NEVADA STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS

INTERIM BOARD MEETING
October 14, 2021
Reno, NV

1. Meeting Call to Order

2. Pledge of Allegiance

3. Public Comment

4. NRS/NAC 625 Waiver Requests

WAIVER REQUESTS
Thursday, October 14, 2021

APPLICANTS REQUESTING WAIVER OF NRS 625.183(4)(B)			
NAME	**DISCIPLINE**	**TO:**	**GRANT?**
1. Thomas Ali	CE	Greg DeSart, PE	
NRS 625.183, item 4, part b, "Two of the 4 years of active experience must have been completed by working under the direct supervision of a professional engineer who is licensed in the discipline."			

5. Non-Appearance Applications for Initial Licensure

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

DEGREE	YEARS CREDIT (MAX)	YEARS ACCEPTABLE EXPERIENCE REQUIRED
Undergraduate (BS): ABET/EAC accredited	4	4
Undergraduate (BS): ABET/ETAC accredited	4	4
Undergraduate (BS): ABET/CAC accredited	4	4
Undergraduate (BS): ABET/ANSAC accredited	4	4
Undergraduate (BS Engineering): ABET equivalent ie Washington Accord	4	4
Undergraduate (BS Engineering): Not ABET accredited	4	6
Undergraduate (BS Construction Management): ABET accredited	4	4
Undergraduate (BS Construction Management): Not ABET accredited	4	6
Undergraduate (BS Engineering): not ABET equivalent	2	8
Engineering Masters: US with non-accredited BS/MS	6	2
Engineering Masters & Doctorate: US with non-accredited BS/MS	6	2
ABET engineering degree in specific discipline – experience and/or exam in another discipline	4	4

*Special Consideration – deficiencies to be reviewed by the Board.

Chemical

ERIC STRICKLIN (14-579-30)

All work experience reviewed by two licensed professionals

DISCIPLINE: CHEMICAL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/10/2021

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
11 years, 10 months

Total Engineering Experience
11 years, 10 months

Experience under licensed engineer
7 years, 9 months

Disciplinary Action
None reported

EDUCATION

Bachelors in Chemical Engineering (EAC)
University of Virginia
August 2005–May 2009

Masters in Sustainable Energy Engineering
University of Maryland, College Park
August 2010–May 2013

EXAMS

Fundamentals of Engineering (FE)
Oklahoma
October 2013

Principles and Practice of Engineering (PE)
Chemical
Nevada
August 2021

LICENSES

Additional Licenses
None

ERIC STRICKLIN (14-579-30)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

ICF International
Virginia (United States)
Associate Engineer
July 2009—August 2013

Verified by
Donald Ray Robinson
donald.robinson12@comcast.net

Experience Summary
Full-Time
Engineering: 4 years, 1 month
Post EAC degree: 4 years, 1 month
Experience under licensed engineer: None

TASKS

Associate Engineer

Key Responsibilities:
♦ Use engineering principles to calculate momentum, heat and mass balances, preliminary economic cash flow, net present value, internal rate of return, and payback period for preliminary designs to reduce natural gas losses from the various segments of the oil and gas industry.
♦ Assemble Excel spreadsheet data analysis tools to model clients' natural gas losses and capture technology economics under varying conditions (e.g. type of mitigation solution, capital cost, and amount and value of recovered product)
♦ Develop presentations on technology and operating/maintenance practices for reducing methane emissions in the oil and gas industry.
♦ Draft memos, letters, and technical reports for clients and upper management.
♦ Research data sources; from public sources such as the Energy Information Administration and the Environmental Protection Agency and proprietary sources such as HPDI® and Oil and Gas Journal surveys.
♦ Coordinate staffing, manpower, and budget planning for individual projects and across business unit.

REPRESENTATIVE PROJECTS

U.S. Inventory of Greenhouse Gas Emissions and Sinks:
2009, 2010, 2011
For three years, I updated and improved a complex excel model that calculates methane and CO2 emissions for Natural Gas and Petroleum Systems in the United States. In updating the U.S. Inventory model for Natural Gas and Petroleum Systems, I empirically modeled processes that are common in Natural Gas and Petroleum Systems such as heater treaters, pipeline blowdowns, and well flaring to identify and estimate industry-wide emissions.

Alberta, Canada Specified Gas Emitters Regulation Third-Party Verification
2011
The Specified Gas Emitters Regulation (SGER) is a regulation in the Canadian province of Alberta that requires facilities in Alberta that emit over 100,000 metric tons of carbon dioxide equivalent (CO2e) per year to annually report their emissions and have a third-party verify its emission report. I conducted and supervised the technical aspects of the audits on emission compliance reports submitted by clients for two in-situ SAGD (steam assisted gravity drainage) facilities. For each audit, I reviewed the clients facilities' unit ops and energy and mass balances with focus on their calculated greenhouse gas emission outputs. I visually inspected a sample of clients' facilities to ensure all major emissions sources were accounted for and accurately represented in their SGER report. For any deviations or miscalculations, I would recommend to the client a solution or the appropriate emissions calculation methodology.

Regulation Development for the Environmental Protection Agency (EPA):
2011-2013
I provided technical support for the Office of Air Quality Planning Standards work group at EPA when developing the proposal for the Standards of Performance for New Sources in Oil and Natural Gas Systems regulation. I calculated the typical VOC (volatile organic compound) emissions from reciprocating and centrifugal compressors and the associated economic impact for operators to comply with the best, available control options. I also empirically modeled venting from gas well completions and re-completions with hydraulic fracturing to determine emissions thresholds for compliance requirements.

ERIC STRICKLIN (14-579-30)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Chesapeake Energy
Oklahoma (United States)
Facilities Engineer
August 2013—February 2021

Verified by
Julio Eduardo Suarez
julio.suarez@chk.com

Experience Summary
Full-Time
Engineering: 7 years, 6 months
Post EAC degree: 7 years, 6 months
Experience under licensed engineer: 7 years, 6 months

TASKS

Project Engineer (2013 to 2017)

- Managed a company-wide leak detection and repair program including 10+ inspectors across 5 business units and a fleet of 13 FLIR GF-320 cameras.
- Served as a technical resource for EHS and business units for greenhouse gas emissions, their identification, quantification, and mitigation.
- Explored technologies to recover natural gas liquids (NGLs) from flared production gas. Interviewed multiple vendors for a turnkey recovery solution, calculated project economics, and negotiated contract terms.

Facilities Engineer (2017 to 2021)

- Responsible for planning the construction of gas production facilities including budget, AFE, scheduling, design, and equipment procurement. Project budgets ranged from $500,000 to $5 million USD; annual budget in excess of $30 million USD.
- Engineering lead and project manager for Appalachia North production facilities design.
- Developed and reviewed PFDs, P&IDs, Cause and Effect Diagrams, Isometrics, and manufacturing documents for equipment procurement and environmental and safety reviews.
- Optimized facilities designs and estimated emissions using ProMax, a process modeling software
- Administered and participated in Process Hazard Assessment for oil and gas production facilities and Drilling SIMOPS.
- Supporting engineer for the rapid installation of 50+ wellhead compressors to uplift declined gas wells and installation of CAT3508 and CAT3516 on larger gas wells.
- Supporting engineer to troubleshoot facility equipment failures, incidents, and recommend preventative maintenance.

REPRESENTATIVE PROJECTS

Storage Tank Vent Gasket Selection
2014
Through managing the leak detection (FLIR camera) program at Chesapeake, I established a company-wide best practice to replace oil and water storage tank vent gaskets with the appropriate material and provided dimensions so those materials could be sourced from non-OEM suppliers. I partnered with a couple business units to test the non-OEM gaskets. Once proven, I published an internal guidance document sharing the best practice including gasket material selection, gasket dimensions, and recommendations for preventative maintenance to get ahead of vent leaks/failures. I estimated saving the company $1-2 million in gasket costs as regulatory requirements for vent valve maintenance were expected to increase.

PSM Energy and Material Balance
2015
I completed a representative energy and material balance for the Smokehouse gas plant and Kermit dew-point plant in Chesapeake's Devonian asset to comply with the plants' PSM requirements. I worked closely with the plant engineer to collect information about unit operations, process conditions, set-points, compositions, and flowrates. Using ProMax, a process simulation software, I built a process model for each plant from scratch and aligned the results with the plants' actual current performance and historical performance under different operating modes.

Appalachia North (AppN) Production GPU Facility Redesign
2017-2018
I was the lead design engineer assigned to redesign the traditional AppN facility to support increasing initial production rates from stronger gas wells. To design a fit-for-purpose facility, I challenged the erosional velocity limits set by API 14E, chose between

single train or dual-train options for heating and separation, and selected a new choke valve to handle larger flows without the concern of back-pressure late in well life. I also worked closely with piping pre-fabricator to pre-fabricate pipe to reduce field welding on-location. The facility layout and piping was designed to also facilitate the easy removal of GPUs for reuse as the wells declined.

Wellhead Compressor Facility Design
2019
A field engineer and I were responsible for developing the process design for wellhead compression on smaller wells (5-10MMSCFD). I personally developed the P&IDs, sized the suction and recycle valves, sized and specified the discharge separation for lube mist, and designed the fuel and pneumatic supply systems. I supported facility layouts and piping design to allow for operator flexibility once the compressor was installed.

Uplift Appalachia North (AppN) Wells by Reducing Facility Back-Pressure
2019-2020
Recognizing that gas wells produce more when flowing at lower pressure, I evaluated the cost-benefit of reducing the back-pressure imposed by production facilities. To do this, I developed a pressure-drop model in Promax for various configuration of legacy and new AppN facilities to determine the back-pressure imposed on a flowing wellhead. I coordinated a field study to collect data to correlate AppN wells' production response to a change in back-pressure. Combining the pressure drop model and the correlation, yielded a method to evaluate the increased revenue potential for a reduction in facility-back pressure due to a change in the facilities design (e.g., valve and line sizing, # of elbows). I used this tool to evaluate the economic value of paying more for less back-pressure (because the well would produce more with less back-pressure). The result was across the board improvements to existing producing wells to increase production as well as changes to new well design that would ensure back-pressure stayed at a minimum through the well's life.

Appalachia North (AppN) Facility Redesign (Take 2) – Project JUMBO
2020
As initial production rates for new wells continued to increase, there was an opportunity to completely re-think the AppN production facility design to reduce CAPEX and OPEX. I was assigned as the project manager and senior engineer to re-invent the AppN production facility design. I reviewed P&IDs, equipment sizing, gas heating strategies, and fuel gas conditioning designs developed by an in-house process engineer. I also ran economic calculations comparing various design iterations to the current design, and assured alignment and input was received from the Construction and Operations teams during the design phase. Furthermore, I participated in HAZOP reviews for the new design. Once the first installation of the design was complete, I led reviews to collect feedback from the Operations and Construction team to continuously improve the design for future builds.

ERIC STRICKLIN (14-579-30)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Tesla
Nevada (United States)
Sr. Process Design Engineer
May 2021—August 2021

Verified by
Sean Frank Geffert
sgeffert@tesla.com

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

TASKS

Sr. Process Design Engineer

Lead engineer responsible for solving process engineering problems and creating novel detailed designs for a wide range of systems from electrolyte to high purity water, involving unit operations such as pump and compressor systems, reverse osmosis, distillation, heat transfer fluid systems, etc.
Specific tasks include:
• PFDs, P&IDsand3D pipe design development
• Specification development and review including equipment, piping and valve selection and sizing, material compatibility analysis, etc.
• Sequence of operations/control scheme development
• Review process design work performed by external EPC firms and team members
• Support facilities operations to troubleshoot processes and resolve bottlenecks.

REPRESENTATIVE PROJECTS

Continuous Boiler Blowdown for nMP Refinery
June 2021 to July 2021
I was the lead design engineer responsible for retrofitting three existing boilers with a continuous blowdown to improve water quality in the boilers. I modeled the blowdown system calculating pressure drops and flowrates accounting for flashing. Once designed, I revised existing P&IDs, selected the appropriate pipe and valve specification, and sized the control valve that will control the blowdown rate. In the handoff to construction, I approved the pipe routing plan.

Drive Unit Fluid Bulk Storage and Distribution, Gigafactory Nevada
June 2021 – Present
I am the lead process engineer designing a bulk storage and delivery system for the Drive Unit Fluid consumed by Gigafactory Nevada. To-date I have selected and specified all the equipment including tanks, pumps, filters, and heat exchanger. I have drafted P&IDS, cause and effect, and a sequence of operations for the process. I worked with the manufacturing engineers to design a fit-for-purpose solution, and I am now working with Construction to iron-out execution details.

ADDITIONAL INFORMATION

QUESTIONS

Has your original license lapsed? If yes, explain.
No

Have you ever been denied licensure by a jurisdiction? If yes, explain.
No

Have you ever been convicted of a misdemeanor? If yes, explain.
Yes, 2010 - Class 4 Misdemeanor - Plead Guilty to Virginia Code § 4.1-308 Drinking alcoholic beverages in public place;

Have you ever been convicted of a felony? If yes, provide a brief letter of explanation and court documents.
No

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

Other Disciplines

Has a jurisdiction ever revoked, suspended, or disciplined your license? (Please note this includes a consent agreement, letter of reprimand, Etc.) If the action has been resolved a yes answer is still needed.
No

Civil

THOMAS ALI (15-544-08)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/24/2021

Citizenship
Ghana

SUMMARY

Engineering Experience after EAC degree

Total Engineering Experience
11 years, 8 months

Experience under licensed engineer
None

Other Experience
1 year, 11 months

Disciplinary Action
None reported

FE EXAM

PE EXAM

4+

EDUCATION

Bachelors in Geological Engineering
Kwame Nkrumah University of Science and Technology
September 1998–March 2003

Masters in Mineral Engineering
New Mexico Institute of Mining and Technology
January 2012–December 2013

Waiver Request: NRS 625.183, item 4, part b, "Two of the 4 years of active experience must have been completed by working under the direct supervision of a professional engineer who is licensed in the discipline."

EXAMS

Fundamentals of Engineering (FE)
New Mexico
November 2014

Principles and Practice of Engineering (PE)
Civil
Nevada
April 2021

LICENSES

Additional Licenses
None

WORK EXPERIENCE

Young Christian Preparatory School
Western (Ghana)
General Science Teacher
September 1996—March 1997

Verified by
Thomas Ali (Self)

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

TASKS

- Prepared lesson notes
-Taught students about basics of science
-Gave assignment and graded

REPRESENTATIVE PROJECTS

There was no special project

WORK EXPERIENCE

Ghana Secondary Technical School
Western (Ghana)
Mathematic Teacher
April 1997—August 1998

Verified by
Thomas Ali (Self)

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

TASKS

-Prepared lesson notes
-Taught elective mathematics
-Gave assignments and graded

REPRESENTATIVE PROJECTS

There was no special projects.

WORK EXPERIENCE

Gold Fields Ghana Limited
Western (Ghana)
National Service Personnel
August 2002—August 2003

Verified by
Kow Attumbu Quartey
kaqpee@yahoo.com

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

TASKS

-Supervise drill pad preparation for exploration drilling.
-Performed RC and DD drilling
-Supervise drilling crew and ensure Safety and Environmental standards are followed
-Assisted in delineation of orebodies
-Performed selective mining by providing directions to the excavator to minimize ore dilution and ore loss.
-Deployed and measured geotechnical slope monitoring instruments such as extensometers and prisms
-Analyze sloping monitoring data including extensometers, prisms and piezometers
-Conducted gotechnical inspection and mapping

REPRESENTATIVE PROJECTS

1. Supervise Reverse Circulation drilling program For Aknontasi Ridge Expansion Project

Scope: Prepare drill pads, log RC samles and ensure samples are sent to Assay labarotory for analysis.

I assisted in mplementing the drilling plan on the field. I managed and upervised the drill pad preparation. I logged the RC samples. I updated database with project data. Ensured Company Safety and Environmental policies were followed both by my company employees and the drilling crew.

2. Installation of geotechnical slope monitoring instruments

Scope; Deployment of Geotechnical Instrument mine wide, Collect and Analyze data.

I assisted the team of the newly created Geotechnical Engineering section to deploy slope monitoring instruments mine wide such as prisms and extensometers. I collected piezometer, extensometer and prism data and interpret.

WORK EXPERIENCE

Gold Fields Ghana Limited
Western (Ghana)
Geotechnical Engineer
September 2003—October 2005

Verified by
Kow Attumbu Quartey
kaqpee@yahoo.com

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

TASKS

- Perform daily and routine inspection mine wide to find geotechnical hazards and mitigate them
-Coduct geotechnical field mapping of highwalls
-Deploy geotechnical intruments such as prisms and extensometers and collect data.
-Update spreadsheet and analyze data determine any problems
-Provide geotechnical support to mine operation

REPRESENTATIVE PROJECTS

1. Geological Mapping of Atuabo, Terebie and Akontasi Ridge Pits

Scope: Conduct extensive geotechnical mapping of Atuabo, Teberebie and Akontasi Ridge and Provide Data to SRK, Geotechnical Consultant For Analysis and Design of future pushback.

