

BACKGROUND

2007-Present
Vice President
Weston & Sampson

2002-2007
Project Manager/Team
Leader
Weston & Sampson

2000-2002
Project Director
Earth Tech, Inc.

1990-2000
Principal Engineer
Maguire Group, Inc.

1987-1990
Project Engineer
Orsine Cotter Carson, Inc.

EDUCATION

1986
Bachelor of Science
Civil Engineering
University of New Hampshire

PROFESSIONAL REGISTRATIONS

Professional Engineer
Connecticut No. 17476
Massachusetts No. 46406

PROFESSIONAL SOCIETIES

Associates Committee,
Connecticut American Water Works
Association
Prospect, Connecticut

American Society of Civil Engineers

American Water Works Association

Water Pollution Control Authority

Water Environment Federation

New England Water Environment
Association

National Society of Professional
Engineers

Chris, vice president and regional manager of Weston & Sampson's Connecticut office, has over 30 years of civil engineering experience. He offers expertise in the planning and design of municipal wastewater collection systems, pumping stations, and wastewater treatment facilities, and provides guidance and oversight for numerous engineering and design projects in western Massachusetts and Connecticut.



SPECIFIC PROJECT EXPERIENCE

MS4 Services, Thomaston, Connecticut. Oversaw the services required to help the town maintain compliance with the 2016 Connecticut General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) Reissuance with Modifications.

MS4 Services, Prospect, Connecticut. Oversaw the services required to help the town maintain compliance with the 2016 Connecticut General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) Reissuance with Modifications.

Stormwater Services for Francis Walsh Intermediate School Construction, Branford, Connecticut. Oversaw the completion of stormwater inspection and monitoring services related to the construction of additions and renovations at this school. These services are being completed in order for the town to maintain compliance with the CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities.

Industrial Stormwater Permitting, Prospect, Connecticut. Principal-in-charge of the stormwater sampling and permitting services as it relates to the Prospect Town Garage and Prospect Recycling Center in order to aid the town in maintain compliance with the industrial permit.

Industrial Stormwater Permitting, Thomaston, Connecticut. Principal-in-charge of stormwater sampling and permitting services as it relates to the Thomaston Municipal Garage and Thomaston Transfer Station in order to aid the town in maintain compliance with the industrial permit.

Stormwater Monitoring for Park Taylor Road Construction, Enfield, Connecticut. Principal-in-charge for the completion of monthly stormwater monitoring to fulfill the requirements of the Permit for Discharge of Stormwater and Dewatering Wastewater for construction activities.

Stormwater Services for Smalley Elementary School, New Britain, Connecticut. Oversaw the completion of stormwater inspection and monitoring services related to the construction of additions and renovations at this school. These services are being completed in order for the city to maintain compliance with the CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities.

Stormwater Planning and Permitting Assistance, Various Locations, Massachusetts. Program manager responsible for the preparation of stormwater

management plans, notices of intent, and no exposure certifications for public works facilities, transfer stations, and landfills in Deerfield, Lenox, and Orange.

National Pollutant Discharge Elimination System Permit Renewal, University of Massachusetts, Amherst. Reviewed permit and plant operations related to the university's coal pile treatment facility. Subsequently, provided services in an on-call capacity, including coordination of the groundwater monitoring wells sampling plan for permit compliance, two training sessions for the university's operations staff, and engineering advice to successfully address DEP concerns regarding the treatment facility.

Stormwater Pollution Control and Countermeasures (SPCC) Plan, Thomaston, Connecticut. Served as principal-in-charge providing contract review and administrative services for the town's Department of Public Works.

Drainage and Erosion Control Improvements, Various Locations. Principal-in-charge for the design of drainage and erosion control improvements in various communities, including East Longmeadow, Lenox, Ludlow, Orange, Ware, and Wendell, Massachusetts; and Killingly, Ledyard, Mansfield, and South Windsor, Connecticut. Directed stream bank stabilization, pipeline design, outfall design, and installation and replacement of small and large box culverts.

Cambridge Crossing Multi-Use Residential Development, Simsbury, Connecticut. Principal-in-charge for this project involving roadway design and site layout of 88 residential units (single family, duplex, apartments), parking layout, stormwater management and low impact development (LID) systems design, utility (sewer, water, gas, electric) systems design, phases erosion and sedimentation control design, and local and state permitting.

Wilton Commons Site Development, Wilton, Connecticut. Principal-in-charge for the design, permitting, and construction administration of a new 75-unit elderly housing project.

Senior Housing Site Development, Trumbull, Connecticut. Principal-in-charge to provide engineering services, in collaboration with an architectural firm, for the design, permitting, and construction administration of a new 40-unit elderly housing project.

Byram Park Pool and Recreation Area, Greenwich, Connecticut. Principal-in-charge for this project involving the site civil engineering, parking layout, storm water management, and low impact development (LID) design, building and landscape architecture, structural design, electrical design, pools/splash pad/pump and filter building design, low-pressure sanitary system design, and local zoning/permitting.

Portland Recreational Complex, Portland, Connecticut. Principal-in-charge for this project involving the design of multiple athletic fields, parking layout, storm water management and field underdrain design, floodplain management, building and landscape architecture, pools/splash pad/pump and filter building design, traffic design, subsurface sewage disposal system design, and local wetland permitting.

