JOHN BIGDA, P.E.



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

Title: Mechanical Engineer

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

Licenses: Professional Engineer, Nevada: #027095

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

Experience & Qualifications: John has over six years of experience in HVAC and plumbing design, hydraulic design, and building energy modeling.

As a design engineer, John has performed thorough energy analyses on industrial, commercial, and residential buildings of various sizes using energy analysis software including Carrier HAP, Manual J, S, & D worksheets, and Cool Calcs.

John 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.

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

PROJECTS:

RENOWN TAHOE TOWER FLOORS 5 & 9 BUILDOUT

John was the lead engineer for the buildouts of floors 5 & 9 of the Renown Tahoe Tower. designed and new mechanical plumbing systems to serve the existing unfinished floors of Tahoe Tower. Renown's The mechanical design included complex VAV system to meet the challenging pressure and air change rate required of a NICU/ICU department. The plumbing system included full domestic, medical, and waste piping to several hundred fixtures. Both these designs were based upon the latest requirements of ASHRAE 170 and the latest FGI design guide requirements.

UNR NYE & ARGENTA RECONSTRUCTION

John provided mechanical and plumbing design for the reconstruction of UNR's Nye & Argenta dormitories. John designed a system that utilized remaining utilities for a complete kitchen and core area redesign. The redesign included a new modular boiler plant as well as the conversion of the existing steam system to hot water. As the scope of the building repair project evolved as construction progressed, John provided frequent and consistent support to the owner and contractors regarding discovered conditions of the existing mechanical and plumbing infrastructure.

MCSD O'BRIEN MIDDLE SCHOOL

John was the plumbing designer for the science laboratories and kitchen for the new middle school for Washoe County School District. John designed complete plumbing systems including domestic water, acid waste and vent, and natural for the multi-story services laboratory building. In addition, John completed a full commercial kitchen design for the middle school which included complex indirect waste and grease waste systems. The project was fully designed and coordinated using the Building Information Modeling (BIM) process in Autodesk's Revit software.