Date: July 10, 2004 to November 15, 2004

I planned the mapping program and manage the execution. I made use of scanline method of mapping by breaking the strike of the high wall into 10 meters scanlines. Major structures such faults, bedding planes and joints were map. Joint conditions, aperture size, joint spacing and ground water conditions were recorded. I used Dips software to analyze the map data and for that reason separated the data into distinct domains. I was also able to determine the mode of failures expected on the inter-ramp and bench scale levels. I performed Rock Mass Rating calculation for each domain. Database were updated with all information gathered. All the data generated was then shared with SRK consultant who is based in Australia for further evaluation and analyses.

2. Monitor slope monitoring instruments and analysis and interpretation of data

Scope: Collect slope monitoring field data, analyzed and provide interpretation

Date: December 1, 2004 to October 30, 2005

I collected the piezometer data using a Sounder, manually measure extensometer reading and collect measurement taken by survey team to update spreadsheet. The trend plot is then interpreted and feedback provided to the mine.

WORK EXPERIENCE

Gold Fields Ghana Limited
Western (Ghana)
Senior Geologist
November 2005—October 2008

Verified by
Kow Attumbu Quartey
kaqpee@yahoo.com

Experience Summary
Full-Time
Engineering: 2 years, 11 months
Experience under licensed engineer: None

TASKS

• Preparation of weekly and monthly grade and tonnage reconciliation of the resource, ore extraction, Also, Planning of daily ore extraction programs in the pit.
• Interrogation of block model and digging plan to the success of in-pit ore mark ups.
• Perfomed grade control delineation and supervise selective mining
• Provision of technical support to mining operation and drill & blast crew to achieve optimum ore extraction.
• Managing and training of geologists and Geo-Technicians in the pit.
• Perform Daily and weekly Risk Assessments to ensure work area is safe and all hazards reported and remedial solution taken.

•

REPRESENTATIVE PROJECTS

1. Managed Grade Control Duties at Teberebie and Atuabo Pit

Scope: Perform grade control duties and provide supervision to ensure ore and waste are delivered to appropriate destination.

Date: January, 2005 to June, 2007

I interrogated the block model to have understanding of the orebody on the working bench of interest. I used the corresponding flitch plan to request survey stakes of the geological contacts and faults. In-order to delineate the ore and establish faults, I used a bulldozer to make cuttlnes. I then studied the lithology in conjuction with the survey stakes to demarcate the ore zones with appropriate grade control tapes. Supervise Geology Technician to ensure selective mining is conducted to expectation and that ore and waste are sent to the right destination, with minimal ore dilution or ore loss. I made sure safety was always come before anything else and encouraged personnel to adhere to the safety and environmental protocols.

2. Managed Grade Control Responsibility at Makulu and Pepe Pits

Scope: Perform grade control duties and provide supervision to ensure ore and waste are delivered to appropriate destination.

Date July 2007 to October 2008

I delineated orebody in very complex Makulu pit in a previously mined environment as well as domed shape Pepe pit with varying and challenging structures.I used Surpac to investigate the ore control model to better understand the orebody on each cut. I supervised geology crew and provided support to mining crew.

THOMAS ALI (15-544-08)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Gold Fields Ghana Limited
Western (Ghana)
Senior Geologist
September 2008—December 2011

Verified by
Kow Attumbu Quartey
kaqpee@yahoo.com

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

TASKS

- Preparation of weekly and monthly grade and tonnage reconciliation of the resource, ore extraction, stockpile movement and plant performance. Also, Planning of daily ore extraction programs in the pit.
- Interrogation of block model and digging plan to the success of in-pit ore mark ups.
- Provision of technical support to mining supervisors and drill & blast crew to achieve optimum ore extraction.
- Managing and training of geologists and Geo-Technicians in the pit.
- Perform Daily and weekly Risk Assessments to ensure work area is safe and all hazards reported and remedial solution taken.

REPRESENTATIVE PROJECTS

1. Managed Grade Control duties Akontansi Ridge

Scope: Perform grade control duties at Akontansi Ridge pit to ensure ore delivery targets are met.
.
Date: September, 2008 to June, 2009

I interrogated the block model to have understanding the orebody on the working bench of interest using Surpac. I used the corresponding flitch plan to request survey stakes of the geological contacts and faults. In-order to delineate the ore and establish faults, I used a bulldozer to make cuttlnes. I then studied the lithology in conjuction with the survey stakes to demarcate the ore zones with appropriate grade control tapes. Supervise Geology Technician to ensure selective mining is conducted to expectation and that ore and waste are sent to the right destination, with minimal ore dilution or ore loss. I made sure safety was always come before anything else and encouraged personnel to adhere to the safety and environmental protocols..

2.Manage and Supervise Kottraverchy

Scope: Perform grade control duties in high grade and structurally complex Kottraverchy pit to ensure ore delivery targets are met.
.
Date: July, 2009 to December, 2011

I interrogated the block model to have understanding the orebody on the working bench of interest using Surpac. I used the corresponding flitch plan to request survey stakes of the geological contacts and faults. In-order to delineate the ore and establish faults, I used a bulldozer to make cuttlnes. I then studied the lithology in conjuction with the survey stakes to demarcate the ore zones with appropriate grade control tapes. Supervise Geology Technician to ensure selective mining is conducted to expectation and that ore and waste are sent to the right destination, with minimal ore dilution or ore loss. I made sure safety was always come before anything else and encouraged personnel to adhere to the safety and environmental protocols.

THOMAS ALI (15-544-08)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

New Mexico Institute of Mining and Technology
Western (Ghana)
Graduate Student
January 2012—December 2013

Verified by
Navid Mojtabai
navid.mojtabai@nmt.edu

Experience Summary
Full-Time
Other: 1 year, 11 months
Experience under licensed surveyor:
None

TASKS

Study MSc Mineral Engineering with specialization in Geotechnical Engineering.
Courses include Soil Mechanics, Foundation Engineering, Rock Mechanics, Computer Application for Geotechnical Engineering, Drilling and Blasting, and Rock Slope Engineering

Research Assistant

REPRESENTATIVE PROJECTS

1. Slope Stability Assessment of Teberebie Open pit, Tarkwa, Ghana.

Scope: Used geotechnical field mapping data of structures of Teberebie Pit to assess the stability of the highwall

I used Dips software to analyze and group the various domains. I went on to assess and characterize the failure modes of the various domains.

WORK EXPERIENCE

Freeport McMoRan Inc
New Mexico (United States)
Geomechanical Engineer II
January 2014—June 2017

Verified by
Thomas Ali (Self)

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

TASKS

• Oversee site geotechnical monitoring programs, provide support for analysis and design, and implement continuous improvement measurements.
• Apply geotechnical expertise to rock slopes, waste dumps, slope depressurization, blast vibration analysis, and soil slopes
• Coordinate the pit wall monitoring program and communicate with geotechnical consultants supporting the operation or projects
• Train and assist others in identifying and eliminating or mitigating work related to geotechnical hazards.
• Assist in ongoing geotechnical research
• Ensure sound wall control blasting is practiced to minimize damage to the wall and also monitor and perform blast vibration analysis
• Act as a safety leader, through promotion and adherence to established policies, procedures and safe work practices.
• Management and control of ground water using horizontal drains, piezometers and in-pit dewatering
• Provide geotechnical guidance to mine technicians as well as mine and plant operations
• Maintain close communication with the mine engineering, mine operations, plant technical and survey groups
• Develop and maintain a database of geotechnical information
• Review short and long term plans for geotechnical hazards, data gaps and design deficiencies.
• Update mine site Standard Operating Procedures and practices on geotechnical matters.
• Work with the pit engineering and mine operations groups to ensure that mining activities progress safely and in accordance with sound geotechnical engineering principles.
• Perform regular geotechnical inspections of mine site facilities: report on the inspections, and provide recommendations to the Mine Operations
• Key member of the slope optimization and slope steepening team currently studying options to improve on the slope angles

REPRESENTATIVE PROJECTS

1. Manage 2AE Slope Failure and Implementation of Controls to keep mine personnel safe

Scope: Manage monitoring of the 2AE Slope Failure and Implementation of Controls

I planned the Deployment of Slope Monitoring Equipments such as radar, prisms, piezometers, and extensometers. I analyzed slope data and projected failure timeframe. Movement was dtected and access controls restricted to essential personnel. I created inverse charts using radar, prisms and extensometers to predict when failure expected. Slope failure occurred within the predicted date range.

2. Littlle Rock Bench Compliance Analyses And Justification to Steepen Slope Face

Scope:: Evaluate Bench Conformance and Determine if Design Parameters are being are achieved.

April 2016 to May 2016

I created digital terrean model using the current scan data. Digitized toe of muck, top of muck, crest, toe and backbreak. Imported into autocad and made use of I-Audit (internal lisp routine created by Freeport McMoRan) to calculate the bench face angle d, catch bench and interramp angle distributions. Cumulative distribution charts were then created. I used the corresponding design angles provided Call and Nicholas Inc. to evaluate bench performance. It became evident that theas-built interramp slope angle was steeper than the design angle.

The high wall was performing well with this steeper angle without any signs of instability and this prompted the mine to start a discussion with the consultant for possible design changes.

WORK EXPERIENCE

Freeport McMoRan Inc
Arizona (United States)
Geomechanical Engineer II
June 2017—March 2019

Verified by
Thomas Ali (Self)

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

TASKS

• Oversee site geotechnical monitoring programs, provide support for analysis and design, and implement continuous improvement measurements.
• Apply geotechnical expertise to rock slopes, waste dumps, slope depressurization, blast vibration analysis, and soil slopes
• Coordinate the pit wall monitoring program and communicate with geotechnical consultants supporting the operation or projects
• Train and assist others in identifying and eliminating or mitigating work related to geotechnical hazards.
• Assist in ongoing geotechnical research
• Ensure sound wall control blasting is practiced to minimize damage to the wall and also monitor and perform blast vibration analysis
• Act as a safety leader, through promotion and adherence to established policies, procedures and safe work practices.
• Management and control of ground water using vertical/directional wells, horizontal drains, piezometers and in-pit dewatering
• Provide geotechnical guidance to mine technicians as well as mine and plant operations
• Maintain close communication with the mine engineering, mine operations, plant technical and survey groups
• Develop and maintain a database of geotechnical information
• Review short and long term plans for geotechnical hazards, data gaps and design deficiencies.
• Update mine site Standard Operating Procedures and practices on geotechnical matters.
• Work with the pit engineering and mine operations groups to ensure that mining activities progress safely and in accordance with sound geotechnical engineering principles.
• Perform regular geotechnical inspections of mine site facilities: report on the inspections, and provide recommendations to the Mine Operations
• Key member of the slope optimization and slope steepening team currently studying options to improve on the slope angles

REPRESENTATIVE PROJECTS

1. Performed Slope Stability Analysis of South And North West Extension Stockpile

May 2018 - June 2018

I generated digital terrain model of the stockpile and then created critical cross sections in Minesight. I used the cross sections to run to make models and then run 2D Slide Analysis using existing phreatic surface.
Performed sensitivity analysis to determine the stability state of each of the stockpiles by calulating the Factor of Safety under different ground water conditions and provided recommendation.

2. Design and Planned 2018 Monitoring Wells and Implementation.

November 2017 to March 2018

Design the monitoring well in Minesight and performed field verification to ensure each well locations would support the drilling target. Coordinated the drilling program and ensuring all safety measures are followed such as Blue Stake Permit and Workplace Examination were done properly. Ensured completed wells were instrumented and data quality verified.

WORK EXPERIENCE

Round Mountain Gold Corporation
Nevada (United States)
Senior Geotechnical Engineer
March 2019—September 2021

Verified by
John Keefner
John.Keefner@Kinross.com

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

TASKS

1. Develop geotechnical design criteria to support safe and optimal mine operations.
2. Plan and manage the installation of the mine-wide geotechnical monitoring systems.
3. Make recommendations on ground control performance to guarantee safe operation and to optimize ore deposit recovery.
4. Proactively perform site inspections, prepare operational mitigation plans, and manage geotechnical issues.
5. Manage consultant work to guarantee quality deliverables.
6. Coordinate Design, Planning, Drill and Blast, and Dewatering to achieve stable highwalls.
7. Develop, maintain and update the Ground Control Management plan.
8. Plan the collection, analysis and interpretation of geotechnical data.
9. Effectively communicate geotechnical outcomes.
10. Provide comprehensive and timely contributions to the daily, weekly, monthly and annual reports.
11. Improve the overall safety performance of the site including facilitating Job Safety Analysis' and Incident Analysis'.
12. Train and mentor staff in all aspects of geotechnical engineering.
13. Compliance with all company policies and procedures including, but not limited to safety, environmental, confidentiality, and code of conduct.
14. Punctuality and regular attendance required.
15. Perform other related functions as assigned by supervisor.

REPRESENTATIVE PROJECTS

1. Round Mountain South Wall slope remediation and mining through scarp.

Scope: Develop a plan and controls with the mine operation to remediate and mine through the scarp created as a result of the 2019 South Failure safely. Project using remote dozer, Job Hazard Analysis, Inspection, Slope Data Review and Reporting and Design of the Digital Terrain Model (DTM) of No Man Line.

March 2019 - Expected to end December 2021

I designed the DTM for the No Man Line when on duty, Job Hazard Analysis (JHA) prepared by the team and documented progress. I also analyzed radar and prism data to ensure no catastrophic failure occurs, while work is being performed. Conducted inspection every morning and as needed and worked with team members when issues arises. I did not solely do the management of this project. My team members also did their portion while on shift.

2. NBR2 Failure Management and Slope Mitigation

Scope: Manage NBR2 Failure and Support Failure Mitigation Effort to ensure mine personnel are safe and out of harm's way.

June 2019 to April 2020

I identified early signs of on-set of failure on North Ramp. Surveyed, documented and monitored area until partial failure. The mine developed and implemented controls such as JHA and slope monitoring for the slope mitigation using track dozer. I performed rock fall analyses and recommended berm size and conex placement to serve as rock fall protection to allow mining in Phase G directly below failure. I conducted daily inspection and slope data analysis to ensure personnel are safe while performing the task. My Geotechnical team members also assisted whiles on duty.

2. Gold Hill North Wall Instability Assessment and Slope Monitoring

Scope: Assess the extent of the Gold Hill North Wall Instability and provide controls to mitigate the risk.

July 2020 to September 2020

I conducted inspection along with Safety Officer, Mine Operation Supervisor and Drill and Blast Supervisor at the North Wall of Gold to better understand the extent and potential impact of the instability. I created a topography of the area and used the Basin Fault model provided by Geology to check for the structure daylighting. Based on the analysis, I determined the fault was not going to daylight in the pit shell. However, it was going to pose bench scale failures in areas it intersect the pit wall. I recommended a slope monitoring radar be moved to monitor the affected area. Radar was moved in time to detect deformation and adequate controls put in place before failure occurred. In the end no personnel was exposed to the hazard and there was minimal impact to production.

ADDITIONAL INFORMATION

QUESTIONS

Has your original license lapsed? If yes, explain.
No

Have you ever been denied licensure by a jurisdiction? If yes, explain.
No

Have you ever been convicted of a misdemeanor? If yes, explain.
No

Have you ever been convicted of a felony? If yes, provide a brief letter of explanation and court documents.
No

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

Other Disciplines

Has a jurisdiction ever revoked, suspended, or disciplined your license? (Please note this includes a consent agreement, letter of reprimand, Etc.) If the action has been resolved a yes answer is still needed.
No

CREDENTIALS EVALUATION - ENGINEERING

Ali, Thomas
(15-544-08)

DEGREES EVALUATED

Institution/Degree	Country	Language	Courses
Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering 09/01/1998 — 03/01/2003	Ghana	English	56
New Mexico Institute of Mining and Technology / Masters in Mineral Engineering 01/01/2012 — 12/01/2013	United States	English	None

COMPARABILITY SUMMARY

Outcome: Not Equivalent

Area	Hours	Deficiency
Math/Science	43 / 32	Missing Biology or Chemistry
Engineering	70 / 48	None
General Education	16 / 12	None
Elective/Other	26 / N/A	None

SPECIAL NOTE

The NCEES Engineering Education Standard requires at least two courses in basic sciences. These courses must be in general chemistry, general calculus-based physics, or general biological sciences. The two courses may not be in the same area.

