
- Advocate for fair and effective licensing processes
- Develop tools and resources for member board training

🗱 Why Choose Aaron:

- Exhibits proven leadership and industry experience
- Devoted to fostering collaboration and communication
- Possesses a passion for advancing the surveying and engineering professions

℅ Let's Build a Stronger Future Together!

Choose Aaron Blaisdell, PLS, for NCEES Western Zone Vice President, a leader dedicated to shaping the future of professional licensure. Together, we can elevate standards, promote innovation, and ensure a thriving community for all surveyors and engineers.

Feel free to reach out at <u>ablaisdellbor@gmail.com</u>, through NCEES E3, or via LinkedIn at <u>https://www.linkedin.com/in/aaronblaisdellpls/</u>



Elizabeth T.B. Johnston, PE, FPE, RCDD

Candidate for NCEES President-Elect

Goals as President of NCEES

Enhancing Licensure Standards: I will charge NCEES Committees to look at our exams, policies, and procedures to maintain the highest licensure standards, adapt to the evolving needs of our professions, and maintain our commitment to public safety.

Advocating for the Professions & Member Boards: I will actively ensure we engage with policymakers, industry leaders, and the public to emphasize the vital roles engineers and surveyors play in shaping the future. We will also advocate for the role of member boards in ensuring public safety. This will include K-12 initiatives, advancing licensure for public protection training, and outreach from NCEES in support of member boards.

Building Capacity & Fostering Collaboration: I am dedicated to providing training and resources to member boards. I want to strengthen collaboration with our zones, member boards, partners, sister societies, and stakeholders to ensure NCEES continues to be a global leader in our field. In particular, I want to create stronger connections with each of the sponsoring societies of our examinations. I want to ensure they are each advocates of professional licensure as well as technical contributors to the exams.

Past NCEES Successes:

- Created a series of WZ Training Sessions that train board members on NCEES resources and provide opportunities for collaboration
- Led NCEES EPP Committee through a complete review of all Exam Development Policies including completing the transition from pencil & paper to CBT
- Facilitated the probation process for the PE Nuclear Engineering Exam and worked with their professional society on a remedial action plan that is a template for future collaborations.

Professional Experience Includes:

- Principal Electrical Engineer at Design Alaska (Fairbanks, Alaska)
- 18 years of engineering experience with 13 years as a Professional Engineer
 - Registered in AK, WA, formerly ND, TX
- IEEE Power & Energy Society Robert Noberini Distinguished Contributions to Power Engineering Professionalism Award
- Alaska Society of Professional Engineers Young Engineer of the Year
- Illuminating Engineering Society of North America Award of Merit

Professional Licensure Experience Includes:

- Board Member (former Secretary, Vice-Chair, and Chair) of the Alaska Board of Registration for Architects, Engineers, and Land Surveyors
 - Rewrote continuing education regulations
 - Created regulation for military spousal licensure
- NCEES Western Zone Vice President
 - Chair Leadership Development Committee
- NCEES Committee on Examination Policy and Procedures (Member and Chair)
- NCARB Continuing Education Workgroup

Elizabeth T.B. Johnston, PE, FPE, RCDD

Professional Society Experience Includes:

- Senior Member of the IEEE with 20 years of volunteer experience
- IEEE Governance Committee (responsible for corporate governing documents)
- IEEE Conduct Review Committee & Ethics & Member Conduct Committee (responsible for reviewing misconduct complaints)
- Humanitarian Technologies Board (responsible for IEEE's activities impacting the UN sustainable development goals)
- Global Student Activities Vice Chair (responsible for all student training and mentoring activities)
- Student Activities Committee Chair (responsible for administering 90 student branches and providing leadership development & events)
- IEEE Publications Services & Products Board (responsible for \$244M of revenue from periodicals, ensuring quality, and oversight)
- Editor-in-Chief IEEE Potentials Magazine
- Women in Engineering Coordinator for Region
- IEEEXtreme Programming Competition (founder of global 24-hr competition for students)
- Alaska Section Secretary, Fairbanks Chair

What Others Have Said

"Elizabeth Johnston, PE, combines outstanding technical expertise with demonstrated contributions to advancing the engineering profession... she's been an able leader and experienced advocate in Engineering Policy, Ethics, History, and Humanitarian Activities. More recently, I have had the pleasure of working with her in several high-level leadership roles on IEEE Board-level committees, including IEEE Governance, that I chaired 2019-21. It is difficult to convey the extraordinary level of these contributions, but I attempted to do this first in 2017 with a special IEEE Region Director's Award." "In the three years that I served with Elizabeth on the Alaska AELS Board and my monitoring of the Board since, I have always found her to be reasonable and well-prepared. We did not always agree on issues, but she always had rational reasons for her position. She has done a wonderful job as Zone Assistant Vice President and I believe that she will do equally well as President-Elect."

Colin Maynard, PE, SE Alaska State Board of Registration for Architects, Engineers, and Land Surveyors (AELS)

"Ms. Elizabeth Johnston is a dedicated volunteer and a consistent leader, I had the privilege of working with her on the NCEES EPP Committee for four years. She serves as our NCEES EPP Committee chair for two consecutive years. Ms. Johnston led the EPP committee through successful review of the Exam Development Policies and the development of EPP charges that were presented at the NCEES Zones and Annual meetings. Her "Servant Heart", Can-do attitude as well as unique abilities to guide and encourage, was the key factor that enable a collective and successful accomplishment of the EPP committee's tasks."

Ademola Peter Adejokun P.E, PMP, ESEP, NCEES EPP Committee, Texas Board of Professional Engineers and Land Surveyors, Lockheed Martin Aeronautics Company



Kathleen Kramer, IEEE President 2025

From the State of California

DR. MOHAMMAD QURESHI, P.E.



For

NCEES President-Elect

Strategíc Initiatives

National Registry of Engineers

I want to continue the goal of making it easier to become licensed in multiple jurisdictions. My contribution to that goal is to develop a National Registry of Engineers that is modeled on the International Registry of Engineers. It is my hope that states will use the National Registry similarly to how the International Registry is being used to facilitate a Mutual Recognition Agreement with the United Kingdom.

"Year of the Volunteer"

Our volunteers are what make NCEES the organization that it is. I want to designate the 2025-26 year as the "Year of the Volunteer". During 2024-25, I hope to work with NCEES staff to find unique ways to:

- Showcase the efforts of our volunteers.
- express our gratitude for their dedication to the member boards.

Elect "Dr. Q" for President-Elect



From the State of California

DR. MOHAMMAD QURESHI, P.E.

For NCEES President-Elect



Candídate Statement

Over the past two years, I have worked with my colleagues on the Board of Directors (BOD) to deliberate and decide how to move our organization forward. Two key initiatives that have occurred during my term are the changes to the Principles and Practice of Surveying (PS) exam and establishment of the NCEES foundation. During the past two years, I have built relationships with the other members of the BOD. In particular, I have established a strong relationship with President-Elect Andy Zoutewelle (NC). Now that it is Western Zone's turn to nominate a President-Elect, I feel it is my duty to support Andy and serve our member boards by utilizing my experience to continue the growth and evolution of the Council.

The strong, positive relationships I have built with the current BOD members and NCEES Staff are just one of the compelling reasons to elect me as the next President-Elect. These relationships demonstrate my approach to leadership. During my tenure as a California Board member and as an officer in NCEES, I have approached my duties with a focus on teamwork and on supporting those around me. As Assistant Vice President to former Vice President Scott Bishop (UT), I knew my role was to support Scott by providing perspective during our discussions and in carrying out the tasks assigned to me. As Vice President, I have held monthly meetings with the Zone officers, so that we are working as a team. Similarly, on the BOD, I think it is imperative that we discuss agenda items candidly and honestly. Equally importantly, I recognize that we are a team and each of us has a role to serve and perspective to share. It's about the organization and not me as an individual. As your Zone Vice-President my role was to ensure that we were represented in the deliberations and the items we valued were championed. As President-Elect and then President, the role becomes that of serving all member board for everyone's benefit.

For the year that I hope to serve as President-Elect I will have two key roles. First, I will be there to support our next President, Andy Zoutewelle and aid him in accomplishing his initiatives. The second role will be to develop a foundation for my two strategic initiatives. I want to continue the goal of making it easier to become licensed in multiple jurisdictions. My contribution to that goal is to develop a National Registry of Engineers that is modeled on the International Registry of Engineers. It is my hope that states will use the National Registry similarly to how the International Registry is being used to facilitate a Mutual Recognition Agreement with the United Kingdom. My second initiative is to designate the 2025-26 year as the "Year of the Volunteer". During 2024-25, I hope to work with NCEES staff to find unique ways to showcase the efforts of our volunteers and express our gratitude for their dedication to our member boards.

I have enjoyed serving the Western Zone as an officer for the past 4 years, I ask for your vote to continue to serve the Zone, Council and future licensees over the next 3 years.

Elect "Dr. Q" for President-Elect



From the State of California

DR. MOHAMMAD QURESHI, P.E.



For

NCEES President-Elect

- ✓ Experienced Leadership
- ✓ Listens to Council Members
- Understands Council Concerns
- ✓ Committed to Serving the Council
- Current NCEES Western Zone Vice President
- NCEES Board of Director's Liaison: Exam Audit (2022), Law Enforcement (2023), UPLG (2023)
- NCEES Western Zone Assistant Vice President (2020-22)
- Member, NCEES ACCA (August 2020-22)
- Vice Chair, NCEES EPE Committee (August 2018-20).
- Member, NCEES EPE Committee (August 2017-20).
- Chair, NCEES Western Zone Nominations Committee (August 2017-19).
- Member, NCEES Western Zone Nominations Committee (August 2016 -19).
- Registered Civil Engineer and Traffic Engineer in California. Expired registrations as Civil Engineer in Hawaii, New Hampshire, and Vermont.
- Past President and Vice President of California Board for Professional Engineers, Land Surveyors, and Geologists.

Elect "Dr. Q" for President-Elect



13. Committee Reports

13.a. Administrative Procedures Oversight Committee 13.a.i. Albertson Consulting/Big Picture Software for Licensing Database Platform and Implementation



Memorandum

March 5, 2024

To:Administrative Procedures Oversight CommitteeFrom:Murray Blaney, Operations/ComplianceSubject:Vendor Selection for Web-Based Licensing/Renewal Software System Platform

Background

In 2012, NVBPELS transitioned from paper/FoxPro data management of licensing, renewals, and firm registration to a web-based platform using a relation database management system. The system was developed by an individual that created inLumon, a firm specializing in development and implementation of regulatory board licensing systems.

In 2013, the board contracted with inLumon to continue to build and host a software platform for webbased licensing, license renewal, and firm registration. The web-based platform, version 1.0, was launched in August 2014.

Early usage of the inLumon platform identified operational functionality deficiencies. In 2016, inLumon formally acknowledged the need for upgrades and committed to the release of version 2.0. inLumon failed to deliver. Due to lack of progress by inLumon to fulfill its verbal commitments, a contract was offered and executed in the fall of 2019, with delivery of version 2.0 due by February 2020. A separate contract was executed with inLumon for platform maintenance and hosting and is in effect through July 2024. The maintenance contract will need to be extended for an additional 24 months, through July 2026.

Due to challenges with inLumon's ability to deliver on its contractual obligations, and the increasing need for improved functionality with firm registration, the board contracted with Trinity Applied Internet, a local vendor, in July 2022. Trinity is tasked with development, hosting, and maintenance support of a new firm registration platform. The anticipated launch date is late 2024.

The inLumon contract to deliver version 2.0 is four years past the contracted delivery date. During those four years, inLumon's platform has evolved to version 4.0 and they have verbally committed to delivering the newer version. inLumon has consistently made verbal commitments and failed to deliver, despite weekly team meetings. inLumon has had a succession of project managers and numerous excuses for the delayed migration to version 4.0. Numerous manual workarounds have been implemented by staff to account for system deficiencies. Board staff is well beyond frustration. The board must have a web-based

1755 E Plumb Lane, Suite 258 Reno, NV 89502 board@boe.state.nv.us www.nvbpels.org T (775) 688-1231 F (775) 688-2991 Memorandum to APOC March 5, 2024 Page 2 of 3

platform that meets the needs of our applicants, licensees, and public, and enables staff efficiency.

Discussion

Staff recommends that it is in the best interest of board operations to engage a vendor to develop, host, and support a new licensing/renewal platform. This would occur while continuing to work with inLumon to migrate the current licensing/renewal system to inLumon's version 4.0 which staff is doubtful will occur based on inLumon's past performance.

Board staff are frequently contacted by software platform vendors who provide systems that support regulatory boards. For due diligence, staff listen to their sales pitches and participate in demonstrations. Staff also seek input from licensing boards that are users of those platforms. During the last two years, three companies were contacted to provide additional information—Thentia, System Automation, and Albertson Consulting/E-Big Picture Software. Below are brief findings for each vendor.

