

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



**Interim Board Meeting  
June 8, 2023  
Virtual**

# 1. Meeting Call to Order

## 2. Pledge of Allegiance

# 3. Public Comment

# 4. NRS/NAC 625 Waiver Requests

**WAIVER REQUESTS**  
**Thursday, June 8, 2023**

| <b>APPLICANTS REQUESTING WAIVER OF NRS 625.183(4)(B)</b>  |                   |                   |               |
|---|-------------------|-------------------|---------------|
| <b>NAME</b>   | <b>DISCIPLINE</b> | <b>TO:</b>        | <b>GRANT?</b> |
| 1. Jens Christiansen  | ME                | Karen Purcell, PE |               |
| <p><i>NRS 625.183, item 4, part b, "Two of the 4 years of active experience must have been completed by working under the direct supervision of a professional engineer who is licensed in the discipline in which the applicant is applying for licensure...."</i></p> |                   |                   |               |

| <b>APPLICANTS REQUESTING WAIVER OF NRS 625.183(1)(A)</b>                                       |                   |                   |               |
|--|-------------------|-------------------|---------------|
| <b>NAME</b>  | <b>DISCIPLINE</b> | <b>TO:</b>        | <b>GRANT?</b> |
| 1. Todd Diaz de Valdes   | ME                | Karen Purcell, PE |               |
| <p><i>NRS 625.183, item 1, part a, "Waiver of FE with 15 or more years of experience."</i></p> |                   |                   |               |

# 5. Non-Appearance Applications for Initial Licensure

Civil

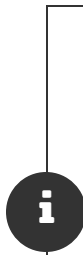


# ASHTON HUNTER (17-794-58)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

## GENERAL



Applying To  
**Nevada**

Application Type  
**Initial - PE**

Application Date  
**05/24/2023**

Citizenship  
**United States**

## SUMMARY



Engineering Experience  
after EAC degree  
**4 years**

Total Engineering  
Experience  
**4 years**

Experience under licensed  
engineer  
**4 years**

Disciplinary Action  
**None reported**



## EDUCATION



Bachelors in Civil Engineering (EAC)  
**University of Nevada, Reno**  
**August 2015–May 2019**

## EXAMS



Fundamentals of Engineering (FE)  
**Nevada**  
**December 2018**

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



## LICENSES



Additional Licenses  
**None**

# ASHTON HUNTER (17-794-58)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

Nevada Department of Transportation  
Nevada (United States)  
Public Service Intern  
May 2019—August 2019

Verified by  
**Michael F. Premo**  
Mpremo@dot.nv.gov

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



### TASKS

This position was as a Public Service Intern within the Structures division of the Nevada Department of Transportation. Specifically it was with the inspections and inventory section completing structural inspections of steel and concrete bridge structures throughout the state of Nevada.

In this position I worked with a team of engineers completing inspections of steel and concrete structures for both initial and routine inspections. I assisted in analyzing load ratings of conventionally reinforced concrete structures. I assisted in assessing permits for oversized vehicles. I digitized vertical clearances of bridge structures.



### REPRESENTATIVE PROJECTS

#### Structural Inspection

I inspected the B-764 E/W and G-765 E/W bridge structures on I-80 near Verdi Nevada in 2019 with a team of structural inspectors. These were four steel girder bridge structures with multiple spans.

With this team of engineers I analyzed and inspected the steel girders for cracking and checked for missing hardware. I inspected the steel girders for signs of rusting. I inspected and analyzed the bridge piers for spalling. I inspected the bridge deck for signs of wear and damage and checked for anything not functioning properly such as clogged deck drains. I inspected adjacent structural and roadway elements such as guardrails for damage that could need repair.

# ASHTON HUNTER (17-794-58)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

Nevada Department of Transportation  
Nevada (United States)  
Staff 2, Associate Engineer - Roadway  
Designer  
August 2019—May 2023

Verified by  
**Brian Michael Deal**  
Bdeal@dot.nv.gov

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

## TASKS

This position is as a roadway designer within the Nevada Department of Transportation. I started this position in August of 2019 as a Staff I Associate Engineer, Roadway Designer and became a Staff II Associate Engineer, Roadway Designer in August of 2021 upon having the needed experience. This is the position I currently hold. This position deals with transportation engineering, specifically roadway design.

My duties in this role include calculating and checking plan quantities, developing estimates, developing estimate summaries and structure lists, producing CADD drawings, establishing and calculating roadway geometrics, and applying roadway design standards set by American Association of State Highway and Transportation Officials, Federal Highway Administration, Manual on Uniform Traffic Control Devices, and Nevada Department of Transportation policy.

My duties also include reviewing consultant designed projects throughout the design process.

In this role I have been responsible for the design of 6 roadway related projects from a small flashing beacon and curb ramp improvement up to a capacity project widening an interstate highway for HOV and general purpose lanes.

## REPRESENTATIVE PROJECTS

### Transportation Design

I was the main Roadway designer of the 2020 6 mile mill and overlay of I-80 through Elko, Nevada. This project included portions of Idaho street and 5th street and the 3 Elko Interchanges with some freeway ramp and ADA improvements.

This project was designed from 2019 to November 2020.

I calculated roadway quantities such as pavement and barriers. I designed sidewalks and curb ramps to replace failing infrastructure. I created roadway striping details and all other roadway plan drawings. I redesigned a portion of the Eastbound Idaho Street ramp to better accommodate semi trucks getting onto I-80. I created and maintained the project estimate.

### Transportation Design

I was the main Roadway designer of the SR 305 Rapid Rectangular Flashing Beacon ADA project in Battle Mountain, Nevada. This project included sidewalk, curb ramps, driveways, signs, a new rectangular rapid flashing beacon system, and lighting.

This project was designed from June 2020 to March 2021.

I designed the sidewalk, curb ramps, and driveways to replace existing non-compliant infrastructure. I created roadway plan sheets, striping details, and all other roadway drawings. I calculated quantities for all sidewalks, curb ramps, driveways, pavement, striping and all other roadway items of work. I created and maintained the project estimate.

### Transportation Design

I was the main Roadway designer for the 2022 8 mile mill and overlay of I-15 through the City of North Las Vegas, Nevada from the Interchange with I-515 to the Craig Road Interchange. This project included the mill and overlay along with ADA improvements

of Lake Mead Boulevard from Losee Road to Yale Street.

The design of this project took place from April 2021 to July 2022.

I was responsible for the calculation of mill and overlay quantities and design of sidewalks, curb ramps, and driveways on Lake Mead Boulevard. I designed barrier rail protection for the I-15 bridge pier in the median of Lake Mead Boulevard. I was responsible for the creation of striping layouts and quantities. I created and maintained the project estimate.

#### Transportation Design

I was the main Roadway designer on the I-15 Phase 2 Widening project through Las Vegas, Nevada adding general purpose lanes from Sloan Interchange to Blue Diamond Interchange and HOV lanes from St. Rose Interchange to Blue Diamond Interchange. This project also added a new auxiliary lane from Starr Interchange to St. Rose Interchange and included a mill and overlay of I-15 from Blue Diamond to the Warm Springs grade separation.

The design of this project took place from March 2020 to April 2023.


I designed a 3D model of the roadway widening to be used for calculating materials as well as for the design of roadside ditches. I designed and calculated all roadway related items such as pavement quantities and barriers. I created preliminary estimates and I created, designed, and quantified the project's striping which included adjustments to the alignments of 12 freeway ramps and the realignment of I-15 through the Cactus Interchange. I created and maintained the project estimate.

# TOAN NGUYEN (15-390-80)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

## GENERAL


 Applying To  
**Nevada**

Application Type  
**Initial - PE**

Application Date  
**05/30/2023**

Citizenship  
**Vietnam**



## SUMMARY



 Engineering Experience  
after EAC degree  
**4 years, 7 months**

Total Engineering  
Experience  
**4 years, 7 months**

Experience under licensed  
engineer  
**4 years, 7 months**

Disciplinary Action  
**None reported**

## EDUCATION


 Non-degree  
**Grossmont College**  
**August 2009–May 2012**

Bachelors in Civil Engineering (EAC)  
**San Diego State University**  
**August 2012–May 2015**

Masters in Civil Engineering  
**California State University, Fullerton**  
**January 2019–May 2021**




## EXAMS

 Fundamentals of Engineering (FE)  
**California**  
**June 2019**

Principles and Practice of Engineering (PE)  
**Civil**  
**California**  
**April 2021**

## LICENSES

 Additional Licenses  
**None**

# TOAN NGUYEN (15-390-80)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

Taney Engineering  
Nevada (United States)  
Hydrologist I  
September 2015—July 2018

Verified by  
**Robert Cunningham**  
RC@Taneycorp.com

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

### TASKS

In Taney Engineering, I worked on residential, industrial, and commercial land development projects. I performed hydrologic analysis preparing technical drainage studies for the projects. I performed hydraulics analysis for drainage systems including gutters flow, inlet efficiency, storm drain systems, open channels, culverts, and detention basins. I also visited the project site for field reviews and other assessments for use in design. I designed and reviewed civil engineering drawings related to drainage engineering components. Moreover, I had written reports and calculation packages to document the work performed.

### REPRESENTATIVE PROJECTS

#### Solar Field Development

Playa Solar Project (2015). Performed hydraulic analysis for the project. The project locates northwest of 93 Highway and I-15 Freeway, Clark County, Nevada.

I performed hydraulics analysis to prepare for a technical drainage study. I applied hydraulic software including Flowmaster and Hec-Ras to analyze and design open channels and berms surrounding the solar field. I applied AutoCAD Civil 3D to create the protection channels model. I also created drainage maps for pre- and post-development.

#### Industrial Development

Ann & Sloan Building 2 Project (2016-2017). Prepared technical drainage study for industrial development. The project locates just southwest of Ann Rd. and Sloan Ln., Las Vegas, Nevada.

I performed hydrologic and hydraulic analyses to prepare a technical drainage study. I applied hydraulic software to analysis of gutters flow, storm drain systems, and detention basins. I performed field visits for use in design. I created drainage maps for pre-development and post-development. I wrote technical drainage reports and calculation packages to document work performed.

#### Subdivision Residential Development

Mountain Falls Project (2016-2017), Prepared technical drainage study for subdivision Residential Development. This project locates in Nye County, Nevada.

I performed hydrologic and hydraulic analyses to prepare a technical drainage study. I applied hydraulic software to analysis of gutters flow, storm drain systems, open channels, and detention basins. I created drainage maps for pre-development and post-development. I wrote technical drainage reports and calculation packages to document work performed.

# TOAN NGUYEN (15-390-80)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

SLR International Corporation  
California (United States)  
Project Engineer  
August 2021 – May 2023

Verified by  
**Nestor Jesus Godinez**  
ngodinez@slrconsulting.com

Experience Summary  
**Full-Time**  
**Engineering: 1 year, 9 months**  
**Post EAC degree: 1 year, 9 months**  
**Experience under licensed engineer:**  
**1 year, 9 months**

### TASKS

In SLR, I have worked on industrial and mining projects. I have performed hydrologic and hydraulic analyses for storm drainage. I designed open channels, culverts, outlet structures, and retention and detention basins. I have prepared construction plans, figures, and exhibits. I applied Civil 3D software to undertake designs and computations. I also calculated quantities of material estimate and earthwork balance. Moreover, I have written memos and calculation packages to document work performed.

### REPRESENTATIVE PROJECTS

#### Mining Development

Magino Gold Project (2021-2023). Planning and designing facilities for the mining site area. This mining project locates approximately 10km southeast of Dubreuilville in Ontario, Canada.

I prepared and updated construction plans for Tailing Management Facility (TMF). I conducted quantities and material estimates for multiple Stages of the TMF. I re-aligned sub-surface drain pipe corridors based on the field conditions. I performed hydrologic and hydraulic analysis and designed open channels for the 100-year storm design. I also prepare the open channels' plans and profiles for construction. I applied hydraulic software to design culverts crossing, outlet structures, and sizing riprap. I also planned overburdened stockpiles, calculated the stockpiles volumes, and sized sump basins to store the runoff of the stockpiles. I created a grading model for dams and cross-section details with liner systems to reduce seepage. I calculated the stage-storage volume for the TMF and ponds within the project. I created an as-built drawing for the first stage of the Tailing Management Facility.

#### Landfill Development Design

Aerojet Waste Consolidation Unit (2022-2023). Prepared a grading plan for this landfill to request a grading permit. This project locates in Sacramento County, California.

I generated the grading plan for this landfill area and applied the design standard of Sacramento County Public Work to request a grading permit. I designed a drainage system and channels surrounding the Waste Consolidation Unit to convey the stormwater to discharge to a retention pond. I performed a hydraulic analysis of culverts and outlet structures for this project. Moreover, I calculated the earthwork balance and adjusted the grading design to reduce earthwork moving. I drafted details for liner systems and anchor trenches. I also prepared an erosion and sediment control plan.

#### Mining Development

Sleeper Mine (2022-2023). Designed evaporated pond and provided material estimate. The project locates approximately 30 miles northwest of Winnemucca, Nevada.

I prepared a construction plan to convert an overflow pond become an evaporated pond. I performed the quantities and material estimates for closer ponds and pregnant ponds.

#### Pond Design

Copper Cities Pond Design (2022-2023). Design ponds. This project locates approximately 3 miles north of Miami, Arizona.

I prepared a grading plan for two ponds in this mining project. The drawing included plans, profiles, and details for the ponds proposed. I calculated the cut and fill volume for the ponds.