MATH/SCIENCE

Specified Criteria Hours: 32

Course	Institution/Degree	U.S. Credits
Calculus I	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	4.0
Calculus II	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	4.0
Calculus III	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	4.0
Crystallography & Mineral Optics	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Differential Equations	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	4.0
Engineering Geology I	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Engineering Geology II	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Geology	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	2.0
Microscopic Ore	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Mineralogy	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Numerical Analysis	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	2.0
Physical Geology	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Physics: Calculus Based	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Statistics	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	2.0
	Total semester credit hours earned:	**43.00**

Specified Criteria Hours: 48

Course	Institution/Degree	U.S. Credits
Applied Electricity	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	2.0
Electronics	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	2.0
Elementary Fluid Mechanics	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Elementary Structures	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Environmental Geology	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Exploration Geochemistry	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Exploration Geophysics	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Ferrous & Non-Ferrous Metal	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	2.0
Fluid Mechanics	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Geochemistry	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	2.0
Geophysics	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	2.0
Geotechnical Engineering	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Hydrogeology I	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Hydrogeology II	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Hydrology	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	2.0
Mining Engineering	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Petrology	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Project	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Soil & Rock Mechanics	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	2.0
Soil Mechanics I	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Soil Mechanics II	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0

Stratigraphy	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	2.0
Strength of Materials	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Structural Geology	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Theory of Structures	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Thermodynamics	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
	Total semester credit hours earned:	**70.00**

GENERAL EDUCATION

Specified Criteria Hours: 12

Course	Institution/Degree	U.S. Credits
Accounting I	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	2.0
Accounting II	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	2.0
Communication Skills I	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	2.0
Communication Skills II	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	2.0
Engineer in Society	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	6.0
Technical Report Writing	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	2.0
	Total semester credit hours earned:	**16.00**

ELECTIVE/OTHER

Specified Criteria Hours: N/A

Course	Institution/Degree	U.S. Credits
Computer Applications	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	2.0
Computer Programming	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	2.0
Economic Geology	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Engineering Drawing	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Geologic Field Methods	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	4.0
Large Scale Surveying	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Mineral Processing	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	2.0
Mineral Processing Economics & Cost	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	2.0
Regional Geology	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	3.0
Technical Drawing	Kwame Nkrumah University of Science and Technology / Bachelors in Geological Engineering	2.0
	Total semester credit hours earned:	**26.00**

Total Semester Credit Hours Earned: 155

PROCESS DESCRIPTION

All education is compared to the NCEES Engineering Education Standard

The evaluation of your academic studies has been prepared to provide engineering and surveying licensing boards with the required assessment of foreign qualifications to facilitate them in determining if you qualify for licensure examination. This is an advisory report prepared based on records received and verified by the institutions issuing the degrees or qualifications. Eligibility to take the examination is determined by the licensing boards.

This report does not include the assessment of written and oral communication skills, computer skills, the quality of laboratory or field work, and the scope of design experience, which require an onsite review. Academic records (such as transcripts and catalogs) do not document qualitative factors and practical constraints to desirable outcomes.

NCEES houses a library of reference materials from around the world. These references are used for the completion of evaluations in conjunction with the NCEES Engineering Education Standard.

OMAR ALVAREZ (16-729-33)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/27/2021

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
3 years, 11 months

Total Engineering Experience
4 years, 6 months

Experience under licensed engineer
4 years, 6 months

Disciplinary Action
None reported

ABET EAC

FE EXAM

PE EXAM

4+

EDUCATION

Bachelors in Civil Engineering (EAC)
University of Nevada, Las Vegas
September 2014–December 2016

Masters in Civil and Environmental Engineering
University of Nevada, Las Vegas
January 2017–May 2020

EXAMS

Fundamentals of Engineering (FE)
Nevada
September 2017

Principles and Practice of Engineering (PE)
Civil
Nevada
April 2018

LICENSES

Additional Licenses
None

OMAR ALVAREZ (16-729-33)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Las Vegas Water District (LVVWD)
Nevada (United States)
Intern
September 2015—May 2018

Verified by
Sri Kamojjala
sri.kamojjala@lvvwd.com

Experience Summary
Part-Time
Engineering: 1 year, 4 months (50%)
Post EAC degree: 9 months (50%)
Experience under licensed engineer: 1 year, 4 months

TASKS

As an engineering intern at the Las Vegas Valley Water District (LVVWD), I specialized in water resources and environmental engineering, focusing on system hydraulics and potable/non-potable water treatment. I have a diverse knowledge of engineering computer software such as InfoWater Pro (IWP). Using IWP, I performed hydraulic analyses, cost analyses for oversized pipelines, demand analyses for future projected growth, energy studies, and calibration of the LVVWD's hydraulic models. I also completed study reports of concerning issues and what-if scenarios. I also performed hydraulic calculations for, and reviewed drawings and specifications prepared by division technical staff and consultant engineers.

My land development responsibilities also included review of consultant design projects for conformance with District standards. This included, performing submittal reviews and plan checks of Consultant Engineers' designs as well as reviewing Water Hydraulic Analyses, Water Plan Sets and issuing Hydraulic Grade Lines.

REPRESENTATIVE PROJECTS

Energy Management Hydraulic Model Start Up - The scope of this project involved incorporating and developing pump efficiency curves for the existing District Hydraulic Model. The analysis provided the District with additional data for future pump operation decisions (saving energy cost and optimizing pump efficiency).

Las Vegas NV, December 2015 to June 2016

I gathered hydraulic pump information for over 200 pumps that included pump curves and historical data (energy consumption and hours of operation) in the Las Vegas metropolitan area. I analyzed the data and generated pump efficiency curves for each of the pumps. I also created energy tariff patterns for each energy provider, such as Nevada Energy and the Colorado River Commission. Additionally, I imported the developed pump efficiency curves and the energy tariff patterns into the model and assigned them to corresponding pumps. I also performed a validation test of model output results versus the actual pump energy data (consumption and cost).

Impact of Proposed Consumption by Land Use Factors on Facility Sizing - The focus of this study was to analyze the effect that proposed demand factors have on developer-required pipeline diameters, specifically in master plan network analyses, and to determine the potential impact on facility sizing and costs to the District in terms of oversizing pipelines.

Las Vegas NV, December 2015 to April 2018

I performed hydraulic analysis using previously established demand factors, and I compared them with proposed demand factors on three master-planned developments, Summerlin 3665/3550 PZ (1768 ac. development), Skye Canyon 3090 PZ (326 ac. development), and Skye Canyon 3205 PZ (219 ac. development). I compared the Max Day Demands, Peak Hour Demands, and Max Day + Fire Flow Pressures with the developer required pipeline sizes and then with the proposed oversized pipeline sizes. Using the results, I performed a cost analysis to determine the impact on facility sizing and costs to the District regarding oversizing of pipelines.

System Model Calibration - The scope of this project was to validate the system model. The District's hydraulic model is used to issue hydraulic grade lines for proposed projects.

Summer 2017

I calibrated and validated the District's Hydraulic Model. I accomplished this by using Hydrant Pressure Recorders (HPRs) and

historical facility data (Pumps Pressures/Flows, Tank Levels, and PRV Pressures/Flows). I strategically chose the critical hydrants for HPR placements and generated exhibits for my team to install HPRs in the field. In addition, I created comparison reports for upper management to proof the hydraulic model against real world recorded pressures.

OMAR ALVAREZ (16-729-33)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Las Vegas Water District (LVVWD)
Nevada (United States)
Assistant Civil Engineer
June 2018—August 2021

Verified by
Sri Kamojjala
sri.kamojjala@lvvwd.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

As an Assistant Civil Engineer at the LVVWD, I perform comprehensive risk and conditions assessments for existing infrastructure, then using results to guide future projects. I analyze annual operating and capital budgets for rural water systems. I monitor expenditures, analyze maintenance and operating costs, to provide necessary recommendations to improve and ensure efficient rural system operations. In addition, I investigate customer complaints regarding water pressure and in explaining the results of findings to customers. I also provide technical guidance and assistance to professional and technical staff on as needed basis.

I also perform engineering planning for major capital construction and/or maintenance programs, including rural systems construction. I research existing and projected population changes and water demand within the District's service area. I review and evaluate water plans and recommend the oversizing of main extensions or construction of other facilities, if any, to accommodate projected growth. In conjunction, I research and plan future system and facilities requirements. I investigate and identify project design requirements and conduct computer modeling of the system and facilities to determine design requirements and parameters. In addition, I analyze and determine the fire flow availability and hydraulic guidelines for existing and proposed projects. Finally, I perform complex calculations and prepare Engineer's estimates of time and material costs.

REPRESENTATIVE PROJECTS

Development Review Projects - Part of my job is to review and approve new development that will connect to the LVVWD system. This includes issuing hydraulic grade lines, reviewing hydraulic analyses, and inspecting plans for compliance with federal, state, and LVVWD regulations.

Las Vegas NV, May 2018 to Present

The development review process encompasses review and/or comment periods consisting of hydraulic grade line issuance, network analyses review, and water/utility improvement plan review. I have been responsible for the comprehensive evaluation of approximately nine large development projects. These reviews required knowledge to make informed decisions whether to approve or make improvement recommendations for projects to ensure hydraulic capacity and District pressure requirements are met and to ensure minimal impact to existing customers

3205, 3320, and 3435 Pressure Zone Expansions - The scope of this project was to evaluate options for future major facilities to serve the 3205, 3320, and 3435 Pressure Zones in the northwest part of the valley in response to inquiries from numerous Developers and the recent expansion of the U.S. Bureau of Land Management (BLM) Disposal Area boundary.

Las Vegas NV, June 2018 to September 2018

I calculated the potential future demands for the BLM Disposal Area. Then, I conceptually designed the required facilities such as pumping stations, reservoirs, PRVs, and transmission pipelines. Finally, I generated detailed presentations and exhibits for upper management and District staff, demonstrating the resulting evaluations . In addition, I conducted a cost estimate for the required facilities, which includes Districts cost and the Developer oversized pipeline participation.

Boulder City Water Reuse Project - The objective of this study was to evaluate several water reuse alternatives that Boulder City could apply to assist with water conservation efforts and the sustainability of water resources.

February 2019 to March 2020

I conceptualized a design for each potential water reuse alternative based on current state regulations and practices. The designs included pumping stations, reservoirs, and pipelines. I conducted a cost analysis for each alternative, with each cost analysis consisting of capital, maintenance, and operational costs out to the year 2050. I also analyzed each alternative's potential environmental impact, which included impacts based on energy consumption and CO2 production during the construction and operation of the proposed designs projected out to the year 2050.

Southern Nevada Water Authority (SNWA) Water Delivery Hydraulic Studies - The scope of these projects/studies is to conduct risk assessments, guide operators to optimize flow deliveries to purveyors, and provide advice for improvements on the system.

May 2018 to Present

370 MGD Flow Delivery

I investigated the inability of the existing system to provide a continuous flow of 370 MGD to the water treatment plant. I conducted a hydraulic sensitivity analysis using computer modeling, prepared an operation plan, and performed a field test. When performing the field test, I was onsite and supervised operators in collection of data during real-time operation of the system.

Options for Providing Additional Flow to the City of Henderson (COH)

I investigated several options for SNWA to deliver an additional 20 MGD to the COH by using the existing South Valley Lateral or the Pittman Lateral. I examined the existing pipeline conditions and installed HPRs at critical locations on South Valley Lateral to collect flow data used in the analysis and related report. I develop a detailed operation plan for operators to meet the additional 20 MGD goal. I generated a report for upper management that demonstrated potential options for providing additional flow through the existing system.

Horizon Lateral Phasing Option and South Valley Lateral Shutdown

I collaborated with internal District departments and COH staff to evaluate phasing options for the future Horizon Lateral project (375 MGD Delivery System). I coordinated with COH staff to review their requirements of the Horizon Lateral if the South Valley Lateral is shutdown. I performed risk assessments in conjunction with hydraulic analyses that involved 14 scenarios with a set of constraints based on existing and future conditions. I provided recommendations for phasing options to the District that could potentially make the capital improvement budget more efficient. I also prepared deliverables of the study to corresponding departments as required.

ADDITIONAL INFORMATION

QUESTIONS

Has your original license lapsed? If yes, explain.
No

Have you ever been denied licensure by a jurisdiction? If yes, explain.
No

Have you ever been convicted of a misdemeanor? If yes, explain.
No

Have you ever been convicted of a felony? If yes, provide a brief letter of explanation and court documents.
No

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

Other Disciplines

Has a jurisdiction ever revoked, suspended, or disciplined your license? (Please note this includes a consent agreement, letter of reprimand, Etc.) If the action has been resolved a yes answer is still needed.
No

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Reason	Explanation
05/2009	08/2014	Unemployed	During that time I worked part in the hospitality field, but concerted most of time in my engineering studies.

DYLAN AXTELL (15-819-64)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
10/04/2021

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
5 years

Total Engineering Experience
5 years

Experience under licensed engineer
5 years

Disciplinary Action
None reported

ABET EAC

FE EXAM

PE EXAM

4+

EDUCATION

Bachelors in Civil Engineering (EAC)
Oregon Institute of Technology
September 2011–December 2015

EXAMS

Fundamentals of Engineering (FE)
Nevada
February 2016

Principles and Practice of Engineering (PE)
Civil
Nevada
April 2021

LICENSES

Additional Licenses
None

DYLAN AXTELL (15-819-64)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Headway Transportation
Nevada (United States)
Engineer/Planner
September 2016—September 2021

Verified by
Loren Edward Chilson
lchilson@headwaytransportation.com

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

TASKS

Description of Engineering Decisions Made:

Created multi-modal operations analysis and simulation by utilizing industry standard software (PTV Vistro & Vissim, and Synchro & SimTraffic). Documented existing conditions, developed traffic forecast projections, and determined appropriate improvements for various projects.

Generated traffic signal, signing, and striping design drawings for various types of projects at all levels of design stage (Preliminary, 50%, 100%). Design drawings were developed using appropriate local and national best practices and standards.

Level of Responsibility:

Performed technical procedures and tasks under general supervision and oversight.

REPRESENTATIVE PROJECTS

Center Street Cycle Track
Regional Transportation Commission of Washoe County (RTC), Reno, Nevada (2020-2021)

Headway prepared a feasibility assessment, alternatives analysis, and conceptual design for an innovative set of bicycle improvements creating a strong link between the UNR campus and Mid-Town. The project work included review of parking utilization, traffic operations, safety, quality/value of bicycle connections, level of traffic stress (LTS) for cyclists, and maintenance factors. Two-way cycle track, one-way cycle track, and bicycle lanes alternatives were compared and contrasted prior to reaching a recommendation for a two-way cycle track on Center Street. I created and analyzed a two-way cycle track including nine intersections using SimTraffic. From this analysis, I identified key problematic areas and developed a set of recommendations and mitigations to implement the two-way cycle track that would meet city and regional policies. I then documented existing conditions and traffic signal equipment on the local roadway. I aided in the effort to create 30% design drawings which incorporated nine signal modifications and signing/striping improvements for the 1.5 mile corridor. The majority of my effort included creating a cost estimate and designing the traffic signal modifications following MUTCD and AASHTO guidelines.

ReImagine Bridge Street
The City of Truckee, Truckee, California (2018-2021)

Headway analyzed multiple intersections and roadway sections in downtown Truckee, CA. in order to improve pedestrian safety and circulation, maintain or improve traffic flow, and to designate a Quiet Zone at the Bridge Street railroad crossing. Due to the complexity of the railroad crossing and limited right-of-way, Headway developed and evaluated eighteen alternatives including roundabouts, traffic signals, and new roadway connections. I created and analyzed traffic operations using a microscopic model of each alternative using SimTraffic with each alternative including a scenario with and without a train present. I then created a detailed simulation model of the preferred alternative in PTV VISSIM to simulate traffic conditions, signal timing, and railroad pre-emption. Finally, I collaborated with the project team to develop a customized phasing scheme which balanced traffic operations, safety at the railroad crossing, and pedestrian circulation.

South Meadows Multimodal Transportation Study
Regional Transportation Commission of Washoe County (RTC), Reno, Nevada (2018-2019)

Headway Transportation was the prime consultant for this multimodal study which identified long-term traffic operations and capacity improvements, safety improvements, pedestrian and bicycle connectivity, and transit service needs for regional roads and intersections in the South Meadows area of Reno, NV. The South Meadows study involved extensive public outreach including in-person and virtual methods of outreach. I compiled the online Metroquest survey and associated pinpoint locations into a GIS database to develop a heat map identifying the areas with the highest amount of congestion and safety concerns. This effort received the American Planning Association (APA) Nevada Chapter Outstanding Public Outreach and Journalism Award at the 2020 Nevada APA Conference. Additionally, I performed an extensive traffic operations analysis including sixteen intersections and various segment level of service under existing conditions and a future year scenario. I developed future growth rates using the RTC's travel demand model which accounted for all approved development project in the South Meadows area. This scenario planning provided insights into the potential phasing of transportation projects and identification of which projects are the most critical to maintaining traffic operations going forward. I then developed a list of potential improvements covering traffic operations, transit, and bicycle/pedestrian facilities that the county could incorporate into their long-range plan.

ADDITIONAL INFORMATION

QUESTIONS

Has your original license lapsed? If yes, explain.
No

Have you ever been denied licensure by a jurisdiction? If yes, explain.
No

Have you ever been convicted of a misdemeanor? If yes, explain.
No

Have you ever been convicted of a felony? If yes, provide a brief letter of explanation and court documents.
No

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

Other Disciplines

Has a jurisdiction ever revoked, suspended, or disciplined your license? (Please note this includes a consent agreement, letter of reprimand, Etc.) If the action has been resolved a yes answer is still needed.
No

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Reason	Explanation
01/2016	08/2016	Unemployed	I studied for and passed the FE Exam in the beginning of 2016. Then moved to Reno, NV and started working for Headway Transportation in June 2016 at an intern position. The internship was excluded from the proffesional experience section.