BACKGROUND

2015-Present
Project Manager
Weston & Sampson

2008-2015
Senior Civil Engineer
WMC Consulting
Engineers

2003-2008
Water Resources Engineer
Milone & McBroom, Inc.

EDUCATION

2003
Master of Science |
Civil & Environmental Engineering
South Dakota School of Mines &
Technology

1999
Bachelor of Engineering
Civil Engineering
Osmania University

PROFESSIONAL REGISTRATIONS & CERTIFICATIONS

Professional Engineer:
Connecticut No. 25720

Certified Floodplain Manager (CFM)

OSHA 10-Hour Construction
Training

PROFESSIONAL SOCIETIES

Association of State Floodplain
Managers (ASFPM)

Connecticut Association of Flood
Managers (CAFM)

HONORS

CTDOT Approved
Hydraulic Engineer

PRESENTATIONS & PUBLICATIONS

2003
"Characterizing Physical and
Hydraulic Habitat Using ArcGIS and
Hydraulic Modeling Techniques"

2003
"Hydraulic Modeling to
Characterize Brown Trout Habitat in
Rapid Creek"

Raju, a Certified Floodplain Manager and CT Department of Transportation (CTDOT) Approved Hydraulic Engineer, specializes in hydrologic/hydraulic analysis, design, and permitting for stormwater management, MS4, highway, bridge/culvert replacement, flood control, and stream restoration projects. His experience ranges from preliminary project planning through final design to permitting and construction contract administration. An expert in helping clients achieve resiliency from inland/ coastal flooding and shoreline destruction, Raju focuses his efforts on understanding and improving inland/coastal drainage and infrastructure for municipalities.



SPECIFIC PROJECT EXPERIENCE

Municipal Separate Storm Sewer Systems (MS4) Permit Registration, Branford, Connecticut. Project Manager involved with the services required to help the town maintain compliance with the MS4 permit. As of February 2019, prepared the Annual Report, Illicit Discharge Detection and Elimination (IDDE) Report, IDDE compliance with town's inland wetlands agency, dry weather screening, wet weather sampling, and stormwater mapping.

Municipal Separate Storm Sewer Systems (MS4) Permit Registrations and Stormwater Management Plans (SWMP), Prospect, Connecticut. Project manager for this project involving the MS4 permit registration, SWMP, dry weather screening, wet weather sampling, and stormwater mapping as required by the 2016 Connecticut General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) Reissuance with Modifications.

Municipal Separate Storm Sewer Systems (MS4) Permit Registrations and Stormwater Management Plans (SWMP), Thomaston, Connecticut. Project manager for this project involving the MS4 permit registration, SWMP, dry weather screening, wet weather sampling, and stormwater mapping. as required by the 2016 Connecticut General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) Reissuance with Modifications.

Stormwater Sampling for Park-Taylor Road Reconstruction, Enfield, Connecticut. Responsible for overseeing monthly sampling and reporting stormwater runoff for turbidity in compliance with the Construction General Permit.

Stormwater Sampling for MDL Realty Remediation Site, Bridgeport, Connecticut. Responsible for overseeing monthly sampling and reporting stormwater runoff for turbidity in compliance with the Construction General Permit.

Philip R. Smith and Eli Terry Elementary Schools Renovation Construction Stormwater Services, South Windsor, Connecticut. Project manager for stormwater inspection and monitoring services related to the construction of additions and renovations at Philip R. Smith and Eli Terry Elementary Schools in South Windsor. These services are being completed for the city to maintain compliance with the CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities.

CTDEEP Industrial Permit for the Parks and Recreation Department, Rocky Hill, Connecticut. Prepared the registration, CTDEEP Industrial Permit, and SWPPP for a Parks and Recreation facility.

CTDEEP Industrial Permit for Four Town Facilities, Branford, Connecticut. Revised the SWPPP and performed the stormwater inspection and monitoring at the Public Works facility, landfill, transfer station and wastewater treatment facility.

CTDEEP Industrial Permit for a New DPW Facility, Waterbury, Connecticut. Prepared the SWPPP and registration involved with constructing this new facility.

Dillon Stadium Renovation Construction Stormwater Services, Hartford, Connecticut. Project manager for stormwater inspection and monitoring services related to the construction of additions and renovations at Dillon Stadium Soccer fields renovation in Hartford. These services are being completed for the city to maintain compliance with the CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities.

Smalley Elementary School Construction Stormwater Services, New Britain, Connecticut. Project manager for the completion of stormwater inspection and monitoring services related to the construction of additions and renovations at Smalley Elementary School. These services are being completed in order for the city to maintain compliance with the CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities.

Francis Walsh Intermediate School Construction Stormwater Services, Branford, Connecticut. Project manager for the completion of stormwater inspection and monitoring services related to the construction of additions and renovations at Francis Walsh Intermediate School. These services are being completed in order for the town to maintain compliance with the CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities.

Small Municipal Separate Storm Sewer Systems General Permit, Various Facilities, Connecticut. Senior civil engineer for the registration and CTDEEP Stormwater from Small Municipal Separate Storm Sewer Systems General Permit for facilities in Berlin, Burlington, Harwinton, Litchfield, New Hartford, Norfolk, North Canaan, Plymouth, Rocky Hill, Simsbury, and Winsted.

