



Title: Mechanical Designer

Education: Bachelor of Science ➤ Mechanical Engineering ➤ University of Nevada, Reno

Experience & Qualifications: Taylor has experience in system and equipment design, equipment maintenance, project management, and manufacturing.

As a mechanical designer, Taylor performs tasks including load calculations, building information modeling, duct and pipe sizing, and assisting with equipment selections. During the design process, she utilizes tools such as Autodesk's Revit software to coordinate with team members and their respective building design models.

Taylor's education was focused in thermodynamics, fluid dynamics, heat transfer, system design and renewable energy, as well as classes in geothermal energy exchange.

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PROJECTS:

LYON COUNTY FERNLEY JUSTICE COURT EXPANSION

Taylor was one of the designers on the Lyon Country Fernley Justice Court expansion. The scope of this project included demolition of a large portion of the existing building to give way to a new addition. Utilizing tools including Carrier's HAP, Autodesk's Revit and Microsoft Excel, Taylor made equipment selections and designed ductwork systems. During the design process, Taylor also collaborated with Architects, Electrical Engineers, and Structural Engineers to ensure the project was well coordinated and met client expectations.

LOVELOCK CORRECTIONAL PIPING AND DIGITAL CONTROL

Taylor played a key role in the Lovelock correctional piping and digital control replacement and upgrade. Specifically, Taylor was involved in the piping portion of the project. Extensive work was undertaken on campus to transition to a more energy-efficient primary/variable secondary piping configuration. Utilizing AutoCAD and the current piping schematics, Taylor identified which pumps needed removal and determined which sections of the piping systems required redesign for the new pumping system. To ensure uninterrupted prison operations during construction, Taylor contributed to developing a phasing strategy aimed at minimizing the project's impact on the facility.

NEVADA STATE HEALTH LABORATORY - DESIGN

Taylor had the opportunity to assist other designers on the very large and technically complex Nevada State Health Laboratory project. This three-story laboratory building is located at the University of Nevada, Reno campus. Specialized calculations including exhaust plume studies and building pressure relation maps were necessary to deliver a facility that not only met the owner's expectations but also complied with building codes and industry standard safety protocol. Coordination among trades during the design phase was crucial to ensure the lab's constructability and to minimize potential issues for the contractor during construction.