

Robert H. Gould, PE

Division Manager



EXPERIENCE SUMMARY

Mr. Gould is a Senior Mechanical Engineer with over 15 years of experience in the field. His experience ranges from commercial and industrial to institutional projects, including a one million-square foot replacement hospital down to small 2,000 SF retail fit-out projects. Mr. Gould has experience managing projects across all disciplines, and interfacing with clients, end-users, construction managers, and contractors.

EDUCATION

BS, Mechanical Engineering; The Pennsylvania State University

PROFESSIONAL REGISTRATIONS

Professional Engineer

REPRESENTATIVE PROJECTS

Holy Redeemer Medical Center – Chiller Plant Upgrades (2018 – 2019)

Project Manager / Mechanical Engineer – Managed and provided mechanical design for the upgrade of a 1,000 TR water cooled chiller plant to 1,500 TR as well as a 420 TR water-cooled chiller plant to a 750 TR (including 250 TR steam absorption chiller). Design was performed in BIM, utilizing 3D HDLS scanning technology in order to model the plants accurately and developing phasing that maintains the plant operating during construction. Design was performed in four months to meet HRMC's schedule and construction is scheduled to be complete by the end of 2019.

SSP Architects/Franklin Township Board of Education – Sampson G. Smith School Additions and Alterations (2015 – 2019)

Project Manager and Lead Mechanical Engineer – Responsible for the mechanical design for this new gym addition totaling 18,000-GSF. In addition, we were responsible for the replacement of the classroom unit ventilators, renovation of the administrative office and toilet areas, conversion of an existing greenhouse to a new classroom and upgrades to three Science Labs in order to incorporate new fume hoods.

Grant Facilities – Aria Health Torresdale Campus, Philadelphia, PA (2015 – 2019)

Mechanical Engineer – Provided design for the approximately 2,000-SF cardiac operating rooms. Desired cooling set points of 60°F were required for the design. The new variable volume system to be provided included a new 8,000-cfm roof top unit. The design incorporates a supplementary refrigerant cooling coil within the unit and new power distribution to upgraded mechanical systems. Project Value Estimated: \$300K

Philadelphia Regional Port Authority – Pier 82 Ammonia Refrigerant Pipe Redesign, Philadelphia, PA (2014 – 2019)

Project Manager & Project Engineer – Provided engineering services to survey the condition of the existing ammonia refrigeration distribution system and provide recommendations for the redistribution of piping within the 130,000-SF refrigerated produce warehouse. The initial design called for the redistribution of piping with the building itself, however this proved to be too disruptive to the warehouse operations. A second design was studied and implemented moving the ammonia suction, liquid and hot gas lines to the roof for less disruption and better occupant safety. Project Value Estimated: \$1.2 million



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City of Philadelphia Department of Public Properties – Strawberry Mansion Healthcare Center #12, Mechanical Infrastructure Upgrade (2015 – 2019)

Project Manager – Provided design for the approximately 11,000- SF medical outpatient facility. We are part of a multidiscipline team tasked with replacing the buildings current water-source heat pump system with a new variable volume, central station air handling system. In addition to the mechanical design, coordination is required with a new approx. 900 SF mechanical room required to be constructed on the back of the building as well as work within the building's older electrical services. Project Value Estimated: \$1.5million

PhilaPort – Pier 82 Condenser Water Tank Replacement (2018 – 2019)

Project Manager – Provided design for the replacement of the 2,000 gallon condenser water storage tank associated with the ammonia refrigeration plant. The scope included the replacement of the tank and associated piping and accessories attached and in the way of replacement.

University of Pennsylvania – Steinberg-Deitrich Hall, HW Pipe Analysis, Philadelphia, PA (2016)

Project Manager and Mechanical Engineer – Provided third party engineering services to study two representative copper fitting connections for heating hot water piping at the recently constructed Steinberg-Dietrich Hall. The pipe was experiencing failures at the joints and PAI was engaged to coordinate with lab testing facilities to analyze the welds including weld depth, weld, clearance and solder composition (chemical analysis). Work concluded with a memo to the University outlining our findings. Project Value: NA study

Kitch and Cloud – SUNY Stony Brook Nobel Hall Jamba Juice, Stony Brook, NY (2015)

Project Manager – Provided design for the approximately 2,000- SF residence hall café. A new multi-zone split system served the food service area and new power and lighting distribution. Project Value: \$650K

Tri-M Group/DuPont Pioneer – Stine-Haskell Research Center, Newark, DE (2014 – 2015)

Mechanical Engineer- Design of the mechanical systems for this new agricultural research facility totaling approximately 140,000- SF. The mechanical systems included an 8,000 MBh shell and tube heat exchanger with associated hot water distribution pumps that utilizes steam from a campus high-pressure distribution system. In addition, we provided five new rooftop units with associated air distribution and a new outdoor chiller plant.