# TOAN NGUYEN (15-390-80)

All work experience reviewed by two licensed professionals

## ADDITIONAL INFORMATION



### TIME GAPS

| Start Date | End Date | Reason     | Explanation   |
|------------|----------|------------|---|
| 05/2006    | 07/2009  | Unemployed | From 05/2006 to 08/2007, I lived in Vietnam. Then, I went to the U.S.A to study abroad. From 08/2007 to 7/2009, I studied English as Second Language with no credits. |




# TRISTAN O'LEARY (19-792-05)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

## GENERAL


 Applying To **Nevada**

Application Type **Initial - PE**

Application Date **05/17/2023**

Citizenship **United States**



## SUMMARY



 Engineering Experience after EAC degree **4 years**

Total Engineering Experience **4 years**

Experience under licensed engineer **4 years**

Disciplinary Action **None reported**


 

## EDUCATION

 Bachelors in Civil Engineering (EAC)  
**University of Nevada, Reno**  
**August 2014–May 2019**

## EXAMS

 Fundamentals of Engineering (FE)  
**Nevada**  
**April 2019**

Principles and Practice of Engineering (PE)  
**Civil**  
**Nevada**  
**October 2019**



## LICENSES

 Additional Licenses **None**

# TRISTAN O'LEARY (19-792-05)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

NV Energy  
Nevada (United States)  
Engineer II - Design Transmission/Civil  
May 2019—May 2023

Verified by  
**Devon Joseph Kendall**  
dkendallunr@gmail.com

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

### TASKS

- I designed new steel pole transmission lines, re-conductors, re-terminations and relocations.
- I created comprehensive construction packages to aid field crews in the construction of those lines including plan and profile drawings, material orders, and structure drawings.
- I created estimates for transmission line projects for capital improvement projects, renewable generator inter-connections, and high voltage distribution lines.
- I completed design of grading plans for substation re-builds and expansions.
- I reviewed grading plans of substation for renewable generator inter-connections.
- I calculated steel and wood pole strengths for addition of overhead distribution lines to existing transmission lines.
- I communicated with project teams and clients through recurring meetings to discuss design updates and project scheduling.
- I worked with our internal standards department to review new substation standards including both materials and design practices.
- I provided engineering support to field crews during the construction phase of projects.

### REPRESENTATIVE PROJECTS

#### Cortez Pit Dump Expansion Re-locations

Location: Lander County, NV

Dates: 2/2020 - 12/2021

Scope/Role: A mine required a re-location of existing 60kV and 120kV transmission lines, both of which provide them service, in order to expand one of their open pit dumps. I communicated with mine representatives to identify routes, discuss outage constraints, and develop a project schedule. I created cost estimates for the construction labor and materials. I designed the lines in PLS-CADD following NESC and company standards. I created a construction package, which included plan and profiles, structure framing drawings, and materials required for the project. I coordinated with field crews in order to develop a plan for constructing the line with minimal line outage durations in order to mitigate down time for mine equipment. I provided field crews with engineering support throughout the construction process.

#### #111 Line Clearance Improvements

Location: Douglas County, NV

Dates: 06/2020 - 11/2022

Scope/Role: An existing 20.1 mile 120kV line was identified to need analysis in order to check if it was meeting NESC standards. I created a model of the existing line in PLS-CADD based off of LiDAR data and identified sections that needed a larger line to ground clearance in order to operate with a larger capacity. I designed modifications to those sections of line in PLS-CADD which included new steel structures and re-tensioning of existing conductor, following NESC and company standards. I created a construction package, which included plan and profiles, structure framing drawings, and materials required for the project. I provided engineering support to field crews throughout the construction phase of the project.

#### Wild Horse Line Folds/Second Source Feed

Location: Storey County, NV

Dates: 2/2021 - 1/2023

Scope/Role: A new 120kV switching station was constructed in order to provide redundancy in the NV Energy system at the Tri-Center industrial park. I was responsible for the fold of an existing transmission line, the re-termination of a 120kV high-voltage distribution line, and two new 120kV high-voltage distribution lines to provide redundant service and replace an existing temporary line. I designed each of the lines in PLS-CADD following NESC and company standards. I designed pier foundations for self-supporting angle structures. I created construction packages, which included plan and profiles, structure framing drawings, and materials required for the project. I coordinated with teams from the customers to create a plan for construction that minimized the


outage duration to their facilities. I provided engineering support to field crews throughout the construction phase of the project.

# STEVIE PARKS (19-382-89)


All work experience reviewed by two licensed professionals





DISCIPLINE: CIVIL

## GENERAL

 Applying To **Nevada**  
Application Type **Initial - PE**  
Application Date **05/22/2023**  
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

 Bachelors in Civil Engineering (EAC)  
**University of Nevada, Las Vegas**  
August 2014–December 2018

## EXAMS

 Fundamentals of Engineering (FE)  
**Nevada**  
August 2018  
Principles and Practice of Engineering (PE)  
**Civil**  
**Nevada**  
April 2019



## LICENSES

 Additional Licenses **None**

# STEVIE PARKS (19-382-89)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

Las Vegas Valley Water District  
Nevada (United States)  
Construction Engineer  
January 2019—May 2023

Verified by  
**Christopher M Luquette**  
christopher.luquette@lvvwd.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

In August 2016 to December 2018, I worked as a part-time intern at Las Vegas Valley Water District in the construction engineering team and assisted the construction engineers and inspectors as needed with construction management duties. From January 2019 until June 2021, I worked as a full-time Assistant Civil Engineer with Las Vegas Valley Water District and worked mostly on the design of water utility projects under direct supervision. I designed small diameter (6- to 12-inch) water pipelines and calculated appropriate sizing for water appurtenances, such as air vacuum-air release valves and thrust blocks. I performed the calculations for steel pipe wrappers required for wet taps and other steel specials. I reviewed designs compiled by consultants for large diameter steel pipe projects for compliance to standards and for accuracy. All design projects required I generate or review for acceptance drawings, specifications, calculation packages, cost estimates, schedules, permitting, right of way acquisition, and perform coordination with intercompany departments and local jurisdictions. All projects that went to construction required I perform engineering services during construction, including bid support and submittal review. In June 2021 I started as a Construction Engineer with Las Vegas Valley Water District and, under general supervision, began managing construction contracts for water utility projects, including a reservoir, pump station, several pipelines, as well as equipment installation, wastewater treatment facility decommissioning, and the construction of a small building. The duties for this role required that I perform general construction contract administration and management such as estimation and evaluation of change orders for scope, validity, and value, proposing and evaluating solutions for issues that arise in the field and subsequent RFI responses, evaluation of contractor bids, and analysis of construction schedules.

## REPRESENTATIVE PROJECTS

Miscellaneous Pipeline Replacements, Phase III  
January 2019 – December 2020

I was the Assistant Civil Engineer for a multi-site pipeline replacement project in Las Vegas consisting of approximately 1,580 feet of 12-inch water pipe and 1,330 feet of 8-inch water pipe. The existing asbestos cement pipes were abandoned in place and replaced with either ductile iron pipe or PVC pipe. I determined the new water alignment, points of connection, and created all related contract documents such as specifications, drawings, schedules, and cost estimates under direct supervision. I performed the calculations for an 8-inch x 24-inch steel wrapper plate required to perform a wet tap on an existing 24-inch steel water pipe and the adjacent thrust block. I also created sequencing of scheduled activities to ensure all customers remained in service during the course of construction. In the construction phase I performed engineering services, such as bid support, requests for information, and submittal reviews.

Springs Preserve Events Site  
January 2019 - Present

I served as both the Assistant Civil Engineer and Construction Engineer for a 644 square foot building with adjacent site work including grading, utilities, flatwork, and landscaping located at the Las Vegas Springs Preserve. During design I reviewed contract documents for compliance and recommended acceptance. During the construction phase of the project I performed bid evaluation, reviewed shop drawings, estimated and budgeted construction costs for the review and processing of change orders, reviewed operations for conformance with specifications, created progress reports, performed progress payment quantification and certification, and resolved issues that arose during the course of construction, such as field adjustments to grading in order to comply with ADA.

Miscellaneous Air Vacuum Air Release Valve Relocation Project  
June 2019 – December 2019

This project consisted of the design to relocate twenty-eight air vacuum air release valves (AVARs) in multiple locations around Las Vegas. As Assistant Civil Engineer I calculated the required size of the AVARs and determined the most constructible proposed locations based on as-builts, other utilities, and most feasible easement locations.

#### Springs Preserve Wayfinding

August 2019 – July 2021

The project consisted of modifying all existing electrified wayfinding signage at the Las Vegas Springs Preserve and adding proposed monolithic signage. As the Assistant Civil Engineer, I calculated footing sizes for proposed signs. I evaluated contractor proposals to perform the work. In addition, I coordinated with the other engineering disciplines to create the final contract document package.

#### Living Machine Decommissioning

April 2022 – August 2022

I performed Construction Engineer duties for the decommissioning of a 50gpm wastewater treatment facility located at the Las Vegas Springs Preserve. I performed the bid evaluation, reviewed test results, reviewed submittals and RFIs, estimated and budgeted construction costs for the review and processing of change orders, created progress reports, performed progress payment quantification and certification, analyzed construction schedule for efficient sequencing, and resolved field issues that arose during the course of construction. The project came in under budget and finished early.

#### 4125 Zone Infrastructure

June 2021 - Present


I performed Construction Engineer duties for the construction of a 12.9 MGD indoor pumping station, a 5 MG semi-underground concrete reservoir, and approximately 13,410 feet of large-diameter steel water pipe for transmission between the pumping station and reservoir in Las Vegas. I evaluated public bids, reviewed test results, estimated and budgeted construction costs for the review and processing of change orders, created progress reports, performed progress payment quantification and certification, and resolved field issues that arose during the course of construction. I performed a feasibility analysis on the testing and commissioning of the facilities and determined a non-standard approach was required, which I then created the sequencing for.

# DON UDOFIA (16-178-49)

All work experience reviewed by two licensed professionals

DISCIPLINE: CIVIL

## GENERAL


 Applying To **Nevada**

Application Type **Initial - PE**

Application Date **05/31/2023**

Citizenship **United States**



## SUMMARY



 Engineering Experience after EAC degree **6 years, 4 months**

Total Engineering Experience **6 years, 4 months**


Experience under licensed engineer **6 years, 4 months**

Disciplinary Action **None reported**


 

## EDUCATION

 Bachelors in Civil Engineering (EAC)  
**University of Arkansas, Fayetteville**  
August 2012–May 2016

## EXAMS

 Fundamentals of Engineering (FE)  
**Arkansas**  
August 2016

Principles and Practice of Engineering (PE)  
**Civil**  
**Nevada**  
May 2023



## LICENSES

 Additional Licenses **None**

# DON UDOFIA (16-178-49)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

United States Navy  
California (United States)  
Project Engineer  
January 2017 – May 2023

Verified by  
**Shannon Lovonne Wright**  
Shannonwrite@gmail.com

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

### TASKS

I reviewed engineering plans and designs for a pre-engineered building and erection of steel walls. I reviewed specifications and ensured the bill of material and work in place were accurate. I tested soils and concrete to ensure no hazardous material was present and to ensure concrete meet contract and plans specification requirements. I reviewed equipment and maintenance plans for 250 pieces of Civil Engineering Support Equipment to include backhoes, excavators, loaders, trailers, tanks, fuel and water trucks, and vehicles. I reviewed plans and specifications for building requirements for future facilities across 2 Naval installations. I analyzed and reviewed plans and specifications for 2 major construction contracts for installation of storm drains and HVAC systems. I reviewed specifications for construction contract support for Naval bases in Asia. I review and recommended working permits for construction projects across 100 facilities.

### REPRESENTATIVE PROJECTS

Projects include:

Name: Erect pre-engineered building (PEB)

Scope: \$2.1M 2000 square foot pre-engineered building; demolition of existing lean-to shady structure, excavation for foundation, erection of prefabricated steel engineering building, installation of mechanical, electrical, and plumbing fixtures

Location: Yokosuka, Kanagawa Prefecture, Japan

Date of Involvement: NOV 2017 - NOV 2018

Engineering Experience: I verified the bill of material for the project, managed and forecasted the work in place and maintained the budget. I recommended equipment operations (what equipment would be best suited for the project)

Name: Construct Steel Walls

Scope: \$560K 1600 linear feet installation of prefabricated steel walls

Location: Yokosuka, Kanagawa Prefecture, Japan

Date of Involvement: NOV 2017 - NOV 2018

Engineering Experience: I verified the bill of material for the project, managed and forecasted the work in place and maintained the project budget.

Name: Onload and Offload of Civil Engineer Support Equipment (CESE)

Scope: Track the movement of 250 pieces of CESE from a maritime cargo ship to maintenance station

Location: Port Hueneme, CA, USA

Date of Involvement: JAN 2019 - APR 2020

Engineering Experience: I calculated space allocation for 250 pieces of CESE. I reviewed load plans and burn rates for fuel.

Name: Repair and Replace HVAC System

Scope: \$1.5M Demolition and removal of existing duct for industrial building, fabricate and install duct supports, install duct.

Location: Norfolk Naval Shipyard, Portsmouth, VA, USA

Date of Involvement: JUN 2019 - APR 2021

Engineering Experience: I negotiated project timeline and contractor cost for labor, equipment and material. I reviewed project plans and ensured contractor was abiding by construction contract requirements.

Name: Install New Storm Drain

Scope: \$1.2M Installation of 12 inch PVC drain system, excavation of existing, broken pipe drain system, tie new drain system into city drain system.

