CONSULTING ENGINEER

**588 STONEHOUSE ROAD** COVENTRY, CONNECTICUT 06238 (860) 742-9019

EDUCATION:	B.A., MATHEMATICS, UNIVERSITY OF CONNECTICUT B.S., CIVIL ENGINEERING, UNIVERSITY OF CONNECTICUT GRADUATE STUDY, UNIVERSITY OF CONNECTICUT
<b>REGISTRATIONS:</b>	PROFESSIONAL ENGINEER, STATE OF CONNECTICUT PROFESSIONAL LAND SURVEYOR, STATE OF CONNECTICUT
AFFILIATIONS:	American Society of Civil Engineers (Member) American Water Works Association (Member) New England Water Works Association (Member) Connecticut Association of Land Surveyors (Member) Assoc. of State Dam Safety Officials (Assoc. Member) American Concrete Institute (Member) Water Environment Federation (Member) PADI Diving Society (Certified Open Water Diver)

#### **EXPERIENCE:**

1986 to Present: KARL F. ACIMOVIC, P.E. & L.S., Consulting Engineer

Currently providing a variety of engineering services to various clients in water resources, sewers, commercial and residential site development, dam design, drainage improvements and land surveying.

#### **REPRESENTATIVE PROJECTS:**

#### **Dams and Reservoirs:**

NATIONAL DAM INSPECTION PROGRAM, Phase I Reports, U.S. Army Corps of Engineers - Site inspections, preparation of hydrologic and hydraulic analyses, including use of the HEC-1 computer program, preparation of final reports and presentation of final reports to the Corps.

PHASE II AND PHASE III DAM INSPECTION REPORTS, PLANS AND DOCUMENTS - These projects included in-depth hydraulic, hydrologic and structural analyses using HEC and SCS computer programs. It also involved the preparation of construction plans, subsequent construction inspection and supervision, and contract administration. Some representative dam sites include the Poquonnock Reservoir Dam, Morgan Pond Dam, Ledyard Reservoir Dam and Poheganut Dam in Groton, Connecticut (Groton Utilities Dept.); Holbrook Pond Dam in Hebron, Connecticut (Water Resources Unit, Conn. DEP); Bashan Lake Dam in East Haddam, Connecticut (Water Resources Unit, Conn. DEP); Gorton Pond Dam in East Lyme, Connecticut (Water Resources Unit, Conn. DEP); Eagleville Lake Dam in Mansfield and Coventry, Connecticut (Inland Water Resources, Conn. DEP); Morey Pond Dam in Ashford, Connecticut (Inland Water Resources, Conn. DEP); Hatch Pond Dam in Kent, Connecticut (Inland Water Resources, Conn. DEP); and Babcock Pond Wildlife Management Area Dams in Colchester and East Haddam, Connecticut (Inland Water Resources, Conn. DEP).

# KARL F. ACIMOVIC, P.E. & L.S.

INSPECTION AND DESIGN WORK FOR CT DEEP / INLAND WATER RESOURCES - Over the last 33 years, work for the department has included inspections of dams requiring repair, assistance with review of submittals to the department and preparation of design plans and specifications for repairs. Through 2022, this has included over 260 dams located throughout the State of Connecticut.

## CURRENT AND RECENT MUNICIPAL RELATED ENGINEERING WORK:

<u>Consulting Town Engineer for the Town of Willington, Connecticut</u> - Advisor to the Board of Selectmen and Public Works Department. Work since 1991 includes preparation of plans, specifications and contract documents for public works drainage, road and bridge projects.

<u>Consultant to the City of Groton, Connecticut</u> - As an in-house consultant to the City and its Dept. of Utilities and Public Works, work includes design of new facilities and repair work for the Water Dept. and Water Pollution Control Authority. Current and past projects include dam inspection and rehabilitation; water and sewer system improvements; water and sewer system pump station construction and rehabilitation; inventory, maintenance and replacement of underground fuel storage tanks; hydraulic analyses for fire flows; planning and feasibility reports; preparation of State and Federal permits; and other miscellaneous work.

<u>Windham Water Works</u> – Work for the Willimantic Water Department's Windham Water Works over the past 15 years has included design and contract administration for projects on repairs to Willimantic Reservoir Dam, raw water intake structures, construction of residuals drying lagoons, building addition installation, and dam inspections.

<u>City of New London</u> – Projects over the past 19 years for the New London WWPCA have included dam inspections for the City's drinking water system, preparation of their Water Supply Plan and Conservation Plan, water tank construction, improvements and repairs to various dams in the system, and property acquisition and feasibility studies

<u>Town of Vernon</u> – Projects over the last 12 years have included dam inspections, preparation of plans, specifications, permits and contract documents for dam rehabilitation.

<u>Town of East Windsor</u> – Projects over the last 5 years have included dam inspections, preparation of plans, specifications, permits and contract documents for drainage projects and dam rehabilitation.

#### **DAM BREACH PROJECTS:**

Preparation of dam breach plans for East Brass Mill Dam in Waterbury, CT, prepared for the Dam Safety Section of the DEEP, including removal of a concrete structure and earth embankment sections, as well as rerouting of the Mad River to its original location; removal of a portion of the earth embankment of Painter Pond Dam, including rerouting of Mill Brook, in Woodstock; and removal of Bulkley Pond Dam on Sasco Creek, adjacent to Route 1, on the Fairfield - Westport Town Line. Current breach projects include Red Mill Pond Dam and Mohegan Brook Dam, both in Uncasville, CT, and Spaulding Pond Dam in Norfolk, CT.