Permitting, Various Locations, Connecticut. Senior hydraulic engineer for the design and preparation of ACOE and CTDEEP permits including Flood Management Certification, IWRD General Permit, IWRD Individual Permit, and IWRD Diversion Permits for various projects in Cornwall, Granby, Greenwich, New Canaan, New Milford, North Stonington, Plainville, Putnam, Redding, and South Windsor.

Stormwater Discharge from Construction Activities Permit, Connecticut. Project manager involved with the preparation and approval of general permit registration and pollution control plan for Crescent Lake drainage improvements in Enfield, remediation at MDL Realty in Bridgeport, and Solar City Photovoltaic installation in Rocky Hill.

BACKGROUND

2019-Present
Project Engineer
Weston & Sampson

2017-2019
Engineer II
Weston & Sampson

2014-2017
Engineer
Weston & Sampson

2013-2014
Civil Engineer
Diversified Technology Consultants

2012-2013
Staff Engineer
Geolnsight

EDUCATION

2012
University of Massachusetts
Amherst
Master of Science
Environmental and Water Resource
Engineering

2011
University of Massachusetts
Amherst
Bachelor of Science
Civil and Environmental Engineering
Commonwealth College
(Honors College) with Great
Distinction
Magna Cum Laude

SOFTWARE

AutoCAD Civil 3D; GIS; ArcGIS

PROFESSIONAL CERTIFICATIONS

Professional Engineer:
Connecticut No. 31345

NHI Roundabout Training

NETTCP HMA Paving Inspector

NETTCP Concrete Inspector

ACI Certified Concrete Field Testing
Technician

Certified Nuclear Gauge Operator

Lauren, a civil engineer in the firm's Rocky Hill office, provides engineering design and review for various site and civil projects including parks, housing, municipal facilities, and solar photovoltaic fields. Her experience ranges from preliminary project planning through final design to construction administration. She also serves as a construction inspector in the firm's Construction Services Group, where she provides flexible on-call or extended assistance as required. In addition, Lauren has prepared stormwater management reports and stormwater permits, and is involved with stormwater sampling, reporting, and mapping based on MS4 requirements.



SPECIFIC PROJECT EXPERIENCE

Stormwater Permitting Assistance, Various Projects. Assisted with the development of applications for the following permits: Connecticut Department of Energy and Environmental Protection (CTDEEP) General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (Construction General Permit) and Connecticut General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4).

MS4 registration, Thomaston, Connecticut. Project Engineer involved with the services required to help the town maintain compliance with the MS4 permit since 2016. These services include:

- Preparation of Stormwater Management Plan (SWMP), April 2016
- MS4 permit registration with CTDEEP, April 2016
- Wet weather outfall sampling, July 2017
- Preparation of Annual Report, Mar 2018
- Preparation of Illicit Discharge Detection and Elimination (IDDE) Report, July 2018
- Preparation of IDDE compliance with town's inland wetlands agency, July 2018
- Dry weather prioritization and IDDE inspections, August 2018
- Wet weather sampling, Ongoing
- Preparation of O&M Manual for town-owned ponds and detention basins, Ongoing
- Stormwater mapping

MS4 registration, Prospect, Connecticut. Project Engineer involved with the services required to help the town maintain compliance with the MS4 permit since 2016. These services include:

- Preparation of Stormwater Management Plan (SWMP), April 2016
- MS4 permit registration with CTDEEP, April 2016
- Preparation of Annual Report
- Preparation of Illicit Discharge Detection and Elimination (IDDE) Report, July

OSHA 10-Hour Construction Safety
Training

Confined Space Safety Training

PROFESSIONAL ORGANIZATIONS

American Society of Civil Engineers
(ASCE) (2007-present)

Connecticut Society
of Civil Engineers (CSCE)
(2013-present)

Chi Epsilon,
Civil Engineering Honor Society
(2009-present), Treasurer (2010)

Concrete Canoe Competition Team
Member (2009-2011)

2018

- Preparation of IDDE compliance with town's inland wetlands agency, July 2018
- Dry weather prioritization and IDDE inspections, August 2018
- Preparation of O&M Manual for town-owned ponds and detention basins, Ongoing
- Stormwater mapping

Municipal Separate Storm Sewer Systems (MS4) Permit Registration, Branford, Connecticut. Project Engineer involved with the services required to help the town maintain compliance with the MS4 permit since 2016. These services include:

- Wet weather outfall sampling
- Preparation of Annual Report
- Preparation of Illicit Discharge Detection and Elimination (IDDE) Report, July 2018
- Dry weather prioritization and IDDE inspections, August 2018
- Wet weather sampling, Ongoing
- Stormwater mapping

Francis Walsh Intermediate School Inspection, Branford, Connecticut. Performed the required stormwater inspections involving turbidity testing for the construction of renovations and additions to the Francis Walsh Intermediate school.

Stormwater Sampling for Park-Taylor Road Reconstruction, Enfield, Connecticut. Responsible for monthly sampling and reporting stormwater runoff for turbidity in compliance with the Construction General Permit.

Department of Public Works Facility, Waterbury, Connecticut. Prepared design plans, details, and specification for the construction of a new facility. Designed the sanitary sewer (including sizing oil/water separators) and stormwater sewer (including hydrodynamic separators). Wrote the stormwater management plan, stormwater pollution prevention plan (SWPPP) and the Connecticut Department of Energy and Environmental Protection (DEEP) General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (Construction General Permit).