NRIPENDRA BASTOLA (14-284-65)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/29/2021

Citizenship
Nepal

SUMMARY

Engineering Experience after EAC degree
5 years, 8 months

Total Engineering Experience
5 years, 8 months

Experience under licensed engineer
5 years, 8 months

Disciplinary Action
None reported

EDUCATION

Non-degree
Bemidji State University
August 2006–December 2009

Bachelors in Civil Engineering (EAC)
Minnesota State University, Mankato
January 2010–May 2013

Masters in Civil and Environmental Engineering
University of Nevada, Reno
August 2013–December 2015

EXAMS

Fundamentals of Engineering (FE)
Minnesota
April 2013

Principles and Practice of Engineering (PE)
Civil
Nevada
October 2018

LICENSES

Additional Licenses
None

WORK EXPERIENCE

South Col Engineering P.C.
New York (United States)
Project Engineer
January 2016—September 2021

Verified by
Mohan K Thapa
mthapa@scengrs.com

Experience Summary
Full-Time
Engineering: 5 years, 8 months
Post EAC degree: 5 years, 8 months
Experience under licensed engineer: 5 years, 8 months

TASKS

During my time at South Col Engineering (SCE), I served as a Project Engineer. Experience gained during this time includes structural design, inspection, load rating, and project management. Design experience includes Newburgh Beacon Bridge catwalk design/rehab and Level II Load Rating. Inspection experience includes bridges and overhead sign structures, and various canal structures. Inspections include element level, NBIS ratings, and repair recommendations for structures. Field analysis includes investigation and analysis in evaluating compliance and deterioration for condition, capacity, and serviceability for public use. Deficiencies include but are not limited to flexure, shear, and torsional-related distress, scour analysis, and safety/serviceability compliance. Inspection types include general, interim, non-destructive, fracture-critical, scour, and visual inspections. Management experience includes scheduling, project coordination with team members, clients, and consultants. I used sound engineering judgment and basic field calculations to determine if deficiencies observed in primary structural members were sufficient to warrant further structural analysis, load rating and posting, or potential structure closure/removal.

All of the above work were or are being completed under the direct supervision of a licensed professional engineer in the state of New York.

REPRESENTATIVE PROJECTS

2016 – Present, Biennial & Interim Bridge and Overhead Sign Inspection:

I am serving as an Assistant Team Leader for New York state bridges and overhead signs inspections. I have performed inspections in the state of New York on over 500 regular and complex bridges and over 30 overhead signs. I schedule and plan inspections to complete the inspections in a safe and time-efficient manner. I review the inspection reports to ensure the information in the report is accurate and satisfies the DOT, NBIS, and AASHTO guidelines. I perform routine, fracture-critical, and special inspections per the NBIS and DOT requirements. I performed Level II Load Ratings for bridges using AASHTOWare BrR software based on the reference documents provided by NYSDOT (NYSDOT EI 05-034 and NYSDOT TA 12-001) and issued the flag if warranted. In addition, I prepared and submitted the Traffic Control Plans (TCP) specifying the date, time, speed limit reductions, oversize vehicle restrictions and lane closures for overhead sign inspections based on guidance provided in “NYSDOT Work Zone Traffic Manual (WZTC)” and “2009 Manual on Uniform Traffic Control Devices (MUTCD).”

Timber Truss Bridges over Delaware River:
I served as an Assistant Team Leader for the inspection of 170’ and 130’ long timber truss bridges over the Delaware River in Delaware county New York. I analyzed the structure for general deterioration and deficiencies in the timber members and performed a scour inspection for the substructure units. I created sketches and organized technical datasheets for the final report that was submitted to the DOT.

Castleton Bridge over Hudson:
I was part of the team that performed an inspection of over a 1-mile-long complex through-truss Castleton-on-Hudson bridge over the Hudson for the New York State Thruway Authority (NYSTA). Assignments were to analyze and document corrosion in high stress-critical members utilizing an ultrasonic thickness gauge, and detailed measurements of pin & hanger retrofits. For structurally deficient(flag) conditions, I collected flag data and assisted in creating flag reports per standard procedures. I created sketches and organized technical datasheets for the final report that was submitted to the NYSTA.

2016 -2020, New York State Canal Corporation (NYSCC) Above Water Inspection:

I served as an Assistant Team Leader for the routine and in-depth inspection of various canal structures that included Lock, Guard gates, Dock, Dry Docks, Waste Weir, Culverts, and Small Bridges based on the “Canal Structure Inspection Manual-95.” I analyzed the structure for general deterioration and deficiencies in the structural elements and prepared Work Urgency Index to document repair urgency based on the inspection manual. I created sketches and organized technical datasheets for the final report.

2017 – 2018, Newburgh Beacon Bridge Catwalk Redesign/Rehabilitation:

The Hamilton Fish Newburgh Beacon Bridge is a 7,855-foot-long cantilever bridge that carries Interstate I-84 across the lower Hudson River in New York State. The primary catwalk under each span runs longitudinally along the bridges. In addition to the primary longitudinal catwalk, there are secondary catwalks that run transversely across the bridge between the primary catwalk and the outside edges of the bridge and can be accessed by cage ladders at six pier locations. I was a part of the team that designed a longitudinal catwalk in the main span and redesigned longitudinal and transverse transitions of the existing catwalk to accommodate the new proposed catwalk which would allow maintenance workers to walk below rather than through the floor beams openings. In addition to the design calculations, I developed CAD drawings that detailed all necessary notes, sequence of construction, typical sections, hanger attachment details, railing details, and joint details.

The catwalk, access ladders, and connections were designed based on guidance provided in the American Institute of Steel Construction (AISC) "Steel Construction Manual," American Association of State Highway and Transportation Officials (AASHTO) Standard Specification for Highway Bridges," and “OSHA 1926 Construction Industry Regulations & Standards Manual."

ADDITIONAL INFORMATION

QUESTIONS

Has your original license lapsed? If yes, explain.
No

Have you ever been denied licensure by a jurisdiction? If yes, explain.
No

Have you ever been convicted of a misdemeanor? If yes, explain.
No

Have you ever been convicted of a felony? If yes, provide a brief letter of explanation and court documents.
No

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

Other Disciplines

Has a jurisdiction ever revoked, suspended, or disciplined your license? (Please note this includes a consent agreement, letter of reprimand, Etc.) If the action has been resolved a yes answer is still needed.
No

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Reason	Explanation
03/2003	07/2006	Unemployed	I took some time off due to personal health issues and to prepare for TOEFL and SAT examination to apply to undergraduate schools in the United States.

DARREN DYK (20-079-97)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/13/2021

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
10 years, 4 months

Total Engineering Experience
10 years, 4 months

Experience under licensed engineer
3 years, 11 months

Disciplinary Action
None reported

ABET EAC

PE EXAM

FE EXAM

4+

EDUCATION

Bachelors in Geological Engineering (EAC)
South Dakota School of Mines and Technology
August 2006–May 2010

EXAMS

Principles and Practice of Engineering (PE)
Civil
Nevada
April 2021

Fundamentals of Engineering (FE)
South Dakota
April 2010

LICENSES

Additional Licenses
None

WORK EXPERIENCE

Newmont USA Limited
Nevada (United States)
Geotechnical Engineer
September 2010—February 2017

Verified by
Kathleen D. Steele
Kathy.Steele@NevadaGoldMines.com

Experience Summary
Full-Time
Engineering: 6 years, 5 months
Post EAC degree: 6 years, 5 months
Experience under licensed engineer: None

TASKS

My tasks and duties included monitoring our piezometer, inclinometer, and settlement monument networks, updating their respective graphs and performing analysis, interpretation and reporting of the data to senior staff and some government entities. I preformed Photogrammetric mapping on critical highwalls with stability issues or that were high risk to the project, geotechnical inspections at numerous local projects, comparisons between all catch benches created during that year's mining progression with minimum design requirements and provided recommendations to improve catch bench performance. I worked with various radar systems and utilized robotic total stations linked to a network to create an automated prism monitoring system to monitor high wall stability. I inspected core drilling rigs during operation and logged core as it was being extracted during drilling campaigns.

REPRESENTATIVE PROJECTS

Highwall Status Report Advancement, 2010-2015. I compiled Highwall Status Reports to analyze the as-built condition of the highwall and I provided recommendations to the blasting engineer and short term planning engineer on how to improve the performance of the highwalls and catch benches from a geotechnical perspective. I advanced the report from a basic comparison of as-built vs design to include correlation with geological formations and blast pattern design, it included cross sections comparing as-built to blast pattern design and provided recommendation for improvement. This was an on-going project that was completed with each bench produced during mining. Additionally, I consulted with representatives of a company that produces and markets LiDAR scanners for mining and commercial use. With my guidance, they produced a tool in their software package that replicated the main outputs of the highwall status reports I produced.

Drilling Campaign Analysis, 2015-2016. A large drilling campaign was competed at the mine site. I logged core as it was extracted from the designed holes which included RMR/RQD logging.

Prism Network Establishment, 2016-2017. Construction of a new shaft for an existing underground mine was ongoing. A critical slope near the shaft expressed some cracking and other indications of possible movement. I designed a prism network and established a base point for monitoring the prisms with a total station. After a majority of the surface work was complete. I established a survey monument and coordinated the placement of a "shack" over this monument so that a robotic total station could be permanently affixed to the monument for automated measurement recording. I monitored the data and compiled reports on a monthly basis for management and staff working in the area.

Instability Monitoring Program, 2016-2017. An instability was discovered along an old haul road that lead to the bottom of an old pit. At the bottom of the pit was an active portal to an underground mine which doubled as a secondary egress for another nearby underground mine. I establish a temporary monitoring system that involved two surveyed base point locations for lidar scans of the wall and three pin-sets that I measured daily. This was utilized until one of our radar systems could be established to monitor the instability. I interpreted the radar and pin-set data and produced daily reports to management and the crews working in the affected area. I also determined when accelerated movement of the instability indicated the area may no longer be safe and shut down the portal in order to keep working staff safe when appropriate.

Working for Better Efficiency, 2016-2017. I was assigned a time consuming and tedious project that would need to be repeated each time the geotechnical domain shapes were updated. I consulted with the vender that provided our mining software to develop a tool that turned this time consuming remedial project into a task that took only a matter of seconds. It was very important that this tool worked correctly since it was the basis of our pit slope design program. I tested the tool in a number of applications and scenarios in order to ensure the accuracy of the tool. This tool eventually became available on their commercially available software package.

DARREN DYK (20-079-97)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Nevada Department of Transportation
Nevada (United States)
Staff II, Assistant Resident Engineer
September 2017—August 2021

Verified by
Boyd Ratliff
BRatliff@dot.nv.gov

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

Tech III: I started with NDOT as an Engineering Tech. III in September of 2017. I was responsible for performing inspection of contracted construction projects. I used the contract plans, special provisions, standard plans and standard specifications as my references to determine if construction occurred as intended. I performed calculations to determine quantities of material placed and collected and documented certs. and samples. I wrote daily reports of my activities and findings and reported data to the Tech IV and crew managers.

Tech IV: I was promoted to an Engineering Tech. IV in May of 2018. My tasks and duties included those of the Tech III in addition to managing other Tech III's, posting quantities of materials placed and services rendered for payment. I was trained and performed inspections of the contractors implementation of their Storm Water Pollution Prevention Plan and Traffic Control plans, ensuring that both met State and Federal standards.

Staff II: I was promoted to a Staff II position in March of 2019. My tasks and duties include reviewing daily reports and payment postings and verifying calculations posted by the Tech IV's, reviewing materials testing paperwork and calculations from the lab, performing field inspections to check on contract progress and answer questions from my Tech's. I also write contract modifications which include justification/explanation and budget/quantity changes, letters of authorization which pay for smaller items that are incidental but not included in the contract and participate in plan reviews at the 60% and 90% completion stage (prior to bid) and suggest changes based on existing conditions. I participate in contract closeout and verify that the required paperwork is completed and submitted to the appropriate personnel and entities.

REPRESENTATIVE PROJECTS

3706 Lamoille Highway Mill and Fill, $3.9 million, 2018: I was responsible for most non paving operations; I inspected the tack truck and calculated application rates of tack being spraying onto the milled surface. I inspected the mill, calculated and paid for quantity of removal. I inspected and paid for sign removal and placement, ITS conduit, cable, pole bases, light poles, rumble strip grinding, permanent striping and thermo-plastic placement.

3691 US50 Mill and Fill $13.5 million, 2019: After I was promoted to a Staff II Engineer, I was assigned to perform an as-built on this contract. The contract had been completed in fall of 2018 but there was an issue with barrow embankment quantities. I lead a small crew to record topography points, with our GNSS receivers, of the entire project (about a 20 mile stretch of highway). I was responsible for directing work and ensuring it moved at a timely pace, I set up the Base Station and receiver daily before work began, ensured accurate readings by checking a known location and I advised my workers how to label certain points (DI, Culvert, EOO, etc).

3765 Lane Expansion on I80 Pequop Summit, $31.6 million, 2019-2020: The plans for this contract were rushed which resulted in several issues. I wrote eleven contract modifications that made significant adjustments to the contract. The most extensive one addressed a utilities conflict the was realized before the contract was scheduled to proceed. I conducted an independent cost analysis to calculate and independently justify extra costs associated with the utilities conflict. In the end, the issue was resolved at our crew level and did not need to be escalated to the managers above the crew. When the contract was posted for bid, no guardrail end treatments were damaged during the design phase. However, when construction began, it was observed that several end treatments had been damaged. I collected locations data and wrote a contract modification to add these end treatments to the contract; this included plan modifications and an independent cost analysis of the proposed price. Unfortunately, at the last minute, the contract modification was rejected because a policy had changed that required a specific type of end treatment that was not intended to be used. This meant the entire process had to be restarted. I worked with the contractor to move the contract modification along quickly and pay for the end treatments that had been ordered but were not going to be placed.

3850 ADA Carlin NV, $1.7 million, 2021: A utilities conflict was realized before construction began. I worked with the contractor and hydraulics division to develop solutions to each issue. One solution I suggested and was implemented involved using an existing pipe that crossed the existing utility rather than installing a new pipe and risk disrupting the utility line. I am helping to write a large change order to address these issues and provide payment to the contractor (a new manager level employee is writing the change order and I am using this as a training opportunity). I performed the independent cost analysis and am editing the document. Existing conditions in some areas were worse than expected. I worked with the contractor to resolve issues where the plans were not adequate to address the issues present in the field. Some of these solutions include paving extra depth to fill low spots and smooth transitions, milling extra depths to smooth severely textured areas of old pavement, and feathering milling depth to smooth transitions while remaining within budget. A school zone flashing beacon light was not included on the plans and the beacon was not sized properly to fit on the new size of signpost. I developed with the solution to sleeve a section of old post into the new one, which allowed for the original flashing beacon to be utilized. This resulted in a cost saving to the contract (not having to buy a new beacon) and allowed for the work to be concluded in a reasonable time.

ADDITIONAL INFORMATION

QUESTIONS

Has your original license lapsed? If yes, explain.
No

Have you ever been denied licensure by a jurisdiction? If yes, explain.
No

Have you ever been convicted of a misdemeanor? If yes, explain.
No

Have you ever been convicted of a felony? If yes, provide a brief letter of explanation and court documents.
No

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

Other Disciplines

Has a jurisdiction ever revoked, suspended, or disciplined your license? (Please note this includes a consent agreement, letter of reprimand, Etc.) If the action has been resolved a yes answer is still needed.
No

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Reason	Explanation
03/2017	08/2017	Unemployed	I left my mining job to pursue a career outside of the mining industry. I was offered a position at NDOT in May of 2017 but delays in my paperwork pushed my actual start date to September.

KATHERINE PRICE (21-745-59)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/08/2021

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
4 years, 5 months

Total Engineering Experience
4 years, 5 months

Experience under licensed engineer
4 years, 4 months

Disciplinary Action
None reported

ABET EAC · FE EXAM · PE EXAM · 4+

EDUCATION

Bachelors in Civil Engineering (EAC)
University of California, Berkeley
August 2010–May 2014

Masters in Civil Engineering
University of Washington
August 2014–March 2017

EXAMS

Fundamentals of Engineering (FE)
California
April 2013

Principles and Practice of Engineering (PE)
Civil
Nevada
April 2021

LICENSES

Additional Licenses
None

KATHERINE PRICE (21-745-59)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Golder Associates
Nevada (United States)
Staff Engineer
April 2017—August 2021

Verified by
Christopher Jason MacMahon
Chris_MacMahon@golder.com

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

TASKS

I am staff project civil and geotechnical engineer with four and a half years of Nevada industry and mining design, construction, and project management experience. I have been responsible for civil and geotechnical design, project coordination, project management, and permitting support for large earthwork projects in Nevada, California, Oregon, and Mexico. My specialties lie in geotechnical stability, subsurface investigation, soil laboratory testing, remote instrumentation and monitoring, seismic engineering and design, hydrological and environmental design, and civil design and closure planning. I routinely design mine operation plans, mine waste facilities such as tailings storage facilities, heap leach pads, waste rock dumps, stormwater diversion systems, reclamation and closure of mineworks, and reclaim and stormwater retention pond and pump systems. I perform cost estimates and risk assessments for construction and operation of these facilities, as well as provide permitting support to our clients for new facility or expansion designs. I also serve as a project manager for low- to mid-complexity projects that involve multi-disciplinary coordination (hydrology, environmental, geology, geotechnical, P&ID, and mine engineering).