Location: Norfolk Naval Shipyard, Portsmouth, VA, USA

Date of Involvement: JUL 2019 - APR 2021



Engineering Experience: I reviewed drawings and plans in order to determine suitability of piping system. I coordinated plans and drawings with the designer of record and contractor to ensure the correct product was being installed. I reviewed survey analysis of piping elevation

Name: Facilities Design Plan and Implementation

Scope: Determine facility requirements for Naval Units

Location: Naval Bases in Bahrain and Guam

Date of Involvement: MAY 2021 - FEB 2022

Engineering Experience: I reviewed proposed plans and drawings for future facility requirements. I analyzed space allocation requirements a 100-personnel building on 2 Naval installations

Name: Operations and Training Officer

Scope: Management of engineering, contracting and transportation efforts

Location: San Diego, CA, USA

Date of Involvement: MAR 2022 - MAY 2023

Engineering Experience: I analyzed general and construction engineering requirements for a 407-personnel Navy unit performing facilities sustainment and operations. I reviewed construction contract requirements while ensuring all actions toward the contract were ethical and legal.

Name: Assistant Public Works Officer

Scope: Program Manager for facility maintenance and operations at Naval Base Point Mugu

Location: Point Mugu, CA, USA

Date of Involvement: MAY 2023 - Present

Engineering Experience: I analyzed facility plans, designs and requirements for tenants and customers on Naval Base Ventura County Point Mugu. I review and liaise with public partners on space allocation, leasing, and modification efforts. I track work permits for construction projects.

# DON UDOFIA (16-178-49)

All work experience reviewed by two licensed professionals

## ADDITIONAL INFORMATION



### TIME GAPS

| Start Date | End Date | Reason     | Explanation  |
|------------|----------|------------|--|
| 06/2016    | 12/2016  | Unemployed | During this time, I was the process of becoming a Naval Officer. I did not have any engineering oversight or management. |


# Electrical

# DYLAN SPRIGGS (19-404-43)

All work experience reviewed by two licensed professionals

DISCIPLINE: ELECTRICAL

## GENERAL


 Applying To **Nevada**

Application Type **Initial - PE**

Application Date **05/17/2023**

Citizenship **United States**



## SUMMARY



 Engineering Experience after EAC degree **4 years**

Total Engineering Experience **8 years**


Experience under licensed engineer **3 years**

Disciplinary Action **None reported**


 

## EDUCATION

 Associates in Mathematics  
**College of the Desert**  
May 2015–August 2017

Bachelors in Electrical Engineering (EAC)  
**Arizona State University**  
January 2017–May 2019

## EXAMS

 Fundamentals of Engineering (FE)  
**California**  
April 2019

Principles and Practice of Engineering (PE)  
**Electrical & Computer**  
**Tennessee PE**  
May 2023

## LICENSES

 Additional Licenses **None**

# DYLAN SPRIGGS (19-404-43)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

US Navy  
California (United States)  
Senior Nuclear Electronics Technician  
November 2006—September 2011

Verified by  
**Dylan Spriggs (Self)**

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



### TASKS

Operate, maintain and repair all control systems pertaining to the nuclear power plant on Submarines.



### REPRESENTATIVE PROJECTS

Replace and test Control rod drive mechanism.  
Oversaw reactor testing and QA

# DYLAN SPRIGGS (19-404-43)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

Greenleaf Power  
California (United States)  
IC&E  
April 2015—November 2017

Verified by  
**Mitchell Martin**  
mmartin@greenleaf-power.com

Experience Summary  
**Full-Time**  
**Engineering: 2 years, 7 months**  
**Experience under licensed engineer:**  
**None**



### TASKS

- Programming of DCS and PLCs.
- Repair of all instrumentation, control systems and electrical areas of the plants.
- Maintained electrical and instrumentation equipment
- Designed and developed control schemes for PLCs as well as SCADA interface screen.
- Designed and built a new Air Emissions system for required monitoring.



### REPRESENTATIVE PROJECTS

- Reviewed and updated plant schematics to reflect current setups and best practices.
- Studied P&IDs to begin implementing control systems upgrade.
- Performed calculations to change electrical components to run more efficiently and reliably while reducing wear.
- Maintained electrical and instrumentation equipment
- Designed and developed control schemes for PLCs as well as SCADA interface screen.
- Worked with various vendors to design and install a new air emissions monitoring system. This included determining and calculating pressure ratings, temperature requirements, gas types/concentrations as well as environmental concerns and controls.

# DYLAN SPRIGGS (19-404-43)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

*Ernie Ball Inc*  
*California (United States)*  
*Quality Assurance Manager*  
**November 2017 – April 2019**

Verified by  
**James Christopher Harrington**  
charrington@ernieball.com

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



### TASKS

Created, documented and maintains all SOP for the Plant. Determined product specifications and tolerances as well as developed the testing methods and frequency required in order to minimize defects.  
Grown the department by 400% since starting ensuring that constant coverage is available during production to minimize waste and downtime.  
Implemented numerous Quality improvements that have reduced scrap, waste and re-work.  
Complete redesign of the plants data gathering and logging system making it more user friendly and reducing downtime.  
Implemented new specifications resulting in a consistent product leaving the floor and reducing customer complaints and returns.  
R&D on several new product lines and production methods.



### REPRESENTATIVE PROJECTS

Developed and Designed testing and test gear for material testing. 11/17 to 11/18  
Performed strain calculations to extrapolate out material strength and toughness.

Performed calculations to develop a repeatable corrosion testing platform. 05/17 – 11/18  
Calculations including the correct level of salinity, time, temperatures, and pressures for various metals and alloys.

Performed analysis on existing equipment to redesign manufacturing equipment to meet final product standards more consistently. 11/17 – 11/18

Developed programming for a camera system for a high speed packaging line for automated rejected based on a variety of factors. 05/18-11/18  
Worked with the engineering team providing electrical engineering support in the development of automated manufacturing equipment. This consisted of electrical calculations vendor and component sizing and sourcing, as well as validation testing. 01/18-11/18

# DYLAN SPRIGGS (19-404-43)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

Schneider Electric  
Tennessee (United States)  
Power Systems Engineer  
May 2019—November 2020

Verified by  
**Michael Davis Divinnie**  
michael\_divinnie@bellsouth.net

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



### TASKS

- Designs medium voltage switchgear in accordance with specifications for industrial use using AutoCAD.
- Develop and determine protection circuitry, relay equipment and interlocks using AutoCAD and proprietary software.
- Determine all required parts and create the Bill of Materials for each design project.
- Programs and develop protective relay schemes for automatic transfer sequences.
- Designs energy storage systems for sites that require reliable backup power.
- Designs networking and communication schemes and protocols.
- Programs, modifies, and wrote programs for PLC transfer and protection systems



### REPRESENTATIVE PROJECTS

Designed Medium Voltage MetalClad Switchgear for the Master time clock system and was responsible for the determining the physical layout, calculating wiring and bus sizing, coordinating protection settings and zones, and sequence of operations. Responsible for relay selection, sizing, wiring determination. Was responsible to oversee the quality control and factory acceptance testing for the system.

Designed Medium Voltage MetalClad Switchgear for Veterans Affairs Hospital and was responsible for the determining the physical layout, calculating wiring and bus sizing, coordinating protection settings and zones, and sequence of operations. Responsible for relay selection, sizing, wiring determination. Including calculating environmental factors to present multiple designs including indoor and outdoor solutions. Was responsible to oversee the quality control and factory acceptance testing for the system.



# DYLAN SPRIGGS (19-404-43)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

Blue Planet Energy  
Hawaii (United States)  
Senior Solutions Engineer  
November 2020 – November 2021

Verified by  
**Romina Garcia**  
romina@blueplanetenergy.com

Experience Summary  
**Full-Time**  
**Engineering: 1 year**  
**Post EAC degree: 1 year**  
**Experience under licensed engineer:**  
**None**

### TASKS

Developed all technical manuals for Installation, Commissioning, Maintenance, and Operation for product.  
Post sales engineering, system design, and integration for energy storage system microgrids.  
Develops system communications, protective relays circuitry, and controls for microgrid projects.  
Subject matter expert and lead on the high voltage commercial and industrial product line.  
Qualifies new vendors and partner companies for system integration partners.  
Developed training programs for installation, operation, and maintenance of microgrid systems.

### REPRESENTATIVE PROJECTS

Some of these are under NDA so I cannot share locations or clients. Due to the similar nature many will have the same wording.  
Microgrid #1 11/2020 – 03/2021

Designed a fully off grid microgrid including BESS, PV, wind, and emergency backup generator.  
Performed sizing calculations for BESS system to provide required power output. Performed cable, bus, transformer, and voltage drop calculations for the system to ensure it met all applicable NEC and power requirements. Commissioned the microgrid to ensure proper operations. Also specified controller and controls requirement and functionality. System was over 1MW in size.  
Microgrid #2 02/2021 – 07/2021

Designed a fully off grid microgrid including BESS, PV, and paralleling backup generators.  
Performed sizing calculations for BESS system to provide required power output. Performed cable, bus, transformer, and voltage drop calculations for the system to ensure it met all applicable NEC and power requirements. Commissioned the microgrid to ensure proper operations. Also specified controller and controls requirement and functionality. System was approx. 500kw with designs to expand.

Microgrid #3 National Guard readiness center. 03/2021 – 06/2021

Designed a grid tied microgrid capable of islanding in order to provide resiliency for troop movements and a community emergency shelter. including BESS, PV, and emergency backup generator.  
Performed sizing calculations for BESS system to provide required power output. Performed cable, bus, transformer, and voltage drop calculations for the system to ensure it met all applicable NEC and power requirements. Commissioned the microgrid to ensure proper operations. Also specified controller and controls requirement and functionality. System was over 500kw in total.

Microgrid #4 Shungnak, AK 02/2021 – 11/2021

Designed a fully off grid microgrid including BESS, PV, wind, and paralleling generators for backup.  
Performed sizing calculations for BESS system to provide required power output. Performed cable, bus, transformer, and voltage drop calculations for the system to ensure it met all applicable NEC and power requirements. Commissioned the microgrid to ensure proper operations. Also specified controller and controls requirement and functionality as well as commissioned these.  
This was a remote village in Alaska that had no utility connection to the outside world and required generation on site.

# DYLAN SPRIGGS (19-404-43)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

Stem  
California (United States)  
Senior Solutions Engineer  
November 2021 – August 2022

Verified by  
**Aravind Sri**  
Aravind.Sri@stem.com

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



### TASKS

Design and Development of large scale Microgrid and backup power solutions for C&I/Utilities.  
Designed new hardware platforms for Microgrid/Backup Power optimization.  
Lead the hardware and software teams for the development of a proprietary Power Plant Controller.  
Lead the integration of the engineering teams after major acquisition of another company resulting in reduced development and manufacturing costs.



### REPRESENTATIVE PROJECTS

Acted as OEM and owners engineer for customer sites and integration. 11/2021 – 08/2022  
Performed calculations for BESS sizing, Transformer sizing, cable sizing, and short circuit analysis. Integrated and designed systems to be able to operate, interact, and optimize battery storage, PV, natural gas generators, utility power and various other DERs. Performed initial economic calculations to verify the ROI on projects and ensure tax incentives would be received. This was on various projects from 11/2021 to 08/2022 ranging from school districts to commercial and industrial sites. Many are under NDA and cannot be disclosed further.

New product development/Upgrade 01/2022-08/2022  
Performed analysis of existing products and components in order to design and develop new panels.  
Performed calculations, sizing, layout, cost analysis and all other areas to design a fully new and integrated hardware platform for software hosting.

# DYLAN SPRIGGS (19-404-43)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

*Black And Veatch*  
*Kansas (United States)*  
*Lead Electrical Engineer*  
**September 2022 – June 2023**

Verified by  
**Michael Barlow**  
barlowmp@bv.com

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

### TASKS

Leading the federal microgrid initiative including building of a new department within the company. Lead and oversees teams of four to fifteen across multiple concurrent projects ensuring designs meet or exceed all required specifications. Performs design, reviews, writing of standards and specifications for microgrid development and construction to maintain resiliency at federal sites including key military bases. Designs systems integrating a mixture of renewable assets as well as traditional generation sources to ensure critical infrastructure is operable for emergency federal operations.

### REPRESENTATIVE PROJECTS

All Federal government projects and under classified status, providing what details I can but will be very similar wording. Microgrid #1 09/2022 – ongoing (04/2023)

Assisted in electrical design and calculations for federal microgrid to improve resiliency for troop readiness. Performed battery analysis for the site, interconnections, utility requirements, transformer, and load analysis to ensure correct sizing and power generation requirements. Wrote product and vendors specifications to procurement to meet the design package requirements.

Microgrid #2 09/2022-ongoing (05/2023)

Assisted in electrical design and calculations for federal microgrid to improve resiliency for troop readiness. Performed battery analysis for the site, interconnections, utility requirements, transformer, and load analysis to ensure correct sizing and power generation requirements. Wrote product and vendors specifications to procurement to meet the design package requirements.

Microgrid #3 10/2022 – ongoing (12/2023)

Lead engineer for microgrid development and design. Performed high level system design, interconnection, and specification. Performed calculations for generator, transformer, loading, modelling, bus bar, short circuit, and voltage drops. Designed the overall microgrid system while leading a team of engineers and verifying and reviewing their work. Coordinates and oversees 9 other disciplines for their reviews and design inputs including, environmental, mechanical, civil, structural, and financials. Manages and budgets manhours necessary to complete the project. Determined and writes hardware, software, and control scheme specifications.

Microgrid #4 11/2022 – ongoing(01/2024)

Lead engineer for microgrid development and design. Performed high level system design, interconnection, and specification. Performed calculations for generator, transformer, loading, modelling, bus bar, short circuit, and voltage drops. Designed the overall microgrid system while leading a team of engineers and verifying and reviewing their work. Coordinates and oversees 9 other disciplines for their reviews and design inputs including, environmental, mechanical, civil, structural, and financials. Manages and budgets manhours necessary to complete the project. Determined and writes hardware, software, and control scheme specifications. Project includes BESS< PV, and natural gas generation.