Thentia

Participated in a Thentia platform demonstration in early 2022. Thentia had a robust system but was missing upgraded functionality that staff consider to be standard options – the system would require customization. Reached out to the Oklahoma board of engineers who contracted with Thentia after terminating their contract with inLumon and their feedback was unfavorable. Oklahoma was told that customization of specific features was possible by the Thentia sales team, only to be told by the development team that the desired customization was not possible. Also, our vetting discovered that any changes to customer accounts—contact information—would need to be done by Thentia and could not be done by board staff. Staff opted not to pursue a cost proposal from Thentia due to the two unfavorable items noted.

System Automation

System Automation was demonstrated in mid-2022. The platform had very good functionality and offered as standard much of the upgraded functionality that staff were seeking. Staff sent System Automation a Request for Proposal for a new firm registration platform in mid-2022 and received a proposal in response. System Automation appeared to offer a mature software platform – not built from scratch – that could easily be adapted to our needs, but the base implementation cost estimate was \$344,000 with an ongoing monthly subscription of \$4,500—\$54,000 per annum. Because of the exorbitant cost for a firm registration platform, System Automation was not asked to provide a proposal for the board's new licensing/renewal platform.

Albertson Consulting/E-Big Picture Software

Participated in a platform demonstration in October 2023. The system looks very promising, has a lot of functionality that we are currently missing, and the functionality is included as standard in their system. Two engineering regulatory boards currently operate on the platform—North Dakota, and West Virginia—and both provided favorable feedback. After providing E-Big Picture with a platform wire-frame diagram, we requested a cost proposal for implementation and ongoing costs. E-Big Picture's

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cost proposal shows an implementation cost of \$60,000 and ongoing monthly costs averaging \$2,200 per month with an hourly rate for additional support of \$150 per hour.

Proposed Action

Staff requests APOC recommend the board approve pursuing a contract with Albertson Consulting/E-Big Picture Software to deliver and implement a new web-based licensing and license renewal system in the amount of \$60,000 to be delivered on or before December 2025.

Staff also requests APOC recommend the board approve pursing a contract with Albertson Consulting/E-Big Picture Software to host and maintain the new web-based licensing and license renewal system in the amount of \$2,200 per month with additional support as needed to be billed at an hourly rate of \$150 per hour.

It is also requested that APOC recommend the board approve staff to execute a 24-month maintenance contract extension with inLumon.

1755 E Plumb Lane, Suite 258 Reno, NV 89502 board@boe.state.nv.us www.nvbpels.org T (775) 688-1231 F (775) 688-2991 Big Picture [™] Software

Nevada Board of Professional Engineers & Land Surveyors

Prepared for:

Nevada Board of Professional Engineers & Land Surveyors

February 7th, 2024

Ву





Big Picture[™] **Software**

Big PictureTM **Software** Nevada Board of Professional Engineers & Land Surveyors

Proposed Pricing

ITEM NO.	DESCRIPTION OF COSTS (Fully Hosted Solution)	PROPOSED PRICING
1	One-Time System Implementation & Standup/Configuration of Online COTS Software as a service (SAS) Licensure System Includes: • Setup Online Individual Renewals 1. https://nvboeonline.org/Ul/License_Renewal.aspx • Setup Online Application Forms for the below Licensee/Applicants Licenses 1. Comity/Endorsement Licensure PE & PLS 2. International Comity/Endorsement Licensure PE 3. Initial Licensure Application for PE & PLS 4. Certification (EI & LSI) 5. Nevada Specific Examination (GEOE & PLS) 6. Reinstatement of Licensure Varilable Applications For Professional Engineers & Land Surveyors Stetca.application Store Profession Stetca.application Store With Stetca.ap	\$60,000 Stand-up and Implementation of all items listed in column 1.
	 Fully Functional Database & Repository CEU Tracking & Reporting Website Integration into boards existing website 3rd Party Web-Site Hosting – AWS (Amazon Web Services) Tier III Security Level Online License Verification Online Services/Public Record Access Firm Registration Lookup Compliance Public Records 	

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	 Variable Search/Sort 	
	 Download Information 	
	Online Customer Self-Service Portal	
	 Payment Processing Gateway Integration 	
	Staff Training	
	Dedicated Support Person/Project Manager	
	Reporting Capabilities	
	 State Required Reporting 	
	 Standard Statistics 	
	 Ad-hoc Queries 	
	Financial Reporting	
	 Historic Records 	
	 Sales Reports 	
	 Access to Proof of Purchase 	
	• Data Import from Legacy System *This price is for Big Picture effort level to load a clean straight forward data structure that is documented, formatted and ready for loading of approximately 42,000 records. It is required that the board have resources available to facilitate delivery of data and provide knowledge transfer so board can provide us support to facilitate Big Picture data loading effort.	
	E-blast/Mass Mailing Capabilities	
	Compliance Tracking & Reporting	
	API Integration with NCEES for Reporting	
	Print Updated Registration Cards from Website	
2	Hourly Rate for Support for additional hours of support	\$150.00
	TOTAL Vendor Hosted System Implementation Costs	\$60,000

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Annual Hosting/Software Licensing/Software Updates

Annual Support & Software Licensing *Free Hosting	PROPOSED COST
1. Year One – Includes 8 hours of non-accumulating monthly hour of support.	\$ 24,400
2. Year Two - Includes 8 hours of non-accumulating monthly hour of support.	\$ 25,400
3. Year Three - Includes 8 hours of non-accumulating monthly hour of support.	\$ 26,400
4. Year Four - Includes 8 hours of non-accumulating monthly hour of support.	\$ 27,400
TOTAL	\$103,600

*First year hosting and implementation cost due upon signature of contract.

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Nevada Board of Professional Engineers & Land Surveyors

Prepared for:

Nevada Board of Professional Engineers & Land Surveyors

February 7th, 2024

Ву





Big Picture[™] **Software**

Proposed Pricing

ITEM NO.	DESCRIPTION OF COSTS (Fully Hosted Solution)	PROPOSED PRICING
1	One-Time System Implementation & Standup/Configuration of Online COTS Software as a service (SAS) Licensure System Includes: • Online Firm Registration Renewals • Setup Online Application Forms for • Initial Application for Firm Registration • Business Name Requests • Certification (EI & LSI) • Fully Functional Database & Repository • CEU Tracking & Reporting • Website Integration into boards existing website • 3rd Party Web-Site Hosting – AWS (Amazon Web Services) Tier III Security Level • Online License Verification Online Services/Public Record Access • Firm Registration Lookup • Compliance Public Records • Variable Search/Sort • Download Information • Online Customer Self-Service Portal • Payment Processing Gateway Integration • Staff Training • Dedicated Support Person/Project Manager • Reporting Capabilities • State Required Reporting • State Required Reporting • State Required Reporting • State Repured Reporting • State Reporting • Ad-hoc Queries • Financial Reporting • Historic Records • Sales Reports • Access to Proof of Purchase	\$30,000 Stand-up and Implementation of all items listed in column 1.

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	 Data Import from Legacy System *This price is for Big Picture effort level to load a clean straight forward data structure that is documented, formatted and ready for loading of approximately 42,000 records. It is required that the board have resources available to facilitate delivery of data and provide knowledge transfer so board can provide us support to facilitate Big Picture data loading effort. E-blast/Mass Mailing Capabilities Compliance Tracking & Reporting API Integration with NCEES for Reporting Print Updated Registration Cards from Website 	
2	Hourly Rate for Support for additional hours of support	\$150.00
	TOTAL Vendor Hosted System Implementation Costs	\$60,000

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4. Year Four - Includes 8 hours of non-accumulating monthly hour of support.	\$ 27,400
TOTAL	\$103,600

*First year hosting and implementation cost due upon signature of contract.

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7110 Samuel Morse Drive, Suite 100 Columbia, MD 21046 P: 800-839-4729 E: info@SystemAutomation.com SystemAutomation.com



Response To FIRM REGISTRATION DATABASE PLATFORM Request For Proposal

Prepared for:

Murray Blaney Nevada Board of Professional Engineers and Land Surveyors 1755 E Plumb Lane, Suite 258 Reno, NV 89502 Response Date: May 19, 2022



THANK YOU FOR THE OPPORTUNITY

1011





May 19, 2022

7110 Samuel Morse Drive Columbia, MD 21046 (301) 837-8000 *fax* (301) 837-8001 www.systemautomation.com

Murray Blaney mblaney@boe.state.nv.us Nevada State Board of Professional Engineers and Land Surveyors 1755 E Plumb Lane, Suite 258 Reno, NV 89502

RE: NVBPELS Request for Proposal for a Firm Registration Database Platform

Dear Mr. Blaney,

System Automation (SA) is pleased to submit this response to the Nevada State Board of Professional Engineers and Land Surveyors (NVBPELS)'s Request for Proposal for a Firm Registration Database Platform. Using the RFP structure as a framework, our team has provided our qualifications, information about our proven solution and approach to the stated Scope of Work items, and evaluation criteria for NVBPELS' consideration.

To fulfill the board's goals of replacing existing data systems for the benefit of all stakeholders, we are proposing:

- 1) Utilizing our market-leading enterprise licensing and regulatory management platform, MyLicense® One, as the technology solution, coupled with
- 2) Implementation delivered in partnership with one of our preferred IT service providers.

When it comes to the right "fit" for this engagement, we believe that NVBPELS will be hardpressed to find another offeror better equipped. Few offerors, if any, can claim the level and history of success in the public sector, both in terms of experience in the regulatory industry and specifically within professional licensure and enforcement, alongside proven technology. Ultimately, NVBPELS will take full ownership of a system that *meets 100% of user needs all with a new, fresh, easy-to-use digital experience*.

SA welcomes the opportunity to further detailed discussions with NVBPELS regarding the project scope, functionalities, timing, and information relevant to the implementation of our MyLicense Platform as the basis for new solution. Should you have any questions, require additional information, or a demonstration of the MyLicense One Platform, please contact me.

We look forward to working with the Board towards the ultimate success of this project.

Sincerely,

Chris Gilbert Account Manager P: (410) 794-4381 E: cgilbert@systemautomation.com



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Qualifications

Nevada State Business License

SA is an actively licensed corporation in the State of Nevada as illustrated by SilverFlume, the Nevada Secretary of State's business portal:

Name	Status	Filing Date	Туре	NV Business ID	Entity Number	Mark Number	Actions
SYSTEM AUTOMATION CORPORATION	Active	08/29/2011	Foreign Corporation (80)	NV20111566784	E0488122011-9		Manage this Business
Page 1 of 1, record	ds 1 to 1 of 1						

ENTITY INFORMATION			
Entity Name:	SYSTEM AUTOMATION CORPORATION	Entity Number:	E0488122011-9
Entity Type:	Foreign Corporation (80)	Entity Status:	Active
Formation Date:	08/29/2011	NV Business ID:	NV20111566784
Termination Date:	Perpetual	Annual Report Due Date:	8/31/2022
Domicile Name:		Jurisdiction:	District of Columbia

System Automation Enabling Responsive Government

Proven Experience database platform software development

About System Automation

System Automation (SA) understands that vendor experience in regulatory management is critical to success in both the implementation and ongoing support of licensing and permitting software. Recently, we have observed many market entrants proposing to treat the deployment of regulatory software as just another IT project. We disagree. Without knowledge of the complex processes within licensing, permitting, enforcement, and regulation, vendors risk mistakes based on misunderstandings that lead to delays and cost overruns.

Founded in the District of Columbia in 1968, SA has been an industry leader in designing, developing, implementing, and maintaining comprehensive enterprise licensing systems for several decades. SA's length of time in business demonstrates both our ability to satisfy our clients' needs and our sound management practices.

In 1994, SA launched its first electronic licensing solution for the Maryland Board of Nursing. Since that time, SA has grown its nationwide footprint in 22 states and 500 agencies across the country. SA's MyLicense Platform is successfully utilized across the country for a diverse collection of professional and business licensing.

SA has designed, developed, and deployed the newest generation of regulatory management software as a state-of-the-art SaaS offering: the *MyLicense One Platform*. MyLicense One enables NVBPELS to expand online services, eliminate manual regulatory processes, improve transparency, communications, and services to their citizens in today's reality where everything is connected, in the cloud, and mobile-ready.

SA uniquely offers both a highly configurable platform, designed from the ground up for state regulatory management, as well as deep subject matter expertise in every aspect of information system implementation and operations. Whereas many IT companies may solicit NVBPELS with general technology services, generic one-size-fits-all solutions, or attempt to adapt CRM or case management software into a clunky licensing 'system', government licensing and permitting expertise is in our DNA – it is what sets us apart.

Our Mission Statement

We exist to develop software that creates new value for our customer communities. Whether it is improving our core products or launching new products, we believe that collaborative innovation makes for a valuable customer experience.

By choosing to partner with SA and utilize the MyLicense One Platform as the basis of the new Firm Registration Database system, NVBPELS will have the tools to become fully self-sufficient in configuration of the system. As MyLicense One is delivered as a Software-as-a-Service ("SaaS") solutions, additional functionality requested by SA customers is iteratively added to help NVBPELS meet future needs and new regulatory requirements for years to come.

About the MyLicense One Platform

The MyLicense One Platform is the newest regulatory platform on the market that has been built for government agencies to reimagine what is possible to accomplish their business goals in today's new reality where everything is connected, cloud, and mobile ready.