REPRESENTATIVE PROJECTS

GOLDER SOIL LABORATORY REVIEWER (2019-present): As expert technical reviewer of our company Denver soils laboratory, I provide detailed quality-control review of the test processes, input parameters, and finalize the client reports for all contracted triaxial testing, direct simple shear, and cyclic direct simple shear tests. I assist with technical support and training for the laboratory staff or clients as required.

FIELD ENGINEER AND GEOLOGIST (2017-present): Some notable subsurface investigations I have provided engineering and supervisor services for include:
*KINROSS AND BARRICK, NEVADA (2017-2019): as field geologist I oversaw a drill team extracting 3500 feet of rotary rock core drilling, logging, and core sampling at Bald Mountain Mine and 2500 feet at Cortez Mine. I performed field rock core point and axial load testing.
*FLUOR, NEVADA (2019): as staff civil designer and geotechnical engineer, I designed the geotechnical earthworks for the Lithium-Boron rock dump facilities. This included sampling and soils characterization laboratory testing of overburden material (Index testing, proctor testing, and Atterberg plasticity testing).
*NEWMONT, CALIFORNIA (2020): as staff geotechnical engineer, I supervised a drill team extracting 500 feet of rotary soil core in a historic earthwork dam on state park, performed logging and sampling, developed the laboratory soils testing program, and installed piezometric monitoring instrumentation and remote telemetry data hubs.
*CALICO, OREGON (2020): as staff civil designer, I oversaw the shallow subsurface exploratory test-pitting investigations, performed the soils logging and sampling, and developed the laboratory soils testing program.
*NEVADA GOLD MINES (NGM), NEVADA (2017-PRESENT): as staff geotechnical engineer for this key client, I routinely oversee numerous subsurface exploratory investigations at NGM-owned mines, including the supervision of shallow test-pitting, sonic rockfill core drilling, rotary and hollow-core auger with SPT and split-spoon testing, and CPT investigations. I install slope and dam monitoring instrumentation including piezometers, settlement cells and monuments, inclinometers, and telemetry systems for remote data collection and processing. I develop the laboratory testing programs, post-process the results and drill record to calculate engineering material properties, and perform advanced geotechnical analyses.

GEOTECHINCAL ENGINEER AND CIVIL DESIGNER (2017-PRESENT): As a mine engineering consultant, I have extensive project engineering design and consulting experience with mines throughout the USA, Canada, Mexico, and Africa. Some of my notable project work includes:
*BARRICK, CORTEZ MINE (2017-present): as staff geotechnical engineer and civil designer for this key client, I have significant multi-disciplinary project and site experience at the Cortez Mine. I am responsible for quarterly performance monitoring reviews of

Area 28 Tailings Storage Facility (TSF) for permitting agencies during construction and operation. I calculated and wrote technical memorandums and design reports for mechanical and civil design of sumps and washbays in the underground workings. I designed the hydrological studies and civil works for the concrete mill secondary containment systems and site haul roads.
*NGM, PHOENIX MINE (2017-present): as staff geotechnical engineer and civil designer for this key client, I have served as a project manager, CQA supervisor, field geotechnical investigation supervisor, and instrumentation and monitoring consultant for the Phoenix TSF). I have provided civil design for facility expansion, and developed a Geotechnical Monitoring Plan (GMP) and Emergency Action Plan (EAP) for operation and emergency response for the facility. To aid in the civil design of the facility, I have performed advanced geotechnical analyses of the facility including such as slope stability and deformation, piezometric drawdown, settlement and compression, dynamic seismic response, and liquefaction potential.
*GLENCORE, CALIFORNIA (2020-2021): as staff geotechnical engineer, I provided EOR support for the Dam Safety Review of the historical TSF. I performed dam stability analyses and wrote numerous technical documents including the Operating, Maintenance, and Surveillance (OMS) manual for the tailings storage facility, data gap analyses on historical facility records, memorandums for the risk assessments for the operation and closure of the facility.
*ITAFOS, WEST AFRICA (2020): as geotechnical engineer, I performed slope stability analyses for Farim Phosphate Mine in Guinea-Bissau.
*KINROSS, NEVADA (2018-2019): as civil designer, I provided project coordination services for Bald Mountain exploration and pit geotechnical stability investigations. I performed the civil design for the Round Mountain lower pond and mine water systems and served as CQA supervisor during construction. I performed the civil design of the site pit dewatering pipe and pumping system for the Round Mountain Mine.

KATHERINE PRICE (21-745-59)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Engineered Fire Systems, Inc.
California (United States)
Contracted Design Engineer
January 2017—August 2021

Verified by
Eric Alan Price
Eprice@efs1.com

Experience Summary
Part-Time
Engineering: 1 year, 2 months (25%)
Post EAC degree: 1 year, 2 months (25%)
Experience under licensed engineer: None

TASKS

I am a part-time contracted design engineer at Engineered Fires Systems on a project-need basis. I regularly provide third party review of residential and commercial fire sprinkler systems for design and installation compliance with NFPA 13D 2016 and California Fire Codes 2019 state codes. I also provide contractual project management services, draft residential fire sprinkler systems, and perform hydraulic calculations to ensure proper performance of the systems.

REPRESENTATIVE PROJECTS

The body of my work for Engineered Fire Systems includes project-based contracted design engineer services. Some notable county project work can be defined as follows:

DATES OF INVOLVEMENT (January 2021-present)
I serve the city of Santa Rosa as the Authority Having Jurisdiction (AHJ) for the fire sprinkler system review of new residential construction. The AHJ is defined in the NFPA fire codes as the person or office charged with enforcing the Life Safety Code. I regularly review the layout of residential and commercial sprinkler heads against building plans for state and national compliance and checked the hydraulic calculations and technical specifications to ensure proper system function.

DATES OF INVOLEVEMNT (2017-present)
I provide engineer design, drafting, and project management services contractually for Engineered Fire Systems. I have designed residential sprinkler systems for wet systems in California's Placer, Plumas, Sonoma, Stanislaus, Pacific Grove, and Yuba Counties. I prepared and managed the scope, schedule and budget for contracted residential single-family or track homes in these counties. I prepared head layouts and civil 2D drafting of building plans, assessed pressurized system needs including municipal, pump, well, and tank systems, compiled technical specifications and hydraulic calculation packages for the systems, and prepared submittals to installation contractor and plan review departments. Upon request, I prepared construction system estimations, material data sheets, purchase order lists, or as-built plans.

ADDITIONAL INFORMATION

QUESTIONS

Has your original license lapsed? If yes, explain.
No

Have you ever been denied licensure by a jurisdiction? If yes, explain.
No

Have you ever been convicted of a misdemeanor? If yes, explain.
No

Have you ever been convicted of a felony? If yes, provide a brief letter of explanation and court documents.
No

Select the disciplines in which you are currently practicing. If more than 1% of time is devoted to a discipline, it must be included.
Disciplines
Civil, Fire Protection, Mining/Mineral, Environmental, Metallurgical/Materials

Other Disciplines

Has a jurisdiction ever revoked, suspended, or disciplined your license? (Please note this includes a consent agreement, letter of reprimand, Etc.) If the action has been resolved a yes answer is still needed.
No

JOHN SALIHOGLU (14-463-33)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/17/2021

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
5 years, 4 months

Total Engineering Experience
5 years, 4 months

Experience under licensed engineer
4 years, 1 month

Other Experience
4 months

Disciplinary Action
None reported

ABET EAC

FE EXAM

PE EXAM

4+

EDUCATION

Bachelors in Civil Engineering (EAC)
University of Illinois, Chicago
August 2007–May 2014

EXAMS

Fundamentals of Engineering (FE)
Illinois PE
October 2013

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

LICENSES

Additional Licenses
None

JOHN SALIHOGLU (14-463-33)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

HBK Engineering
Illinois (United States)
Project Engineer
June 2014—September 2014

Verified by
Michael Christopher Tedeschi
mtedeschi@hbkengineering.com

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

TASKS

I was a project engineer working on underground infrastructure design in the Chicago, IL metropolitan area. I only worked on one large complex project, as my time there was short. I was responsible for locating and mapping underground electrical line conduit utilizing surveying instruments such as a Sokkia Set total station, as well as using the gathered information to design new and formerly incomplete underground mainline cable systems in conduit using AutoCAD and GIS software. I also did research into other local utilities in the sub-grade area and incorporated the necessary design restrictions of stated utilities into the newly designed electrical distribution conduit. These duties were done on a daily basis and my time was 100% spent on engineering tasks.

REPRESENTATIVE PROJECTS

The ComEd Underground Suburban Mapping Revitalization Project was my main representative project while working at HBK Engineering in the summer of 2014. The majority of the project was located in Cook County, Illinois, with about 10% of the project site being located in surrounding counties such as Lake, Dupage, and Kane Counties. The project revolved around creating an updated system for end users, with the following benefits of performance being as follows:
·Improved dig-in prevention and underground facility protection.
·Identification of cables present for crews entering manholes.
·Improved visualization for system modification during design.
·Improved design process for system upgrades and expansion.
·Electric system model with physical location of underground infrastructure.

This projects' undertaking includes the mapping, locating surveying and updating of internal systems for ComEd’s entire underground mainline cable system in conduit. My duties were to complete, as part of a larger team, the following:
·I created 30 maps based on initial research performed during RFP cost estimate development in AutoCAD and GIS system
·I adjust and created 100 manholes within the CE*GIS System, located throughout Cook County, IL
·I modified and adjusted 500 electrical line feeders in the underground sections of the GIS bases map of ComEd’s suburban regions
·I field located, collected and adjusted, and designed 50 conduit miles within the GIS based map of ComEd’s underground suburban regions.
-I visited 12 substations to verify feeder sources, and confirm as-built locations and record drawings
-I covered around 175 square miles of the total 11,174 square miles of electrical system overhaul in the overall project in my designs of underground electrical conduit. This project lasted my entire duration of work at HBK Engineering in June through September of 2014.

JOHN SALIHOGLU (14-463-33)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

McNally's Restaurant
Oregon (United States)
Manager
October 2014—February 2015

Verified by
Jim McNally
jim@mcnallystaproom.com

Experience Summary
Part-Time
Other: 3 months (75%)
Experience under licensed surveyor: None

TASKS

Manager, server, host, bartender, cleaner, filled orders with distributors, general restaurant procedures.

REPRESENTATIVE PROJECTS

N/A

WORK EXPERIENCE

DN Tanks, Inc.
California (United States)
Regional Estimator
March 2015—April 2020

Verified by
Kevin Kevin Peacock
kevin.peacock@dntanks.com

Experience Summary
Full-Time
Engineering: 5 years, 1 month
Post EAC degree: 5 years, 1 month
Experience under licensed engineer: 3 years, 10 months

TASKS

My role at DN Tanks fits within the Civil Engineering branch of engineering. While working with DN Tanks, my role has included assisting with the design input for AWWA D110 Type I and Type III prestressed concrete tanks. I have spent the majority of my work on Type I prestressed tank design, reviewing and creating project design and calculations in Mathcad, reviewing and creating construction site layouts and constructability issues with D110 Type I and Type III Prestressed Tanks. I have also prepared Design-Build proposal packages on many projects, averaging 25 per year. I utilize AutoCAD daily to assist the with the design on each project that is assigned to me.
I have been responsible for reviewing site specific geotechnical reports and evaluate the impacts to the design of a prestressed concrete tank. I would often coordinate direct with the geotechnical engineer to evaluate how various subgrade preparation methods would change the parameters utilized in the structural tank design. I would analyze numerous foundation systems and recommend the best course of action.
I have been responsible for working on AWWA D110 prestressed concrete tanks on over 25 projects in the past 5 years, in over 14 states; the majority of which have been in high seismic regions. I evaluated subsurface conditions, establish what piping, electrical and reservoir appurtenances are required based on the specific need of the storage structure. I have gained experience in developing sites for potable water, wastewater, and recycled water projects. The vast majority of this work has been under the direction several Professional Engineers.
My responsibilities continued throughout the preliminary design, bid level design, final design phase and during tank construction of the majority of projects assigned to me, and 100% of this time was engineering task experience.

REPRESENTATIVE PROJECTS

The 2.0 million gallon "Kahului Tank Addition" project was a circular prestressed concrete tank design project in Kahului, HI that I worked on over the the period of April 2015-January 2016. This was an AWWA D110 Type I Prestressed tank design. I completed the geotechnical review, construction site layout, project plan and specification review, rebar design review, overall tank construction and design estimate, site and overall coordination with project owner and engaged contractors.

The "Yerba Buena Island Tanks Project" in San Francisco, CA was a circular prestressed concrete tank design project I worked on over the the period of January 2016-August 2016. This was a unique project involving 3 - 1.67 million gallon Type I Prestressed Reservoirs. I was responsible for making recommendations on what type of roof structure best fits the needs of the project. Prestressed concrete tanks can utilize a column supported flat slab roof, a free standing concrete dome, or an aluminum roof structure. I analyzed each of these types of structures and provided recommendations on the most appropriate roof structure for the project, which was a column supported, flat-slab roof. I designed construction site layouts for best possible construction scenarios.

The "8.0 MG ARGO Reservoir", Los Angeles, CA project was a circular prestressed concrete tank design project I worked on over the the period of April 2018-January 2019. This was a unique project as it was a water filtration reservoir with no floor, whose purpose was to contain the runoff from the tarmac and runways of the Los Angeles International Airport. The tank had a column supported flat-slab roof and was also completely buried. I completed the geotechnical review, construction site layout, project plan and specification review, rebar design review, overall tank construction and design estimate, site and overall coordination with project owner and engaged contractors.

The 1.0 MG "Carisbrook Reservoir", Oakland, CA was a circular prestressed concrete tank design project I worked on over the the period of August 2016 - January 2017. This was a potable water storage tank in the east hills of the Oakland region with many tight access conditions and construction feasibility issues that impacted design. The project utilized the floor slab of a previously constructed tank incorporated into its foundation to help with overturning. The tank had a column supported flat-slab roof. I completed the geotechnical review, project plan and specification review, overall tank construction and design estimate, site and

overall coordination with project owner and engaged contractors and subcontractors. I designed a crane site layout for this project depicting the setup needed for a 350-ton crane to operate effectively.

The 9.0 MG "South Reservoir", Castro Valley, CA project incorporated a 9.0MG circular prestressed concrete tank into a large water system upgrade project that I worked on over the period of January 2018- April 2018. This was a potable water storage tank project in a high seismic zone. The tank had a column supported flat-slab roof. I completed the geotechnical review, project plan and specification review, overall tank construction and design estimate, site and overall coordination with project owner and engaged contractors and subcontractors.

I reviewed and created concrete mix designs for each reservoir was accurate to code and met the strength requirements of the project. I also reviewed tank design drawings to ensure they met the AWWA D110 Code standards, and reviewed calculations in Mathcad for all listed projects to ensure they met the needs of projects' client.

Other AWWA D110 Type I projects include (but not limited to):
940,000 Gallon Stratified Chilled Water Storage Tank, Cypress, CA - 2017

2.0 MG Circular Concrete Tank, Tulare, CA - 2018

5.3MG Potable Water Storage Reservoir, Bozeman, MT - 2016-2017

4.0 MG Prestressed Concrete Water Reservoir, Billings Heights, MT - 2017-2018

300,000 Gallon Potable Water Storage Reservoir, Stovepipe Wells, Death Valley, CA - 2019

Henderson 5A Potable Water Storage Reservoir, Henderson, NV - 2015-2016

Henderson 10A Potable Water Storage Reservoir, Henderson, NV - 2016-2017

4.2 MG Prestressed Concrete Storage Tank — Modesto, CA - 2016

2.0 MG Potable Storage Tank in Yigo, Guam -2018

Santa Rita, Santa Rosa, and Sinifa Water Prestressed Concrete Reservoirs - Guam 2019-2020

JOHN SALIHOGLU (14-463-33)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

HBK Engineering, LLC
Illinois (United States)
Project Manager
August 2021—September 2021

Verified by
Michael Tedeschi
mtedeschi@hbkengineering.com

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

TASKS

Tasks and duties are as follows:
Leading a project team consisting of engineers, designers, and field personnel involved in the design, modification, analysis and constructability of new and existing utility systems.
Working on challenging assignments that include investigating, trouble-shooting a, and solving a large variety of engineering and construction related issues.
Acting as a team lead in the coordination of detailed of the different phases of utility system designs for a different array of clients.
Preparing, reviewing and/or approving proposals, contracts, and cost estimates.
Negotiating revisions, changes and additions to contractual agreements with sub-consultants, and clients.
Performing and overseeing designs for underground and overhead power and fiber installations.
Lead efforts to ensure projects are completed satisfactorily, on time, and within budget.
Coordinate design activities to ensure installation and operations will comply with specifications, codes, and client requirements.
Interface with vendors to prepare materials and equipment purchase specifications for client recommendations.
Research available equipment and proven pre-engineered systems to utilize for the execution of required project designs.
Prepare reports and studies that present technical information in a clear and concise manner, as well as meeting client requirements.
Perform independent reviews of work performed by others including calculations and drawing preparation.

