



WSP, an award-winning and innovative multi-disciplinary engineering consulting firm, seeks a **Senior Water Systems Engineer** with strong project management, analytical and design skills to join our Water and Environmental Division in **Shelton, Connecticut**. Work will involve management and design of improvements to public water supply distribution and transmission systems, with a focus on larger diameter pipeline design projects, and associated pumping, valve and storage facilities. Joining WSP gives you the opportunity to work on some of the most challenging, transformative water and environmental projects in the U.S. and abroad. The position offers great potential for professional growth in a stimulating work environment and the opportunity to apply the latest technology to water projects.

POSITION RESPONSIBILITIES:

- Serve as lead engineer or project manager for evaluation, design and construction phase engineering of improvements to water utility distribution and transmission system infrastructure.
- Perform hydraulic modeling analysis to evaluate existing infrastructure, and prepare recommendations for improvements including facility location and sizing.
- Perform condition assessment on existing pipes and networks.
- Prepare conceptual layout of pipe routes, develop comparative analytics, and make recommendations for improvement projects.
- Perform condition assessment on existing pumping and valve facilities.
- Evaluate suitability of pipe materials for new construction and pipe rehabilitation projects, based on project requirements, design and installation considerations, and life cycle analysis.
- Perform surge analysis and incorporate improvements into project designs as required.
- Prepare detailed pipeline, pumping station, storage tank and related facility designs.
- Prepare design of stream, river, bridge, highway and railway pipeline crossings, including design of directionally drilled and pipe installed through jacking or boring processes.
- Design of temporary bypass facilities, line stops, and insertion valves as required.
- Interact with permitting and funding agencies, develop and deliver presentations, prepare applications, and respond to inquiries, to assist clients with obtaining project approvals.
- Mentor and lead assigned staff engineers, drafting personnel and technicians in evaluation, design and construction phase activities.
- Communicate with clients, establish goals and objectives for project teams, and scheduling and coordinating resources to deliver projects on time, within budget, and to the performance expectations of the client.
- Supporting proposal development on a variety of water related as well as interdisciplinary projects and attending conferences and seminars.

Job Requirements

REQUIRED SKILLS AND QUALIFICATIONS:

- Bachelor's degree in civil engineering, environmental engineering, or related field.



- Minimum 5 years of experience in water utility engineering, design and hydraulic modeling.
- Experience with design of large diameter water pipelines, pipe rehabilitation, pumping stations, valve facilities and/or storage facilities is required.
- Must have experience developing cost estimates for capital and operating expense of utility systems, cost-benefit analysis, and life cycle cost analysis.
- Must be familiar with design of stream, river, highway or railroad utility crossings, and use of trenchless technologies.
- Construction phase engineering experience on large diameter pipeline projects is highly desirable.
- Knowledge of water utility system operations is highly desirable.
- Candidate should be familiar with construction contracting and good engineering practice for control of construction change orders through design and management.
- Previous experience leading engineering teams on water utility design projects is desirable, but not required.
- Experience with design and operation of wastewater systems is also beneficial.
- Have or ability to obtain within 2 years a PE License in Connecticut or New York.
- Must function independently with minimal supervision in a multi-disciplinary team setting.
- Excellent English verbal and written communication skills.
- Proficient with use of WaterGEMS or InfoWater modeling software, and with use of MS Project, Primavera, or other scheduling software.

About WSP USA

WSP USA is the U.S. operating company of one of the world's leading engineering and professional services firms. Dedicated to serving local communities, we are engineers, planners, technical experts, strategic advisors and construction management professionals. WSP USA designs lasting solutions in the transportation, buildings, energy, water and environment sectors. With nearly 7,000 people in 100 offices across the U.S., we partner with our clients to help communities prosper. www.wsp.com/usa

WSP provides a progressive mix of benefits including medical, dental, 401k and long-term disability insurance focused on providing health and financial stability throughout the employee's career.

At WSP, we want to give our employees the challenges they seek to grow their careers and knowledge base. Your daily contributions to your team will be a key piece in our meeting client objectives, goals and challenges; are you ready to get started?

WSP USA is an Equal Opportunity Employer - Race/Color/Religion/Sex/Sexual Orientation/Gender Identity/National Origin and Veterans and Disability.

The selected candidate must be authorized to work in the United States.