# DYLAN SPRIGGS (19-404-43)

All work experience reviewed by two licensed professionals

## ADDITIONAL INFORMATION



### TIME GAPS

| Start Date | End Date | Reason     | Explanation   |
|------------|----------|------------|---|
| 10/2011    | 03/2015  | Unemployed | I had a variety of jobs at this time, however they were either too short in time to really count or not related to the field, |


# Environmental

# BRYCE BANNER (18-890-65)


All work experience reviewed by two licensed professionals





DISCIPLINE: ENVIRONMENTAL

## GENERAL


 Applying To **Nevada**  
Application Type **Initial - PE**  
Application Date **12/02/2021**  
Citizenship **United States**

## SUMMARY


 Engineering Experience after EAC degree **4 years, 2 months**  
Total Engineering Experience **6 years, 2 months**  
Experience under licensed engineer **6 years, 2 months**  
Disciplinary Action **None reported**

## EDUCATION


 Bachelors in Environmental Engineering (EAC)  
**San Diego State University**  
August 2013–May 2018

## EXAMS

 Fundamentals of Engineering (FE)  
**California**  
April 2018  
Principles and Practice of Engineering (PE)  
**Environmental Nevada**  
May 2020



## LICENSES

 Additional Licenses **None**

# BRYCE BANNER (18-890-65)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

Christina Wheeler Engineering  
California (United States)  
Lab Technician  
May 2014—March 2019

Verified by  
**Michael Blaine Wheeler**  
mwheeler@christianwheeler.com

Experience Summary  
**Part-Time**  
**Engineering: 2 years, 5 months**  
**(50%)**  
**Post EAC degree: 5 months (50%)**  
**Experience under licensed engineer:**  
**2 years, 5 months**

### TASKS

I performed various lab tests on soil samples collected in the fields. I monitored/tested soil compaction/density in the field for various projects. I assisted staff engineers/geologist with various tasks related to their projects.

### REPRESENTATIVE PROJECTS

2014-2019 I worked with the company geotechnical engineering staff conducting site observations during the construction phase of various projects to verify that our geotechnical recommendations were being followed for soil removals, slope inclinations, soil compaction, foundation excavations and other project specific issues.

2014-2019 I worked with the company geotechnical engineering and geology staff conducting preliminary geotechnical site investigations during the design phase of various projects. I observed subsurface investigation using drilling, CPT and other methods. I collected samples and assisted in the performance of determining the soil physical properties including density, shear strength, moisture and more.

2014-2019 I assisted in the preparation of preliminary geotechnical investigation reports preparing site cross sections using site topographic maps amongst other report attachments on various projects during my employment.

2014-2019 I assisted with preliminary site assessments by reviewing historical aerial photos, conducting property records and conducting site surveys to help establish past site development histories and evaluate sites for any potential sources of contamination on projects throughout my employment.

2014-2019 I performed site percolation testing and three ring infiltrometer testing and conducted the related analysis to evaluate site drainage properties related to the design of leach fields and other site infiltration systems on various projects during my employment.

# BRYCE BANNER (18-890-65)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

NAVFAC SW  
California (United States)  
Facilities Engineer  
April 2019—January 2023

Verified by  
**Theresa Luana Morley**  
theresa.l.morley.civ@us.navy.mil

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

### TASKS

Working on/overseeing environmental contracts, creating environmental reports, performing environmental site assessments, oversight of hazardous waste/treatment facilities, hazardous waste facility oversight/inspections.

### REPRESENTATIVE PROJECTS

2020- Current, I worked with staff engineers to prepare, evaluate, and manage environmental contracts concerning storm water monitoring for Marine Corps Base Camp Pendleton and Marine Corps Base Barstow. I reviewed monthly documents submitted by contractors performing site investigations and documenting any violations. I reviewed storm water pollution prevention plans, comprehensive compliance reports, level 2 exceedance response action technical reports for storm water contaminants, trash assessment reports, and sewer lateral condition assessment reports.

2020-2021, I performed site assessments at Marine Corps Base Camp Pendleton to look for any signs of habitat for endangered species or sources of environmental contamination, reviewed historical aerial photos and historical contamination areas near the desired location to compile information for environmental condition reports prior to parcels of land being released for further development.

2019-2020, I assisted with document review and site inspections in relation to the decommissioning of the San Onofre nuclear power plant.

1/15/2020-Current, I took over project management for a PFAS wastewater treatment system design and operation at MCAS Miramar for the treatment of spent Aqueous Fire Fighting Foam in storage tanks adjacent to the aircraft hangers. I reviewed documents submitted by the contractor in regards to the data they collected from the treatment system. including treated water contamination concentrations and the effectiveness of the chosen treatment media. I worked with MCAS Miramar and contractor Personnel to review their contract and making alterations removing the triple rinsing aspect until a PFAS free fire fighting foam replacement is implemented to prevent going over budget and remaining on track for completion.

4/28/2019-Current, I have performed monthly inspections of Naval Base Point Loma (NBPL), Naval Air Station North Island (NASNI), Naval Amphibious Base Coronado (NAB), and Naval Base San Diego (NBSD). I inspect their hazardous waste storage facilities to ensure compliance with all the regulations governing the facilities from RCRA, EPA, or State and Local Laws. I assist the contracting personnel with any issues or questions they might have in regards to properly tracking the stored/treated waste, new waste streams, facility maintenance, and any new or emerging regulations. I perform walkthroughs of the Industrial Waste and Oily Waste Treatment Plant at NASNI, and NBSD as well as the minor storage/treatment areas at NBPL and NAB looking for any deficiencies or possible problems that an agency inspector would flag as being noncompliant. I inspect the condition of the various pump stations at NASNI/NBSD and the pier hook ups, that the naval ships use to connect to the system, to ensure proper use and maintenance are being conducted.

5/18/2020-8/15/2020, I assisted staff engineers in reviewing historical projects to prepare a scope of work and government estimates for tank replacements and tank repairs at NBSD industrial waste water and oily waste treatment plant to ensure compliance with the regulating agencies to maintain the permit for the treatment system.

4/24/2021-Current, I compiled information and reviewed past projects to construct a statement of work and an internal government estimate for a contract to evaluate potential PFAS impacted bases in the southwest region of the United States. I reviewed current and potential regulations as well as existing treatment technologies and emergent technologies for their potential implications on the scope of work.



4/24/2021-Current, I reviewed NASNI Industrial Waste Water and Oily Waste treatment plant to design a scope of work and Internal government estimate for the implementation of the closure plan for two out of service Nitrite Tanks to comply with RCRA regulations.

# DANIEL DUTRA (18-890-69)

All work experience reviewed by two licensed professionals

DISCIPLINE: ENVIRONMENTAL

## GENERAL



Applying To  
**Nevada**

Application Type  
**Initial - PE**

Application Date  
**05/17/2023**

Citizenship  
**United States**

## SUMMARY



Engineering Experience  
after EAC degree  
**4 years, 4 months**

Total Engineering  
Experience  
**4 years, 4 months**

Experience under licensed  
engineer  
**2 years, 4 months**

Disciplinary Action  
**None reported**



## EDUCATION



Bachelors in Environmental Engineering (EAC)  
**San Diego State University**  
**August 2013–December 2017**

## EXAMS



Fundamentals of Engineering (FE)  
**California**  
**July 2018**

Principles and Practice of Engineering (PE)  
**Environmental**  
**Nevada**  
**May 2020**



## LICENSES



Additional Licenses  
**None**

# DANIEL DUTRA (18-890-69)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

Naval Facilities Engineering Command  
Southwest  
California (United States)  
Remedial Project Manager  
(Environmental Engineer)  
December 2018—April 2023

Verified by  
**Bryce Russell Banner**  
brycebanner@gmail.com

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

## TASKS

I am the remedial project manager for several installations affiliated with the Marine Corps and Navy. Some tasks and duties for which I am responsible are as follows: I create and oversee compliance and restoration based environmental contracts/scopes of work, create and review regulatory required environmental reports, oversee and provide technical support on hazardous restoration sites, and conduct on-site inspections and assessments as well as track and submit deliverables for a variety of different CERCLA related programs. These programs mainly include storm water monitoring, drinking water monitoring, pollution prevention, air quality monitoring and control, installation restoration and munitions response.

For the installations where I maintain responsibility, I work with staff engineers to prepare, evaluate, and manage environmental contracts concerning storm water monitoring, drinking water treatment, munitions response, and hazardous substance investigation and remediation. I regularly review documentation submitted by contractors regarding site inspections, data evaluation and site plans (work plans, safety plans, field activities etc.). I document any breaches of contract requirements and submit appropriate data and documents to regulatory agencies within the allotted timeframe.

## REPRESENTATIVE PROJECTS

Project management responsible locations include: Marine Corps Base (MCB) Camp Pendleton, MCB Barstow, MCB 29 Palms, Marine Core Air Station Miramar, Marine Corps Mountain Warfare Training Center Bridgeport, and Naval Stations Lemoore and Fallon..

06/10/2021- Current, I work with program managers, project managers, staff engineers and military installation personnel to prepare, facilitate, and evaluate environmental contracts concerning wastewater monitoring, storm water monitoring, and drinking water programs at Marine Corps Base, Barstow and Marine Corps Base, Camp Pendleton. Furthermore, I am the remedial project manager for several compliance and restoration sites at Marine Corps Air Station, Miramar, Naval Air Station, Fallon and Naval Air Station, Lemoore. I personally review deliverables that interest Navy stakeholders that are submitted by contractors to ensure that all work being performed is in compliance with the CERCLA process, and that there are no violations or deficiencies with regards to the requirements dictated by the contract awarded. Some deliverable examples include: storm water pollution prevention plans, work plans, vapor intrusion risk assessments, human health risk assessments, sampling and analysis plan and comprehensive compliance reports.

11/01/2020-Current, assumed the position of remedial project manager for the implementation of mobile per- and polyfluoroalkyl substances (PFAS) water treatment system at Marine Corps Logistics Base, Barstow. This treatment was implemented to remediate the groundwater beneath several areas throughout the installation, where Aqueous Fire Fighting Foam was used. I reviewed the proposed plan, risk assessment, work plan, and all data report documents submitted by the contractor that involved the mobile treatment system. I track contaminant concentrations for the duration remediation activities and ensured that the contractor was performing so that the work schedule was not delayed. I worked with MCLB Barstow personnel and the contractor to conduct a contract modification to remove an unnecessary remediation process to remain within the initial contract budget.

02/01/2020-Current, I performed preliminary assessments at Marine Corps Mountain Warfare Training Center, Bridgeport to determine the existence of PFAS. I had reviewed historical data and testimony from on-site personnel to determine if remediation action was required for the installation. The facilitation of this preliminary assessment progressed to the site inspection and remedial investigation phases to ensure the safety of human health and the environment. I regularly communicate with the regulatory agency to ensure that our remediation methodology and goals align with their position and EPA requirements.

2/01/2020-Current, I research past projects and installation histories to compose both scopes of work and internal government estimations for contracts that evaluate possible PFAS affected bases in the Southwest region of the United States. I routinely

review current regulations dictated by the EPA and Navy to ensure that PFAS related scopes adhere to the most applicable limits of remediation. Additionally, I research and attend environmental conferences that relate to treatment technologies involving PFAS and other hazardous chemicals that may have implications on remediation work.

12/10/2018-05/14/2020, I have performed regular (monthly) inspections of land use controls and long term monitoring at former Marine Corps Air Station, Tustin and former Marine Corps Air Station, El Toro. I inspected former hazardous waste storage facilities and provided remediation oversight to ensure compliance with all the regulations governing the facilities from CERCLA, RCRA, EPA, or State and Local Laws. I provided assistance to contracting personnel with any inquiries they had with regards to facility history and prior site work so that they may have a more thorough understanding of the facility's prior contamination. I tracked and communicated any new or emerging regulations to the contractors so that we could remain in compliance. I routinely perform walkthroughs of the former Industrial Waste and Underground Storage Tank locations, in addition to other minor storage/treatment areas, at Tustin and El Toro to ensure contractor field work involving sampling and monitoring did not have any deficiencies that a regulatory inspector might mark as noncompliance.

12/10/2018-5/14/2020, I assisted Navy staff engineers with writing several scopes of work and internal government estimations (project cost estimations) that were in relation to radiological remediation at Hunters Point Naval Shipyard. I reviewed board orders and site history relating to radiological contamination on the installation and worked with several contractors to develop the most realistic and cost effective method of remediation that complied with all board orders and regulations.

# DANIEL DUTRA (18-890-69)

All work experience reviewed by two licensed professionals

## ADDITIONAL INFORMATION



### TIME GAPS

| Start Date | End Date | Reason     | Explanation  |
|------------|----------|------------|--|
| 01/2018    | 11/2018  | Unemployed | I had spent the first few months following my undergraduate graduation applying for jobs. I was unemployed (relative to engineering experience) for approximately 10 months. |

# Land Surveyor

# GREGORY SAUNDERS (12-992-32)

All work experience reviewed by two licensed professionals

DISCIPLINE: LAND SURVEYING

## GENERAL



Applying To  
**Nevada**

Application Type  
**Initial - PS**

Application Date  
**05/16/2023**

Citizenship  
**United States**

## SUMMARY



Surveying Experience after  
EAC degree  
**6 years, 5 months**

Total Surveying  
Experience  
**6 years, 5 months**

Experience under licensed  
surveyor  
**6 years, 5 months**

Disciplinary Action  
**None reported**



## EDUCATION



Bachelors in Geological Engineering (EAC)  
**University of Nevada, Reno**  
**August 2007–December 2011**

Masters in Geohazards  
**University of Oslo**  
**August 2012–December 2014**

Non-degree  
**Great Basin College**  
**January 2021–May 2022**



## EXAMS



Fundamentals of Engineering (FE)  
**Nevada**  
**April 2011**

Fundamentals of Surveying (FS)  
**Nevada**  
**October 2022**

Principles and Practice of Surveying (PS)  
**Nevada**  
**January 2023**

## LICENSES



Additional Licenses  
**None**

# GREGORY SAUNDERS (12-992-32)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

Nevada Department of Transportation  
Nevada (United States)  
Photogrammetrist  
October 2016—October 2019

Verified by  
**John Francis Burgess**  
jburgess@dot.nv.gov

Experience Summary  
**Full-Time**  
**Surveying: 3 years**  
**Post EAC degree: 3 years**  
**Experience under licensed surveyor:  
3 years**

### TASKS

This was my first professional job after my graduate degree. I went in with a strong knowledge base of structure from motion processing of aerial data but limited survey knowledge. Through mentorship and hands on training this position helped me develop a strong foundation of knowledge in survey and geodesy.

