



128 Years of Engineering Experience

Water Supply and Distribution Services

Since 1880, James W. Sewall Company has provided engineering services throughout the Northeast, establishing a reputation for superior design and construction management. With experience in civil, structural, mechanical, electrical, and environmental engineering, Sewall has accumulated an impressive performance record on a wide range of projects including industrial buildings, roads, streets and airports; drainage, sewerage and waste treatment systems; water supply and distribution systems; reservoirs, dams, and flood control; and recreational facilities. Depending on client requirements, Sewall has performed feasibility studies and system analysis, planning and site development design, permitting, and construction inspection. In addition, Sewall has expertise in hydraulic modeling, database design, and data conversion for GIS integration.

Sewall brings to an engineering project broad capabilities, including aerial photography, surveying/GPS, photogrammetric and cadastral mapping, facilities management, and natural resources consulting. Prepared inhouse, aerial photography, base mapping, and orthophotography provide accurate planimetric, topographic, and geologic data that expedite route and site analysis. Sewall survey control and layout eliminate reliance on third parties, providing single-source responsibility

that speeds production and strengthens quality control. As a conversion vendor, Sewall can deliver design drawings and attribute data in digital formats compatible with existing databases or create new models.



A 1.1 million GPD filtration system, Southwest Harbor, Maine

WATER SUPPLY AND DISTRIBUTION

For many years, Sewall has provided comprehensive water supply and distribution services to meet the needs of industrial, municipal, and residential users. Sewall has performed system improvement and acquisition studies and supported wellhead and watershed delineation and protection efforts. Sewall has designed, inspected,

and administered contracts for pipeline, pump station, and storage and treatment facilities. For numerous water supply, treatment, and distribution projects, Sewall engineers have prepared detailed applications and assisted in securing permits and funding.

SOURCE OF WATER SUPPLY – WATERSHED AND WELLHEAD PROTECTION

Sewall engineers have expertise in aquifer location, delineation, and evaluation for groundwater supplies, as well as watershed outline and sanitary surveys for surface water services. They are experienced in preparing applications for waiver of filtration requirements and in negotiating waiver terms.

WATER DISTRIBUTION SYSTEMS

In transmission and distribution pipeline work, Sewall utilizes hydraulic modeling to size and locate facilities. Materials are carefully specified depending upon such considerations as soils, pressures, owner preference, and unusual service conditions. In the course of our many pipeline design assignments, we have worked closely with communities and state departments of transportation to locate utilities and arrange for utility construction in concert with new construction. Our pipeline projects have included bridge-suspended crossings and subaqueous crossings beneath major rivers.

PUMP APPLICATIONS

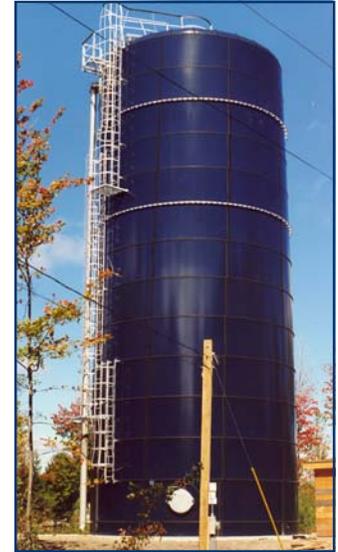
Our pump station designs include deep-well turbine installations, river and lake intakes and pump systems, and booster installations. Sewall engineers have accumulated considerable experience in variable speed systems to minimize storage and optimize energy usage.

STORAGE FACILITIES

Storage facilities have run the gamut from 1,000,000-gallon welded steel structures to reinforced concrete ground-level and underground tankage. Sewall engineers pioneered the first glass-coated steel standpipe in Maine, an economical material that has subsequently been incorporated into numerous storage project designs.

TREATMENT SYSTEMS AND TROUBLESHOOTING

Critical to each water system is the correct application of treatment facilities. Sewall has arranged for and overseen bench and pilot studies to compare and optimize treatment processes. Designs of treatment facilities have ranged from rapid sand to pressure filtration. Sewall engineers also evaluate and troubleshoot existing facilities.



A 220,000 gallon glass-coated steel standpipe, Oakland, Maine

CONSTRUCTION MANAGEMENT

Depending on client preference, full-time qualified field inspection personnel oversee most of our projects. We firmly believe that the key to our ongoing success is to ensure that our clients receive the quality services they require and have come to expect.

For more information on Sewall's water supply and distribution and other engineering services, contact: Patrick Graham, PE, Senior Project Manager at (207) 827-4456. E-mail: patrick.graham@jws.com



JAMES W. SEWALL COMPANY / Since 1880

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