## OTHER:

Town of Coventry, CT – Public Works Facility Study Committee & Public Works Building Committee (2001 – 2012, Chairman). Member of Town Committee for duration of a study of location siting and facility requirements for a new Public Works Garage, selection of design-build contractor, and coordination with Public Works Dept. and Contractor for design and construction of the new garage.

## Karl F. Acimovic, P.E. & L.S.

Education: Mathematics, BA, University of Connecticut Civil Engineering, BS, University of Connecticut Graduate Courses in Engineering (Water Related, Hydraulics, Geotechnical), University of Connecticut

Professional Licensing / Registration:

Professional Engineer, Connecticut Professional Land Surveyor, Connecticut

Professional Membership Affiliations:

American Water Works Association (Also New England & CT Sections) American Society of Civil Engineers (Also CT Section) Water Environment Federation American Association of Dam Safety Officials Connecticut Association of Land Surveyors American Concrete Institute

Karl Acimovic, P.E. & L.S. - Project Descriptions / Consultant to Groton Utilities

Permitting:

Prepare permit applications for environmental and water related projects to the Department of Energy & Environmental Protection, Department of Public Health and other Local, State and Federal Agencies as required. This includes mainly water and sewer related projects, but on occasion also electric facilities.

Update and keep permits current, particularly annual diversion permit reports to satisfy permit conditions for metering and other activity monitoring.

Examples: Diversion Permits (DEEP), Change-In-Use Permits (DPH), Marine Facilities at the PAF (DEEP), Air Quality Permits for Generators (DEEP), Underground and Aboveground Fuel Storage Containers (DEEP and Federal), Inland Wetland Permits (Local), etc.

**Design Projects:** 

Assist Project Management with preparation of design plans, technical specifications and contract documents for both permitting and bidding, related to water sewer and electric projects.

Examples: Water & Sewer Pump Station Construction, Modifications and Upgrades; Pump Replacements at Various Facilities (Water Treatment Plant Low Lift & High Lift); Project Management Building, Performance Specifications for Bidding and Site Plans for Local and State DPH Review; Electrical Substation Foundation Design, Site Plans, Security Enhancements and Spill Containment; Gravity and Force Main Sewer Installations; Water Main Installations; GIS (ESRI) and AutoCAD Mapping and Drafting; Dam Repair and Rehabilitation Projects, including hydrologic and hydraulic assessments of the Groton Utilities watershed areas; etc.

## Dams & Reservoirs:

Perform dam inspections, including structural evaluations of embankments, spillways, gatehouses and associated facilities; evaluate toe drain discharges and piezometric water grade lines at earth embankments; design improvements, modifications and repairs to dams, including plans, technical specifications and contract documents; prepare emergency action plans for high and significant hazard dams for potential storm events that could impact downstream infrastructure and built-up areas; etc.

Inspections, Contract Administration, Troubleshooting:

Assist Project Management staff with daily problematic situations as they occur.

Reports & Studies, Miscellaneous:

Assist staff with long range analyses and studies such as preparation of information dealing with hydraulic modeling, water supply plans, conservation plans, emergency plans, drinking water quality management plan, stream flow analyses, etc.

Assist Project management in review of site plans, designs, calculations and reports / studies from other consultants, both for in-house submittals and those from local land use agencies.

Past & Ongoing Special Projects:

Drinking Water Quality Management Plan (DWQMP) – This plan drew together various stakeholders from Southeastern Connecticut communities in promoting a clean source water program, while protecting the existing economic base and promoting growth in trade and industry through a wise use of natural resources within our watershed. For the past many years, I have been working with Management to promote and maintain a concern for watershed resources through the development of a plan specifically designed for Groton Utilities. While the plan has now been completed, I continue to act as a liaison between Groton Utilities, stakeholders and regulators.

Water Supply Plans (WSP) – These plans, mandated by the State of Connecticut Department of Public Health (DPH), are dynamic plans requiring periodic updates to satisfy regulatory obligations. Past plans, adopted and approved by the Department of Energy & Environmental Protection (DEEP) and the Department of Health (DPH), included those prepared for both Groton Utilities and the Town of Ledyard WPCA. Because of the substantial amount of information required to be addressed, work on background data is continually being analyzed and compiled in a timely fashion in order to be prepared for required updates. In my capacity of assisting Project Management, I periodically review the current plans, identify the need for sections to be updated, categorize the work that we could accomplish with in-house staff, and draw up an RFP for those items requiring outside consulting services. Groton Utilities then compiles the final report to be submitted to the DPH and DEEP.

Conservation Plans & Emergency Operations Plans – These plans, again mandated by the State of Connecticut Department of Public Health and the Department of Energy & Environmental Protection, are required as appendices to the Water Supply Plan and to DEEP Diversion permitting. Both of these were prepared in-house for the most recent WSP submittals. To assist Project Management staff, I continue to provide assistance in updating these two plans.

Minimum Stream Flow Requirements – The State of Connecticut, Department of Energy & Environmental Protection, has instituted into law minimum standards for stream flows throughout the State. These rules have a significant impact upon the water industry – particularly those (e.g., Groton Utilities) that rely on surface water resources. I have been working with Project Management and Water Treatment Plant staff over many years in analyzing flows from influent streams such as Great Brook and Thompson Brook and continue to contribute toward a working management plan that meets current and future DEEP requirements.

Karl Acimovic, P.E. & L.S. - Consulting Engineer in Private Practice

For the past 36 years, I have been an independent consultant providing services to a varied clientele. Previous to that, work included professional services to both surveying and engineering firms over a 20-year period. Current and past work has included a wide spectrum of projects in the civil engineering field with municipal, State and Federal clients with respect to water resources, dams, infrastructure and other various fields.