Bel-Air Manor, Newington, Connecticut. Designed a stormwater system to meet the town's low impact development (LID) requirements and wrote a stormwater management report. Obtained soil information from a Web Soil Survey and off-site contour data from CTECO.

Solar City Photovoltaic Projects, Rocky Hill, Branford, Cheshire, Newtown, and Ledyard, Connecticut. Prepared site plans including existing conditions, erosion and sedimentation controls and layout plans for solar photovoltaic (PV) projects. Clipped topographic contours in GIS and imported the shape files into AutoCAD in order to delineate the watershed. Prepared stormwater management plans for each site.

Route 17 Recreational Fields, Portland, Connecticut. Prepared site layout (alignment for a new road), grading, drainage, and stormwater analysis with Hydraflow Hydrographs.

BACKGROUND

2019-Present
Technical Leader
Weston & Sampson

2018-2019
Senior Project Manager
Weston & Sampson

2011-2018
Project Manager
Weston & Sampson

2003-2011
Senior Engineer
Weston & Sampson

1998-2003
Environmental Engineer
Weston & Sampson

EDUCATION

2002
Master of Science
Civil Engineering
Tufts University

1998
Bachelor of Science
Civil Engineering, *cum laude*
Tufts University

PROFESSIONAL REGISTRATION

Professional Engineer -
Massachusetts No. 45474

PROFESSIONAL CERTIFICATION

University of New Hampshire
Stormwater Management
Certification Program, 2017-2018

PROFESSIONAL SOCIETIES

New England Water Environment
Association

Water Environment Federation

PAPERS & PRESENTATIONS

June 2017
Jerdee, Theodore and Schwartz,
Jaurice, "A Practical Approach
to Managing Stormwater Assets
and Water Quality in Newton,
Massachusetts," APWA 2017
Summer Conference

Jaurice has more than 20 years of experience in the planning, design, and permitting of wastewater and stormwater systems. Her experience includes working with both municipal and state agency clients and assisting with the procurement of project funding through various state and federal programs. In particular, she has assisted many communities with stormwater permit compliance including the General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s).



SPECIFIC PROJECT EXPERIENCE

MS4 General Permit Notices of Intent and Annual Reports, Various Locations.

Project manager/ engineer for the development of Notices of Intent for the communities of Boxford, Middleborough, Millbury, Tewksbury, Townsend, Watertown, Winchester, and Wrentham, Massachusetts, and Salem, New Hampshire, and the development of annual reports for the communities of Littleton, Lunenburg, North Andover, Pembroke, and Wrentham, Massachusetts, and Salem, New Hampshire in compliance with the MS4 General Permit. Identified BMPs for each town to implement to meet the MS4 requirements, and prepared accompanying Stormwater Management Plans, which outlined existing practices and included a proposed schedule for BMP implementation over the 5-year permit period. Assembled annual reports detailing a community's MS4 progress to date. To address the industrial stormwater permitting component of the NPDES Phase 2 program, coordinated a quarterly outfall sampling program for the town of North Andover's recycling facility.

MS4 General Permit Cost Compliance, Various Locations. Project manager for the review of the MS4 permit for various communities to outline anticipated permit requirements and costs. Completed a breakdown of anticipated permit compliance costs for the communities of Bridgewater, Lunenburg, MassDevelopment (Devens), Millbury, Newton, Rutland, Shrewsbury, Watertown, Winchester and Wrentham, Massachusetts; the Wrentham Developmental Center; and Salem, New Hampshire.

NPDES MS4 Permit Compliance and Consulting Services, Massachusetts Development Finance Agency.

Project manager for consulting services in support of compliance with the NPDES Phase II Permit for discharges from the MS4 at the Devens Regional Enterprise Zone (regulated areas within the towns of Ayer, Harvard, and Shirley). Working with MassDevelopment's Engineering and Public Works Departments to develop an implementation plan. Also assisting with the preparation of a Notice of Intent for submission to EPA and DEP so that Devens can obtain coverage under the new MS4 Permit once it becomes effective.

MS4 General Permit Compliance Assistance, Watertown, Massachusetts.

Provided assistance to the town in complying with the requirements of the MS4 General Permit, including review of permit requirements and costs for compliance as they pertain to Watertown, development of the town's Stormwater Management Plan, and review of the town's existing stormwater regulatory mechanisms, to identify any updates needed to bring the Town into compliance with the permit.

March 2017

Elmer, David and Schwartz, Jaurice,
"MS4 Permit Compliance, CIP
Development & Stormwater Utilities
as a Funding Mechanism,"
The New England States
Government Finance Officers
Association 2017 Spring Conference

January 2015

Elmer, David and Schwartz, Jaurice,
"A Practical Approach to Managing
Stormwater Assets and Water
Quality in Newton, Massachusetts,"
NEWEA 2015 Annual Conference

October 2013

Elmer, David and Schwartz, Jaurice,
"Flood Control through the
Implementation of a Cost-Effective
Stream Maintenance Assessment
Program," WEFTEC 2013 Annual
Conference

October 2012

Elmer, David and Schwartz,
Jaurice, "Flood Control through
the Implementation of a Cost-
Effective Stream Maintenance
Assessment Program in Woburn,
Massachusetts," APWA 2012 Fall
Conference

MS4 General Permit Compliance Assistance, Salem, New Hampshire. Project manager for stormwater-related tasks to assist the town in complying with the EPA's MS4 General Permit. Assisted with the development of a public education program; stormwater bylaw development; enhancement of the town's existing drainage GIS; development of operation and maintenance procedures for municipal activities and facilities; development of a Stormwater Pollution Prevention Plan (SWPPP) for the town's DPW facility; municipal employee training on illicit discharge detection and elimination (IDDE) and the SWPPP developed for the DPW facility; and preparation of a Stormwater Management Plan, IDDE plan, and chloride reduction plan.