I helped developed a UAV surveying program based off the existing aerial photogrammetry workflow at NDOT. Captured and processed images from manned aerial and UAV systems. Created workflows for processing and analyzing UAV data. Presented for webinars and conferences and preformed outreach. Processed point clouds from SFM and LiDAR. Conducted terrestrial surveys for control and supplemental data to combine with aerial surveys.

### REPRESENTATIVE PROJECTS

2018-2019: The monitoring of detention basins with unmanned aircraft was completed to fulfill a consent decree to monitor sediment deposition in detention basins. This required the accurate production and compilation of data from multiple surveys to create accurate volume changes of small amounts of sediment. Data was captured by a sub-contractor. There was an issue with too many images so I wrote a python script to decimate the number of images in a way that would preserve data quality and speed up processing. The project was a success, and the data fulfilled the consent decree. My roll in the project was to establish a field workflow, process data and create deliverables to be analyzed by the hydro group at NDOT.

2019: The highway mapping topo was done for roadway improvements between Schurz and Fallon. My roll was to establish control, complete in field checks, capture imagery, and process data. During the establishment of control we came across Native American petroglyphs and worked with the state archeologist to ensure proper methods were taken to respect and preserve the site. This was a good learning experience in how to deal with cultural artifacts. The capture of imagery was completed with manned aircraft. I served as the large format camera operator. My team worked to post process trajectory data of the images to establish exterior orientation data. I completed photogrammetric processing to create ortho rectified imagery and surface data. I then worked to create CAD files for the engineers to work off. These files consisted of a decimated surface.

2018: Topographic mapping was completed near Hawthorne Nevada to design stormwater infrastructure. Mapping was completed using imagery from both manned and unmanned platforms. Manned aircraft were used for mapping of a corridor of Hwy 95. Additional mapping was completed using PPK drones. The project was a success. NDOT sub-contracted out a company to complete the flight paneling. I noticed discrepancies in the data and was able to determine that improper survey techniques were used in setting of the panels. By careful QA/QC I was able to rectify the errors and compile the mapping to meet ASPRS standards.



# GREGORY SAUNDERS (12-992-32)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

Wood Rodgers  
Nevada (United States)  
Survey Technician  
November 2019—December 2022

Verified by  
**Kevin Michael Almeter**  
kalmeter@woodrogers.com

Experience Summary  
**Full-Time**  
**Surveying: 3 years, 1 month**  
**Post EAC degree: 3 years, 1 month**  
**Experience under licensed surveyor:**  
**3 years, 1 month**

## TASKS

My work at Wood Rodgers was primarily focused on remote sensing data. I was hired on to help with the increasing workload in the remote sensing department. The work was based out of Reno, Nevada but we completed projects in Nevada, California, and Oregon to help out the other offices in the company.

My job was to plan out projects, complete field work, and analyze data to meet standards required by the clients. While most of my work was focused on the completion of topographic mapping. I also go experience with all aspects of the survey line of work. I completed field work for boundary surveys and resolved boundaries in the office.

During this work I used GNSS equipment, total stations, UAVs, LiDAR (mobile and aerial) and worked with terrestrial LiDAR. I worked closely with field crews. I would line them out on topo work and help complete field data capture if needed.

In addition to field work and data processing I also proposed on jobs and built client relationships. I was also tasked with training up others on data capture and processing procedures.

## REPRESENTATIVE PROJECTS

(South Tahoe Public Utility District) STPUD utility mapping, 2022. Utility and topographic mapping was conducted in the Bijou neighborhood of South Lake Tahoe, CA. Roughly 200 acres of mapping were conducted. Ground topo of all utilities, USA markings, fences, and driveway was combined with aerial LiDAR and photogrammetric data to create a detailed topographic map of the subject area. I managed the flights, processed ground topo and combined all the data into one final CAD file for delivery. This project was the second part of a project completed in 2021 which I also took helped complete. The major hurdles for this project were compiling large amounts of field data consisting of over 7000 ground shots.

Spring Creek Roundabout, 2022. The initial survey work for a roundabout in Spring Creek, NV was completed by myself in 2021 and 2022. Boundary and topographic surveys were completed for this project. I planned the topographic field work and UAV flights. I worked as survey crew chief for field collection of supplemental topo, setting of flight panels for aerial imagery, and locating boundary corners. I compiled the data from the flights and ground topo to make a complete design level CAD file. The 1 (one) mile corridor of State Route 227 was mapped to meet ASPRS 10cm accuracy class standards. All utilities were located based of USA markings. After initial completion of the project additional areas of interest were added. I completed the same field and office procedures to add the new areas to the original CAD drawing. This project demonstrated my ability as a survey technician to manage data, and merge information from multiple sources to a completed final product that meets required standards.

RTC North Virginia, Reno, 2021. Topographic mapping of North Virginia Street in Reno, NV was completed between Moana and Brinkby Ave. This was a portion of a project for RTC. Mapping was completed using a Phoenix LiDAR mobile scanning setup. The data was checked using shots from conventional survey methods. I planned, preformed, and processed the mobil scanning portion of this project. The data was verified using ground check shots. This project was used as a demonstration of the accuracy of mobile LiDAR data. I compared the extracted data to traditional survey data to show that the methods completed in the field would produce data to meet project specifications. This was not my first mobile LiDAR project, but the comparison to the traditional topo made for a good justification of furthered use of the mobile technology.

Red Rock Road boundary and topo, Washoe County, NV 2022. I worked on this project by going through record documents and deeds to plot easements and base map a parcel. Calculated points from the base map were used as search coordinates for field crews. Once the boundary data was collected I used the measured locations to resolve the boundary. This project demonstrated my ability to interpret legal documents and measured data to form a final project. I worked under the supervision of a PLS on this project to ensure my interpretation of the data collected were correct. In addition to boundary work I supervised and compiled a topographic map for the project as well.

# GREGORY SAUNDERS (12-992-32)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

*DOWL*  
*Nevada (United States)*  
*Survey Technician*  
**January 2023—May 2023**

Verified by  
**George James Nicholas**  
jetdog6@gmail.com

*Experience Summary*  
**Full-Time**  
**Surveying: 4 months**  
**Post EAC degree: 4 months**  
**Experience under licensed surveyor:  
4 months**

### TASKS

For the last four months I have been employed as a survey technician with a specialty in remote sensing. I am tasked with bringing in work and projects as well as completing projects and conducting quality control. I have also been conducting community outreach such as presenting on the surveying career to high schoolers at conferences. In addition to work activities DOWL has encouraged me to engage in working with the American Society of Photogrammetry and Remote Sensing (ASPRS). I have attended meetings and participated in working groups focused on setting standards and modernizing testing for ASPRS certifications.

### REPRESENTATIVE PROJECTS

Selmi Drive mapping, Reno, NV 2023: I was handed this project midway through when I started at DOWL. I entered in the middle of the project and used knowledge from my time at NDOT and Wood Rodgers to help complete accurate topographic mapping of a corridor on Selmi Drive. The PLS in charge of the project then left the company. The delivered map had geospatial issues relating to a datum shift. I figured out the correction and was able to resubmit the project to the engineering team in a timely fashion.

Governors Field, Carson City, NV 2023. This project combined aerial photogrammetry, terrestrial scanning, SLAM scanning and RTK survey. The combination of all the data sources resulted in a final product that met detail and accuracy specifications where needed. I was in charge of lining out the field crews, processing control networks to ensure accurate locations of terrestrial scanning, registering SLAM scanned data, and delivering a final product. I ensured that the highest quality data from each section of the mapping area was used in a way to be useful to the engineering team. This project demonstrated my ability to manage a project and determine the best and most efficient method for data capture.

South Ocean Beach Mapping, San Francisco, CA 2023. I brought in an outside client and managed the project from bidding on the proposal to data analysis. This project is still under way, but it shows that I can manage a project from the start to finish.

# GREGORY SAUNDERS (12-992-32)

All work experience reviewed by two licensed professionals

## ADDITIONAL INFORMATION



### TIME GAPS

| Start Date | End Date | Reason     | Explanation  |
|------------|----------|------------|--|
| 01/2012    | 07/2012  | Unemployed | Between graduating from my Bachelor's at UNR and beginning my Master's at UiO I took time off to snowboard between January and May. I then hiked the Pacific Crest Trail from Mexico to Reno between May and August. |
| 01/2015    | 09/2016  | Unemployed | I took time to travel europe after my Master's degree. I then moved back to the US and worked part time at Patagonia. The other time was spent snowboarding.   |


# Mechanical

# JENS CHRISTIANSEN (18-159-97)


All work experience reviewed by two licensed professionals





DISCIPLINE: MECHANICAL

## GENERAL

 Applying To **Nevada**  
Application Type **Initial - PE**  
Application Date **05/08/2023**  
Citizenship **United States**

## SUMMARY

 Engineering Experience after EAC degree **4 years**  
Total Engineering Experience **4 years**  
Experience under licensed engineer **4 years**  
Other Experience **10 months**  
Disciplinary Action **None reported**


   
 


## EDUCATION

 Bachelors in Mechanical Engineering (EAC)  
**University of Nevada, Reno**  
**August 2013–May 2018**

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

## EXAMS

 Fundamentals of Engineering (FE)  
**Nevada**  
**March 2018**  
Principles and Practice of Engineering (PE)  
**Mechanical**  
**Nevada**  
**July 2022**



## LICENSES

 Additional Licenses  
**None**

# JENS CHRISTIANSEN (18-159-97)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

KG Walters Construction  
Nevada (United States)  
Project Engineer  
June 2018—April 2019

Verified by

Experience Summary

**Full-Time**

**Other: 10 months**

**Experience under licensed surveyor:**

**None**



DESCRIPTION

# JENS CHRISTIANSEN (18-159-97)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

State of Nevada  
Nevada (United States)  
Staff Associate Engineer  
May 2019—May 2023

Verified by  
**Chad Christopher Myers**  
cmyers@ndep.nv.gov

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

## TASKS

I started working as a Compliance Officer in the Nevada Division of Environmental Protection-Bureau of Air Pollution Control in 2019. One of my duties involves conducting field inspections at stationary air pollution sources to determine compliance with applicable U.S. Environmental Protection Agency (EPA) and State of Nevada air quality regulations. This includes analyzing facility operations, process throughputs, operational records, and determining if engineered pollution control technology is working as intended.

I observe emissions stack testing in the field, as well as review and verify that the final source test results are valid and accurate. During testing, as an on-site observer, I ensure exhaust flows are being routed through emission controls, verify that stack testing is congruent with EPA and State of Nevada regulations and requirements, and answer questions related to testing methods.

While in the field, I identify, document, and recommend corrective actions as necessary to environmental staff and stakeholders of facilities in non-compliance. I prepare an accompanying inspection report that includes detailed written explanations of findings with recommendations for potential enforcement action. Should non-compliance be determined, I participate in the subsequent enforcement hearing to determine if a violation is warranted.

Additionally, I am responsible for reviewing draft permits for federally enforceable (Title V) and State of Nevada (Class II) stationary air pollution source facilities. This includes assisting the Permitting Branch in developing testing and record-keeping requirements for draft permits. Because the permitting process is based on engineering estimates and calculations supplied by the facility, I apply my engineering knowledge of mechanical processes and field experience to review the conditions of the permit, ensuring they are realistic and enforceable.

Finally, I review and analyze Permit Deviations and Excess Emission Reports while utilizing mechanical engineering principles and field experience to help facility staff identify the causes of deviations and excess emissions.

## REPRESENTATIVE PROJECTS

In 2020 I led the development of a Notice of Findings and Order (NFO) for Nevada Gold Mines LLC Gold Quarry Operations in Carlin, Nevada. The project scope was to improve the mercury capture rate of control equipment while also allowing the facility to continue operating during the construction of this upgraded equipment. One of the primary concerns was the facility exceeding the National Ambient Air Quality Standards (NAAQS) set forth by the EPA for particulate matter (PM).

An air emissions stack test, utilized by the facility, was conducted for determining the loading rate of PM to the existing Venturi scrubbers. Based on my review, it became apparent that the test deviated from EPA specified testing methods. I determined follow-up testing would have the same deviations because of stack and gas stream conditions. In lieu of test-driven data, the factory provided emissions calculations for the control unit were given a safety factor of two; with this conservative safety factor, the ambient concentrations of PM would not exceed the short-term NAAQS. Due to the uncertainty of the facility-provided construction timeline, I wrote the order to accommodate any unforeseen delays in construction. The control upgrade project was not impeded by our bureau as the facility complied with NAAQS throughout the duration of the project.

The Nevada State Implementation Policy requires biennial inspections of federally enforceable Title V air pollution sources, and inspections of Class II air pollution sources every five years. Nevada currently has three hundred thirty-four facilities that require regular inspections.

Over the course of my tenure at the BAPC, I have led eighty inspections across Nevada and assisted other lead inspectors with their facilities. Inspections involve analyzing facility operations, process throughputs, operational records, and determining if engineered pollution control technology is working as intended. Additionally, new Title V and Class II facilities are constantly being permitted. During the permitting process, I participate in developing the testing and record-keeping requirements in the permit.