- 3) *MyLicense One is a platform that is dedicated to the business of regulation* and as such is built specifically to satisfy an agency's core business needs.
- 4) It is NOT a generic CRM platform that will require expensive customization to meet your underlying business needs. The MyLicense One Platform delivers on the best of both worlds providing out-of-the box core Licensing functionality, while remaining flexible to accommodate future use cases of NVBPELS.
- 5) Although it is a licensing and regulatory point solution, *the MyLicense One Platform comes* with the scalability and configurability to be used at the enterprise level supporting hundreds of licensing boards, programs, bureaus, or divisions as necessary.
- 6) The configurability of the MyLicense One Platform is unmatched and provides NVBPELS with the flexibility *to easily adapt to inevitable regulation changes without incurring unexpected costs.*
- 7) The MyLicense One Platform is *API Driven* from the ground up to anticipate and enable future integrations and use cases with custom applications to interact with the underlying licensing data.

The MyLicense One Platform is continuously evolving by partnering with our customers to determine the top priority needs throughout the regulatory community. SA understands that it is equally important to be able to support the full life cycle of registration, licensure, and certification processes, as well as reporting, CE, investigations, and enforcement.

ONLINE SERVICES	BACK OFFICE LICEN	ISE MANAGEMENT	CASE MANAGEMENT	INSPECTION SERVICES	ADMINISTRA	TION
Public Verification Q	Business Rules & E	License Management	Compliant/Incident Tracking	Assignment Management	Administration & Security	
Complaint Submission	Workflow & Task Assignment	Communication Tracking	Allegation/Discipline Management	Summary Report Generation	Configuration Management	R
Initial Applications & Renewals	Advanced Search &	License Renewed Transactions	Compliance Monitoring	Checklist Review & Verification	Batch Job Interface	*
Online Payments	License Approved & Issuance	Reporting & Analytics	Investigations	Supervisor Dashboard	Imports & Exports	
Guided Questions Configurable Forms	Correspondence Management	Advanced API Integration	Caseload Management	Site Management	Rule Management	(ist in the second sec
Online Transfers & Demographic Changes	Full Document Management	Transaction Audit	Adjudication	Time Tracking	Staff/Role Management	i iți i
		CORE MYLICENSE PLA	TFORM CAPABILITIES			
	ic scheduled updates	Dedicated supp to assist with con		RAMP HIGH Secured		

High-Level Graphic of the MyLicense One Platform Capabilities



The MyLicense Platform is currently used to manage licensing operations in **22 states for nearly 800 different license/permit types**, including compliance, enforcement, and reporting functions. The graphic below exemplifies where MyLicense is utilized across the US.



SA's nationwide experience

SA has grown its nationwide footprint to more than 500 agencies, including:

- Indiana Professional Licensing Agency
- New Hampshire Department of Information Technology
- Virginia Department of Education
- Virginia Department of Health Professions
- Georgia Department of Community Health
- Georgia Professional Licensing Boards
- Kansas State Board of Healing Arts
- Kansas Board of Nursing

- California Emergency Medical Services
 Authority
- Massachusetts Department of Public Health
- New Jersey Division of Consumer Affairs
- New Mexico Regulation and Licensing
 Department
- Rhode Island Department of Health
- Utah Department of Technology Services

The following table includes just a few of the many reasons why SA is the ideal long-term partner for the NVBPELS's new Firm Registration Database solution.

SUMMARY OF SYSTEM AUTOMATION'S VALUE PROPOSITION				
Key Differentiator	The SA Team Advantage			
Direct access to the MyLicense product manufacturerSA is the software vendor, meaning the State will have direct access to the manufacturer of its licensing and permitting platform.				
Easy to configure!	The MyLicense One Platform is so easy to configure and begin using, our customers do it all the time.			
Best user experience	Board staff, applicants, licensees, firms, and constituents are met with the most user-friendly and intuitive interface available on the market .			

Understanding of Nevada state agency database and online platform security requirements

In addition to meeting or exceeding Nevada state IT security requirements, MyLicense One Platform's user security is built from the ground up to support next-generation security frameworks, ensuring that NVBPELS is ready for FedRAMP, StateRAMP, and the future of Zero Trust Architecture from day one. More importantly, these capabilities will give all users assurance that their personal data and credentials are secure.

The MyLicense One Platform contains a comprehensive, role-based security module that allows administrators to create users, roles, and groups. Access to the system for both internal and external users is controlled by unique user ids and passwords (Which can be reset automatically by a user with a valid user ID and registered email address.). Once a user authenticates to the system, the access that they have is based on their role.

In addition to robust encryption capabilities within the MyLicense Cloud infrastructure, MyLicense contains built-in role-based access control, using roles and security keys. Roles are assigned to the necessary security keys, and users are added to the roles that align with their job responsibilities.

Security administration is accomplished through an intuitive and easy-to-use system administrator interface. Administration is both graphical and menu-driven to allow administrators to easily setup new users, roles, and groups. A system user with administrator access can establish user profiles using three components of the Administration Module:

- **Roles** A role grants or denies a user access to parts of the system (e.g., Applicant Processing, Licensee Management, Enforcement, etc.), to windows within each module, to functions (insert, delete), and to types of access (read only, update). Examples of roles include System-wide Administrator, Agency (Profession) Administrator, Licensing Manager, Licensing Data Entry Specialist, Enforcement Manager, Verification Read-Only, and Accounting and Revenue.
- User ID This function allows a user with the proper authority to establish user IDs and passwords for each user; connect a user's role to the ID; assign roles and professions (logical grouping of license types) to a user; and assign users to groups.
- User Group This activity allows an authorized system user to create groups and assign multiple users to groups.

MyLicense boasts granular access control, down to the individual fields, buttons, and menu items on screens in the system. This puts the power of "need to know" in the hands of the agency; as part of the implementation process, SA will work with NVBPELS to identify which users should contain which roles and establish a role-based security schema that ensures people have access to what they need, but nothing more.

NVBPELS should procure nothing less than the best user security capabilities as reflected in the MyLicense One platform to ensure its users' data and credentials are fully protected.

The MyLicense Platform is hosted in the Microsoft Azure Government Cloud, which provides clients with a fully managed MyLicense environment hosted in a FedRAMP certified Cloud environment. The MyLicense SaaS blends the cost benefits and scalability of public cloud, with the security, stability, and customization of private cloud. The MyLicense Cloud allows an organization to meet FedRAMP, FISMA, HIPAA, NIST 800-53, NIST 800-171 ("DFARS"), and program-specific security requirements.

The MyLicense Platform is built to scale for enterprise systems that handle many thousands of users acting concurrently at one time. The following table summarizes the SA's viewpoint on the key industry standards for the replacement of regulatory management systems.

Industry Standard	SA Advantage			
Deploy Software-as-a- Service (SaaS)-based, secure cloud-hosted software.	MyLicense is 100% SaaS and fully hosted in the Azure FedRAMP Moderate environment, eliminating State IT overhead and ensuring compliance with Federal information security standards .			
Use a platform focused on regulatory needs to ensure speed-to-value.	MyLicense is tailored to the needs of regulatory agencies within Nevada, ensuring implementation time is spent deploying the application, not building new code .			
Implement mobile-ready, responsive, and dynamic online services.	MyLicense Online Services can be quickly configured to deliver beautiful, mobile-friendly forms that change in response to users' selections to take the guesswork out of applications, renewals, and filings and reduce costly errors .			
Provide robust back-office operations that easily and flexibly support many business processes.	The MyLicense Back Office integrates all agency regulatory business flows into a single, easy-to-use application, granting users the full power of back-office automation while making the process of changing business flows intuitive and simple .			
Integrate document handling with the application to see documents in context of associated data.	MyLicense's integrated document management capability allows user to drag, drop, view, and manage documents seamlessly throughout the platform.			
Grant users a full view into their data with robust ad-hoc reporting.	MyLicense's reporting allows non-technical agency users to quickly gain insight into KPIs, review real-time operational data , and rapidly respond to information requests from agency stakeholders.			
Achieve strong interoperability to quickly integrate with new data partners and payment processors.	Whether it is integrating with a National Association, deploying an integrated Learning Management System, or using the native APIs and Import/Export tools in the platform, MyLicense is built to allow agencies to quickly and securely connect to its data partners to communicate exam and payment data, among other areas.			

Hosted in a FedRAMP-certified environment, the stability of the platform is unmatched with the high configurability NVBPELS desires to leverage for years to come.

System Automation Enabling Responsive Government

Scope of Work

SA is providing the following responses, information, and examples of how our expertise and implementation of the MyLicense One will meet or exceed NVBPELS' goals as the new Firm Registration Database Platform.

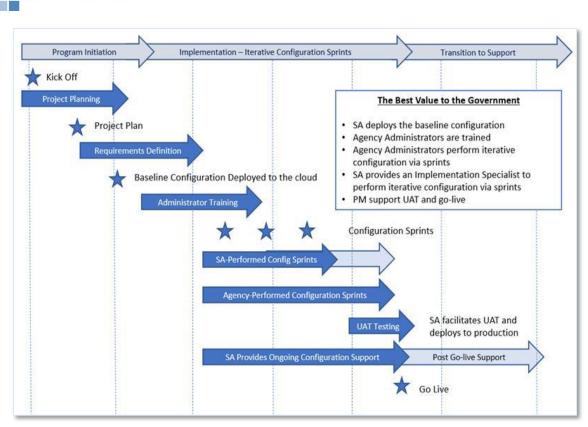
Work with NVBPELS stakeholders to determine how the application should work for them to manage the firm registration and name authorization processes more easily

SA understands that the chances of project success are greatly increased by thoughtful, welldefined project management practices. SA aligns its project management with industry best practices as defined by the Project Management Institute (PMI). By closely aligning with established best practices, SA controls schedule, scope, and cost, and achieves repeatable, reliable project success.

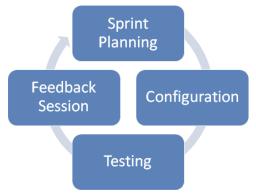
At the onset of the project, SA and NVBPELS management will set governance for the project through project planning. For an implementation of this size, it is critical for both the SA and the NVBPELS project teams to be aligned on the implementation approach, and to view the project holistically. As part of this initial project planning, we will determine the priorities for the Board, and **we are prepared to pivot our schedule to accommodate those priorities**.

The approach to organizing tasks is inherently flexible. SA has performed implementations using both Waterfall and Agile approaches to configuration. In our experience, one highly successful method of organizing teams consisting of both SA and client resources is to organize the work into two-week Configuration Sprints. Through this approach, which is explained in detail below, NVBPELS stakeholders will be able to visualize progress as it's made in the form of system configuration and associated demonstrations.

SA typically employs an agile methodology in the implementation of its SaaS platform, with emphasis on iterative system configuration and review early in the project. NVBPELS will have the option of administering the configuration of the platform on its own, have its internal or external IT resources perform ongoing configuration as a service to NVBPELS, or have an SA-preferred services provider perform all the necessary configuration and administration services. This decision is based on the budget and human resources that NVBPELS has available. Whichever strategy NVBPELS implements, the implementation approach will look similar to this illustrative graphic:



Prior to the start of configuration, SA provides just-in-time training to NVBPELS resources. This means that NVBPELS Administrators will receive training on online services configuration, back-office configuration, etc. soon before beginning the sprints where those products will be configured. The team then plans upcoming work into two-week Sprints, which are organized as shown in this diagram:



Sprint-based configuration lifecycle

Each Sprint starts with a Sprint Planning session, where NVBPELS team meets with the SA Project Manager and Implementation Specialist to identify the scope of work that can be realistically accomplished in the coming two-week cycle. Two-thirds of the working time in the Sprint is devoted to NVBPELS Administrators performing configuration, with the remainder devoted to testing of that configuration. Throughout, NVBPELS can call on SA to answer questions about configuration or to provide support to overcome sticking points in the implementation process.

System Automation

The remaining third of the cycle is devoted to testing by NVBPELS administrators and appropriate subject matter experts. This ensures that NVBPELS users are engaged throughout the project lifecycle, increasing user familiarity with the system over the course of the project and reducing barriers to user adoption at User Acceptance Testing, User Training, and Go-Live. Where testing identifies issues requiring SA configuration or development support, the SA project manager will record those items in the project issues log for triage by the implementation specialist and potential review by the SA development team.

Each Sprint ends with a Feedback Session that allows the team to review progress, discuss and strategize around challenges, and adjust velocity. As NVBPELS administrators become more comfortable with configuring the platform, workload can potentially increase in each Sprint, accelerating the project progress and bringing in project timelines. Conversely, if the team finds in testing that configuration is not working as expected, the team can decelerate the next Sprint to focus on quality.

During initial planning, we will also identify all key stakeholders and points of contact for each phase of the project. The resultant communication plan will be used throughout the project to ensure the appropriate stakeholders are engaged at the appropriate times. Together, the project and communication plans, along with weekly status reports and calls, will allow SA and NVBPELS to tightly control the project and provide visibility to project progress to key project stakeholders.