Asturian Group Inc./US Navy Patuxent River Naval Air Station - Building 2199 HVAC Upgrades, Patuxent River, MD (2014 - 2015)

Project Manager – Responsible for the design-build retrofit of the existing HVAC system for an existing pilot barracks building. We replaced the existing Dedicated Outside Air System (DOAS) with a new variable volume air handling system for the building. The design consisted of a semi-custom rooftop air handling unit with a chilled water cooling coil, a hot water preheat coil, and a new ductwork distribution system.

Philadelphia Senior Center - Property Condition Assessment, Philadelphia, PA (2014)

Project Engineer – The Philadelphia Senior Center, at 509 S Broad Street in Center City Philadelphia, is a two story senior center housing a kitchen, serving area, dining area, art room, multipurpose room(s), auditorium, and associated offices. At approximately 15,000-SF, the building contains packages rooftop units for HVAC, gas-fired domestic water heaters, main electrical distribution, fire protection, fire alarm systems. Pennoni performed a condition survey on the buildings MEP/FP and systems, identifying the condition of the existing systems as well as recommendations for remediation.



New Boston Air Force Station – Efficiency Upgrades, New Boston, NH (2014 - 2016)

Project Engineer - Building 100 is part of a classified satellite tracking facility on the New Boston Air Force Base. Mr. Gould acted as a member of a Design-Build team charged with implemented energy conservation measures for the Base's Building 100. The measures included, replacing the existing 150TR chiller with a new 100TR chiller, providing VFDs and associated controls for variable flow chilled water and hot water systems, providing revised control sequences for plant operations and air-side economizer (free-cooling). The changes were modeled using Trane TRACE 700 software to identify overall improvement over the existing building operations

Confidential Federal Client – Replacement of Air Handling Units Phase 2, Philadelphia, PA (2015 – 2016)

Served as mechanical engineer providing documentation in Revit, for the replacement of three existing air handling units, ductwork distribution and associated hydronic piping. As part of the project, we performed load calculations, selection of custom and standard air handling units, selection of exhaust fans, coordination of building controls to new equipment, and modifications to the existing duct and piping distributions systems.

Confidential Federal Client – Fifth Floor Tenant Fitout, Philadelphia, PA (2015)

Served as mechanical engineer providing documentation in Revit, for the renovation of an existing tenant space. The project consisted of the tenant fit-out of an existing 7,000 square foot space on the 5th floor. Duties included performing an extensive on-site survey, load calculations, design of new variable air volume system and induction unit system, and ductwork distribution.

Confidential Federal Client – Replacement of Variable Air Volume Boxes, Philadelphia, PA (2014 – 2016)

Project Manager – Served as mechanical engineer for multiple projects located at a 750,000+SF federal facility located in Philadelphia. Various projects included the replacement of large infrastructure such as air handlers and fans, review and evaluation of downstream air distribution and controls and the consultation temporary measures to keep the building functioning while construction work commenced. Projects were performed in AutoDesk Revit software to coordinate with other “out-of-scope” utilities and tight construction conditions.

Confidential Federal Client – Replacement of Variable Air Volume Boxes, Philadelphia, PA (2014 – 2016)

Project Manager - Served as mechanical engineer providing documentation in Revit for the replacement of existing AHU-15 VAV systems and associated hydronic piping. As part of the project, we performed load calculations, selection of replacement VAV boxes, coordination of new floor plan allocation, and modifications to the existing duct and piping distributions systems.

Confidential Federal Client – Replacement of Air Handling Units Pilot Project, Philadelphia, PA (2014 – 2016)

Served as mechanical engineer providing documentation in Revit for the replacement of three existing air handling units, ductwork distribution and associated hydronic piping. We performed load calculations, selection of custom and standard air handling units, selection of exhaust fans, coordination of building controls to new equipment, and modifications to the existing duct and piping distributions systems.

Confidential Client - Air Handling Unit Replacement, Philadelphia, PA (2014 - 2016)

Project Manager – Responsible for the approximate 750,000 SF in an infrastructure replacement project to upgrade the existing air handling units (AHU) throughout the facility. Replaced two AHUs in the mezzanine mechanical room which support the auditorium and associated lobby area. Care was taken to coordinate the construction efforts with the buildings operating and security practices.