Applying engineering knowledge of mechanical processes and field experience, I review permit conditions to make sure they are realistic and enforceable before issuance.

I have reviewed numerous third-party air emissions stack test reports for permissible air pollutant emission rates of Title V and Class II facilities. I verify, invalidate, or indicate if a facility fails to comply with the state and/or federal regulations. Should there be a deviation from the specified EPA test methods, my best engineering judgement must be used to determine if any significant inaccuracies in the results occurred. If I determine significant inaccuracies, or the emission rate is greater than that of the permitted limits, I work with facility staff, consultants, environmental engineers, and EPA officials to identify the cause of the failure and identify a solution. Confirming the validity of these reports ensures that the health, safety, and welfare of the public is maintained.

In January of 2023, I started work on the evaluation of precious metal processing and refining retorts, and their related mercury air emissions. There are twenty-four permittees in Nevada that have a Mercury Operating Permit to Construct (MOPTC) and retorts. The goal of this project is to quantify the change in volatilization rates for purposes of emission calculations from 2011 through 2023.

In 2018 the Nevada Mercury Control Program (NMCP) implemented a change to testing requirements for mercury retorts. This change involved a stepped temperature approach to volatilizing mercury for purposes of stack testing emissions and compliance with the MOPTC. Mercury volatilization rates change as temperature and pressure change. The point of the testing update was to get a broader sense of how and at what temperature mercury volatilizes. As there was no data previously available, the NMCP proposed that a stepped approach focusing only on temperature, would yield more representative data for the batch process. Currently, the industry-wide assumption for permit applications is that all mercury will volatilize within a one-hour time frame rather than the duration of the batch process. I am currently analyzing the mercury emission data found in air emissions stack test reports from before and after the stepped approach change, to see if this is representative of mercury loading to the control equipment throughout the batch process.

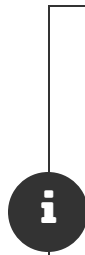


# TODD DIAZ DE VALDES (20-301-31)

All work experience reviewed by two licensed professionals

DISCIPLINE: MECHANICAL

## GENERAL



Applying To  
**Nevada**

Application Type  
**Initial - PE**

Application Date  
**05/17/2023**

Citizenship  
**United States**

## SUMMARY



Engineering Experience  
after EAC degree  
**16 years, 5 months**

Total Engineering  
Experience  
**18 years, 11 months**

Experience under licensed  
engineer  
**9 years, 11 months**

Other Experience

Disciplinary Action  
**None reported**



## EDUCATION



Bachelors in Mechanical Engineering (EAC)  
**University of Arizona**  
**September 1992–December 1996**

**Waiver Request:** NRS 625.183, item 1, part a, "Waiver of FE with 15 or more years of experience."

## EXAMS



Principles and Practice of Engineering (PE)  
**Mechanical**  
**Nevada**  
**September 2022**

Waived Fundamentals of Engineering (FE)  
**Nevada**  
**May 2023**



## LICENSES



Additional Licenses  
**None**

# TODD DIAZ DE VALDES (20-301-31)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

Magma Copper Co.  
Arizona (United States)  
Mechanical Engineering Intern  
June 1990—June 1993

Verified by  
Todd Diaz de Valdes (Self)

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



### TASKS

Assisted engineering in planning and coordinating a large-scale shutdown.



### REPRESENTATIVE PROJECTS

Gathered and organized data for underground expansion feasibility study, including; time studies on all major work groups involved in block cave mining (draw raise miners, haulage miners, etc.)

# TODD DIAZ DE VALDES (20-301-31)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

CAID Industries, Inc  
Arizona (United States)  
Mechanical Engineer  
June 1993—June 1995

Verified by  
**James M Bailey**  
Jim.Bailey@caid.com

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



### TASKS

Duties included; Shop drawings, material take-off, CNC & Plasma Programming.



### REPRESENTATIVE PROJECTS

1. Cold Box fabrication for nitrogen extraction used in oil & gas recovery, Air Liquide
2. Cathode Stripping Machine fabrication, MDC, La Cariadad, Mexico

Expanded design drawing to shop drawing level of detail sufficient to fabricate individual parts, weldments, and order buy-out items. Programmed plasma to cut parts from plate sheets. Aided shop staff in assembly of machine for testing.

# TODD DIAZ DE VALDES (20-301-31)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

Bateman Engineering  
Arizona (United States)  
Mechanical Engineer  
June 1995—June 1997

Verified by  
**Robert Hayes**  
ryhe@aol.com

Experience Summary  
**Full-Time**  
**Engineering: 2 years**  
**Post EAC degree: 6 months**  
**Experience under licensed engineer:**  
**None**



### TASKS

Mechanical engineering, equipment review, plant layout, and design including; material handling, conveying equipment, crushing circuits, leach ponds, SX-EW circuits, milling, flotation, gold processing, thickener and tailings ponds.



### REPRESENTATIVE PROJECTS

#### 1. Mill expansion, Cobre Mining Company, Hanover, New Mexico

I calculated tank size, pipe sizes, pressure drop, and control and isolation valve arrangements for dozens of separate hydraulic systems. I calculated pump discharge head (TDH), suction head (NPSHa), and power required to meet flowrate needed for the plant process to function. I wrote specifications for the type of pump required and reviewed all the vendors technical data to confirm they met specification. I calculated conveyor belt power and apron feeder design parameters. I designed in ACAD the plant layout to safely meet OSHA, MSHA, and the process flow requirements and allow for easy maintenance access.

#### 2. Conveyor modifications Cyprus Sierrita, Arizona

I produced CEMA calculations to adjust belt speed to increase tonnage while maintaining an acceptable load profile. New belt speed required that I check and modify the drive and power trains as well as head pulley modifications to address material trajectory at discharge of belt. Higher tensions in belt required that I check for over stress in transient conditions like belt lift-off at start-up and when re-started from an emergency stop. I used these tensions to check and modify the structural supports for higher pulley forces at tail, head, and snub pulleys.

#### 3. SX-EW modification Phelps Dodge Morenci, Arizona

#### 4. SX-EW Plant, Mariquita, Cananea, Sonora Mexico

I calculated gravity driven hydraulic systems for solvent extraction circuit. I size settlers and mix pump tanks to meet required chemical reaction duration and shear energy input. I designed in ACAD the plant layout to maximize gravity circuit while allowing reasonable access to equipment.

# TODD DIAZ DE VALDES (20-301-31)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

Aker Kverner  
California (United States)  
Lead Mechanical Engineer  
June 1997—June 1998

Verified by  
**Ronald Dean Parriott**  
ron@parriottengineers.com

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



### TASKS

Mechanical engineering activities for green field plant design and layout. Assisted the development of construction schedule and estimating support for final Feasibility Study.



### REPRESENTATIVE PROJECTS

1. Gold & Silver Plant, Meridian Gold, El Peñón, Chile

Coordinated mechanical design criteria to meet duty and service required by the process design. Calculated equipment size to meet duty and code requirements. Designed plant equipment and building layout to safely meet the process flow and provide for easy maintenance access. Calculated pressure vessel design parameters. Wrote and/or reviewed technical specifications for all mechanical equipment. Calculated hydraulic piping systems. Calculated conveyor belt and apron feeder design parameters. Reviewed all technical documents including drawings for engineering design intent and quality control.

# TODD DIAZ DE VALDES (20-301-31)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

Direct Partners LLC  
Arizona (United States)  
President  
June 1998—June 2008

Verified by  
Todd Diaz de Valdes (Self)

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



### TASKS

I run all aspects of the company that provided software and services to other small businesses. The technical aspects of the job included; systems engineering, software engineering and architecture, and database administration.



### REPRESENTATIVE PROJECTS

1. Success Web Systems (3,000+ active websites processing ~10 million page views/month)
2. Technical Skillset;
  - 2.1 SQL Experience (Transactional SQL, database design, data transformation, server management)
  - 2.2 Linux Experience (Apache, MySQL, email, firewall, user security roles, configuration, log management/review)
  - 2.3 VMWare Experience (PM to VM conversion, replication across remote data centers, network setup, firewall configuration)
  - 2.4 Programming languages (Visual Basic, Javascript, PHP, Cold Fusion, JSP/Java)
  - 2.5 Frameworks & Concepts (MVC, DRY, ORM, version control, OOP)

# TODD DIAZ DE VALDES (20-301-31)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

Jacobs Engineering  
Arizona (United States)  
Lead Mechanical Engineer  
June 2008—June 2013

Verified by  
**Michael E Vuich**  
mvuich@msn.com

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



### TASKS

Lead Mechanical engineering activities for green field plant design and layout. Mechanical design of pressure vessels (refractory-lined) in Pressure Oxidation Circuit. Mechanical design of heat exchangers and pressure vessels in Crystallizer Circuit. Managed team in the development and execution of general arrangements, equipment specifications, technical bid analysis and vendor equipment review/approval. Mobilized to job site as mechanical field engineer in support of construction activities.



### REPRESENTATIVE PROJECTS

1. Molybdenum Autoclave Process (MAP) facility, EPCM Services for Kennecott / Rio Tinto
  - 1.1 Phase 3 - Basic Engineering / FEED / Long Lead Early Procurement / Class 2 estimate
  - 1.2 Phase 4 - Detailed Design Engineering and Procurement / HazOp / Definitive estimate
  - 1.3 Phase 5 - Construction / Field Engineering

Coordinated mechanical design criteria to meet duty and service required by the process design. Calculated equipment size to meet duty and code requirements. Designed plant equipment and building layout to safely meet the process flow and provide for easy maintenance access. Calculated pressure vessel design parameters. Wrote and/or reviewed technical specifications for all mechanical equipment. Calculated hydraulic piping systems. Calculated conveyor belt and apron feeder design parameters. Reviewed all technical documents including drawings for engineering design intent and quality control. Reviewed all vendor quotes to confirm they met specifications (technical bid evaluations). Review all vendor fabrication and constructions documents. Designed heat recovery system for waste heat off of primary flash vessels. Calculated tank and agitators size to meet process mix times and system surge capacity. Support field RFI's and designed alterations for construction support. Inspected mill wright equipment leveling and installation. Documented as-built conditions and coordinated changes back to office.

# TODD DIAZ DE VALDES (20-301-31)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

*Precision Systems Engineering  
Utah (United States)  
Project Manager / Sr. Mechanical  
Engineer  
June 2013—June 2014*

Verified by  
**Claus Jan Graetz**  
clausgraetz@hotmail.com

*Experience Summary*  
**Full-Time**  
**Engineering: 1 year**  
**Post EAC degree: 1 year**  
**Experience under licensed engineer:  
None**



### TASKS

Project management, mechanical engineering, equipment specs, and general arrangements for capital improvement projects.



### REPRESENTATIVE PROJECTS

1. Pneumatic Conveyor & Lime System modifications for Pacificcorp, Wyoming
2. Ammonia Offloading modifications for Apache Nitrogen, Arizona
3. Feasibility Design & Budgetary Estimate for Newmont Gold, Nevada
4. Nitric Acid Addition for Scrubber modifications for Apache Nitrogen, Arizona
5. Dust Collection Design & Evaluation, Copper Sulfate Building, FMI – Sierrita, Arizona

As Project Engineer/Manager on multi-discipline engineering project like those listed above; I coordinated design criteria across the disciplines as well as the client representatives. I calculated equipment size to meet duty and code requirements. I reviewed all technical documents including drawings for engineering design and quality control. I designed, reviewed, and collaborated to produce the plant layout to safely meet OSHA, MSHA, and the process flow requirements and allow for easy maintenance access.

I calculated conveyor belt power and apron feeder design parameters. I produced CEMA calculations to adjust belt speed to increase tonnage while maintaining an acceptable load profile. New belt speed required that I check and modify the drive and power trains as well as head pulley modifications to address material trajectory at discharge of belt. Higher tensions in belt required that I check for over stress in transient conditions like belt lift-off at start-up and when re-started from an emergency stop. I used these tensions to check and modify the structural supports for higher pulley forces at tail, head, and snub pulleys.

I calculated tank size, pipe sizes, pressure drop, and control and isolation valve arrangements for dozens of separate hydraulic systems. I calculated pump discharge head (TDH), suction head (NPSHa), and power required to meet flowrate needed for the plant process to function. I wrote specifications for the type of pump required and reviewed all the vendors technical data to confirm they met specification. I calculated gravity driven hydraulic systems for solvent extraction circuit. I size settlers and mix pump tanks to meet required chemical reaction duration and shear energy input. I designed in ACAD the plant layout to maximize gravity circuit while allowing reasonable access to equipment. I designed safe venting system for rail tanker offloading of ammonia.



# TODD DIAZ DE VALDES (20-301-31)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

Jacobs Engineering  
Colorado (United States)  
Lead Mechanical Engineer  
June 2014—June 2015

Verified by  
**Stephane Gilbert Kauffmann**  
sgkauffmann@gmail.com

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

### TASKS

Lead Mechanical engineering activities for equipment selection, plant design and layout. Supervised mechanical group in the development of general arrangements, equipment specifications, technical bid analysis and vendor equipment review/approval.

### REPRESENTATIVE PROJECTS

1. Çöpler Sulfide Expansion Project, Eastern Turkey, for Anagold Madencilik
  - 1.1 Basic Engineering / FEED / Long Lead Early Procurement / HazOp / Class 2 estimate
    - Gold, Silver & Copper Production
    - Sulfide Ore processing via Autoclaves (Pressure Oxidation)
    - CIP (Carbon in Pulp) Cyanide Circuit

As Lead Mechanical Engineer on multi-discipline engineering project; I coordinated design criteria across the disciplines as well as the client representatives. I calculated equipment size to meet duty and code requirements. I reviewed all technical documents including drawings for engineering design and quality control. I designed, reviewed, and collaborated to produce the plant layout to safely meet OSHA, MSHA, and the process flow requirements and allow for easy maintenance access.