Our implementation approach combines extensive experience implementing licensing systems with a collaborative approach to deployment of dozens of Licensing Systems. We have found that this approach will result in numerous benefits to NVBPELS:

- 1) Leadership NVBPELS management will have a highly experienced Project Manager leading the effort and supporting the organizational changes necessary to make the project successful.
- 2) **Speed-to-Value** SA will divide the implementation into phases to prioritize configuration to quickly bring value to NVBPELS, its goals, and objectives.
- 3) **Cost Reduction** NVBPELS avoids expenses paying for implementation services that they do not need, with the option to accelerate or add-on to the implementation with additional Configuration or Development Sprints.
- 4) **Flexibility** Through its extensive experience, SA has learned that, as SA and our clients learn about each other through an implementation, project priorities can shift. Our approach allows NVBPELS flexibility to reprioritize configuration as needed to meet its goals faster, even when those goals change.

SA Project Manager oversight is integral to the entirety of the project. Our project managers are accountable to you for the results of the project, and provide leadership, guidance, and organization from day one to go-live and beyond.

One major advantage of this approach is that it will allow for the iterative release of new online forms into Production, allowing NVBPELS to gradually transition its renewal and initial application processes to new online services in MyLicense. This process lowers the impact of any individual release of new forms, allowing the team to more nimbly address any issues that arise

when forms are deployed to Production. It also allows the project team to continually deliver value throughout this phase of the project, improving the user experience and driving increased adoption of robust online services.

We recommend this approach for implementations like this one, as we find it leads to faster progress, more collaboration between client and SA resources, and faster learning for client administrators. However, our project approaches are flexible enough to accommodate other ideas and techniques preferred by NVBPELS. We look forward to the opportunity to discuss this approach with NVBPELS stakeholders.

Requirements Gathering and Documentation

SA's approach to determining how the MyLicense Platform will work for NVBPELS stakeholders is rooted in our process of requirements gathering and documentation. This process formalizes a set of activities that help ensure that elicitation, documentation, refinement, and changes of requirements is adequately dealt with during a project's full lifecycle, with a view toward satisfying the overall need to the customers' satisfaction.

During this process, SA will establish a Requirements Management Plan that provides clear and direct alignment to NVBPELS' needs. Additionally, this will align broader program requirements to scope, schedule, and business operations.

The Requirements Management Plan (RMP) describes the requirements items, requirement types (including attributes), the requirements management process, and the metrics and tools to be used for measuring, reporting, and controlling changes to the requirements. The RMP will incorporate the following:

- Stakeholder roles and responsibilities
- Requirements management process (elicited, analyzed, documented, and managed)
- Requirements type definition
- Requirements type/artifact mapping
- Naming and numbering convention
- Requirements prioritization
- Requirements traceability
- Requirements versioning
- Requirements baseline (requirements change control)
- Communication strategy for requirement changes
- Requirements management tools

Ultimately, this process will produce a guiding understanding of the need the system is to fulfill. That understanding will lead to an effective execution of those requirements, and objective proof that the requirements are satisfied.

NVBPELS will benefit by having an overarching roadmap for how we all communicate, collaborate, and co-develop the final system.

Elicit and identify – SA will arrive with a clear, stable, and comprehensive solution – without starting from scratch. We initiate collaborative requirements sessions with a focus on configuring the proven model unique to NVBPELS needs.

- Targeting best practices
- Leveraging feedback to help guide the collection on configuration elements as well as facilitated sessions to confirm, clarify and document specific needs
- Tailoring of the process focuses on translation up front of requirements to our technical team

Categorization - Facilitates linking requirements to user stories, coding, test cases and training documentation and classifies into:

- *Functional Requirements*: system-related requirements, how the system operates to an end-user
- Non-Functional Requirements: traced to more infrastructure elements that may be less visible to an end-user, such as availability, cloud hosting, and security frameworks
- *Technical Requirements*: physical infrastructure, system availability and performance. These are traced to technical documentation or deliverables.
- Priority: high, medium, low

MyLicense Setup Questionnaire

The ISF Team offers a significant accelerator in gathering requirements by bringing NVBPELS proprietary guides that aid in the elicitation of system configuration information. The setup questionnaires have been refined throughout many implementations of the MyLicense Platform and are collected individually for each license type and profession.

Joint Validation Sessions with Stakeholders

Our team will conduct joint validation sessions with NVBPELS and stakeholders to understand the current business processes. We will define and refine the business requirements of the system, examine existing manual processes, screens, reports, etc., and ensure all business processes have been identified. At the end of this process, the scope will be fully mapped and understood by the project team.

SA will follow the same process for all the work sessions. Initial sessions will be conducted to gather preliminary information and allow for demonstrations. As more information is uncovered and further details are developed, SA will conduct follow-up meetings as needed to validate and verify the information. In this way, the entire project will build upon itself, increasing and funneling in the details as the project progresses. Utilizing the same SA consultants to conduct sessions with the same areas over the life of the project, we will foster team building and a sense of ownership in the final implementation among NVBPELS staff.

We believe this approach to working sessions is what separates us from other consulting vendors. This structure will allow project stakeholders to have maximum input and insight into the project, and ensure all views and data can be considered, without overwhelming the project with input from many individuals.



Requirement Traceability Matrix

The Requirements Traceability Matrix (RTM) provides forward and backward traceability from requirements to downstream project artifacts and activities (e.g., training, M&O), and upstream to requirements. This would focus on the development, documentation, and approval of a Functional Specification Design Document for each Phase – and then tracking the successful execution of user stories, test cases, UAT and training in direct alignment to how requirements may have evolved.

Change Control Management - Once requirements are baselined, categorized, and validated, any added, modified, or deleted requirements must be approved through the project's change control management process, focused only on the clarification of key decisions in favor of full transparency.

Reporting and Communication – Requirements' status is communicated throughout the duration of the project both formally and informally. Each project team member is expected to understand and adhere to the project's approach to managing, validating, and tracking requirements, as well the change request process.

Our Functional Specification Design Document elaborates, as needed for the components:

- User interface screenshots/prototypes, process models, business rules, role-based access models
- Delivery options and the proper sequencing of activities
- Performance expectations, including concurrent users, transaction volumes, peak usage period and efficiency in specific business flows
- Data, data flow, data model our team always says the data drives decisions and corresponding functional, interface, and technical requirements at a detailed level and all linked back to the RTM

The Functional Specification Design Document is a shared responsibility – all managed and controlled with the singular focus of our Project Manager - across the requirements and training teams, the product team, the data conversion and migration team, and the integration team. The product team has the deep expertise in the proven MyLicense Platform to meet all necessary requirements. As the team gains momentum with requirements approval, the product team begins the sprint cycles to develop added functionality and closely aligns with the responsibilities and approach that "transitions and builds around" the core with unique NVBPELS data and integration/trading partners.



Create a simpler process for firms to establish, manage, and renew their license – including a user interface dashboard

The MyLicense One Platform will provide the ability for users to securely log in and perform online transactions based on the agency's business policies and rules. This application provides a highly dynamic, mobile-ready, and intuitive interface for applicants completing online initial applications and renewal requirements.

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MyLicense One Platform Login Screen for Online Self-Services

MyLicense One's Online Services will allow users to perform all the key licensing processes, such as initial apps, renewals, and name authorizations, as well as perform an arbitrary number of adhoc changes and form submissions through actions tied to their linked licenses.

Online Services users will also be able to print their license, request duplicate copies of badges and other physical documents, and manage license relationships. All these processes can include payment through integration with NVBPELS's preferred payment processor.

The following additional capabilities transform the user experience of online services:

• Dashboard View to centralize management of licenses, permits, and applications

System Automation ling Responsive



- Online Wizard that guides applicants to the correct application type •
- Dynamic forms that respond to users' selections, making online processes easier than • ever
- Precise validations of data format and required document uploads with Smart Upload capability to validate the content of documents, ensuring applications are fully complete before submission
- A streamlined deficiency notification flow that allows for precision and speed in identifying and remedying application deficiencies, dramatically decreasing the time to licensure
- Hub for communication with back-office staff to eliminate friction and delay in the • application process
- The MyLicense One Platform provides a centralized location for online services to the agencies NVBPELS serves.

Welcome		Activity	
	Ith & Environmental Control is here to serve the needs of the o what you need to take action on your professional licenses. M		
new licenses, as well as k	pplication for Home Health Agency	Please indicate the reason for appl	ication:
Apply for a License	aved 4:37 PM EDT		_
	Introductory Text	🗌 Initial 🔤 Re	newal New/Amended License (Change Reque
	T. C.	- Liberse Number	
Licenses	Agency Information	ABC123	
		- Expiration Date	
NAME 1	O Counties Served	11/30/2020	
Smith, John 8	Branch OFfices	Alerts can be used to pro	vide information or notices to an applicant.
	Contact Person		
	Contact Person	Please complete the following field	ds for your Agency:
	Operation Disclosure		
	T	Excellent Home Health Care	
_	Documentation		
_		Physical Address 123 Main St	
	Verification	Cty/Text	
		Charleston	State • 29401 County
			State is a County is a required field required field
		Telephone number	Fai turber
		(301)	(301) 555-1234
		Please enter a full phone number, incl code	uding the area

Sample Configured Application

When applicants and licensees log into MyLicense One Online Services, they are presented with a single view that acts as a portal to new applications, in-progress applications, and actions (like renewals and address updates) on existing licenses or permits. This simplified dashboard view makes it easier for users to find the right action based on their goal, reducing the time they spend looking for an online process instead of completing it.

Nelcome						Activity
	Hampshire Department of registration, or scroll dow				on below to	Submitted Manufactured Housing Permit Application Submitted Manufactured Housing Permit Application Started Manufactured Housing Permit Renewal Submitted Manufactured Housing Permit Application Started Manufactured Housing Permit Application
	d Registrations		our existing licenses an	d registrations.		Submitted Manufactured Housing Permit Application Started Manufactured Housing Permit Application Submitted Manufactured Housing Permit Application
NAME	TYPE	LICENSE NUMBER	STATUS	EXPIRATION	ACTIONS	
John C Reilly Contractors	Manufactured Home Permit	MH-0000001	Active	12/31/2024		

The MyLicense One Online Services Dashboard

From the dashboard, users can access license actions to make additional changes to the license, renew the license, or submit additional forms. Since actions are license-specific, users can instantly see which actions are available for their license based on NVBPELS business rules.

Liberioco un	d Registrations				
Please review your e	xisting licenses and regis	trations below, or link yo	ur existing licenses ar	nd registrations.	
NAME	TYPE	LICENSE NUMBER	STATUS	EXPIRATION	ACTIONS
John C Reilly Contractors	Manufactured Home Permit	MH-0000001	Active	12/31/2024	Renew License
	Don't see your license? Click here to search for it.				

Actions available on a license in MyLicense One Online Services.

To select an application or get help on how to proceed, users are directed to the Form Finder, a fully configurable online wizard that guides users to the correct next step. The form finder asks business-focused, meaningful questions to help guide the user to the appropriate application form, instructions, or website. Even if what the user is attempting to accomplish is not in the jurisdiction of the licensing agency, Online Services can direct the user to the appropriate resources, deflecting phone calls to the agency.

stem Automation

	What is your goal today? I want to:
	Blassa polast as assume
	Title and register a mobile home
	Modify an existing mobile home
	Renew or transfer my registration
	Apply for a Manufactured Housing occupational license
	Become a registered education provider
	Submit an education course for approval
_	Become an approved education instructor

The form finder guides users to the correct next step.

Once guided to the correct form by the Form Finder, applicants are taken to an application form that is fully responsive to the user. Questions, fields, text, upload fields, and entire sections appear and disappear depending on the user's selections and agency business rules. Additionally, the license type and path to licensure associated with the form can be dictated by the user's selections. This saves the user the effort of having to determine which data to enter and which documents to upload based on their chosen path to licensure and other personal characteristics (e.g., whether they are a citizen or registered alien).

Conditions (
	Advanced
Show this field if All 👻 of the following conditions are met:	CLEAR ALL
Fact Operator Value priorRealEstateE + Equals Yes	$\oplus \ominus$

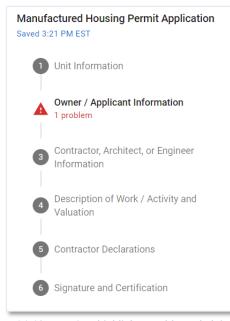
Visibility rules offer NVBPELS full control over which fields appear under which conditions

This control over the user's selections in the form extends to the data sent back with the application, including the license type and path to licensure. This means that a single application form can potentially support up to dozens of license types (for example, a liquor license whose form varies only slightly by license type). This both simplifies the application process and vastly increases the speed with which NVBPELS can deploy and modify online services.

As users complete online applications and other forms in Online Services, the applications also guide users to ensure all data is entered correctly and that the appropriate document are uploaded. NVBPELS administrators will have fine-grained control over both the field-level validations and the messages presented to the user, even allowing for multiple validations on the same field that can guide the user in the appropriate direction depending on their mistake.

g Responsive Government	
vearOfManufacture	
Rules (i)	
✓ This field is required	
RULE 1 Adva	anced 💽 🗙
This field is valid if All 👻 of the following conditions are met	CLEAR ALL
Fact Operator Value yearOfManufact Matches \dd{4}/	$\oplus \in$
Message	
Must be a 4-digit year.	
Year of Manufacture	
Must be a 4-digit year.	