REPRESENTATIVE PROJECTS

Currently a new hire working on getting through the onboarding process.

ADDITIONAL INFORMATION

QUESTIONS

Has your original license lapsed? If yes, explain.
No

Have you ever been denied licensure by a jurisdiction? If yes, explain.
No

Have you ever been convicted of a misdemeanor? If yes, explain.
No

Have you ever been convicted of a felony? If yes, provide a brief letter of explanation and court documents.
No

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

Other Disciplines

Has a jurisdiction ever revoked, suspended, or disciplined your license? (Please note this includes a consent agreement, letter of reprimand, Etc.) If the action has been resolved a yes answer is still needed.
No

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Reason	Explanation
05/2020	07/2021	Unemployed	Unemployed due to Covid as a stay at home father for my two children (ages 2 and newborn)

SCOTT WARDWELL (17-379-27)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/14/2021

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree

Total Engineering Experience
3 years, 1 month

Experience under licensed engineer
3 years, 1 month

Other Experience

Disciplinary Action
None reported

FE EXAM

PE EXAM

EDUCATION

Bachelors in Applied Mathematics
University of Nevada, Reno
September 2007–May 2011

Masters in Civil Engineering
Colorado State University
May 2014–August 2017

EXAMS

Fundamentals of Engineering (FE)
Nevada
July 2017

Principles and Practice of Engineering (PE)
Civil
Nevada
April 2021

LICENSES

Additional Licenses
None

SCOTT WARDWELL (17-379-27)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Safeway Inc.
Colorado (United States)
Pharmacy Technician
August 2013—August 2016

Verified by
Scott Wardwell (Self)

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

TASKS

Count and prepare medications for patients. Verify prescriptions and enter data into computer. Operate cash register and assist customers. Answer phones and assist customers.

REPRESENTATIVE PROJECTS

Non-engineering experience related to this employment.

SCOTT WARDWELL (17-379-27)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Safeway Inc.
Nevada (United States)
Pharmacy Technician
August 2016—August 2018

Verified by
Scott Wardwell (Self)

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

TASKS

Count and prepare medications for patients. Verify prescriptions and enter data into computer. Operate cash register and assist customers. Answer phones and assist customers. No engineering responsibilities.

REPRESENTATIVE PROJECTS

Non-engineering experience related to this employment.

SCOTT WARDWELL (17-379-27)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Ashley and Vance Engineering, Inc.
Nevada (United States)
Project Engineer
August 2018—September 2021

Verified by
Jordan Paul Denio
Jordan@ashleyvance.com

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

TASKS

Prepare structural plans and calculations under engineer of records supervision for multiple types of building projects. Assist in construction administration for said projects.

REPRESENTATIVE PROJECTS

2018-2019 Los Olivos, CA project.
This project is a 1000 square foot open pergola in Olivos, CA. My role in the project was to prepare structural plans and provide structural calculations including lateral analysis for the project under the supervision of the EOR. The project framing was wood roof framing over steel cantilever columns. The foundation system was concrete pads and piers. Additionally, I assisted in construction administration for issues that arouse during construction. Providing additional detailing and information as requested.

2019 Healdsburg, CA project.
This project is a 3000 square foot single family residence in Healdsburg, CA. My role in the project was to prepare structural plans and provide structural calculations including lateral analysis for the project under the supervision of the EOR. The project framing included a combination of wood and steal beams connected to a combination of wood and concrete shearwalls and steel cantilever columns. The foundation system was concrete grade beams over cast in place concrete piers and included retaining walls up to 8 foot in height. The project also included structural slabs to span between concrete grade beams.

2019 Mammoth Lakes, CA project.
This project is a 3000 square foot 2-story single family residence in Mammoth Lakes, CA. My role in the project was to prepare structural plans and provide structural calculations including lateral analysis for the project under the supervision of the EOR. The project framing was standard wood construction with pre-manufactured wood roof trusses and utilized existing framing and foundation as required. The foundation system utilized existing and new conventional spread footings.

2020 Incline Village, NV project.
This project is a 8000 square foot 3-story single family residence in Incline Village, NV. My role in the project was to prepare structural plans and provide structural calculations including lateral analysis for the project under the supervision of the EOR. The project framing was a mix of conventional wood and steel. The lateral system was composed of steel moment frames, steel cantilever columns, manufactured wood shearwalls, concrete shearwalls, and conventional wood shearwalls. The foundation system utilized conventional spread footings, concrete shearwalls, and retaining walls up to 12 feet in height. I also assist construction administration, revising and modifying plans and calculations for issues that arise in the field as they occur. This project is currently in construction and I will continue to provide assistance until completion.

2021 Taqhoma, CA project.
This project is a 24000 square foot 3-story single family residence in Taqhoma, CA. My role in the project was to prepare structural plans and provide structural calculations including lateral analysis for the project under the supervision of the EOR. The project framing was a mix of conventional wood and steel. The lateral system was composed of steel special moment frames, steel special cantilever columns, steel special braced frames, manufactured wood shearwalls, concrete shearwalls, and conventional wood shearwalls. The foundation system utilized conventional spread footings, concrete shearwalls, grade beams, and retaining walls up to 10 feet in height. I will also assist with construction administration, revising and modifying plans and calculations for issues that arise in the field as they occur when this project goes into construction.

ADDITIONAL INFORMATION

QUESTIONS

Has your original license lapsed? If yes, explain.
No

Have you ever been denied licensure by a jurisdiction? If yes, explain.
No

Have you ever been convicted of a misdemeanor? If yes, explain.
No

Have you ever been convicted of a felony? If yes, provide a brief letter of explanation and court documents.
No

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

Other Disciplines

Has a jurisdiction ever revoked, suspended, or disciplined your license? (Please note this includes a consent agreement, letter of reprimand, Etc.) If the action has been resolved a yes answer is still needed.
No

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Reason	Explanation
06/2011	07/2013	Unemployed	Part time employment and summer jobs that I do not recall time frames for.

Electrical

TYLER BEAUCHAMP (17-401-91)

All work experience reviewed by two licensed professionals

DISCIPLINE: ELECTRICAL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/15/2021

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
4 years, 4 months

Total Engineering Experience
4 years, 4 months

Experience under licensed engineer
4 years, 4 months

Disciplinary Action
None reported

EDUCATION

Non-degree
Schoolcraft Community College
August 2011–May 2013

Bachelors in Electrical Engineering (EAC)
Michigan Technological University
September 2013–April 2016

EXAMS

Fundamentals of Engineering (FE)
Colorado
December 2018

Principles and Practice of Engineering (PE)
Electrical & Computer
Wisconsin
July 2021

LICENSES

Additional Licenses
None

TYLER BEAUCHAMP (17-401-91)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Systems Control
Michigan (United States)
Engineering Intern
May 2016—May 2017

Verified by
Tyler Beauchamp (Self)

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

TASKS

Systems Control is a substation Control Enclosure and panel Manufacturing company, my main responsibility was to do point to point checks of wiring diagrams to schematics so that the people wiring the panels and building came across the least amount of errors possible.

I also created digitally in Microstation the panel tags for the panels, this required analyzing the schematics and wiring diagrams to determine appropriate device labeling depending on the relay, test switch, or lockouts specific function.

During this internship I had a couple week duration where I actually "rang out" panels before they were moved to the control houses. Ringing out panels tests the schematics to the actual panel to ensure the panel will work how the engineers intend.

I also rang out from panel to panel once they were moved to the control houses to ensure cables were landed correctly to also ensure functionality would be how the engineer intended. Lastly I got to test some functionality of the relays using a Doble and a lockout that would act as a breaker.

REPRESENTATIVE PROJECTS

The only project lifecycle I particularly remember is an ITC (utility) project that I got to follow from receiving the project to when the control house left the warehouse to get delivered to the substation. During this cycle got to actually ring the panels and cables that I point to point checked on paper as well as created panel tags for. Being an internship the rest of my role in the project lifecycle process was minimal and only included parts of the process. I do recall there was an SEL relay delay for everyone that summer and my manager let me sit in on a meeting with their representatives, which I felt was atypical for an internship position.

TYLER BEAUCHAMP (17-401-91)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Ulteig Engineers Inc
North Dakota (United States)
Design Engineer
May 2017—September 2021

Verified by
Trenton Jon Stein
Trenton.Stein@Ulteig.com

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

TASKS

Design of substation physical drawings including general arrangements, elevation views, grounding, lightning protection, conduit plans, bill of material creation and ordering, AC system and DC system calculations. Design of protection and control drawings including one lines, AC schematics, DC schematics and wiring diagrams in voltage classes from 15kV to 345kV. Day to day engineering to client specific processes is about %75/%25 respectively.

Client specific processes include estimates, design guides, schedule modification/adherence and project manuals. Estimates were created that accounted for total project cost including internal/external engineering fees, construction costs, material costs, testing/commissioning costs as well as overhead percentages.

General Arrangement and elevation drawings were designed to current industry/client standards by confirming clearances and layout preferences in accordance with the needs for maintenance vehicles, and possible future expansion.

Grounding drawings and designs were developed using CDEGS modelling software to test grid layout, soil properties, and applicable fault currents. Geotechnical studies were used to import soil values and the fault currents used were based on client internal system modelling.

Lightning protection was designed using rolling sphere and fixed angle industry standard methods depending on voltage class and substation layout. Future substation expansion is also taken into account depending on lightning protection method (shield wire or static mast).

AC calculations which take into account all possible AC loads are done to size the station service transformer. DC calculations take into account all constant DC loads and worst case fault scenarios in order to size the back up substation battery and charger.

One-line, and therefore AC/DC schematics, and wiring diagrams are designed according to industry/client standards. Depending upon the project (greenfield/brownfield) this could consist of replacing existing relays or new relays also depending on the protection required.

REPRESENTATIVE PROJECTS

Rush Creek Wind Farm, Mortenson, Matheson, CO (2017)
I double checked bill of material counts to the general arrangement and elevations, in order to get familiar with a standard substation physical construction drawing set. I then performed an station AC calculation in order to size the station service transformer. In order to do this I referenced all of the applicable vendor drawings for their constant AC load and input them into our excel spreadsheet. I performed a DC battery sizing calculation taking into account the worst case fault scenario of the substation and relay loading data and inputting that into an excel spreadsheet in order to determine the appropriate battery size. I performed a grounding study using the software package CDEGS in order to simulate touch and step potentials given the worst case substation fault current. I performed a lightning protection study using an excel calculator and the necessary equipment and mast heights.

Denver City W900 & W970 Breaker Replacement, Xcel Energy, Denver City, Texas (2017-2018)
Denver City was my first real project where I created the initial project documents including; design guide (project summary word document), estimate (these estimates are for the total cost of the project including construction, engineering, etc. contracts as well as all material), and marking up the General Arrangement for CAD. Once the project was approved by the client I marked up/designed the drawing package including elevations, grounding/conduit plans, and construction details, taking into account the new breaker layout/sizing and the existing foundations, conduit location, surrounding structure locations. I then created and

ordered the physical bill of material including the breaker, four hole pads, jumper cable, grounding cable and connection items, and conduit and all fittings. I continued with this project through the as-builts stage completing client specific tasks like updating the final estimate which incorporates actual contract and material costs.

In the summer of 2018 I helped mentor a summer intern on our team where I showed him Xcel specific project timeline standards and deliverables as well as how to do AC/DC/Grounding/Lightning calculations.

XIT to Wolves, Xcel Energy, Dalhart, Texas (2018-2019)
This was the first project where I was the protection and control design engineer. I was given an already developed metering & relaying one line, and based off this I designed the AC/DC schematics and wiring diagrams for a breaker addition to a ring bus substation for a line to a nearby facility that utilized step distance relaying. I designed the panel elevations, ordering the steel, relays, test switches, lockouts, cable, terminal blocks, screws, and ring lugs. As a general rule at Ulteig the physical design teams handle most of the Xcel specific non-engineering tasks (estimates, design guides, and project manuals) while the protection and control design teams only give their input to these items.

Johnson Draw LCEC Terminal, Xcel Energy, Gaines, Texas (2018-2021)
I was also the protection and control engineer on this project which was a breaker addition to a breaker and a half scheme to an adjacent utility. I performed all of the tasks listed above.

In 2019 I mentored a new grad hire showing him things similar to the intern in 2017.

Recloser Projects, Intermountain Rural Electrical Co-op (Now CORE Electric Co-op), Various substations in Colorado (2018-2019)
I was the physical as well as the protection and control design engineer for a group of recloser replacement projects at rural substations in Colorado. This was my first project with a new client where I learned their spin on a lot of the same deliverables. I marked up and CAD'd the physical and P&C drawings which are generally the same as Xcel only differing in style preference. The main difference with this client was material ordering which was done a lot more by the client and contractor than by the consultant.

Cheyenne Ridge Wind Farm, Mortenson, Cheyenne County, CO (2019)
I reviewed and helped our new hire while he performed the AC/DC/grounding and lightning calculations for two wind farm collector substations.

PCA/Pecos/Red Bluff/Wood Draw, Xcel, New Mexico (2019-2020)
For these projects I was the main point of contact for a sub-consultant to help them with understanding/accessing client processes as well as a conduit for project deliverables.

ADDITIONAL INFORMATION

QUESTIONS

Has your original license lapsed? If yes, explain.
No

Have you ever been denied licensure by a jurisdiction? If yes, explain.
No

Have you ever been convicted of a misdemeanor? If yes, explain.
No

Have you ever been convicted of a felony? If yes, provide a brief letter of explanation and court documents.
No

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

Other Disciplines

Has a jurisdiction ever revoked, suspended, or disciplined your license? (Please note this includes a consent agreement, letter of reprimand, Etc.) If the action has been resolved a yes answer is still needed.
No

DAVID CARRONA (17-005-51)

All work experience reviewed by two licensed professionals

DISCIPLINE: ELECTRICAL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/21/2021

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
7 years, 3 months

Total Engineering Experience
7 years, 3 months

Experience under licensed engineer
7 years

Disciplinary Action
None reported

ABET EAC

FE EXAM

PE EXAM

4+

EDUCATION

Bachelors in Electrical Engineering (EAC)
University of Nevada, Las Vegas
September 2009–May 2014

EXAMS

Fundamentals of Engineering (FE)
Nevada
March 2018

Principles and Practice of Engineering (PE)
Electrical & Computer
Nevada
October 2019

LICENSES

Additional Licenses
None

DAVID CARRONA (17-005-51)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

NV Energy
Nevada (United States)
Regional Engineer II
June 2014—September 2021

Verified by
Jennifer Kelly
Jennifer.Kelly@NVEnergy.com

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

TASKS

06/2014 - 03/2015 -- Associate Buyer (0% engineering/surveying)
Creation of requisitions & purchase orders.
Creation and management of bid events & RFPs.

03/2015 - Present -- Regional Engineer I & II
Calculating utility wood pole loading capacities for existing and proposed attachments.
Creation of pole drawings for fabrication of non-wood poles by third-party vendors.
Verifying delivered poles and anchor-bolt cages meet all required dimensions, loading capacities and applicable material standards.
Study and application of NESC & NEC industry standards to company design & field installation practices.
Creation of department electrical grid design guidelines and standards.
Coordination of electrical utility Distribution system with Transmission and Substation engineering groups.
Review of installed Distribution assets and actual peak demand on the Distribution grid to monitor possible conductor overloads.
Review of customer panel schedules to determine actual peak power usage and service transformer size requirements.
Review of municipal improvement plans to determine field conflicts between existing utility assets and proposed municipal installations.

REPRESENTATIVE PROJECTS

Pole Loading Calculator Improvements
03/2015 - 10/2015
I overhauled an in-house pole loading program to meet current NESC guidelines and provide a better analysis of pole loads. I analyzed the existing program and introduced new coding subroutines to automatically perform multiple tension and wind loading calculations to improve the structural analysis while reducing the amount of user input. I designed the new program to allow for updates to loading variables as needed by changes to company & NESC standards.

Electrical Distribution Grid Overloading
04/2017 - 09/2017
I reviewed problematic sections of the electrical utility grid to determine likely areas where distribution conductors might surpass their ampacity ratings. I recommended points on the system for company line crews to place equipment to capture real-time amperage loads during the summer peak loading timeframe. I analyzed the collected peak line loads to determine required asset upgrades to prevent future equipment failures. I verified existing field conditions, developed the project scope, and prepared a construction cost estimate for the required upgrades.

Critical Crossings
06/2019 - 02/2020
I analyzed all freeway/highway pole crossings in the company's service area to determine required pole changeouts to meet new company guidelines. I gathered conductor & pole information at all freeway crossings to generate pole drawings and loads for steel pole fabrication by third-party vendors. I generated pole & conductor sag profiles based on collected survey data at each crossing to verify NESC and Nevada Department of Transportation clearances were met. I coordinated with a third-party contractor to create the construction plan and foundation designs for each freeway crossing.