Wollaston Beach Drainage Water Quality Study, Quincy, Massachusetts.

Project manager for this study, which included identifying locations within the Wollaston Beach drainage area where contaminated dry and wet weather flows were believed to exist. Based on sampling results, identified high priority areas for illicit connections, and selected storm drains in these areas for more detailed illicit connection identification tasks, including internal television inspection and dyed-water testing of adjacent suspect service connections.

Stormwater Utility Feasibility Study, Shrewsbury, Massachusetts.

Senior engineer for a feasibility study, which examined the town's current and future stormwater expenditures and how current expenditures are funded. Examined potential user fees to be collected under a stormwater utility through the collection of parcel-specific information, including impervious area data. Also examined different alternatives for collecting user fees, including correlating fees to the amount of impervious area on a particular parcel or its zoning/land use classification. Evaluated various rate structure options for user fee collection to balance the level of funding needed with reasonable user rate fees.

Feasibility Study for Drainage Diversion, Salem/Beverly Water Supply Board.

Engineer for a feasibility study to determine whether it was possible to divert a portion of Airport Brook, a tributary of the Wenham Lake drainage area, to the headwaters of the Bass River with gravity flow in order to alleviate flooding problems in the area. Responsibilities included evaluating three alternative routes for the proposed drainage piping to be used in diverting runoff and assisting with writing of the final report.

Impervious Area Assessment, Newton, Massachusetts.

Project manager overseeing the assessment of the impervious area associated with 4,000 non-residential parcels within the City for use by the City in assessing stormwater fees. Impervious areas were generated in GIS by surface type using available color ortho imagery and City parcel data.

BACKGROUND

2018-Present
Project Engineer - Transportation
Weston & Sampson

2017-2018
Engineer II - Transportation
Weston & Sampson

2014-2016
Engineer I - Transportation
Weston & Sampson

May-August 2013
Internship
Site/Civil Construction
Xenelis Construction Co.

Kenneth is a transportation/highway and traffic project engineer with experience in intersection/roadway design and analysis, drainage analysis, and project estimating. He has worked on projects for Connecticut, Massachusetts, New York, and Vermont municipal clients, as well as for the Connecticut DOT. Kenneth has developed plans for horizontal and vertical roadway layout, bridge details, maintenance and protection of traffic, signing and pavement marking, traffic signals, drainage, and grading. He also has prepared construction cost estimates for the design of roadways, drainage systems, and bridges.

**EDUCATION**

2013
Bachelor of Science
Civil Engineering
University of Connecticut

Pending 2020
Masters of Engineering with
Transportation Engineering
Specialization
University of Hartford

SPECIFIC PROJECT EXPERIENCE

Francis Walsh Intermediate School Inspection, Branford, Connecticut. Performed the required stormwater inspections involving turbidity testing for the construction of renovations and additions to the Francis Walsh Intermediate school.

Barnum Avenue, Bruce Avenue, and Oronoque Village Drainage Improvements, Stratford, Connecticut. Engineer for drainage analysis and improvements, including drainage analysis of flood-prone areas, conceptual designs, and site improvements based on implementation of rational method drainage calculations. Work included preparation of permitting and cost estimates, and drafting of construction plans.

Bruce Brook Storm Drain Installation at West Avenue, Stratford, Connecticut. Resident representative for the installation of a 42-inch reinforced concrete pipe and associated manholes, a cast-in-place concrete retaining wall, channel construction, and utility relocation to relieve flooding issues at the Barnum Avenue and West Ave intersection.

Bruce Avenue Railroad Underpass Drainage Improvements, Stratford, Connecticut. Engineer responsible for drainage system alterations and improvements implemented to minimize heavy flooding at the Bruce Avenue underpass. Completed hydrologic analysis using the Storm Sewers - Hydraflow model to assess flooding issues. Presented multiple concept alternatives with a cost-benefit analysis to the town. Coordinated with utility companies to resolve conflicts with drainage structures and cost estimating. Also served as resident representative for the manhole, catch basin, and RCP installation as well as pipe cleaning and joint sealant techniques, and inspected sidewalk installation and roadway milling and paving.

Freeman Brook Drainage Improvements, Stratford, Connecticut. Assisted with construction oversight of the construction of the sidewalk, retaining walls, riprap installation, and site grading installed to reduce flooding and drainage issues along Freeman Brook in the Oronoque Village Condominiums.

Hickory Hill Road Local Transportation Capital Improvement Program (LOTICIP) Application, Thomaston, Connecticut. Engineer responsible for assisting the town in preparing a LOTICIP application for Connecticut DOT. Conducted drainage field survey. Developed concept plan (through aeriels and town ROW mapping) to determine potential roadway improvements. Provided suggestions for drainage

PROFESSIONAL REGISTRATION

Professional Engineer:
Connecticut No. 0032867

OSHA 10-Hour Training

NETTCP HMA Paving Inspector

Certified Nuclear Gauge Operator

PROFESSIONAL SOCIETIES

American Society of Civil Engineers

Connecticut Society of Civil
Engineers

system upgrades and replacements.