A configured field validation rule and the resulting message in Online Services.



stem Automation

MyLicense One highlights problems, helping users successfully submit applications

If validation requirements are not met, applicants cannot submit their applications. All data and documents must be entered and uploaded in the appropriate format prior to submission.

Because the admin interface is easy to use, it is easy for NVBPELS to iterate on validations to identify and mitigate areas where users are entering data incorrectly, ensuring that minimal effort is needed by back-office staff to issue deficiency notifications for applicants to respond to in the portal.

Document uploads are required in line with the appropriate section of the application, making it simpler for licensees to identify the right documents to upload.

Additionally, SA is taking innovative steps using artificial intelligence and machine learning to validate the content of uploaded documents with Smart Upload.



When applicants upload documents, MyLicense One Online Services validates that the uploaded document or photograph resembles the template of the document learned through samples provided to Smart Upload. If the content of the document does not match the template or the document is illegible, MyLicense One will prompt the user to upload a legible document of the appropriate type.



Using Smart Upload, NVBPELS can ensure that online users upload the right documents every time.

Payments in the MyLicense One Back Office are recorded in association with both entity and license records and can be allocated to fees with State-specific revenue codes for ease of reporting to Treasury. Payment processing flows include data reconciliation with physical and online payments to ensure that all monies collected in the system are properly allocated to fees and accounted for in the appropriate GL accounts.

License Fe	ee Invoice				January 14, 20
xiom Contrac	ting	Invo	ice #	INV-000020	
00 Gacramento CA	94203	Due	Date	January 14,	2022
Service Date	ltem	Description	Qty	Rate	Amoun
01/14/2022	Mobile Home Permit Inspection Fee	Mobile Home Permit Inspection Fee			\$196.00
				Total	\$196.00
			Amount Re	ceived	\$196.00
			Invoice B	alance	\$0.00

A paid license fee invoice in MyLicense One Back Office.



The MyLicense One Platform includes integrated payment processing with many PCI-compliant solutions (including NIC USA, Converge, US Bank, and Government Window to name just a few). Each integrated processor supports a suite of merchant agreements with banks (e.g., Chase)—we will work with NVBPELS to select the processor that best aligns with Nevada State IT policy and merchant services agreements.

Fees		Introductory Text
(tec)	Atout	All current Alcohol Licenses expire December 31, 2020.
Databart Sports Packaged To Do	\$725.00	Thère si nu grace period.
Distilled Spirits Manufacturers	0105.00	Accord Lowens Reviewal applications must be automated annually on or before Revented: 15m to receive your alcohol loverse by the January 1st, 2021 beadline. Revenue applications will be accepted until 12(11/20. After this date a new Accord Lowens Application will have to be submitted.
		Alcohol License Renewal Process:
Mail Beverage Teproom	\$425.00	The may renew your Alcohol Upenve onthe it
inted Application	8200.00	Those Transmiss and Accord of Lickments are convent and not deriving and Those Appendix the first same in the first and appendix 200 Seconds Lickment Conversity for this con characterist price appendix 2000 revieware Those Transmiss address are the same as all tables or your 2000 Interview
Total	\$2625.00	The following is required to lenses your 2021 ACOhol Literate
BACK	. Par	Completed 2011 Alcohol License Renewal application Completed 2011 Alcohol License Renewal application Copy of the Apert's revenested 6.6 Onliver's interest Bathress address annot be used as horize address; Completed, apend, and naturated 5.6 Alf-Michael Sould and Versifiate document totakel begt
		Accepted Methods of Payment: Credit and Debit.
		Application Questions
		Any you submitting an initial Application or a filteneed for an existing license? Application Type: Initial Application
		Are you addressing a Business Continuation application?

Sample of a configured site with Integrated Payment Processing

Through our integrated payment processing, users can complete their transactions online without the need to mail in checks or come into the office to pay directly. During our implementation for NVBPELS, SA will integrate the Cybersource payment processor with MyLicense One Online Services to ensure NVBPELS can continue using its payment processor of choice.

MyLicense Backpack			Licenses Print Do	cuments Calendar Time	& Expense Q 🔒
r's Taxen					Status Pending v
Icohol Beverage		spections Violations File	ns <u>Accounting</u> Comment	s Audit History	
Type Alcohol Beverage	Balance: \$1,	500.00 Show Invoices		O NEW DAY	
Licensee	Date +	Description	Charge	Payment	Balance
Joe's Taven	04/30/2021	Otation	\$750.00		\$1,500.00
Status Pending	04/06/2025	Citation	\$790.00		\$790.00
Issue Date				Rows per page:	5 + 124/2 < >
Expiration Date					



MyLicense One's support of applicants and licensees does not end once applications are submitted. As soon as payment is complete, applicants will be directed to back to the main Online Services dashboard and can view an Application Dashboard showing the real-time status of their application.

System Automation

The Application Dashboard shows the status of each checklist item from the back office, deflecting phone calls to agencies about application processing status. It also provides applicants access to a PDF copy of their application and their submitted documents, keeping them literally on the same page with agency users should questions arise about their application.

< 1	Return to Dashboard				
Jo	hn C Reilly Contractors				Status: Pending
	nufactured Housing Permit App cation Received Date: 01/20/2022	lication			
	Licensing Requirements				Downloads
	ITEM	LICENSE TYPE	STATUS	DATE	Application 👲
	Application Completed & Signed	Manufactured Home Permit	In-Progress		Letter of Recommendation.pdf 🛓
	Application Fees Paid	Manufactured Home Permit	 Completed 	01/20/2022	
	Inspection Requested	Manufactured Home Permit	0 In-Progress		
	Approved Inspection Report	Manufactured Home Permit	O In-Progress		

The Application Dashboard answers licensee questions about the status of their submission

When applications flow from Online Services to the Back Office, users will be notified of the incoming applications based on configured work queue assignments. Auto-assigned users can then drill down into the notification to retrieve the application record.

Once inside a record, users can toggle between different categories at the click of a button, instantly retrieving data already loaded for the user. Multiple categories of data within a given section (for example, address, bond, and education data related to a single license) can be viewed and edited on the same screen, and all updated with a single click. This refreshes the data in an instant, allowing the user to quickly proceed to the next task.

	ousing Permit () 2 OPEN VIC	DLATIONS		
DETAILS	License Data Inspections Violation	s Files Accounting Commo	ents History	
Туре				
Manufactured Housing Permit	UNIT	× ✓	OWNER	× ✓
Licensee	Type of Services	Inspection To Obtain In 👻	Owner First Name	Jacob
Axiom Contracting	Unit Type	Manufactured Home/	Owner Middle Name	Randolph
Status	Who is Completing Work?	Contractor 👻	Owner Last Name	Smith
Pending	Decal Number	MH-123322	Owner Street Address	123 Main St
	Commence Commence Andre	B3	Owner Suite/Apt. No	100
Issue Date				
Issue Date	Occupancy Group Code	SN232434234	Current City	Sacramento
	Serial Number	SN232434234	Owner City Owner County	Sacramento

Many categories of license data can be edited in one screen and updated with a single click

Just as the MyLicense Platform allows administrators to apply validation rules to online forms, NVBPELS administrators can apply the same validations to Back Office forms, ensuring data integrity is maintained for data entered by both back-office and online users.

UNIT	×	~
Type of Services	Inspection To Obtain In	•
Unit Type	Manufactured Home/	•
Who is Completing Work?		•
	Required Field	
Decal Number	MH-123322	

Configured field validation in the MyLicense Platform Back Office

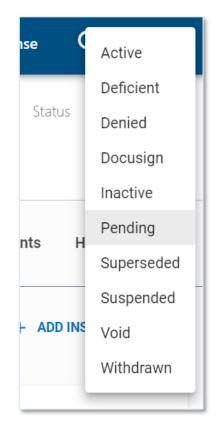
Configurability at the license type level and in-depth security roles allow the Board to ensure that users only have access to what they need.

The MyLicense back office is like a control center from which NVBPELS operations staff can control every aspect of the licensing operation. From configuring fee rules through controlling the look and feel of the online portal that licensees use, MyLicense provides a single pane of glass from which NVBPELS can manage a sophisticated licensing business operation.

When NVBPELS users are reviewing applications, they will be able to update the status of the application. This allows agencies to take advantage of status-driven events such as automatically setting data values based on status, sending notifications to licensees and staff, and creating fees and other penalties based on calculated conditions in the data.

As applications advance to approval, back-office users can update the status to trigger status-driven workflow events. Applications can advance and regress through statuses as defined by agency business rules. As these transitions occur, workflow events can be triggered based on the prior and current status. This allows, for example, notifications automatically go to licensees and licensing supervisors when a license status is changed from "Pending" to "Deficient".

These same workflows can be applied to Online Services. This allows for communication with users as statuses change in Back Office. It also allows for what we term multi-step applications. SA observed that a common challenge in licensing is application processes requiring multiple participants (e.g., a Supervisor or Sponsor) in addition to the applicant.



Status changes trigger workflow events in the MyLicense Back

The MyLicense Platform's Online Services workflows allow applications to be completed in stages by each of these stakeholders, sending notifications when it is the next participant's turn to contribute to the app. This will eliminate time spent waiting for mailed-in approvals, documents, and data from third parties in the licensing process, which we know is a key blocker for application approval. It will also improve visibility of these parties into approved applications, allowing employers, supervisors, and other stakeholders real-time insight into their supervisees' licensure status.

In addition to giving NVBPELS tools to improve processes, the system's Back Office is focused on surfacing more important information to users at the right time in the licensing lifecycle. Examples include prominent alerts that indicate problems with licensure and inspection violations, as well as visible notifications when changes have occurred on a license.

Axiom Contracting

 Manufactured Housing Permit
 ① 2 OPEN VIOLATIONS

Specific alerts indicating problems with licenses are prominently displayed

Workflows in the MyLicense One Back Office will further streamline the process of issuing fees and invoices and collecting payments. Because workflow rules can be designed to act on any data in the system, there is no limit to the flexibility of these rules, allowing NVBPELS free rein to define the conditions for all agency workflows across all back-office processes and events. When certain system events occur (e.g., overdue renewals or inspection remediation due dates), MyLicense One can create a fee and associated invoice for the fee (e.g., a Citation with penalty). This allows NVBPELS to automate communications about outstanding obligations so that licensees and fined respondents immediately understand their obligations to log into Online Services and pay fines.



Overdue obligations can trigger additional fees in the MyLicense One Back Office.

Reports can be created in a variety of formats, from a standard tabular data output to bar charts, line charts, pie charts, and other graphic outputs to allow agencies to easily see and represent their financial data.

Furthermore, MyLicense One Online Services will vastly reduce the number of deficient applications through advanced validation. However, we know that deficiencies will still occur. We envision an improved deficiency notification process that allows for more precise communication and response between back-office users and online services users.

List all other names which appea	t appears on identification documents, such as medical education and examination records n identification documents.	
Jeff A Steyer		
Attach a copy of a current goverr	ent issued photographic identification (e.g., driver license, passport, etc.) Drag 'n' drop files here, or click to select files.	
A hospital ID badge is not an Please submit a government driver's license or your passpi		

Prototype of Online Services Deficiency Flow

In the deficiency flow, back-office users will directly remand specific fields and documents in the application back to the applicant for correction, attaching specific messages instructing the user on how to correct the form. Online services users will see their form but will only be able to interact with areas requiring correction, ensuring that only the problem areas are updated. Once corrections are submitted, back-office staff will be notified of the correction, allowing them to quickly review the corrections and approve the application if appropriate.

We believe that this deficiency flow will forever close a longstanding gap in the communications between online users and back-office staff and increase the responsiveness of back-office staff to corrected deficiencies.

Our experience working with regulators in states like Nevada us that a successful online portal for permit application and renewal must address the following key challenges:

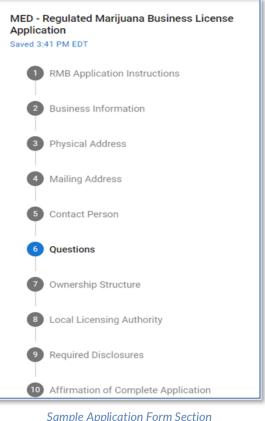
• Application flows are complex

System Automation

- Large document uploads are required
- Licensees and applicants demand proactive communication from agencies
- Administrators need to respond to ever-changing regulations

MyLicense One Platform's Online Services is designed to rise to these challenges, addressing these needs in the following ways:

- Dynamic forms that adapt to user's responses and present only the fields that are needed
- Unlimited file upload size and flexibility in categorizing documents by type
- Application dashboards that provide real-time application status, as well as timely notifications to applicants
- Admin portal that allows for collection of new data and other application changes in minutes



Sample Application Form Section Navigation

System Automation Enabling Responsive Government

To succeed in its regulatory mission, NVBPELS will need an online platform that ensures that applicants *get it right the first time*, dramatically reducing the need for deficiency notifications and time-consuming application remediation through amendments. However, we also know that proactive communication is also vital to applicants' and agencies' success—therefore we are continuing to evolve Online Services to support innovative approaches to licensing communications.

