

**Title:** Mechanical Designer

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Alex utilizes his experience in construction project management to understand physical system construction, and produce quality design work.

**Education:** Recently graduated from the University of Nevada, Reno with a Bachelor of Science in Mechanical Engineering.

**Professional Affiliations:** American Society of Mechanical Engineers (ASME), 152<sup>nd</sup> Airlift Wing Nevada Air National Guard Civil Engineering Squadron

**Experience & Qualifications:** Alex has eight years of prior experience in construction project management through the United States Air Force as a structural engineering non-commissioned officer.

As a mechanical designer, Alex analyzes existing mechanical and plumbing conditions along with client requests in order to design system changes aimed at delivering an efficient, desirable product that meets/exceeds the client's request. This process is achieved by using various methods, such as computer aided drafting (CAD), load calculations, and system design analysis.

Alex's education includes classes in heat transfer, fluid dynamics, mechanical design, design synthesis, and engineering communications.

## PROJECTS:

### Ely, Nevada State Prison Boiler Replacement Project

Alex was part of the design team for a boiler system upgrade at the Nevada State Prison in the city of Ely. This facility has a housing capacity of 1,183 inmates. The mechanical system consists of three high capacity boiler systems including steam and high temperature water tube boilers, plus all of the associated piping, pumps, and accessories. The proposed upgrade is scheduled to be completed in 2022

### Reno Rodeo Arena New Construction & Renovation

Alex was involved in the preliminary design phase for a major construction/renovation of the local rodeo arena in Reno, NV. This project involved drawing HVAC and plumbing systems for both, indoor and outdoor spaces of the newly proposed four-story rodeo arena. The facility is expected to seat 15,000 people during the rodeo, and other major entertainment events.

### Humboldt County School District Distance Education Remodel

Alex is actively taking part in the conversion of woodshop and welding shop spaces of a school in Humboldt County, NV. The repurposed spaces will provide the district with a new computer testing station which will give students enrolled in distance education a space to earn credit for their online coursework. In addition, the remodel will also provide the school with additional temperature controlled classroom space to hold in- person class sessions.

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