Saint James West Roadway Reconstruction, Enfield, Connecticut. Project Engineer responsible for stormwater analysis and design for the roadway reconstruction for multiple residential roads. Used Storm Sewers - Hydraflow modeling software to design the storm drainage systems. Work also included construction cost estimates and review of construction plans.

I-84 Interchange Improvements, Exit 16, State Project 130-182, Southbury, Connecticut. Highway engineer for roadway and drainage reconstruction and improvements, including analysis and design of horizontal and vertical alignments, cross sections, and intersection operations. Used Storm Sewers - Hydraflow modeling software to design the storm drainage systems. Work also includes accommodations for pedestrians, bicyclists, and school buses due to two nearby schools. Traffic analysis and lane configurations required, as well as coordination of traffic signal redesign. Prepared and drafted construction plans and cost estimates.

I-84 Interchange Improvements, Exit 14, State Project 130-173, Southbury, Connecticut. Highway project engineer for roadway and drainage reconstruction and improvements, including analysis and design of horizontal and vertical alignments, cross sections, drainage, and intersection operations. Work also includes accommodations for pedestrians and bicyclists due to vicinity of restaurant and local businesses. Work included traffic analysis and lane configurations, as well as coordination of traffic signal redesign. Design incorporated a modern roundabout at the intersection of the I-84 highway ramp, as well as the complete relocation and realignment of the exit westbound off-ramp. Prepared and drafted construction plans and cost estimates.

Crescent Lake Road Reconstruction, Enfield, Connecticut. Highway engineer responsible for analysis and design of roadway replacement within the Crescent Lake area, including design and improvements of horizontal and vertical alignments, cross sections, and infrastructure upgrades. Used Storm Sewers - Hydraflow modeling software to design the storm drainage systems. Prepared and drafted construction plans and cost estimates.

Sylvan Lake Road Reconstruction, Watertown, Connecticut. Highway engineer responsible for roadway re-alignment to improve horizontal and vertical geometry along Sylvan Lake Road, including improvements to pedestrian and bicyclist conditions to allow for safe access to local park. Work included preparation of construction plans and cross sections, drainage analysis and design, two culvert replacements, intersection grading, infrastructure upgrades, implementation of a large earth retaining wall, and complete cost estimate. Used Storm Sewers - Hydraflow modeling software to design the storm drainage systems. Work also included implementation of geosynthetic-reinforced, soil-integrated bridge system for two culvert replacements and one culvert repair. Responsible for layout of new bridges, design/drafting of plans, and water handling plans.

Parsons Road Reconstruction, Enfield, Connecticut. Highway engineer responsible for roadway reconstruction design and drafting of Parsons Road, which included horizontal and vertical geometry improvements, drainage analysis and design, site grading to ensure minimal residential property impacts, and a construction cost estimate.

BACKGROUND

2017-Present
Geologist
Weston & Sampson

August-October 2017
Environmental Advisor Intern
DNO ASA, Oslo, Norway

2015-2017
Graduate Teaching Assistant
UTK Department of Earth and
Planetary Science

May-July 2016
Mentor
National Science Foundation:
Research Experience for
Undergraduates

June 2016
Scientific Outreach
UTK Steen Lab, Newark, NJ

2012-2014
Undergraduate Teaching Assistant
Department of Geology
College of Charleston

EDUCATION

2017
Master of Science
Geology
University of Tennessee Knoxville

2015
Bachelor of Science
Geology
College of Charleston

CERTIFICATIONS

OSHA HAZWOPER 40-Current
OSHA 10 Construction
Confined Space Entry
Electrical Hazard Safety Training
American Red Cross Adult CPR/
First Aid

PRESENTATIONS

2017
East Tennessee Geologic Society
Invited Speaker, "Controls on
Microbial Extracellular
Enzymes in Fresh Water"

Abigail is a geologist with experience in water quality monitoring, environmental site assessment, subsurface assessment and GIS mapping. She has been involved in numerous environmental site activities including drilling, groundwater sampling/monitoring, soil sampling/monitoring, and site walks. Abigail has experience with environmental monitoring tools such as water quality meters, XRF, PID, and groundwater monitoring equipment.



SPECIFIC PROJECT EXPERIENCE

Francis Walsh Intermediate School Inspection, Branford, Connecticut. Performed the required stormwater inspections involving turbidity testing for the construction of renovations and additions to the Francis Walsh Intermediate school.

Dillon Stadium Renovation Construction Stormwater Services, Hartford, Connecticut. Performed the required stormwater inspections related to the construction of additions and renovations at Dillon Stadium Soccer fields renovation in Hartford. These services are being completed for the city to maintain compliance with the CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities.

Smalley Elementary School Construction Stormwater Services, New Britain, Connecticut. Performed the required stormwater inspections related to the construction of additions and renovations at Smalley Elementary School. These services are being completed in order for the city to maintain compliance with the CT DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities.

Route 17 Recreational Fields, Portland, Connecticut. Performed the required stormwater inspections related to the construction of a new park and athletic complex.

