
JOHN BIGDA, P.E.

Title: Mechanical Engineer

Education: Bachelor's of Science ➤ Mechanical Engineering ➤ Master's of Business Administration ➤ University of Nevada, Reno.

Licenses: Professional Engineer, Nevada: # 027095

Professional Affiliations: American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)-Treasurer

Experience & Qualifications: Mr. Bigda has over 4 years of experience in HVAC and Plumbing design, Hydraulic design, and building energy modeling.

As a design engineer, Mr. Bigda has performed thorough energy analyses on industrial, commercial, and residential buildings of various sizes using energy analysis software including Carrier HAP, Manual J Worksheets, and Cool Calcs.

Mr. Bigda also has experience in the area of energy analysis and measurement and verification of high-efficiency equipment performance as well as continuing education with AutoCAD M&P and Revit software, and building energy modeling.

Mr. Bigda is responsible for HVAC and plumbing system design, building energy modeling, report writing, specification writing and construction administration.

JOHN HAS OVER 4
YEARS OF
EXPERIENCE IN
HVAC, PLUMBING,
HYDRAULIC DESIGN
AND BUILDING
ENERGY
MODELING.

PROJECTS:

COVER ROCHESTER MINE
FILTER PRESS SYSTEM
RENOVATION "PERFORMED AT
PREVIOUS EMPLOYER"

RENO HOUSING AUTHORITY,
MULTIFAMILY HOUSING
"PERFORMED AT PREVIOUS
EMPLOYER"

NCSD MARK TWAIN AND
FREMONT HIGH SCHOOL
EXPANSIONS "PERFORMED AT
PREVIOUS EMPLOYER"

John was the designer for this complete renovation of the 10,000gpm process plant at the Couer Rochester Mine outside of Lovelock, Nevada. A working hydraulic model in KYPipe and a complete dimensional CAD design of the piping, valves, & various instruments was created to simulated the current and projected flows of the system. The project was redesigned several times to meet the budget and flowrate requirements of the owner. Eventually, a massive single pump system with a 30' header pipe to distribute the process solution was settled upon for the final design

John was lead mechanical designer for a new multifamily residential building scheduled to be filled by the elderly. John designed a system with the added the complexity of user-friendly equipment. From faucets to thermostats, every piece of equipment selected was to be usable by elder residences. Additionally, the entire building was to be energy star compliant. A compliant design was submitted, but due to budget constraints, a non-energy star compliant designed was selected for the building.

John was the lead plumbing designer for an addition to two high schools in the Northern Nevada area. John designed a complex plumbing system which tied into the existing mechanical and plumbing systems of the school. The design included a boiler room and cooling tower redesign as the addition of several water source heat pumps.