The MyLicense One Platform emphasizes proactive communication with your constituents, allowing for actions to be taken by them to submit ad-hoc reports, requests, and changes when needed. These changes can be accessed as actions directly from the user presented on the dashboard, making the process quick and reliable.

A successful NVBPELS Online Self-Services Portal rollout will ensure that the correct tools are in place for proactive two-way communication with users saving time and reducing phone calls to NVBPELS offices. MyLicense One Platform's Online Services is designed to help NVBPELS achieve those goals while transforming the online user experience.

System Automation Enabling Responsive Government

Develop a searchable database of Nevada engineering firms that is accessible by the public can sort or refine initial search results

When information is updated in the MyLicense One Back Office Back Office, data that is made publicly accessible will be instantly available through the public lookup site. The MyLicense One API includes the ability to instantly render non-PII data available to the public lookup site and display this data by license type according to NVBPELS agency business rules. Searches can be performed by any data element as permitted by NVBPELS, allowing users maximal flexibility to perform real-time searches to find the records they need.

Within the MyLicense One Platform product roadmap, SA is innovating on traditional approaches to providing public data to all stakeholders in the licensing process, including Nevada licensees, citizens, and business owners. Our API will allow businesses with an interest in licensing data to obtain it on demand and per their specifications. For example, hospital associations requesting licensing lists and pharmacy chains requesting updated public disciplinary information can subscribe to a bespoke data feed from licensing data published by NVBPELS. This will both reduce the burden of ad-hoc data requests to licensing agencies and provide private organizations with vital compliance information in a timely fashion.

Bass Pharmad	× , Angel	
Profession		
Pharmacy Board		
License Number		
266158550A		
Status		
Active		
Issue Date		
04/01/2020		
Expiration Date		
06/30/2022		
Last Refresh Date		
01/27/2022		
An Online Services user a	ccesses her license in	-

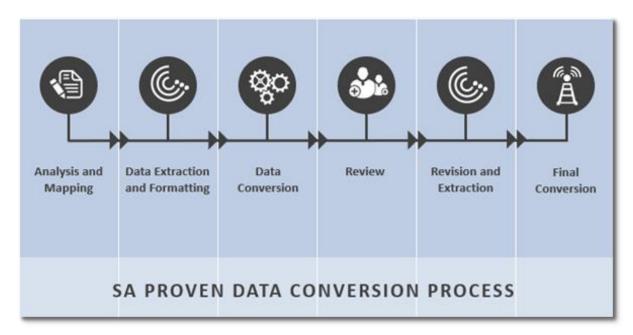
An Online Services user accesses her license in real-time Members of the public will also be able to tailor their search and download results (in Excel or PDF) to the desired data set and format, allowing citizens to independently gather open data without the need to submit records requests. This capability will build transparency into NVBPELS's operations and will further reduce administrative burdens related to data and records requests.

Finally, the MyLicense One Platform now has the technical capabilities in place to provide digital credentialing across our client base nationwide. Today, MyLicense One Online Services users can retrieve a real-time digital version of their license and can download a printable or emailable copy of the license on demand, allowing inspectors to verify licensee status and document compliance instantly while onsite. We envision a day when credentials are fully digital, including the license posted on the wall of a pharmacy or bar.

At a minimum, NVBPELS should request that a vendor provide a public lookup site that facilitates full public transparency while slashing agency staff time spent responding to data requests. However, we believe that NVBPELS can go further, and request a system that prepares the State of Nevada for a fully digital licensing and credentialing future.

Migrate old firm information to the new system

SA has a proven track record of consolidating and converting customer data from existing legacy systems into the MyLicense One Platform. Our data conversion approach ensures data is normalized during the conversion and has been successfully used to consolidate dozens of databases in previous implementations. SA understands that data consolidation and conversion is not just a technology challenge—our approach and process combines the right amount of people, process, and technology to deliver successful outcomes.



- 1) Analysis This step involves completing a thorough analysis of the source data to develop an understanding of the relationships between files/tables, the general flow of data in the Legacy system, and the meanings of individual tables and fields. A data dictionary containing definitions of each source table and field is necessary for this step. Additionally, all the various import formats that will be needed must be identified and all of the source data must be moved to staging tables in the MyLicense One Platform database. This way both the source and the target are now in the same RDBMS and the source data can easily be queried and manipulated.
- 2) Mapping This step involves mapping all the source tables/fields to the appropriate location in the import formats. It will be necessary to map all the coded values from the source to the appropriate setup coded values in MyLicense One Platform and to map all coded values that exist in MyLicense One Platform back to a correspondence in the system. A spreadsheet will be provided that will contain the mappings from the source to the target, mappings of all coded values, and a section to track all conversion related issues/questions. A list of each coded value relevant to each individual import format will also be provided for reference.



- 3) **Conversion** This step involves writing code to convert the source data to the tables representing the import formats. Stored procedures, functions, or some logical method will need to be designed to move the Legacy data to the pre-determined import formats. The import formats will be stored as a table on the MyLicense One Platform database. All the steps previously completed involving analysis and mapping should make the transition to this step much easier by eliminating guesswork.
- 4) Execution This step involves executing the pre-defined stored procedures (provided by SA) to move the data from the import format tables to the appropriate MyLicense One Platform application tables. The stored procedures will track the number of records that pass and fail. All failed records will be written to pre-defined error tables.
- 5) **Review** This step involves reviewing all the converted data as it exists in MyLicense One Platform, as well as testing certain functionality in MyLicense One Platform using the converted data. This review may facilitate some changes to the conversion procedures.
- 6) Revision This step may involve revising some of the conversion procedures created during Conversion; correcting any records that may have failed in Execution; and implementing changes discovered in Review. Upon completing this step, it may be necessary to return to Conversion to re-execute a portion of the conversion, or possibly to redo the entire conversion again. If this is done, it will also be necessary to re-execute, review, and revise again until SA and NVBPELS are completely comfortable the reported results of data migration.

Typical implementations will include two iterations of initial data conversion for testing. After the first iteration, testing will be done, and feedback provided to revise the conversion to address any reported issues in the second iteration. Additionally, an iteration of the data and document conversion will be done both prior to UAT and at go live to keep data synchronized between systems and to avoid confusion for the end users that will be testing.

Our approach of multiple iterations of data conversions has proven to be successful and gives NVBPELS a "hands-on" view of the data migration results before and after conversion processes. We have found that this procedure also helps to develop confidence and trust in the SA data migration and conversion process and guarantee positive outcomes in taking the system live.

SA NEVER commingles data.

Unlike some platforms that commingle your agency's data in a multi-tenant solution (perhaps with the intention of saving cost but at the expense of violating state security guidelines), the MyLicense One Platform was designed from the ground up to be multi-tenant SaaS with DISTINCT tenant databases, one for each set of client licensing data.

This approach ensures that all PII and Licensing Data remains segregated from any other State agency's PII and provides the NVBPELS with complete control over who has access to every piece of sensitive information.

Document and train NVBPELS shareholders on the application

Training and knowledge transfer are critical to the adoption and ongoing use of any new technology. If done well, training will provide the state with the resources it needs to self-sufficiently respond to inevitable legislative changes that introduce new business rules or requirements that require configuration within the MyLicense One Platform. For more than 20 years, SA has excelled at empowering its customers to do just that.

SA's approach to training prepares both administrators and end users to support and use the MyLicense One Platform. SA will collaborate with NVBPELS on the development of a training plan that will outline the various training modalities that will be used, including:

- End user training
- Administrator training
- Train-the-trainer training
- New Feature release webinars

The training plan will outline the use of the train-the-trainer approach, ongoing skills development, and training solutions that address the immediate and ongoing needs of the state. Training can be supplied in a variety of formats, including virtual, in-person or a hybrid approach. SA will record trainings and make them available to NVBPELS to serve as a resource for "refresher" trainings and/or in support of training new hires. Recording these sessions and making them available online will help NVBPELS reduce downstream costs as new employees are onboarded and need to be trained. With our training approach, NVBPELS will save time and money.

In addition to the standard training approach described above, SA is also experimenting with several new innovations in our R&D Lab to deliver training in real-time. Examples include integrating knowledge base articles into the support portal, so that when NVBPELS starts to create a ticket, AI analyzes the data within the ticket and presents knowledge base articles to the NVBPELS administrator that are relevant. This will allow for the delivery of targeted information on an as-needed basis.

We are also experimenting with real-time chat integration into the support portal so that NVBPELS administrators can engage directly in real-time with an SA support resource. SA is continuously soliciting feedback from its customer community on the best format and delivery medium for training and will incorporate this information into the next-generation MyLicense One delivery model.



Establish a strategy with NVBPELS for the communication and launch of the new application

SA understands the importance of a smooth and seamless transition from implementation to operations. We understand that the initial operational period is always challenging as people are becoming familiar with new processes and technology. It is our goal to fully support NVBPELS and make this as easy as possible.

At the initiation of this process, SA will develop a final status update and a recap of all of implementation activities, which will then be presented to the NVBPELS stakeholders as a closeout of the implementation phase and transition into maintenance & operations. Included in this report will be a list of all items that have been identified as post implementation activities.

SA will also lead NVBPELS in the development and execution of a transition plan and process. A key element in the transitional process is the identification of who does what in the operational phase and making sure that operational staff will have the appropriate background and knowledge necessary to perform their tasks both efficiently and effectively. The transition process will include the following:

- Identification of the tasks necessary to be performed for smooth and efficient systems operations.
- Identification of the staff that will be assigned, available and responsible for operational tasks.
- Determination of "who does what" in the operational model, making sure that each task has an owner.
- Validation that the task owner has the appropriate training and background to perform the necessary tasks. Depending on the situation, additional training and/or tactical transition meetings may be required to provide the appropriate level of training and/or background to the operational staff

In some cases, tasks will be transitions from SA to NVBPELS staff. Other tasks may involve transitions between staff members within SA or NVBPELS. For each scenario SA completely understands the importance of an effective Transition Plan with an emphasis on effectiveness, open communication, and transparency when launching the new application to NVBPELS community of users. NVBPELS will always have a clear understanding for the process, assignments, and success factors for this most important step.

System Automation Enabling Responsive Government

Make recommendations for next steps based on the final application

SA Project Manager oversight is integral to the entirety of the project. Our project managers are accountable to you for the results of the project, and provide leadership, guidance, and organization from day one to go-live and beyond.

As mentioned previously, for a project like NVBPELS, it is important to have a clear path to vendor executive management. SA's experienced project managers are continuously involved in steering the project towards the envisioned goal and senior management remains connected to the project and is readily available for greater involvement as needed.

In addition to the meetings conducted with NVBPELS, SA project managers will have regular scheduled meetings with the SA executive team to review the progress of each project. During these meetings the progress of each significant task is reviewed and checked to see if it is on time or experiencing delays of any type. The executive team stands ready to provide advice and/or assistance, where necessary, in navigating risks that may arise.

With respect to ongoing operations following the initial implementation, NVBPELS will benefit from the combined experience of the entire SA Team. Our team collaborates to support our customers across the country, so that there is no single point of failure. With that said, NVBPELS will benefit from a consistent resource that will serve as the focal point for ongoing operations—this will be the same resource that works with NVBPELS on the implementation phase of the project. The advantage this brings is that there is no rigid "hand off" from the implementation phase into operations.

Helpdesk and phone support will be provided by System Automation's Service Delivery Team (SDT) which is located at SA's office in Columbia, MD. The following table provides standard support hours and describes the channels (phone, email, web, etc.) that can be used to engage Customer Support.

Extended Business Hours		Non-Business Hours	
Hours	7:00AM - 6:00PM (EST)	6:00PM - 7:00AM (EST)	24 hours
Days	Monday - Friday	Monday - Friday	Saturday - Sunday
Critical (C1) Issues	1 hour	4 hours	
Non-critical Issues	1 hour	4 hours	

SA will use the following process for managing incoming support issues and managing the escalation of highly technical issues received by NVBPELS:

Step 1 - Each agency has a maximum of two dedicated internal representatives that are authorized to contact SA. These NVBPELS representatives can contact the SDT via phone, email, or the web.

Step 2 – If the incident submitted is a C-1 (critical incident) and is received between the hours of 7 AM – 6 PM, the SDT will acknowledge the receipt of the issue within 1 hour and seek to resolve the issue as fast as possible. Lower criticality issues will be acknowledged within 3 hours

System Automation

if submitted during the same timeframe and by the next business day when received outside of normal business hours. The acknowledgement will be either via email or phone.

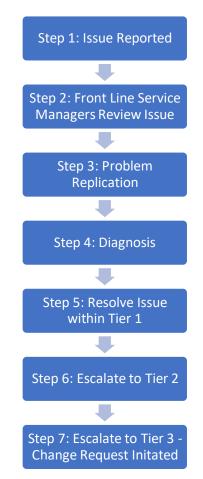
Step 3 - The SDT will attempt to replicate the problem using the client's data and product version. Should replication of the incident prove difficult the SDT will work with NVBPELS to reproduce and resolve the issue.

Step 4 - The SDT will identify if the problem exists within the application, the database, or the network. If the SDT determines the problem can be corrected via training, setup, or other non-code related solutions, the SDT will work with NVBPELS to apply the solution.