New Intermediate School Construction, Rocky Hill, Connecticut. Performed the required stormwater inspections related to the construction of a new intermediate school for the Town of Rocky Hill.

Groundwater Monitoring, Nashua, New Hampshire. Collected groundwater and drinking water samples from monitoring wells and a private residence to assess the quality of the water due to a leak at an adjacent substation.

Groundwater Monitoring, Holden, Massachusetts. Collected groundwater and surface water samples from monitoring wells and a reservoir to assess the quality of the water as part of a quarterly sampling plan.

Drainage Delineation, Hopkinton, Massachusetts. Conducted investigation on drainage manholes to delineate Hopkinton's drainage system. Identified and mapped drainage manholes and catch basins using ARC GIS. Additionally, reviewed archived architecture plans to understand the history of the drainage system.

BACKGROUND

2018-Present
Project Engineer
Weston & Sampson

2017-2018
Technical Product Specialist
BASF, Construction Chemicals

2015-2017
Professional Development Program
Engineer
BASF

EDUCATION

2015
University of Michigan
Master of Science in Engineering
Environmental Engineering

2014
University of Michigan
Bachelor of Science in Engineering
Civil Engineering
Magna Cum Laude

SOFTWARE

AutoCAD, ArcGIS

**PROFESSIONAL
CERTIFICATIONS**

Engineer in Training (EIT)
Michigan

**PROFESSIONAL
ORGANIZATIONS**

New England Water Environment
Association (NEWEA)

Gina is a project engineer in Weston & Sampson's Wastewater Group. She has experience with stormwater outfall inspection, sampling, and reporting, especially as it relates to assisting Massachusetts communities achieve compliance with their NPDES Phase II MS4 Permits. She also has experience in wastewater treatment system planning, design, and construction administration for communities in Massachusetts and Rhode Island.

**SPECIFIC PROJECT EXPERIENCE****MS4 General Permit Compliance, Chelsea, Massachusetts.**

Project engineer for the development of several programs and written documents required for compliance with the NPDES Phase II Permit for discharges within an MS4. Responsibilities for general stormwater compliance included the preparation of significant updates to the City's Stormwater Management Plan, Illicit Discharge Detection and Elimination plan, Standard Operating Procedures for city-wide inspection practices, a proposed schedule for BMP implementation over the five-year permit period, and annual report detailing Chelsea's progress to date.

MS4 General Permit Compliance Assistance, Revere, Massachusetts. Provided assistance to the City in complying with the requirements of the MS4 General Permit, including review of permit requirements, development of the City's Stormwater Management Plan and Illicit Discharge Detection and Elimination supplements, and review of the City's existing stormwater regulatory mechanisms.

Stormwater Regulatory Mechanism Review, Multiple Locations. Provided review of existing ordinances and other regulatory mechanisms for multiple communities in support of compliance with requirements of the NPDES Phase II Permit for discharges within an MS4. Highlighted instances of noncompliance and provided language recommendations for achieving compliance with the MS4 Permit. Provided these services to the communities of Chelsea, Dedham, Hamilton, Hopkinton, Millbury, Revere, Rockport, and Salisbury, Massachusetts.

Stormwater Ordinance Amendments, Salisbury, Massachusetts. Provided review of existing stormwater ordinances for Salisbury in support of compliance with requirements of the NPDES Phase II Permit for discharges within an MS4. Drafted language modifications to achieve compliance with the MS4 Permit and coordinated with the Town and government officials to approve the modifications.

MS4 General Permit Cost Compliance, Framingham, Massachusetts. Provided assistance for the review of the MS4 permit for Framingham to outline anticipated permit requirements and costs, including a five-year projection of capital projects and operation and maintenance costs.

Stormwater Engineering Services, Chelsea, Massachusetts. Project manager for stormwater outfall monitoring and sampling in the City of Chelsea. Coordinate annual wet and dry weather inspections, sampling, and reporting mandated by the EPA under the provisions of the Clean Water Act and new requirements of the MS4 Permit.

Stormwater Engineering Services, Revere, Massachusetts. Assisted the City of Revere with annual wet and dry weather outfall inspection, sampling, and reporting mandated by the EPA under the provisions of the Clean Water Act and new requirements of the MS4 Permit.

Engineering Report and Financial Review, Woonsocket, Rhode Island. Provided a review of and summary report of the current status of Woonsocket's wastewater treatment and collection systems. Review included evaluation of the town's financial records, operation and maintenance data, and capital improvement plans and implementation progress.

Administrative Order on Consent Assistance, Marion, Massachusetts. Provided assistance to the Town of Marion in semi-annual reporting requirements detailing the Town's progress towards compliance with the Town's WWTF AOC. Ongoing responsibilities include assistance with additional reporting requirements for copper and phosphorus removal and regionalization efforts.

Owner's Project Management for WWTF Upgrade and Pump Station Replacement, Uxbridge, Massachusetts. Provided OPM services to the Town of Uxbridge for upgrades to their WWTF and replacement of a proximate pump station, including regular construction site visits, coordination with the contractors for project updates, preparation of daily site visit reports, and attendance at monthly coordination meetings. Responsibilities have also included regular coordination with the project team on construction and project schedules, budget review and oversight, invoice processing for the capital project, change order review and negotiation, and building committee/public presentation of project information.

