

RAFAEL TORRES

(509)-302-1390

Sr. MECHANICAL/CIVIL PROJECT DESIGNER

Experience Overview:

I Have excellent communication skills, very friendly, respectful, great conversations and love to meet new people. Possess excellent working relationships with clients and co-workers.

Have 30 years of CAD design and 3D modeling experience. Was the CAD Lead Designer for the Mechanical Group at Meier A&E with 15 years of mechanical design experience specializing in HVAC layout routing and sizing duct as well as Piping layout using AutoCAD 2014 2D/3D, MicroStation and Revit 2014. Experienced in design layout of mechanical (HVAC/Piping) official drawings, revision drawings, shop drawings from engineer sketches and verbal information. I maintained the mechanical standards for our group, creating and maintaining the Mechanical CAD layers, CAD blocks of details, diagrams, schedules, title blocks & other components into a central repository where staff can look up and access everything needed to create and revise our mechanical drawings. All this is was done recognizing national CAD standards (ANSI/ASME). Poses multi-discipline drafting skills in mechanical (HVAC/piping), Civil and a some Electrical and Structural.

My experience also includes over 7 years of GIS (Geographical Information Systems) electronic mapping on the Hanford Site including the preparation of permit maps, road and sidewalk civil design documents, and civil site layout plans. I was part of the developing team that created CAMIS (Computer Animated Mapping Information System) for the Hanford site

I have extensive Hanford mapping experience creating custom maps, maintaining spatial data using CAMIS. I was responsible for preparing, importing and exporting CAD files with GIS and linking attribute data from external databases. I very familiar with the Hanford drawing archives, researching and obtaining drawings for various projects while at Hanford and at Meier A&E.

**Over 6 years' experience teleworking (2015 to present) with great communication, quality work, reliable and no issues or complaints from company or clients.**

Bilingual: English/Spanish (Fluent in speaking, reading, writing and translating)

I am currently employed at Handford with CCPCO and up to date with all drawing standards and procedures.

Education: High Tech Institute, Phoenix, AZ, 1990

Technical Associates Degree with emphasis in Electro-Mechanical Drafting

Project Experience:

- Bangor Naval Base 3D Piping Coordination and Shop Drawings, Created 3D piping models for new storage facility at Bangor Naval Base. Integrated and Coordinated with all other disciplines 3D models, corrected conflicts and created 2D shop drawings from the 3D model.
- 100B Area B-Reactor 3D Model, Atomic Heritage Foundation. Gathered raw information from Hanford site drawing archives to create a 3D model of the B-Reactor to be used for an animation video presentation. Had to model every component related to the reactor to animate how it came together and how it worked.
- 300 Area Accelerated Closure Plan Utility Studies, Battelle Pacific Northwest National Laboratory, Richland, WA. Provided CAD support for the study to determine the utility infrastructure needed to

sustain continued operation of PNNL facilities in the 300 Area and to develop new facilities north of Horn Rapids Road, south of the 300 Area, and west of the Environmental Molecular Science Laboratory (EMSL). Responsibilities included preparing graphical views of each utility system that served the identified facilities. Mechanical utilities included sanitary water, fire protection water, sanitary sewer, process sewer, retention process sewer, raw (river) water, compressed air, natural gas and radioactive liquid waste systems.

- 200 East Tank Farms, CH2M Hill, Richland, WA. Gathered raw information from Hanford site archives for as-building of tank farms waste piping systems and created 3D models. Models used for interference checking for routing of waste lines for new vitrification sites. Also modelled underground piping and facilities to be imported to VRML for graphical fly-through and viewing on the Internet.
- Lourdes Medical Center Chiller Upgrades, Pasco, WA. Provided mechanical design services, working with Johnson Controls under their energy savings performance contract, to replace aging central chillers with new equipment..
- Gesa Buildings, Pasco & Kennewick WA, Designed the HVAC system for the entire facility. Placed equipment, routed and sized the ductwork using Revit
- Chiawana High School, Pasco WA, Designed the HVAC system for the entire school. Routed and sized the ductwork using AutoCad.
- WRPS Scan & Survey, BNLTech, Richland WA, Provide design support creating engineering drawings from GPR scanned data. Very familiar with the Hanford Site and it's procedures from past employment as a GIS mapping Specialist and designer.

#### Work History:

2019-Present	CCPCO - Hanford Site (Full time Designer Specialist – All Disciplines/3D modeling) Using AutoCAD 2019, Autodesk Inventor 2019 and Solidworks 2018
2015 - 2021	BNLTech (Part Time Field Designer)
1999 - 2015	MEIER A&E (Senior Mechanical Designer & CAD Lead)
1996 - 2001	Columbia River Tree Service (Owner and Operator)
1996 - 1998	Fluor Daniel Northwest, Inc. (Hanford Site - Mapping Services)
1994 - 1996	ICF Kaiser Hanford Co. (Hanford Site - Mapping Services)
1992 - 1994	Westinghouse Hanford Co. (Hanford Site - Mapping Services)
1991 - 1992	HEPCO, INC. (Hanford Site - Mapping Services)