Step 5 - If the SDT cannot determine the source of the problem, or if the problem requires significant time to debug, or if the problem is determined to be code or database related, the issue will be escalated to our Tier 3 support team including implementation specialists and database administrators for further analysis. The SDT will still maintain the communication with NVBPELS and keep the affected parties updated on an hourly basis.

Step 6 – For critical issues that cannot be solved through explanation or training, SA will escalate the incident to our Tier 2 level (product specialists), the acknowledged technical experts on the SA product line. Product Specialists will work with the SDT and NVBPELS to identify the source of the problem and to suggest possible resolutions.

Step 7 - Should the problem require a coding change; the Core Development Team (CDT) will develop the requirements and work with the SDT to assure the prompt resolution of the issue. If the problem were deemed to be a major issue, an emergency patch release would occur that would fix the problem. Otherwise, the defect fix would be scheduled to be included within the next standard biweekly release.



System Automation

Pricing

SA offers its market-leading Software-as-a-Service (SaaS) MyLicense One Platform for the NVBPELS' consideration. With a "made-for-hire" custom development approach, the State should carefully consider its total cost of ownership.

As an agency's needs evolve over time, additional custom development will be required. The advantage of this is that the agency receives a solution that is custom-built for its needs, but increasingly expensive over time as requirements change. With a proven configurable SaaS platform supported and maintained by a vendor with a nationwide network of state government agencies, the agency will benefit from ongoing enhancements incorporated into the platform regularly throughout the year.

Our proven SaaS platform affords the State the flexibility it needs to be nimble in response to changing requirements in the future while saving taxpayer money. This is because the platform will continuously be supported and updated without custom "one-off" fees being charged to the agency and/or State.

Factors that drive the majority of SA's cost model include number of business process types (i.e., license or permit types / workflows) to be configured in the system, quantity, and nature of integrations / interfaces with other systems, and the overall complexity of the specific implementation. NVBPELS can benefit from being able to expand the number of users without expecting a price increase. Some unique features of our cost model:

- Our license and subscription fees are not based on number of agency or public users.
- Our subscription fees do not go up as more users benefit from the system.
- Transaction volume and storage space does not impact pricing. The system can be lightly or heavily used with no fluctuating prices.
- We do not charge a percentage of the license fees or a convenience fee paid by licensees.
- Our support and subscription fees ARE based on the number of license types or credentials as this ultimately drives the complexity of the system and its required support.

There are also different factors that impact the software licensing, hosting, and maintenance options for each implementation, but SA is committed to working with each agency to find an approach that meets the agencies goals, timeframes, and budget.

In addition, the State should be wary of vendors that will charge them for things that may have been "hidden costs" not determined until after go-live of the system. We believe that building a relationship and partnering with customers in success helps provide higher transparency in product offerings and capabilities, alignment on budgets, and prioritization of the appropriate solutions needed to get the job done.

SA is pleased to present the following price information to NVBPELS for its Firm Registration Database Platform project. There are two types pricing contained in our proposal:

System Automation



- One-time fees associated with the professional services to manage the implementation from end to end.
- Ongoing subscription fees that cover the maintenance, hosting, support, and ongoing development of the MyLicense One Platform.

SA's cost proposal delivers the best overall value to NVBPELS by blending the benefits of SA's experience, the inherent flexibility and configurability of the MyLicense One Platform, professional services delivered in partnership with a preferred provider with enabling self-sufficiency of NVBPELS administrators to configure the system on an ongoing basis. SA welcomes the opportunity to clarify any questions NVBPELS may have regarding the pricing information provided below.

In general, the following table summarizes the total price that should be expected for a project of this size with either SA or a preferred systems integrator partner performing implementation services.

	Description	Total Fees
Implementation Fees	Billed as part of a fixed price deliverable schedule, negotiated in the development of a final SOW (with complete requirements), and scheduled in a project plan to be developed at the onset of the project. Fees include SA-preferred service provider performing implementation and configuration services alongside SA resources.	\$343,750*
Annual Subscription Fees	Subscription fees begin when the SaaS products become available for configuration. Fees include secure hosting, ongoing support, and maintenance.	\$4,495 monthly * (\$53,940 annually*)

*Total fees reflected are subject to revision after further detailed discussions with NVBPELS regarding project scope, requirements, time considerations, and budgetary limitations.

System Automation Enabling Responsive Government

Pricing Assumptions

- 1) This proposal assumes the following scope variables:
 - a) MyLicense One Back Office
 - i) 3 license types
 - ii) 20 document templates
 - b) MyLicense One Online Services
 - i) 3 initial application forms
 - ii) 3 Renewal forms
 - c) MyLicense Public Search
 - i) 3 public search views
 - d) MyLicense Case Management
 - i) 8 case types
 - e) Integration with Cybersource
- 2) To help facilitate meeting the scheduled milestones and the go-live date, SA and NVBPELS will work together to categorize issues discovered during testing and UAT stages of the project. UAT issues will be catalogued and prioritized into one of the following categories:
 - a) Critical (Level 1) The identified item affects critical functionality or critical data. It does not have a workaround.
 - b) High (Level 2) The identified item affects major functionality or major data. It has a workaround but is not obvious and is difficult to perform.
 - c) Minor (Level 3) The identified item affects minor functionality or non-critical data. It has an easy workaround.
 - d) Low (Level 4) The identified item does not affect functionality or data. It does not necessitate a workaround. It does not impact productivity or efficiency.

SA and NVBPELS will collaboratively address Level 1 and Level 2 categorized items during the UAT in preparation for go-live. Items categorized as Level 3 or Level 4 will be addressed in a future release received after production implementation and will not be tied to acceptance of the project.

- 3) System Automation will deliver (email) each deliverable to the NVBPELS management team upon that deliverable's completion. We will invoice for each deliverable following acceptance by NVBPELS or after 5 business days of no feedback, whichever is less.
- 4) SA will be importing data into the MyLicense Database as part of our data migration plan. We assume no other imports to other host storage servers will be needed and any additional effort required by SA will be priced separately.
- 5) We assume that support and maintenance will be billed annually at the start of the maintenance period. If NVBPELS prefers to be billed on a monthly basis, we can accommodate that, as well.

13.b. Legislative Committee

Bill Draft Request for 2025 Legislative Session

NRS 625.183 Qualifications of applicant for licensure as professional engineer.

1. A person who is 21 years of age or older may apply to the Board, in accordance with the provisions of this chapter and any regulations adopted by the Board, for licensure as a professional engineer.

2. An applicant for licensure as a professional engineer must:

- (a) Be of good character and reputation; and
- (b) Pass the **NCEES** examination on the:
 - (1) Fundamentals of engineering or receive a waiver of that requirement; and
 - (2) Principles and practices of engineering,

pursuant to NRS 625.193.

3. An applicant for licensure as a professional engineer is not qualified for licensure unless the applicant is a graduate of an engineering curriculum of 4 years or more that is approved by the Board and has a record of 4 years or more of active experience in engineering which is satisfactory to the Board and which indicates that the applicant is competent to be placed in responsible charge of engineering work. An applicant who is eligible to take the examination on the principles and practices of engineering pursuant to subsection 2 of <u>NRS 625.193</u> may take the examination on the principles and practices of engineering before the applicant meets the active experience requirements for licensure set forth in this subsection.

4. To determine whether an applicant for licensure as a professional engineer has an adequate record of active experience pursuant to subsection 3:

(a) Graduation from a college or university in a discipline of engineering with a master's or doctoral degree is equivalent to 2 years of active experience, except that, in the aggregate, not more than 2 years of active experience may be satisfied by graduation from a college or university with such degrees, regardless of the number of degrees earned.

(b) Two of the 4 years of active experience must have been completed by working under the direct supervision of a professional engineer who is licensed in the discipline in which the applicant is applying for licensure, unless that requirement is waived by the Board.

(c) The execution, as a contractor, of work designed by a professional engineer, or the supervision of the construction of that work as a foreman or superintendent, is not equivalent to active experience in engineering.

5. A person who is not working in the field of engineering when applying for licensure is eligible for licensure as a professional engineer if the person complies with the requirements for licensure prescribed in this chapter.

(Added to NRS by 1997, 1038; A 1999, 2434, 2435; 2005, 206, 208; 2011, 227; 2019, 1527, 4259)

NRS 625.193 Examination for licensure as professional engineer: Scope; waiver; administration.

1. The examination for licensure as a professional engineer must consist of:

(a) An The NCEES examination on the fundamentals of engineering that must cover the subject matter of a general education or training in engineering. If the applicant for licensure as a professional engineer has graduated from an engineering curriculum that is approved by the Board and has 15-8 years or more of experience in engineering, the examination on the fundamentals of engineering may be waived by the Board.

(b) An The NCEES examination on the principles and practices of engineering that must cover the discipline of engineering in which the applicant is applying for licensure.

2. An applicant for licensure as a professional engineer must pass the examination on the fundamentals of engineering or receive a waiver of that requirement before the applicant may take the examination on the principles and practices of engineering.

- 3. When determining the content of the examinations on the fundamentals of engineering and the principles and practices of engineering, the Board shall consider the recognized disciplines of engineering and may conform the examination to the particular qualifications of the applicant.

4. The Board may require additional examinations for licensure in specialized areas of practice within one or more recognized disciplines of engineering.

- 5.— The Board may administer or authorize an accredited college or university that offers a program in engineering approved by the Board to administer the examination on the fundamentals of engineering to persons who are not applicants for licensure as professional engineers in this state.

- 6. The Board may prescribe or limit the use of notes, texts and reference materials by applicants who are taking the examinations.

7. The Board may require the examinations or any portion of the examinations set forth in this section to be completed:

(a) In writing, with a pen or pencil of a type that has been approved by the Board;

(b) With a computer that has been provided or approved by the Board; or

(c) Orally, in the manner prescribed by the Board.

(Added to NRS by <u>1997, 1039</u>; A <u>1999, 2436</u>; <u>2013, 423</u>)

NRS 625.270 Qualifications of applicant for licensure as professional land surveyor.

1. A person who is 21 years of age or older may apply to the Board, in accordance with the provisions of this chapter and any regulations adopted by the Board, for licensure as a professional land surveyor.

2. An applicant for licensure as a professional land surveyor must:

(a) Be of good character and reputation;

(b) Pass the **NCEES** examination on the fundamentals of land surveying required by paragraph (a) of subsection 1 of <u>NRS 625.280</u> or receive a waiver of that requirement;

(c) Pass the **NCEES** examinations on the principles and practices of land surveying required by paragraph (b) **and (c)** of subsection 1 of <u>NRS 625.280</u>; and

(d) Have a record of 4 or more years of active experience in land surveying that is satisfactory to the Board and indicates that the applicant is competent to be placed in responsible charge of land-surveying work.

3. An applicant for licensure as a professional land surveyor is not qualified for licensure unless the applicant is a graduate of an land surveying curriculum of 4 years or more that is approved by the Board and has a record of 4 years or more of active experience in land surveying which is satisfactory to the Board and which indicates that the applicant is competent to be placed in responsible charge of land surveying work. may not take the examination on the principles and practices of land surveying required by paragraph (b) of subsection 1 of <u>NRS 625.280</u> unless the applicant is a graduate of a land surveying curriculum of 4 years or more that is approved by the Board. An applicant who is eligible to take the examination on the principles and practices of land surveying pursuant to subsection 2 of <u>NRS 625.280</u> may take the examination on the principles and practices of land surveying before the applicant meets the active experience requirements for licensure set forth in this subsection.

4. To determine whether an applicant for licensure as a professional land surveyor has an adequate record of active experience pursuant to subsection 2:

(a) Two of the 4 years of active experience must have been completed by working under the direct supervision of a professional land surveyor, unless that requirement is waived by the Board.

(b) The execution, as a contractor, of work designed by a professional land surveyor, or the supervision of the construction of that work as a foreman or superintendent, is not equivalent to active experience in land surveying.

5. A person who is not working in the field of land surveying when applying for licensure is eligible for licensure as a professional land surveyor if the person complies with the requirements for licensure prescribed in this chapter.

[Part 14:198:1919; added <u>1947, 797</u>; A <u>1951, 459</u>; <u>1955, 391</u>]—(NRS A <u>1965, 1326</u>; <u>1975, 1169</u>; <u>1977,</u> <u>743</u>; <u>1989, 783</u>; <u>1991, 2243</u>; <u>1995, 49</u>; <u>1997, 1043</u>; <u>1999, 2437</u>; <u>2011, 228</u>; <u>2019, 1528</u>, <u>4260</u>; <u>2021, 410</u>)

NRS 625.280 Examination for licensure as professional land surveyor: Scope; waiver; administration.

1. The examination for licensure as a professional land surveyor must consist of:

(a) An The NCEES examination on the fundamentals of land surveying that must cover the subject matter of a general land surveying education or training. If the applicant for licensure as a professional land surveyor has graduated from a land surveying curriculum that is approved by the Board and has 15 8 years or more of experience in land surveying, the examination on the fundamentals of land surveying may be waived by the Board. For the purposes of determining the years of experience of an applicant for licensure as a professional land surveyor pursuant to this paragraph, the Board shall consider graduation from a land surveying curriculum that is approved by the Board to be equivalent to 4 years of experience.