Comprehensive Wastewater Management Planning, Bridgewater, Massachusetts. Project engineer for the completion of the analysis of alternatives for sewer collection and treatment for the town's 1.44-mgd WWTF. Responsibilities include assessment on environmental impacts and greenhouse gas emissions, coordination with regulatory agencies, including the preparation of an extended Environmental Notification Form for MEPA, and coordination of the public participation process.

Anaerobic Digester Feasibility Study, Nantucket, Massachusetts. Project manager for the study to assess the feasibility of adding an anaerobic digester to the treatment train of the island's Surfside Wastewater Treatment Facility. Responsibilities of the assessment include grant application preparation, the evaluation and quantification of on-island fuel sources, financial viability analysis, public outreach and meeting organization, and coordination with the awarding grant program, the Massachusetts Clean Energy Center Organics to Energy program.

BACKGROUND

2019-Present
Wastewater Engineer I
Weston & Sampson

2018
Intern
Department of Public Works
Merrimack, NH

2018
Teaching Assistant
University of Maine

EDUCATION

2019
University of Maine
Bachelor of Science in Civil
Engineering

SOFTWARE

AutoCAD, HEC RAS

CERTIFICATIONS

Engineer in Training
New Hampshire
OSHA 10-Hour Construction
Training

Andrew has experience in the planning, design and permitting of wastewater and stormwater systems. He has assisted many communities with stormwater permit compliance including the General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s). Andrew's experience includes conducting field work including mapping, infrastructure inspections and investigations. He has also assisted municipal clients with on-site construction services.



SPECIFIC PROJECT EXPERIENCE

MS4 General Permit Cost Compliance, New

Scotland, New York. Engineer for the review of the MS4 permit to outline the anticipated permit requirements and costs. Completed a breakdown of anticipated permit cost compliance and developed a stormwater budget and long-term capital improvement plan for the town.

MS4 General Permit Compliance Assistance, Winchester, Massachusetts.

Provided assistance to the town in complying with the requirements of the MS4 General Permit, including review of permit requirements and costs for compliance as they pertain to Winchester, development of the town's Stormwater Management Plan, and review of the town's existing stormwater regulator mechanisms, to identify any updates needed to bring the Town into compliance with the permit.

MS4 General Permit Compliance Assistance, Salem, New Hampshire.

Provided assistance to the town in complying with the requirements of the MS4 General Permit, including review of the town's existing stormwater regulator mechanisms to identify any updates needed to bring the Town into compliance with the permit.

Stormwater Management Plan, Chelmsford, Massachusetts.

Engineer for the development of a plan to assess stormwater quality and flooding concerns and provide recommendations to the town regarding maintenance/improvements of the town's drainage system. Conducted culvert inspections, outfall inspections, and stream assessments to document current conditions of the town's drainage system and provided recommendations to the town.

Sanitary Sewer Rehabilitation, Bedford, Massachusetts.

Engineer and inspector for the rehabilitation of 6,750 linear feet of sanitary sewer and 100 sanitary sewer manholes. Recorded quantities and work completed to include in daily reports. Assisted in the review of pay requests, processing change orders, and developing as-built tables.

Dye Testing Potential Inflow Sources, Framingham, Massachusetts.

Engineer for a program to dye test roof leaders, yard drains, driveway drains, floor drains, and window drains in private residential and industrial properties to confirm direct connection to either local sanitary or storm sewer systems.

BACKGROUND

2018-Present
Engineer I
Weston & Sampson

2017-2018
Intern
Weston & Sampson

EDUCATION

2018
Bachelor of Science
Environmental Engineering
University of Connecticut, Storrs

CERTIFICATIONS

OSHA 29 CFR 40-Hour Hazardous
Waste Site Operations Training

OSHA 10- Hour Construction Safety

Akanksha is an engineer with experience completing the sampling and field services for environmental assessment and remediation projects throughout Connecticut.



SPECIFIC PROJECT EXPERIENCE

CTDEEP Industrial Permit for the Parks and Recreation Department, Rocky Hill, Connecticut. Prepared the registration and SWPPP for a Parks and Recreation Department facility.

CTDEEP Industrial Permit for Department of Public Works Facility, Branford, Connecticut. Revised/updated SWPPP and performed stormwater inspection/monitoring for the town's DPW facility.

Sewage Treatment Plant, Branford, Connecticut. Revised/updated SWPPP and performed stormwater inspection/monitoring for the town's DPW facility.

English Station Soil and Groundwater Investigations, New Haven, Connecticut. Responsible for tracking all types of samples including soil, concrete, and porous media, collected at the site. Tracking involved cleaning the jars after collection, labeling them, prepping the chain-of-custody for the lab, and completing separate record keeping for internal purposes. Created a master document compiling sample results. Performed groundwater sampling and assisted with the preparation of the project reports.

Former MGP Site Assessment and Remediation, Wallingford, Connecticut. Completed soil sampling as well as recorded nomenclature. During remediation of the site, performed air monitoring and recording of the excavated area.

Farmington DPW, Farmington, Connecticut. Conducted air monitoring for the site during building demolition.

Berlin Settling Basin, Berlin, Connecticut. Prepared a Remedial Action Plan for the site.

Sampling, Various Locations. Conducted groundwater sampling, soil sampling, and concrete and porous media sampling for various sites.