ADDITIONAL INFORMATION

QUESTIONS

Has your original license lapsed? If yes, explain.
No

Have you ever been denied licensure by a jurisdiction? If yes, explain.
No

Have you ever been convicted of a misdemeanor? If yes, explain.
No

Have you ever been convicted of a felony? If yes, provide a brief letter of explanation and court documents.
No

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

Other Disciplines

Has a jurisdiction ever revoked, suspended, or disciplined your license? (Please note this includes a consent agreement, letter of reprimand, Etc.) If the action has been resolved a yes answer is still needed.
No

Environmental

DIANA KOUGIAS (14-635-25)

All work experience reviewed by two licensed professionals

DISCIPLINE: ENVIRONMENTAL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
10/04/2021

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
3 years

Total Engineering Experience
3 years

Experience under licensed engineer
3 years

Disciplinary Action
None reported

ABET EAC

FE EXAM

PE EXAM

EDUCATION

Bachelors in Civil Engineering (EAC)
University of Mississippi
August 2009–May 2014

Masters in Environmental Engineering
University of Illinois, Urbana Champaign
August 2014–August 2016

EXAMS

Fundamentals of Engineering (FE)
Mississippi
October 2013

Principles and Practice of Engineering (PE)
Environmental
Illinois PE
October 2018

LICENSES

Additional Licenses
None

WORK EXPERIENCE

US Army Corps of Engineer
Illinois (United States)
Civil Engineer
August 2016—August 2018

Verified by
Diana Kougias (Self)

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

TASKS

During my time at US Army Corps of Engineers I worked on the Gray Water Treatment and Reuse System (G-WTRS). In my position as a Civil Engineer I directed the planning and execution of fieldwork on the G-WTRS pre-prototype, organized testing plans around training schedules while meeting project and funding agency's milestones and objectives. I improved the design of the system to simplify operation while complying with army and state regulations. Furthermore, I tested and analyzed G-WTRS's product water in an effort to gain state and army approval for water reuse. I also authored the manual, operating instructions, and the failure mode analysis and troubleshooting guide for G-WTRS.

REPRESENTATIVE PROJECTS

During my time at US Army Corps of Engineers I worked exclusively on the Gray Water Treatment and Reuse System (G-WTRS).

WORK EXPERIENCE

EXP U.S. Services
Illinois (United States)
Civil Engineer
September 2018—September 2021

Verified by
Madukhar Reddy Karnati
Reddy.Karnati@exp.com

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

TASKS

During my entire time at EXP, I was working as a civil engineer within the land development team providing civil engineering services for a variety of projects all over the country. Halfway through my time at EXP, I switched to the water resources team but continued working exclusively as a civil engineer on land development projects under direct supervision of a professional engineer with many years of experience in land development work. Types of projects in which I have been involved include but are not limited to:
- site redesign of telecommunication facilities (critical T-Mobile, AT&T, and Verizon facilities)
- Moraine Valley Community College parking lot resurface
- Chicago Transit Authority existing site redesign
- USPS parking lot resurface and new facility site design
- BP parking lot resurface and expansion
- Speedway new site design.

In February of 2018, I began managing my own projects under direction and supervision of registered professional civil engineers with years of experience in land development work. In managing the projects, my responsibilities were to perform all due diligence research for the specific site, which in many cases was not in a jurisdiction that I had worked previously. It was also my responsibility to write RFPs for survey and geotechnical work. I set up all the base files and sheets, performed all engineering design, and communicated the design with architects, structural/mechanical/electrical engineers, clients, and city officials. I produced all plans and specifications as well as calculated construction costs. My work was then reviewed by a professional engineer, and I addressed any comments they may have had.

REPRESENTATIVE PROJECTS

T-Mobile Jacksonville – Jacksonville, FL – Civil Engineer – September 2018 through September 2021
This project took place in 3 phases. In phase 1, I worked as part of a civil engineering team consisting of me and one more engineer, and for phases 2 and 3, I became the lead civil engineering. For phases 2 and 3, I performed all analysis and design for this 3-acre site. In both phases, I performed the design for paving, grading, and overall site drainage. This site also required a precast concrete trench for mechanical pipes, which ran through the parking lot from the main building to the new mechanical enclosure. I was charged with selecting the trench and worked closely with the mechanical engineer to ensure that the trench met all requirements. In phase 2, I designed the network of storm pipes and structures to manage the required storm event per the city's design manual. In phase 3, I designed the water utilities and the floodwall location required by the municipality for flood control, while the wall itself was designed by a structural engineer. For all the grading and storm water utilities, I used Civil 3D software. I created all design plans and specifications for both phase 2 and 3, calculated all the land development costs associated with this project, and lead all the communication with the local municipality regarding site requirements and rezoning.

T-Mobile Norcross - Peachtree Corners, GA – Civil Engineer – February 2018 through September 2021
This project was an expansion of a telecommunication facility located on a 2.4-acre site. As the lead civil engineer for the land development portion of this project, I took the project from initial design all the way through permitting and construction administration. I performed all analysis and design for paving, grading, overall site drainage, stormwater utilities and underground detention system with a water quality component. Civil 3D and XPSTORM were used for the design and analysis of this project. I was also involved with the master plan study for this site where a building expansion is planned, and I was charged with redesigning the site layout to ensure that the future plans comply with all city requirements and that there is a plan in place for grading and stormwater management. The future buildout for this site will require an underground detention system, which I sized using XPSTORM modeling technology.

T-Mobile Mobile – Mobile, AL – Civil Engineer – September 2018 through September 2021
This project took place in 2 phases. In phase 1, I was involved with mainly production work, and during phase 2, I became the

lead engineer for the project. In phase 2, I performed all due diligence research, grading, pavement design, perimeter fence design, and stormwater management design where a precast concrete trench was designed and installed to resolve flooding issues in the existing parking lot. I prepared all construction plans as well as assembled project specifications. I took the project through permitting and provided construction administration support, which involved answering RFIs and reviewing submittals. I also worked closely with contractors to ensure that any issues or concerns were addressed early on.

T-Mobile Erie – Millcreek Township, PA – January 2021 through September 2021
For this project, a large portion of the existing facility was demolished and rebuilt. The building footprint was expanded in one direction, which took out the entire existing parking lot. This facility is also located on a property zoned for an industrial facility but is surrounded by residential properties, which meant there were many limitations and requirements that had to be met. As the lead civil engineer, I did all the due diligence research and lead the effort of requesting 7 variances. For the variance request, I gave a presentation to the zoning hearing board to explain this complex project and our requests. Ultimately, our variances were approved. Additionally, I performed all analysis and design for this project, including new site layout to meet all municipality requirements, all grading, trash enclosure location and design, pavement design, and new water and sewer connections. I was also involved with the overall design of stormwater management system for the site. I prepared all construction plans and put together specification documents

ADDITIONAL INFORMATION

QUESTIONS

Has your original license lapsed? If yes, explain.
No

Have you ever been denied licensure by a jurisdiction? If yes, explain.
No

Have you ever been convicted of a misdemeanor? If yes, explain.
No

Have you ever been convicted of a felony? If yes, provide a brief letter of explanation and court documents.
No

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

Other Disciplines

Has a jurisdiction ever revoked, suspended, or disciplined your license? (Please note this includes a consent agreement, letter of reprimand, Etc.) If the action has been resolved a yes answer is still needed.
No

Mechanical

TIMOTHY MARTIN (15-957-68)

All work experience reviewed by two licensed professionals

DISCIPLINE: MECHANICAL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/29/2021

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
5 years, 7 months

Total Engineering Experience
5 years, 7 months

Experience under licensed engineer
2 years, 5 months

Disciplinary Action
None reported

ABET EAC

FE EXAM

PE EXAM

4+

EDUCATION

Bachelors in Mechanical Engineering (EAC)
University of Nevada, Las Vegas
January 2013–December 2015

EXAMS

Fundamentals of Engineering (FE)
Nevada
July 2015

Principles and Practice of Engineering (PE)
Mechanical
Nevada
June 2020

LICENSES

Additional Licenses
None

TIMOTHY MARTIN (15-957-68)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Poly-West Inc
Nevada (United States)
Mechanical Engineer
January 2016—March 2019

Verified by
Alexander Edward Harris
aeharris25@yahoo.com

Experience Summary
Full-Time
Engineering: 3 years, 2 months
Post EAC degree: 3 years, 2 months
Experience under licensed engineer: None

TASKS

I was responsible for coordinating and evaluating various service contractors for maintaining central utility plant operation and performance along with design and drawing development of many production improvements, troubleshooting, and repairs.

REPRESENTATIVE PROJECTS

List of projects:
Jan-April 2016
I upgraded the design for folding arms, added worm drive adjusters for quick and precise adjustment of the folding arms on one of the extrusion lines. To do this, I took measurements, modeled it in solid works, and created CAD files for approval. Once approved, I ordered materials and commenced installation.
Jan-March 2016
I designed a safety cage for installation on the inlet of a resin recycling shredder to help prevent debris from being ejected by the blades. I measured the existing opening, calculated the minimum required opening for product to enter, then designed a welded metal cage to catch ejected debris before it could leave the hopper. I developed drawings for approval, but the system was not approved.
April 2016-March 2018
I upgraded Oil Flow system to extrusion line gearboxes on a total of 17 production lines. I designed the piping layout, developed drawings, calculated total developed lengths, pressure drops, and ideal pipe size for the chosen flow sensors. I created the procedure and torque specifications for the piping installation. I then did most of the installation myself with help from maintenance when available.
March 2018-April 2018
Change out of entire production line under extremely tight time constraints. I did the forensic engineering on the root cause of failure of the old machine. Which was determined to be caused by faulty manufacturing of the inserts on the flange bolts. The new machine was to be installed over a 1-week window. During this time, I precisely measured the location of the new machine as it was larger so the outlet would be in the exact same place as the old machine for downstream equipment. I marked the locations of where to place the anchors, sized the anchors, and specified the torque on the anchor bolts. I then designed the coolant piping system to adapt to the old piping system. This included pressure drop calculations, and ideal flow rates for the new equipment. One unforeseen issue was the unknown pressure drop through the oil cooler, to reduce the effect of this, the hoses were enlarged, and the piping was reduced to minimize pressure drop. Once installed, I checked the level of the extrusion barrel and die to the nearest 0.001”/ft and the center of the die with a plumb bob relative to the top of the equipment several floors above to the nearest 1/16”.
April 2018-March-2019
I investigated the rising issue of compressed air capacity of the plant. New equipment being installed was using more air than the old equipment. I fabricated an assembly to move from machine to machine to measure its total air consumption in SCFM. After logging all production lines, I determined that the capacity of the plant’s compressed air system would be exceeded if the production line upgrades continued. To resolve this issue, I proposed the addition of a new compressor which would operate at load non-stop, allowing the older compressors to operate at a reduced load and be able to be rotated in amount out of service for maintenance. I sized the new compressor based upon the projected SCFM usage of all machines getting the upgrade with an additional 20% factor of safety for unknown future upgrades/losses. During this time, existing compressor motors began to fail at an alarming rate. I performed a vibration analysis checking 5 different points on the compressors with a manufacture’s representative. The analysis came back nominal. Next, I had an oil sample drawn and analyzed. This analysis showed excessive wear on the air end of the compressors. The wear I determined was causing higher friction on the motor causing the motor to overheat from over current. Due to the increased air consumption of the plant, a diesel-powered air compressor was installed as a back-up for failures and maintenance of existing compressors. I designed a piping modification to the receiving header that would improve flow, cooling, and drying of all compressors via the addition of valves and manifolding the air compressors and dryers

together.

TIMOTHY MARTIN (15-957-68)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

HPA Consulting Engineers
Nevada (United States)
Mechanical Designer
April 2019—July 2020

Verified by
Amy S Lasseigne
alasseigne@hpace-lv.com

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

TASKS

I did mechanical design of HVAC systems and related auxiliary equipment via MEP consulting work, specifically the M&P portions. I did heating and cooling load, ventilation, pump head-loss, and expansion tank calculations to meet applicable IBC, IECC, UMC, and IMC codes and ASHRAE standards. Doing equipment selection and designing of air and water systems routing, sizing, calculations, and air terminal selection.

REPRESENTATIVE PROJECTS

April 2019-December 2019, Nellis Bldg. 10210 Remodel:
The building was a complete replacement of the HVAC system. I performed load-calcs on the envelope with full occupancy and redesigned the system from the ground up. I sized the central plant chiller and boiler and selected them along with hydronic pumps. I performed head loss calculations for the pumps including all control valves and fittings with an added factor of safety for contractor routing. I also calculated the expansion tank requirements, sized, then selected appropriate expansion tanks for both the chilled water and the heating water. From there the next challenge I had was fitting everything into the extremely limited ceiling space. I selected Hydronic fan coils with a height of 12” to allow fitting in the tight ceiling space. I carefully routed all of the ductwork and piping as crossing elements was not allowable. Each fan coil had its own mixing box for mixing return air and outside air to meet minimum ventilation requirements. I performed an ASHRAE 62.2 ventilation calculation based upon full occupancy. I sized and selected additional fan systems for outside air supply to the basement level, along with exhaust air for showers and restrooms on all three levels. I found a solution to the ductwork and unit locations to work with the building’s SIPR (Secure Internet Protocol Room) meeting all the security requirements. I also sized and selected various DX min-splits as redundant backup to several comm-rooms which operated when the central plant went offline. Lastly, I sized selected, and routed dryer exhaust and dryer exhaust booster fans from the basement laundry room to an above ground discharge.
December 2019-July 2020, Owens Cultivation Core and Shell and Tenant Improvement:
I performed HVAC load calculations, ventilation calculations, and full psychrometric analysis of all the cultivation areas. The cultivation areas needed to be maintained at exactly 65 degrees and 50% relative humidity. In order to avoid using glycol in the chilled water system, I had to design the airflow in each room to meet the heat load of the lights and remove the added moisture from the hydroponic system. I sized, selected, and placed all equipment including: Chillers, Boilers, Pumps, Expansion Tanks, Air Separators, Towers, Centrifugal Separators, Fan Coils, and Air devices. I performed a detailed clean room analysis calculation for air changes and leakage to maintain hermetically sealed cultivation and production areas. I created and designed the control diagrams, sequence of operations, and points lists for the building management system to be designed from. I designed the ductwork and piping with the architect, structural engineer, and client in mind for installation, serviceability, and maximum performance in mind. For life-safety, I sized, selected, and routed an exhaust fan with odor neutralizing filters, and a supply fan with HEPA filters to energize when the ppm of CO_2 reached an alarm threshold. I also sized and selected the exhaust systems for the production areas and extraction areas.

TIMOTHY MARTIN (15-957-68)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

HPA Consulting Engineers
Nevada (United States)
Mechanical Design Engineer
July 2020—September 2021

Verified by
Bill Bruninga
bbruninga@hpace-lv.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

I did mechanical design of HVAC systems and related auxiliary equipment via MEP consulting work, specifically the M&P portions. I did heating and cooling load, ventilation, pump head-loss, and expansion tank calculations to meet applicable IBC, IECC, UMC, and IMC codes and ASHRAE standards. Doing equipment selection and designing of air and water systems routing, sizing, calculations, and air terminal selection.

REPRESENTATIVE PROJECTS

July-Aug. 2020 Del Taco Investigation and Remodel
I analyzed a previous design from 2017 that had been built but had cooling issues. I performed an independent load calculation and compared it to the previous one done in 2017. I noticed the kitchen area was missing 60MBH of cooling and the dining area did not factor in full occupancy. In order to reduce costs. I proposed moving the 7.5-ton RTU located in the dining area to the kitchen and purchasing only 1 new 10-ton unit for the dining area. I then redistributed the air-flows. I selected the new RTU to have increased static as the duct-work was not going to be up-sized. I dropped the new airflow from the relocated RTU unit down to the problem areas of the kitchen to maximize the cooling effectiveness. This option reduced the cost of fixing the design significantly.
Sept. 2020-Jan 2021 Sunshine Mint Design
An industrial operation in the process of consolidating machinery to one location needed a thermal system design for their process cooling. Since the loads were unknown from the proprietary equipment, I designed a rig to measure the input/output temperatures and flow of the cooling water circulating each piece of machinery. I also had differential pressure sensors installed at the inlet and outlet. I then compiled all the machinery into various systems and designed a closed loop cooling system for each production line. Decoupled from this was an open loop tower system to provide the cooling as the process only needed 75 degree water. By decoupling the system, the dirty tower water was not introduced to the delicate machinery. I sized pumps, towers, expansion tanks, and plate-frame heat exchangers all with expand ability in an n+1 variable primary system with parallel pumping. I then created the control diagrams, sequence of operations, and points lists for the system to operate.
Jan-July 2021 Centennial Toyota
I designed a car dealership with a two-story showroom and 38 bay service center. The two-story service center had very little room for duct-work and the client wanted the system to be invisible so linear air devices were selected for these areas and hidden in the soffit of the ceiling. I performed detailed load and ventilation calculations for the showroom and office areas. I selected all of the RTUs and placed them. The 2nd floor had a server room requiring two RTUs for redundancy. Routing the duct-work was difficult with the limited space available. The service center required HVAC and to accomplish this, three large Energy recovery units were selected. I routed the return/exhaust down walls to 12” above finished floor per code. I selected units with full ability to maintain space temperature year round. I selected additional exhaust fans for the compressor rooms for cooling and for the restroom, locker room, and break room areas. I also selected mini splits for the electrical room that was to remain.
July-Sept. 2021 Taste of Africa
I performed HVAC and ventilation load calculations. Due to the dense occupancy and tight design constraints I designed a system with variable outside air and variable exhaust. The outside air came from a chilled water fan coil that tempered the outside air to 75 degrees on a VFD. Medium pressure duct then fed VAVs connected to each space’s fan coil. The VAVs modulated the outside air from a CO2 sensor. The fan coils controlled temperature. The exhaust fan was controlled via a differential pressure sensor between the space and the outside. Lastly, kitchen hood exhaust and make-up air had to be sized and routed to the roof through a floor above. Rooftop utility sets were selected and VFD driven for energy conservation.