I calculated conveyor belt power and apron feeder design parameters. I produced CEMA calculations to adjust belt speed to increase tonnage while maintaining an acceptable load profile. New belt speed required that I check and modify the drive and power trains as well as head pulley modifications to address material trajectory at discharge of belt. Higher tensions in belt required that I check for over stress in transient conditions like belt lift-off at start-up and when re-started from an emergency stop. I used these tensions to check and modify the structural supports for higher pulley forces at tail, head, and snub pulleys.

I calculated tank size, pipe sizes, pressure drop, and control and isolation valve arrangements for dozens of separate hydraulic systems. I calculated pump discharge head (TDH), suction head (NPSHa), and power required to meet flowrate needed for the plant process to function. I wrote specifications for the type of pump required and reviewed all the vendors technical data to confirm they met specification. I calculated gravity driven hydraulic systems for solvent extraction circuit. I size settlers and mix pump tanks to meet required chemical reaction duration and shear energy input. I designed in ACAD the plant layout to maximize gravity circuit while allowing reasonable access to equipment.

# TODD DIAZ DE VALDES (20-301-31)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

CAID Industries, Inc  
Arizona (United States)  
Senior Project Manager  
June 2015—June 2017

Verified by  
**James Bailey**  
Jim.Bailey@caid.com

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



### TASKS

Project Management of large (+20k man-hour) unique metal fabrication projects built to the engineering clients specifications. Detail design down to the part level with shop drawings for weldments, machining, sub-assemblies and final assemblies.



### REPRESENTATIVE PROJECTS

#### 1. Water Cooled Primary and Secondary Converter Hoods & Doors

As project manager I worked directly with the engineering and design teams at three levels; client, vendor, and fabrication. I directly checked all design elements to confirm they met the vendors specifications and clients intended use. I reviewed both the 3D model and the derivative approval drawings before releasing them to the shop floor. These design checks included engineering confirmation of critical details as well as constructability of design. I expanded vendor design drawing to shop detail levels sufficient to fabricate individual parts, weldments, and order buy-out items. I programmed and approved laser, waterjet, and plasma to cut parts from plate sheets. I developed material cut list for shop to make parts from pipe, bar, angle, channel, and beams.

#### 2. Engineered Barges and Pumping Solutions

I provided the principle engineering for several design-build floating pump barge systems. I calculated buoyancy, righting moment, and stability for the design of multiple pump barges, distribution barges, header barges, and walkways. I checked pump and hydraulic pipeline system designs for each barge and the combined systems they made up. I determined, specified, quoted, and procured all the raw material and buyout items required to fabricate and assembly the barge system. I expanded engineering level design drawing to shop detail levels sufficient to fabricate individual parts, weldments, and order buy-out items. I programmed and approved laser, waterjet, and plasma to cut parts from plate sheets. I developed material cut list for shop to make parts from pipe, bar, angle, channel, and beams.

# TODD DIAZ DE VALDES (20-301-31)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

Hanlon Engineering & Architecture  
Arizona (United States)  
Project Manager / Sr. Mechanical  
Engineer  
June 2017—June 2018

Verified by  
**Eric M Hadley**  
ehadley@hanlonengineering.com

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



### TASKS

Managed all engineering activities for multi-discipline team in the development and execution of a Detailed Design Engineering projects.



### REPRESENTATIVE PROJECTS

As Project Engineer/Manager on multi-discipline engineering projects like the two listed below; I coordinated design criteria across the disciplines as well as the client representatives. I calculated equipment size to meet duty and code requirements. I reviewed all technical documents including drawings for engineering design and quality control. I designed, reviewed, and collaborated to produce the plant layout to safely meet OSHA, MSHA, and the process flow requirements and allow for easy maintenance access.

#### 1. ASARCO Mission North Mill Primary Crusher

I calculated conveyor belt power and apron feeder design parameters. I produced CEMA calculations to adjust belt speed to increase tonnage while maintaining an acceptable load profile. New belt speed required that I check and modify the drive and power trains as well as head pulley modifications to address material trajectory at discharge of belt. Higher tensions in belt required that I check for over stress in transient conditions like belt lift-off at start-up and when re-started from an emergency stop. I used these tensions to check and modify the structural supports for higher pulley forces at tail, head, and snub pulleys.

#### 2. Kinross Bald Mountain Vantage Complex project

I calculated tank size, pipe sizes, pressure drop, and control and isolation valve arrangements for dozens of separate hydraulic systems. I calculated pump discharge head (TDH), suction head (NPSHa), and power required to meet flowrate needed for the plant process to function. I wrote specifications for the type of pump required and reviewed all the vendors technical data to confirm they met specification. I calculated gravity driven hydraulic systems for solvent extraction circuit. I size settlers and mix pump tanks to meet required chemical reaction duration and shear energy input. I designed in ACAD the plant layout to maximize gravity circuit while allowing reasonable access to equipment.

# TODD DIAZ DE VALDES (20-301-31)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

Freeport McMoRan Copper & Gold Inc.  
Louisiana (United States)  
Project Manager & Mechanical  
Engineer  
June 2018—June 2019

Verified by  
**Daniel Jordan Shapiro**  
dshapiro@fmi.com

Experience Summary  
**Full-Time**  
**Engineering: 1 year**  
**Post EAC degree: 1 year**  
**Experience under licensed engineer:**  
**None**



### TASKS

Supporting capital and operational improvement projects within portsite, millsite, and ore flow groups at PTFI (Indonesia). Daily review of engineering work by local team of engineers.



### REPRESENTATIVE PROJECTS

Projects range from small improvements on existing equipment to large capital expansion projects.

Coordinated mechanical design criteria to meet duty and service. Calculated equipment size to meet duty and code requirements. Calculated hydraulic piping systems. Calculated conveyor belt and apron feeder design parameters. Reviewed all technical documents including drawings for engineering design intent and quality control.

# TODD DIAZ DE VALDES (20-301-31)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

CAID Industries, Inc  
Arizona (United States)  
Senior Mechanical Engineer  
June 2019—May 2023

Verified by  
**James Bailey**  
Jim.Bailey@caid.com

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

## TASKS

I am the senior mechanical engineer at a large steel fabrication shop (CAID Industries, Tucson AZ). I am responsible for all engineering within the company and am personally responsible for work produced by all our junior engineers. It's a small group of engineers so I'm involved as both a lead of other engineers' work produced as well as generating a substantial portion of the work myself.

CAID is a certified ASME BPVC Div 1 shop and we regularly build stamped unfired pressure vessels; I'm responsible for all the engineering and design of those vessels to both the ASME code as well as site specific codes. Additionally, I engineer and design API-650 Tanks, ASME B31.3 process pipe, and heavy industrial equipment such as Settlers and Mix-Pump Tanks for SX (Solvent Extraction). All equipment is designed to meet the end user's needs so there is a heavy coordination with the client's plant engineering group. I'm the primary engineering contact for all projects with an engineering deliverable or a requirement to coordinate an engineering solution to the project. The complexity of the work includes both meeting multiple codes as well as part level design for fundamental strength as serviceable duty.

As my workload allows I also run shop floor projects as the Project Management of large unique metal fabrication projects built to the engineering client's specifications. Detail design down to the part level with shop drawings for weldments, machining, sub-assemblies and final assemblies.

## REPRESENTATIVE PROJECTS

### 1. Florence Pipe Skids

I designed 8 large mobile pipe skids for use across an in-situ leach field. The frame design required structural evaluation to hold 4 large pipe headers each with 14 small discharge pipe spools to distribute raffinate to individual injection wells within the leach field. The structural evaluations required pipe support calcs, frame member and stability calcs, and lifting calcs. The piping headers and discharge spools required P&ID development for isolation valves, control valves, and flowmeters. The control system required layout and design work for the control panel and routing cable tray. The project includes over 1100 valves across 8 mobile skids.

### 2. API-650 Tanks

I have engineered and designed hundreds of API-650 tanks as well as ASME pressure vessels. The most recent tanks were vertically installed 12 ft diameter x 38 ft tall. Those tanks required shell, floor and roof calcs per API-650 code as well as anchor chair calcs per ASCE 7-16 wind and seismic requirements for equipment. The tanks are 316SS with relatively thin shell wall thicknesses and required additional engineering review for the lifting transition from horizontal to vertical. The lifting calculations drove the bottom shell course to a larger thickness as well as a robust tail lug with repads to finally solve. The tank also required engineering calcs for the hydrotesting in the horizontal position and temporary saddles were required and designed not to over stress the shell. The methods described in WRC 537 were used to evaluate the local shell stresses in both the tail lug and saddle designs.

### 3. Machine Shop Compressed Air System

I calculated compressed air usage across a large machine shop and determined utilization factors for each usage to determine the average and maximum demand of the system. I calculated design criteria to meet the machine shop's demands and reviewed equipment sizes and vendor data to confirm acceptance. I outlined equipment configuration with management to determine the critical up-time requirements and set the redundant equipment confirmation.

### 2. Engineered Barges and Pumping Solutions

I provided the principle engineering for several design-build floating pump barge systems. I calculated buoyancy, righting moment, and stability for the design of multiple pump barges, distribution barges, header barges, and walkways. I checked pump and

hydraulic pipeline system designs for each barge and the combined systems they made up. I determined, specified, quoted, and procured all the raw material and buyout items required to fabricate and assembly the barge system. I expanded engineering level design drawing to shop detail levels sufficient to fabricate individual parts, weldments, and order buy-out items. I programmed and approved laser, waterjet, and plasma to cut parts from plate sheets. I developed material cut list for shop to make parts from pipe, bar, angle, channel, and beams.

# BOGDAN PREDA (20-809-69)

All work experience reviewed by two licensed professionals

DISCIPLINE: MECHANICAL

## GENERAL



Applying To  
**Nevada**

Application Type  
**Initial - PE**

Application Date  
**05/17/2023**

Citizenship  
**Romania**

## SUMMARY



Engineering Experience  
after EAC degree

Total Engineering  
Experience  
**3 years, 5 months**

Experience under licensed  
engineer  
**3 years, 5 months**

Disciplinary Action  
**None reported**



## EDUCATION



Bachelors in Robotics  
**Polytechnic University of Bucharest**  
October 2015–July 2019

Masters in Mechanical Engineering (Robotics)  
**Polytechnic University of Bucharest**  
October 2019–June 2021



## EXAMS



Fundamentals of Engineering (FE)  
**Nevada**  
June 2020

Principles and Practice of Engineering (PE)  
**Mechanical Nevada**  
July 2022

## LICENSES



Additional Licenses  
**None**

# BOGDAN PREDA (20-809-69)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

**SIGMA ENGINEERING SOLUTIONS  
INC.**  
Nevada (United States)  
**ENGINEER 1**  
**December 2019—May 2022**

Verified by  
**Joseph Emil Farre**  
jfarre@sigmanv.com

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



### TASKS

**Structural/Demolition Engineering:** I performed floor loading evaluation for demolition equipment and demolition activities on existing building, using finite element analysis software such as STAAD Pro , with applications of Allowable Stress Design and Ultimate Strength Design to verify the capacities of existing members to support the demands imposed by the demolition activities. I have also designed bracing and shoring systems in the event that the existing floor system could not support the required loads from demolition activities. My evaluations of existing building include various types of structures such as concrete, wood/timber, steel, and trusses etc. I also performed structural design of structures such as awnings/canopies. I also performed calculations and analyses for controlled demolition and felling of structures; these include: weight estimations, gravitational rotation, and evaluate for structural stability of structures, with required modifications, to be demolished or felled by the use or mechanical equipment pushing/pulling or by energetic felling operations.

**Field Support:** I performed field visits to coordinate with the client and subcontractor to confirm and verify designs, solve conflicts, provide oversight to a construction task/phase and provide daily reports. Additionally, I also performed the duty of an on-site emergency engineer, following a natural disaster, to provide immediate solutions and provide advises or recommendations for structural integrity of damaged structures and/or temporary supports of damaged structures.



### REPRESENTATIVE PROJECTS

**Firestone Polymers Facility Emergency Response, Sulphur, LA (2020 to 2021) -** I performed the duty of an on-site emergency engineer to provide immediate support and provided advises for structural integrity of damage structures that were hit by Hurricane Laura. I also provided temporary shoring support and new design/retrofit of damaged building or portions of the building. I also attend daily safety meetings, oversight of work, address any safety issue/concern, and provided daily report of the work progress.

**Boulder City Public Works Improvement, Boulder City, NV (2021 to 2022) -** I performed 3D modeling, using SolidWorks software, and produced detailed shop drawing level drafting of a classic train themed Bus and Pedestrian Shade Shelter design for the city of Boulder City new bench and trash can design, handrails, solar panel and LED lighting attachments; all designs included built-in anti-theft mechanisms. I also coordinated with the project manager in the design of the retrofit for the damaged footing support for the Hoover dam turbine monument.

**Amadeus Wind Farm, Turkey (2022) –** Using 3D SolidWorks modeling and finite element analysis, I performed an evaluation on a damaged turbine tower, with proposed demolition required modifications, in order to perform energetic felling operations. I analyzed for the worst-case scenarios, including combinations of code level wind speeds from different directions.

**PDX Airport Oregon Market Demolition, Portland, OR, (2019 to 2022) –** I coordinated with project manager and developed detailed structural demolition plans.

**IAH Airport Parking Garage Demolition, Houston, TX, (2021 to 2022) -** I coordinated with project manager and developed detailed structural demolition and shoring layout plans.