(b) An The NCEES examination on the principles and practices of land surveying.

(c) The NCEES examination on the public land survey system.

2. An applicant for licensure as a professional land surveyor must pass the examination on the fundamentals of land surveying or receive a waiver of that requirement before the applicant may take the examination on the principles and practices of land surveying.

3. The Board may administer or authorize an accredited college or university that offers a program in land surveying approved by the Board to administer the examination on the fundamentals of land surveying to persons who are not applicants for licensure as professional land surveyors in this state.

— 4.— The Board may prescribe or limit the use of notes, texts and reference materials by applicants who are taking the examinations.

- (a) In writing, with a pen or pencil of a type that has been approved by the Board;

(b)-With a computer that has been provided or approved by the Board; or

(c)–Orally, in the manner prescribed by the Board.

[Part 14:198:1919; added <u>1947, 797</u>; A <u>1951, 459</u>; <u>1955, 391</u>]–(NRS A <u>1965, 1326</u>; <u>1967, 951</u>; <u>1989</u>, <u>784</u>; <u>1997, 1045</u>; <u>2013, 423</u>)

625.310 1. The Board will [offer Nevada specific] require the passing of the following examinations [at least once each year. Specific information concerning times and places for scheduled examinations may be obtained from the office of the Board.] 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 and other structures.

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 an engineer [:] *that is not 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 Engineering, which is a national examination that covers the principles and practice of engineering.

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

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(b) The Principles and Practice of Surveying, which is a national examination that covers the principles and practice of land surveying.

(c) The Public Land Survey System, which is a national examination that covers the public land survey system of land surveying.

4. [The Board will require the passing of a short examination on this chapter and chapter 625 of NRS.

—<u>5.</u>] In addition to the <u>[examination]</u> *examinations* set forth in subsection [4,] 3, 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. The examination to become a structural engineer is a 16-hour examination which is composed of two parts, each of which lasts 8 hours.]

5. Legislative Counsel Bureau Language **Proposed for Board Regulation Changes** Related to Contracts and PLS Standards of Practice

From:	Zimmerman, Tara	
To:	Murray Blaney	
Cc:	Fernley, Bryan; Patty L. Mamola	
Subject:	RE: NVBPELS Proposed Revision to NAC 625.545	
Date:	Thursday, February 15, 2024 2:49:50 PM	
Attachments:	image001.png image002.png image003.png image004.png	

Murray-

Thank you for this background and your suggested revision. We will include your suggested revision in the proposed regulation.

Tara

From: Murray Blaney <mblaney@boe.state.nv.us>

Sent: Tuesday, February 13, 2024 12:52 PM

To: Zimmerman, Tara <Tara.Zimmerman@lcb.state.nv.us>

Cc: Fernley, Bryan <Bryan.Fernley@lcb.state.nv.us>; Patty L. Mamola <pmamola@boe.state.nv.us> **Subject:** FW: NVBPELS Proposed Revision to NAC 625.545

Some people who received this message don't often get email from <u>mblaney@boe.state.nv.us</u>. <u>Learn why this is</u> <u>important</u>

Good afternoon Tara –

The origin of the amendment was that the Board believed the term "schedule" is more appropriate than "date". Often when a contract is drafted, determining a singular date of completion is not possible because of factors outside of a professional's control i.e. items to be provided by the client or review time periods by public entities. Providing a schedule is more helpful in managing client expectations than solely providing a project completion date. A schedule based on a project scope could be as simple as providing a completion date or could include milestones and deliverable dates including statements related to receiving items needed from parties outside of the professional's control. An example of simple language for a schedule could be, three weeks after we receive X, we will deliver Y".

So based on the above, and after some internal discussion, our suggested revision is:

NAC 625.545(1)(c) The anticipated schedule for completion of the work that indicates the time and sequence of each part of the work.

Thanks – Murray

Murray Blaney Operations / Compliance

Nevada Board of Professional Engineers and Land Surveyors 1755 E Plumb Lane, Suite 258 Reno, NV 89502 775.688.1231

mblaney@boe.state.nv.us www.nvbpels.org

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From: Murray Blaney Sent: Thursday, February 8, 2024 10:56 AM To: Zimmerman, Tara <<u>Tara.Zimmerman@lcb.state.nv.us</u>> Cc: Fernley, Bryan <<u>Bryan.Fernley@lcb.state.nv.us</u>>; Patty L. Mamola <<u>pmamola@boe.state.nv.us</u>> Subject: RE: NVBPELS Proposed Revision to NAC 625.545

Good morning Tara –

We were considering whether the term "schedule" would need a definition in the General Provisions section for clarification – but were waiting for LCB input, so thank you for the proposed language. I will connect with the Board's Legislative Committee to consider the proposed language and get back to you.

Thanks – Murray

Murray Blaney Operations / Compliance

Nevada Board of Professional Engineers and Land Surveyors 1755 E Plumb Lane, Suite 258 Reno, NV 89502 775.688.1231

mblaney@boe.state.nv.us www.nvbpels.org



From: Zimmerman, Tara <<u>Tara.Zimmerman@lcb.state.nv.us</u>> Sent: Thursday, February 8, 2024 10:19 AM To: Murray Blaney <<u>mblaney@boe.state.nv.us</u>> Cc: Fernley, Bryan <<u>Bryan.Fernley@lcb.state.nv.us</u>> Subject: NVBPELS Proposed Revision to NAC 625.545

Good morning-

I am the LCB drafter for your proposed revision to NAC 625.545. In reviewing the requested revision,

13.c. Professional Association Liaison Committee

13.d. Public Outreach Committee

13.e. PLS Standards of Practice Subcommittee

14. Updating Nevada Revised Statutes and Nevada Administrative Code 625

15. Candidates for Filling Director Position

15.a. Candidate 1

15.b. Candidate 2

15.c. Candidate 3

16. Government Liaison Report

17. Board and Staff Assignments

Action List

BOARD MEETING ITEMS

September 12, 2019 Board Meeting

12. Administrative report by Executive Director

b. Action items related to the 2017-2021 Strategic Plan

Mr DeSart asked that dates be posted on our website of when the Las Vegas board office is staffed. Staff

September 21, 2023 Board Meeting

11. <u>Discussion and possible action on delegation of formal hearings to a hearing officer, Nevada Revised</u> <u>Statute 625.150 (5).</u>

Staff to work with Mr MacKenzie and Ms Purcell to gather information on contractor's board hearing officer process and draft proposed changes to the Rules of Practice. **Staff**

16. <u>Discussion and possible action on electronic submittals and digital signatures, Nevada Administrative</u> <u>Code chapter 625, NAC 625.610.</u>

Reconvene taskforce to review current guide (update as needed), explore issues relating to digitally signing submittals with multiple disciplines, and review and advise on entity electronic submittal intake requirements. **Staff**

Develop entry level in-person workshops on preparing and digitally signing electronic submittals. Reach out to stakeholder organizations for opportunities to present/host. **Staff**

January 24, 2024, Board meeting

15.a.i APOC - Discussion an possible action on draft personnel policies handbook.

Edits noted during discussion to be made to final document. Ms Mamola DONE

15.a.ii Discussion an possible action on Executive Director recruitment

Remove preference for being Reno based + job announcement to be circulated to wider industry associations. **Ms Mamola DONE**

15.b LegComm report.

Outreach opportunities related to regulation changes/updates. Mr DeSart and Mr Kidd to present at APWA Spring Conference (South). **Staff to provide presentation.** Mr Gingerich and Ms Mamola to present at Five State Western Region PLS conference (North). **Staff to provide presentation.**

15.e. PLS Standards of Practice Sub-committee

LCB regulation draft language to be presented for sub-committee consideration. **Staff to schedule with Mr Gingerich.**

16.a. Regulation changes to contracts and PLS Standard of Practice.

Staff to package approved regulations and forward to LCB legal for drafting. **Staff DONE**

16.b. Executive Orders regulation changes (R-Files)

Staff prepare and post the required noticing for public hearing (intent to adopt regulation) **Staff DONE**

18. Status of Board and staff assignments

Prioritize actions items from transition list to those that can be completed in the near-term vs long term items that may be considered for contracting/consulting. **Staff + Ms Purcell**

20. Future meeting topics

Agenda item at March 2024 board meeting to consider WZ candidate presentations and discuss possible board support. **Staff**

COMMITTEE ITEMS

PROFESSIONAL ASSOCIATION LIAISON COMMITTEE

February 9, 2021 Meeting

7. <u>Discuss board's updated Strategic Plan—goals and strategies related to PAL Committee and discuss</u> <u>possible tactics/action items.</u>

Goal 2: Licensure - Strategy (5): Provide options to meet land surveyor educational requirements

Consider forming sub-committee to contact with UNLV Dean of Engineering about creating a minor in land surveying. **Ms Mamola**

September 20, 2023 Meeting

7. Open discussion topics.

Following invitation to Ms Mamola to speak at a northern Nevada NALS meeting about electronic map submittals, an e-map submittal taskforce was formed and Ms Mamola is representing the board. **Ms Mamola**

ADMINISTRATIVE PROCEDURES OVERSIGHT COMMITTEE

APOC - March 30, 2021 Meeting

5. <u>Discuss third-party verification of digital signatures for licensees of the board and possible role of the board in the verification process including cost participation.</u>

Continue to monitor other states regulations relating to third-party verification requirements. Staff

March 30, 2023, Meeting

5. Consider executive director work performance and salary.

Update salary study information (use 2017 document as template). Staff

6. Consider proposed budget for fiscal year July 1, 2023 to June 30, 2024.

Suggested that options be explored that could be of some tangible benefit to existing licensees to accelerate the reduction of the reserve. Prepare evaluation of options to be considered by APOC. **Staff**

May 10, 2023, Meeting

6. Consider proposed budget for fiscal year July 1, 2023 to June 30, 2024.

Projections for health insurance costs in consideration of possible expansion of board covered expenses. **Ms Mamola**

December 14, 2023, Interim board meeting

APOC delegated task by board chair to search for Executive Director candidates.

PUBLIC OUTREACH COMMITTEE

Public Outreach Committee - January 12, 2023 Meeting

6. <u>Consider and discuss public communications/social media efforts and available budget for remainder</u> of fiscal year, January 1, 2023, to June 30, 2023).

Identify schedule of career fairs at UNR and UNLV and consider a NVBPELS booth. Staff

LEGISLATIVE COMMITTEE

Discuss proposed NAC 625.310(4), requiring engineering applicants to pass a short exam on chapter 625 of NRS and NAC.

Short exam on chapter 625 of NRS and NAC to be updated by staff (periodically) and submitted to LegComm for approval.

This item has been paused pending the amendment to NAC removing the short exam requirement and replacing it with an attestation of NRS/NAC review by the applicant.

<u>Consider future licensing of engineers as it relates to emerging technologies and blended engineering</u> <u>degrees including considering retention and/or modification of specific disciplines licensed by the board.</u>

Develop position statement before end of FY 2023/2024 of the issues to be addressed. This item to encompass discipline specific vs PE state discussion. Mr Fyda and Ms Mamola discuss and identify possible solutions to the issues identified by position statement.

Possible NRS changes for consideration

- NRS 625.183 Discussion on experience and supervision (PE of same disc) requirement for engineering licensure - NRS 625.193 Discussion on time period for waiver of the FE + additional housekeeping edits - NRS 625.270 Consider impacts of NCEES PLSS module release Oct 2027 + additional housekeeping edits - NRS 625.280 Discussion on time period for waiver of the FS + additional housekeeping edits

Possible NAC changes for consideration

- NAC 625.310

Consider impacts of NCEES PLSS module release Oct 2027 on Nevada state specific PLS exam.

Public Comment – Tony Simmons

Following review of Mr Simmons' documents, no further action is needed. MB

Schedule for NAC changes currently under review

Executive Order regulation changes/repeals

Ticket created w/ licensing platform vendor – relates NAC 625.420 and generating an identification card (pocket card) that indicates a license has been moved to RETIRED status

3.14.2024 – Intent to Adoption Regulations Hearing.

Contract and PLS regulation changes/repeals

LCB has assigned the following R-file #s **R006-24** for NAC 625.545 (written contract) **R007-24** for all other proposed amendments relating to the Standard of Practice for PLS

STRATEGIC PLAN ITEMS

DRAFT Annual Report for APOC/Public Outreach committee review.

BUSINESS PLAN ITEMS

Electronic submittals + digital signing of documents.

System database comprehensive upgrade. Website effectiveness.

18. Future Meeting Dates

BOARD MEETING DATES

Board meetings are typically scheduled for the second Thursday of every other month.

May 9, 2024 — Las Vegas July 18, 2024 — Tonopah September 12, 2024 — Las Vegas November 14, 2024 — Reno January 16, 2025 — Las Vegas

March 13, 2025 — Reno

Future NCEES Meetings

NCEES Western Zone Interim Meetings

May 16–18, 2024 — Bozeman, Montana

NCEES Annual Meetings

August 14–17, 2024 — Chicago, Illinois

August 19-22, 2025 — New Orleans, Louisiana

19. Topics for Future Meetings

20. Public Comment

21. Adjournment