ADDITIONAL INFORMATION

QUESTIONS

Has your original license lapsed? If yes, explain.
No

Have you ever been denied licensure by a jurisdiction? If yes, explain.
No

Have you ever been convicted of a misdemeanor? If yes, explain.
No

Have you ever been convicted of a felony? If yes, provide a brief letter of explanation and court documents.
No

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

Other Disciplines

Has a jurisdiction ever revoked, suspended, or disciplined your license? (Please note this includes a consent agreement, letter of reprimand, Etc.) If the action has been resolved a yes answer is still needed.
No

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Reason	Explanation
06/2004	12/2012	Unemployed	In college and worked in non-engineering fields

JARED PETERSON (14-420-03)

All work experience reviewed by two licensed professionals

DISCIPLINE: MECHANICAL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
10/06/2021

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
7 years, 10 months

Total Engineering Experience
7 years, 10 months

Experience under licensed engineer
2 years, 7 months

Disciplinary Action
None reported

ABET EAC

FE EXAM

PE EXAM

4+

EDUCATION

Bachelors in Mechanical Engineering (EAC)
University of Nevada, Las Vegas
August 2008–December 2013

EXAMS

Fundamentals of Engineering (FE)
Nevada
April 2013

Principles and Practice of Engineering (PE)
Mechanical
Nevada
August 2021

LICENSES

Additional Licenses
None

JARED PETERSON (14-420-03)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Bombard Renewable Energy
Nevada (United States)
Design Engineer
December 2013—March 2019

Verified by
William Alan Brooks
Alan.Brooks@bombardelec.com

Experience Summary
Full-Time
Engineering: 5 years, 3 months
Post EAC degree: 5 years, 3 months
Experience under licensed engineer: None

TASKS

o Responsible for the development and design of commercial and utility scale solar photovoltaic projects with consideration of applicable engineering codes and standards, requirements from the Authority Having Jurisdiction (AHJ), and customer defined requirements.
o Major responsibilities include:
o Development of solar photovoltaic designs with consideration available space, energy production, system power capacity, allowable structural loading of rooftops, electrical design calculations, and equipment integration.
o Analysis of data and results for the development of practical solutions to basic engineering problems.
o Development of equipment layouts, electrical design drawings, and standard details to submit to AHJ's for construction permitting of projects.
o Complete cost estimations for commercial and utility scale solar photovoltaic projects.
o Develop scopes of work, bill of materials, specifications, bid drawings, and project schedules.
o Coordinate with outside consultants and vendors for project design and equipment selection.
o Provide engineering support for execution of projects including design consultation, equipment selection, building code compliance, and project management.

REPRESENTATIVE PROJECTS

Searchlight 21.5 MW Solar PV Plant (2013 – 2014, Searchlight, NV): Bombard teamed with American Capital Energy and Signal Energy, LLC to engineer, procure, and construct a 21.5 MW solar PV plant located in Searchlight, Nevada. I calculated estimated construction costs for the project. This required my review of the geotechnical analysis for excavation and backfill, electric design drawings for source circuit conductors, combined DC conductors, inverter architecture, medium voltage AC conductors, and mechanical design drawings for the single axis tracking system.

Republic Services Recycling Center 500 KW Solar PV Plant (2014, 360 W Cheyenne Ave, North Las Vegas, NV 89030): The Republic Services 500 KW Solar PV Project is a roof mounted solar PV installation at a North Las Vegas recycling complex utilizing 110,000 square foot building. I calculated estimated construction costs for the project. I designed the solar PV system electrically and mechanically per NEC and IBC requirements. Electrical calculations I calculated included energy and power production, conductor ampacities, grounding, and overcurrent protection. Structural calculations included roof loading of the structure for solar PV modules and their respective mechanical mounting system.

Valley Electric Association (VEA) 15 MW Solar Power Plant (2015 – 2018, Pahrump, NV): The VEA 15 MW Solar Project is the largest community solar project in the U.S. utilizing 80 acres of land with fixed tilt structures for the mounting of the solar PV modules. I calculated estimated construction costs for the project. I designed the solar PV system electrically and mechanically per NEC and IBC requirements. Electrical calculations I calculated included energy and power production, conductor ampacities, grounding, and overcurrent protection. I recommended electrical and mechanical equipment to internal and external stakeholders for the project. Mechanical equipment included a fixed tilt mechanical mounting system that utilized I-beam piers driven into the ground to a depth appropriate per the respective installation location's geotechnical findings and in-situ testing (i.e. "pull out" loading capacity of a pier).

City of Las Vegas 200 KW Solar Covered Parking Garage (2017, 495 S Main St, Las Vegas, NV 89101): I calculated estimated construction costs for the project. I designed the solar PV system electrically and mechanically per NEC and IBC requirements. Electrical calculations I calculated included energy and power production, conductor ampacities, grounding, and overcurrent protection.
I recommended electrical and mechanical equipment to internal and external stakeholders for the project. The solar support structure required a licensed S.E. for design which I worked closely with to complete loading calculations and make

recommendations to internal stakeholders and contractors for a cost effective solution.

Wynn Paradise Park (2018 – 2019, 3131 S Las Vegas Blvd, Las Vegas, NV 89109): Solar projects completed with Wynn Resorts include 103,000 square feet of on-site rooftop solar panels. I calculated estimated construction costs for the project. I designed the solar PV system electrically and mechanically per NEC and IBC requirements. Electrical calculations I calculated included energy and power production, conductor ampacities, grounding, and overcurrent protection.
I recommended electrical and mechanical equipment to internal and external stakeholders for the project. The mechanical mounting system for the solar PV modules utilized ballast weight and mechanical attachments to satisfy wind loading and allowable loading of the existing rooftop. I calculated roof loading and noted areas of the installation that required mechanical attachments per racking manufacturer requirements and the allowable live load capacity of the rooftop.

JARED PETERSON (14-420-03)

All work experience reviewed by two licensed professionals

WORK EXPERIENCE

Southern Nevada Water Authority
Nevada (United States)
Mechanical Engineer
March 2019—October 2021

Verified by
Sean A. Vallesteros
Sean.Vallesteros@lvvwd.com

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

TASKS

Performs engineering research and planning for elements of capital construction, maintenance and/or asset management projects involving mechanical and hydraulic systems and equipment including reservoirs, pump stations, motors, surge tanks, HVAC systems, valves, treatment facilities, and related components and hardware. Conducts analyses to determine the demand requirements for parts and components of existing machinery, systems, and structures and develop specifications for the purchase, construction and/or installation of replacement machinery, systems, and structures; renders engineering opinions regarding equipment and facilities; develops system, facilities, and equipment plans to meet mechanical and hydraulic system requirements.

Prepares design drawings and plans, construction drawings, specifications and other materials for assigned projects; conducts field inspections and investigations to verify as-built conditions as they may impact design requirements; performs complex engineering computations and prepares estimates of time, material, and equipment costs; prepares Requests for Proposal for design and/or construction projects, including participated in the bid evaluations, selection of successful bidders and preparation of agenda reports and other materials for approval.

Researches, develops and recommends standards, specifications, and procedures for the construction, operation and maintenance of mechanical systems, equipment, and structures such as surge tanks and pumping systems; develops and maintains design and installation standards for pumps and pumping equipment.

Reviews design documents, plans, and specifications prepared by other engineers and consultants for compliance with organizational design standards, design guidance documents, building and safety code, and other requirements and construction standards.

Provides engineering support during project construction and may serve as project manager for assigned projects; monitors work in progress, including field investigations, to ensure compliance with approved plans, specifications and standards; provides engineering direction for the resolution of conflicts between design specifications and field conditions; ensures solutions are consistent with organizational policies and all other applicable requirements.

REPRESENTATIVE PROJECTS

Hydraulic Analysis for Control Valve Operation at Parkway ROFC Site (2019, Las Vegas, NV) - I analyzed record information that required the use of two valves in series to control flow without cavitation. I calculated the head loss required through the rate of flow station to satisfy desired minimum and maximum flow rates utilizing SCADA for actual station operating conditions (flow rates, source and destination reservoir levels). I ultimately calculated the cavitation index and recommended a single control valve to be deemed allowable based on historical operating conditions to reduce maintenance costs associated with a second control valve.

Sloan & Lamb Pump Stations Forebay Low-Level Setpoint Analysis (2019, Las Vegas, NV) - Operators desired an adjusted lower limit of the forebay water level be reviewed to allow for easier operation of the pump stations. I calculated the Net Positive Suction Head Available (NPSHA) and the Net Positive Suction Head Required (NPSHR) utilizing SCADA for historical operating conditions, record pump curves from the pump manufacture, and Hydraulic Institute (HI) recommendations. I recommended the low level setpoints to remain unchanged to prevent cavitation of the pumps.

SNWS System Wide Surge Tank Controls Upgrades (2019 - Present) - This project supports ongoing upgrades to the surge tank control systems located at various locations within the Southern Nevada Water System. I analyze site operating conditions and record surge analysis reports (if available). I calculate an operating range, an add air set point, a release air set point, a low level setpoint, a high level setpoint, and appropriate deadbands to be programmed into the respective surge tank control strategy. Once

my analysis and calculations are complete, I recommend the point values for implementation in the field.

SNWS System Wide Actuator and Valve Upgrades (2019 - 2021) - This project supports ongoing replacements of valves and actuators in the Southern Nevada Water System. I analyze the existing valve's mechanical specifications such as pressure class, size, and velocity class along with an analysis of existing operating conditions such as flow rates and pressure differential for consideration for the recommendation of an appropriate replacement valve. I specify the appropriate force or torque rating for replacement actuators based on calculating the required force or torque of the valve per American Water Works Association application factors and valve manufacturer recommendations.

Replacement of Pumping Plant 1A Pumps 8-12 (2019-Present) - This project involves the procurement, installation, startup, commissioning, and testing of five (5) horizontal split case centrifugal pumps (600 HP, 445 TDH, 3500 GPM). I specified appropriate replacement pumps based on an analysis of existing pump specifications, historical operating conditions, SNWA standards, and industry standards (AWWA, HI, NSF, ANSI, API). Once purchased through a public bidding process, I oversaw the installation of the pumps with reference to API 686: Recommended Practice for Machinery Installation and Installation Design. Once installed, I oversaw field performance testing and for the respective pump, and recorded flow, head, and power data. I calculated brake horsepower and pump efficiency based on field performance testing values to provide formal acceptance of the respective pump.

River Mountains Water Treatment Facility (RMWTF) Service Water Pump (2020 - Present) - I recommended this project in response to realizing the need for a backup potable water source at the River Mountains Water Treatment Facility during future outages of its source lateral. I calculated head losses through piping and valves to determine the appropriate total head rating of the backup pumps. I analyzed a record fire inspection report to determine the appropriate flow demand for the pumps. I specified appropriate pumps based on hydraulic requirements, SNWA standards, and industry standards (AWWA, HI, NSF, ANSI, API). The procurement process for these pumps are in progress, Installation of the pumps is anticipated to occur in 2022.

ADDITIONAL INFORMATION

QUESTIONS

Has your original license lapsed? If yes, explain.
No

Have you ever been denied licensure by a jurisdiction? If yes, explain.
No

Have you ever been convicted of a misdemeanor? If yes, explain.
No

Have you ever been convicted of a felony? If yes, provide a brief letter of explanation and court documents.
No

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

Other Disciplines

Has a jurisdiction ever revoked, suspended, or disciplined your license? (Please note this includes a consent agreement, letter of reprimand, Etc.) If the action has been resolved a yes answer is still needed.
No

RONALD ROYCE (18-175-19)

All work experience reviewed by two licensed professionals

DISCIPLINE: MECHANICAL

GENERAL

Applying To
Nevada

Application Type
Initial - PE

Application Date
09/10/2021

Citizenship
United States

SUMMARY

Engineering Experience after EAC degree
7 years, 10 months

Total Engineering Experience
7 years, 10 months

Experience under licensed engineer
7 years, 10 months

Disciplinary Action
None reported

ABET EAC

PE EXAM

FE EXAM

4+

EDUCATION

Bachelors in Mechanical Engineering (EAC)
Boise State University
August 2003–May 2008

Masters in Mechanical Engineering
University of Idaho
May 2008–August 2010

EXAMS

Principles and Practice of Engineering (PE)
Mechanical
Nevada
October 2019

Fundamentals of Engineering (FE)
Idaho
April 2008

LICENSES

Additional Licenses
None

WORK EXPERIENCE

Barrick Nevada - Cortez District
Nevada (United States)
Dewatering Mine Engineer II
April 2011—September 2021

Verified by
Shaun Paul DeBray
sdebray@nevadagoldmines.com

Experience Summary
Full-Time
Engineering: 7 years, 10 months (75%)
Post EAC degree: 7 years, 10 months (75%)
Experience under licensed engineer: 7 years, 10 months

TASKS

- I have tested and analyzed the performance of pump stations. This includes changing the frequency of pumps, analyzing the performance of the pump, flow rate, and head, and made a design package and list of specification recommendations for both improving the performance of the pump or necessary steps needed to change out the pump. (75% engineering / 25% non-engineering)
- I calculated head loss, total dynamic head, hydraulic horsepower, brake horsepower in a well field to determine the operation and performance of the pipe distribution system at a mine site. I had to give a list of instructions to operators for changing the pipe distribution system performance then gave expectations for outcomes. (90% engineering / 10% non-engineering)
- I have calculated material stresses on the welds, part configurations for numerous pipe fittings, and various parts. I created drawings for these parts and handed them to the supervisor for construction. I also had to review the completed part/assembly before/during installation to ensure it was handled correctly. (75% engineering / 25% engineering)
- I provide feasible options to discuss with management on capital projects. I give ratings of uncertainty to the options as well as risk assessments on each option. I then provide the costs for each option and discuss each option within our current business framework. (50% engineering / 50% non-engineering)
- I have calculated the differing stresses: tensile, torsional, and compression strength for hanging pipe strings in wells and made recommendations for fittings in applications. I have made drawings that include some of the calculations on specific sections to call out specifications need for manufacturing. (25% engineering / 75% non-engineering)

REPRESENTATIVE PROJECTS

- Cortez Hills Dewatering
- Apr 2011- Jun 2018
- I was the project engineer for a 23-well, 5-aquifer dewatering project for the Cortez Hills gold mine in Central Nevada. I have designed well pump columns given the well design information from Hydrogeologists. I recommended pump types, sizes, and motor horsepower's for equipping wells. I tested the pumping equipment with operators to ensure its operating within parameters. I reviewed pumping reports for the duration of the project which included flow rates, horsepower, and direction of flows for supervision and management.

- Cortez Dewatering Maintenance Program
- Jan 2015 – Dec 2018
- I have organized the Dewatering's asset structures according goal, purpose, and function to capture a work order and preventative maintenance system's cost and history. This data gets used by accounting software to help determine the following years budget.

- Cortez Reliability Centered Maintenance Program
- Jan 2012 – Jan 2015
- I have performed Reliability Centered Maintenance meetings and work which went through a systematic functional work review to capture work that either was being done and wasn't being recorded, or was not being done but left vulnerabilities to the department leaving components/equipment in a failed state and not be apparent.

- Cortez Dewatering Data Acquisition Program
- Jul 2018 – Jun 2020
- I have designed a project for acquiring data from flow and pressure instrumentation in the field back to a Gateway to upload data into a company data historian for operational review. I have built operational data review human machine interface screens with

functional information on how pumps and pipes are tied together along with their incoming data to assist in troubleshooting when there is a problem in the dewatering well field. I performed calculations on live equipment to ensure their operation is within design parameters.

ADDITIONAL INFORMATION

QUESTIONS

Has your original license lapsed? If yes, explain.
No

Have you ever been denied licensure by a jurisdiction? If yes, explain.
No

Have you ever been convicted of a misdemeanor? If yes, explain.
No

Have you ever been convicted of a felony? If yes, provide a brief letter of explanation and court documents.
No

Select the disciplines in which you are currently practicing. If more than 1% of time is devoted to a discipline, it must be included.
Disciplines
Civil, Mechanical, Metallurgical/Materials, Mining/Mineral

Other Disciplines
Hydrology

Has a jurisdiction ever revoked, suspended, or disciplined your license? (Please note this includes a consent agreement, letter of reprimand, Etc.) If the action has been resolved a yes answer is still needed.
No

ADDITIONAL INFORMATION

TIME GAPS

Start Date	End Date	Reason	Explanation
09/2010	03/2011	Unemployed	I was looking for work in the middle the recession.

6. Public Comment