**San Diego Airport Pedestrian Bridge Demolition, San Diego, CA (2022) –** I performed demolition equipment floor loading evaluation on pedestrian bridge. I also evaluated for temporary stability of the structure in its modified conditions, partially removed and supported by shoring. I developed detailed structural demolition and shoring plan.

**Kentucky Warehouse Emergency Service, Louisville, KY (2021) -** I performed the duty of an on-site emergency engineer to provide immediate support and provided advises for structural integrity of damage structures that were hit by tornado.

Other projects include: Texas highway bridges demolition (demolition loading evaluation and drafting for demolition plan), various



steel boilers, stacks and wind turbines demolition by use of energetic and mechanical felling (verification of vertical and lateral support modifications and provided detailed plans), etc.

# BOGDAN PREDA (20-809-69)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

Nikkiso Cryo Inc.  
Nevada (United States)  
Design Engineer  
May 2022—May 2023

Verified by  
**Albert Bruce Ticknor III**  
bruce.ticknor@nikkisocryo.com

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



### TASKS

As a design engineer working for Nikkiso Cryo Inc., the main tasks are to design LNG, LEG and LPG single or multistage pumps and all subassemblies associated with these. I have performed Solidworks modeling and design of pump assemblies, electrical system assemblies, instrumentation system assemblies, lifting system assemblies and general arrangement assemblies. I have performed calculations to support the pump design which include: Axial stack-up calcs., Thrust Analysis calcs., Flange thickness calcs. (bolted connections), Interference fit calcs (Shrink-fit), Orifice sizing calcs., Discharge size calcs., Power cable and Support cable sizing calcs., Design pressure calcs. etc. I have performed finite element analysis using Solidworks Simulation on pumps housings to determine housing stiffness at bearings location through the pump. I have also performed lateral critical speed analysis for multi stage pumps for various worst case conditions (clearance and unbalance) using Dyrobes (Rotor Dynamics Software) to determine pump modes at operating speeds and critical speeds, Campbell diagrams, Torsional frequency interference diagrams and clearances to be within API 610 code.

As a design engineer I have also put together production drawings and assembly drawings for all of the above-mentioned assembly models. I have also checked and released production drawings, bill of materials and calculations; addressed customer comments and red lines; and took part in daily engineering meetings.



### REPRESENTATIVE PROJECTS

Colon Gas Expansion Project A – Panama (3 LNG 2-Stage, Removable In-tank Pumps): I have performed modeling and production/assembly drawings for pump assembly, electrical system assembly, instrumentation system assembly and lifting system assembly. I have performed calculations which include: Axial stack-up calc., Thrust Analysis calc., Flange thickness calc. (bolted connections), Interference fit calcs (Shrink-fit), Discharge size calc., Power cable and Support cable sizing calc., Design pressure calc. I have performed finite element analysis and lateral critical speed analysis. I have addressed customer comments and concerns as this is still an ongoing project.

Colon Gas Expansion Project B- Panama (3 LNG 7-Stage, Pot mounted Pumps): I have performed modeling and for pump assembly layout. I have performed calculations which include: Axial stack-up calc., Thrust Analysis calc., Flange thickness calc. (bolted connections), Interference fit calcs (Shrink-fit), Orifice sizing calc., Discharge size calc., Design pressure calc. I have performed finite element analysis and lateral critical speed analysis, project is still ongoing.

Other miscellaneous tasks on various projects, tasks which are included in the "Tasks and Duties" field.

# RICARDO SEVILLA (17-664-42)

All work experience reviewed by two licensed professionals

DISCIPLINE: MECHANICAL

## GENERAL



Applying To  
**Nevada**

Application Type  
**Initial - PE**

Application Date  
**05/31/2023**

Citizenship  
**United States**

## SUMMARY



Engineering Experience  
after EAC degree  
**5 years, 4 months**

Total Engineering  
Experience  
**5 years, 4 months**

Experience under licensed  
engineer  
**5 years, 4 months**

Disciplinary Action  
**None reported**



## EDUCATION



Bachelors in Mechanical Engineering (EAC)  
**University of Nevada, Reno**  
**August 2013–December 2017**

## EXAMS



Fundamentals of Engineering (FE)  
**Nevada**  
**July 2017**

Principles and Practice of Engineering (PE)  
**Mechanical**  
**Nevada**  
**April 2018**



## LICENSES



Additional Licenses  
**None**

# RICARDO SEVILLA (17-664-42)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

Bureau of Reclamation  
Nevada (United States)  
Mechanical Engineer  
January 2018—May 2023

Verified by  
**Manuel Antonio Hernandez**  
mahernandez@usbr.gov

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

### TASKS

- Responsible for engineering and maintenance of waterworks infrastructure systems at Hoover Dam, Davis Dam, and Parker Dam, including: 130-MW turbine-generator units, 30-ft diameter penstocks, water control gates and valves, coating systems, auxiliary pumps and heat exchangers, machining equipment, lifting equipment, and fall protection systems.
- Responsible for all phases of the project lifecycle from initiation to closeout.
- Prepare and review engineering designs by performing complex computations and utilizing CAD/FEA programs
- Prepare and review design plans, technical specifications, and procurement packages for mechanical construction and maintenance projects.
- Oversee the execution of construction and maintenance projects,
- Coordinate with plant personnel and contractors; monitor performance, document progress, anticipate problems, and provide solutions to facilitate plant reliability.
- Inspect, survey, evaluate, and document existing equipment and infrastructure conditions utilizing non-destruction examination techniques.
- Perform failure analysis and troubleshooting, design calculations, technical and market research, and cost/benefit analyses.
- Formulate maintenance and improvement plans which detail problems, recommendations, cost estimates, consequences, and alternatives for funding approval.
- Collaborate directly with plant mechanics, electricians, and operators.
- Communicate effectively with leadership on complex engineering topics.
- Create and revise drawings and 3D models utilizing AutoCAD and Inventor.

### REPRESENTATIVE PROJECTS

- 1) 2018 High pressure air compressor replacement (\$25K, significant supervision):
  - Prepared salient characteristics document according to facility requirements
  - Oversaw installation, testing and commissioning
- 2) 2018 Sump pump replacement (\$290K, significant supervision):
  - Prepared salient characteristics document and drawings for three pumps in accordance with required head, flow, outlet elevation, and other constraints
  - Supported mechanics during installation, tested and troubleshot issues during commissioning
- 3) 2019 Transformer fall protection systems (\$110K, significant supervision):
  - Prepared design calculations, drawings, and FEA analysis of custom fall protection equipment for supervisory review
  - Performed a feasibility study comparing my design to commercially available solutions
  - Prepared technical specifications in accordance with end user needs
  - Oversaw installation, testing and commissioning
- 4) 2019 CNC mill, lathe, and waterjet procurement and installation (\$590K, moderate supervision):
  - Prepared technical specifications in accordance with end user needs
  - Reviewed facility construction drawings and coordinated inspection of installation areas utilizing ground-penetrating radar to locate existing features
  - Prepared installation plans including utility routes to avoid embedded hazards
  - Oversaw installation, testing and commissioning
- 5) 2020 Water storage tank repairs and recoating (\$550K, moderate supervision):
  - Prepared technical specifications including replacement of the tank bottom, method of surface preparation, required quality control tests and reports, and incorporated standards from AWWA, ASTM, SSPC/NACE, and Federal and state regulations
  - Oversaw contract execution to ensure compliance with specifications and safety standards
  - Performed independent quality control tests such as surface profile, environmental conditions, and dry film thickness
- 6) 2020-2023 Hydroelectric generating unit A9 overhaul (\$4.2M, moderate-to-minimal supervision):


- Lead project engineer responsible for rehabilitating a 69-MW hydroelectric turbine-generator
  - Prepared design calculations and drawings of custom lifting equipment for supervisory PE approval
  - Performed shaft alignment, tolerance stack-up, critical bolt torque, and other necessary calculations
  - Prepared the technical specifications, cost estimate, and design drawings for new wicket gates, replacement parts (wear rings, facing plates, bushings, coatings, etc.), and field machining
  - Reviewed design, machining, and other submittals for acceptability in accordance with specifications
  - Oversaw the installation and machining of wear parts in the turbine pit within the specified tolerances
- 7) 2021-2022 Lower NV Penstock cylinder gate stems replacement (\$8M, supporting engineer):
- Prepared drawings and 3D models of equipment
  - Assisted the lead engineer with inspections during production and installation
  - Coordinated with contractors with competing interests working in overlapping work areas to maximize productivity
- 8) 2021-2022 Lower NV Penstock recoating (\$5.5M, minimal supervision):
- Lead capital project engineer for re-coating a 30-foot diameter pipe with four 13-foot diameter laterals and six outlets, totaling over 2200 linear feet of pipe
  - Prepared technical requirements specifying method of surface preparation, quality control tests and reports, and incorporated standards from ASTM, SSPC/NACE, and Federal regulations
  - Oversaw contract execution, including mobilization, scaffolding erection, surface preparation, and recoating operations to ensure compliance with specifications and safety standards
  - Performed independent quality control tests such as surface profile, environmental conditions, and dry film thickness
  - Inspected inlet and outlet gates, butterfly valves, scroll cases, and other appurtenant features during outage and provided recommendations for immediate and future maintenance activities based on the findings
- 9) 2022-2023 Emergency gate rehabilitation (\$780K, minimal supervision)
- Prepared technical specifications identifying repairs to restore gate functionality
  - Overseeing contract execution
  - Will be responsible for assisting mechanics with field repairs of the valve body, gate seats, and actuators

# JULIA STUEVE (19-801-81)

All work experience reviewed by two licensed professionals

DISCIPLINE: MECHANICAL

## GENERAL


 Applying To  
**Nevada**

Application Type  
**Initial - PE**

Application Date  
**05/05/2023**

Citizenship  
**United States**



## SUMMARY



 Engineering Experience  
after EAC degree  
**4 years**

Total Engineering  
Experience  
**4 years**

Experience under licensed  
engineer  
**4 years**

Disciplinary Action  
**None reported**


 

## EDUCATION

 Bachelors in Mechanical Engineering (EAC)  
**University of Nevada, Reno**  
August 2015–May 2019

## EXAMS

 Fundamentals of Engineering (FE)  
**Nevada**  
March 2022

Principles and Practice of Engineering (PE)  
**Mechanical**  
**Nevada**  
March 2023



## LICENSES

 Additional Licenses  
**None**

# JULIA STUEVE (19-801-81)

All work experience reviewed by two licensed professionals

## WORK EXPERIENCE

RHP Mechanical Systems  
Nevada (United States)  
Engineer in Training (EIT)  
May 2019—May 2023

Verified by  
**Douglas Peter DeAngeli**  
ddeangeli@rhpinc.net

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



### TASKS

Daily tasks include sizing and designing HVAC & plumbing systems for commercial construction. I consistently worked along side architects, electrical, structural, civil, and fire protection engineers to coordinate and submit permit plans to the city. I am also a Project Manager and manage the install of my own approved designs and designs of other engineers. I am involved in reviewing plan & spec drawings provided by other engineers. I have acted in the design assist position along side engineers outside of my company both in the design phase and in the construction phase. As a project manager, I also confirm installs are done per designs and per code. In the most recent years, my engineering work and project management work has been split about 50/50.



### REPRESENTATIVE PROJECTS

The first project I would like to reference is the existing office remodel and chiller addition at the Nevada Museum of Art. This project was started early 2022 and is just coming to a close. For this project I acted as a design assist engineer in combination with the Engineer of Record out of LA. During design I reviewed the plans provided by the EOR in detail and would return them with my notes and design suggestions. These plans included new VAV selection with respective hot water piping and 2-story duct revisions, chiller, chilled water pump, and chilled water piping, water softener system, large restroom addition, and steam piping. After back and forth collaboration the plans were approved and submitted. I was also the head project manager and oversaw the entire install. Since the record drawings were not 100% accurate, it was my duty to interpret the plans vs the existing system and adjust install to ensure engineered design needs were met and codes were still followed. Duct and piping were included in the design for future expansion. I calculated and confirmed duct and pipe sizes were correct for the expansion needs and adjusted when necessary. The project was a success and the next phase expansion is about to move forward.

The second project I would like to reference is Spine Nevada MRI at Rancharra. Along with doing the shell design for most buildings at the new Rancharra center, I also designed the Spine Nevada MRI suite. Since standard equipment was chosen for the shell design, I calculated the loads for the space and accommodated the design to cover building needs and use existing roof top equipment. The existing equipment consisted of (2) large rooftop units which were larger than necessary for the spaces requirements. I designed the air distribution in order to use both units to the most of their capabilities and also limit over cycling. I also designed the MRI suite stand alone HVAC systems and Chiller system per the spec'd MRI equipment provided by Siemens. This included the design and selections of the Quench Vent for the MRI machine. I also designed the plumbing for the restroom, breakroom, and gas fired water heater per the owner's specifications. I also was the Project Manager and oversaw the entire install. By doing the design and the install, I was able to make informed decisions about any changes that were needed, This building is complete and has been up and running since early 2022.

The third project I would like to reference is a standard warehouse TI space. This space is named Stord TI and included about 4500 square feet of office area, multiple battery charger exhaust areas which included exhaust fans and plumbed eyewash stations, a separate shipping and receiving office area, and HVLS fans. I designed the main office area with (3) rooftop units, an exhaust fan for the large restrooms, and a dedicated split system for the server room. I zoned this space with exterior walls/windows and their respective directions as main factors as a office with an exterior wall facing west will get more solar heat load then a similar office facing north. I designed the plumbing system for the main office large restrooms including a design of a pre-fab carrier that is produced by our in house pipe fabrication shop. I designed the waste slope at 1/8" slope in order to reach the distant single restroom at the shipping and receiving office. Although each specific office design is unique, the respective warehouse office TI is a typical project and over my time at RHP I have worked on 20+ similar projects.

# 6. Public Comment



# 7. Adjournment