

Molly Garrow, PE, CFM

Project Manager



EDUCATION

B.S., Biological Systems
Engineering – Environment
and Natural Resources,
University of Wisconsin, 2014

Joined Firm in 2023

Years of Experience: 10

REGISTRATIONS

Licensed Professional
Engineer: Illinois

TRAINING/CERTIFICATIONS

Certified Floodplain Manager:
IL-19-00860

National Highway Institute
(NHI) Course 135095 – Two-
Dimensional Hydraulic
Modeling of Rivers at Highway
Encroachments

Molly is a seasoned project manager with nine years of experience in water resource management, floodplain management, and stormwater engineering. She has successfully managed and overseen numerous water resources and storm sewer improvement projects throughout the northern Illinois region. Molly's portfolio includes designing and coordinating complex stormwater infrastructure, streambank restoration, and flood mitigation projects, collaborating with multiple stakeholders including regulatory agencies, municipal staff, and residents. She is proficient in using advanced hydraulic modeling tools, including XPSWMM-2D, to deliver effective and sustainable projects.

REPRESENTATIVE PROJECTS

While working with others:

Lisle, IL*

Main Street Storage Basin and Spillway

DuPage County Stormwater Management – Project Manager overseeing the Phase 2 design of a proposed native-planted, 10.8 acre-feet basin with 50-foot spillway to provide the St. Joseph Creek Watershed with additional floodplain storage. Project required coordination with residents, the Village of Lisle, DuPage County, IDNR-Office of Water Resources, UEPA, USACE and Kane/DuPage SWCD. Project included streambank restoration of Reach #2 at the confluence with the St. Joseph Creek mainstem to reduce velocities in this area. FEQ analysis of watershed improvements was included during permitting to regulatory agencies. The proposed spillway will accept flows when the mainstem rises four additional feet. ERA designed armoring around the spillway to protect against erosion from high velocities during storm events. The project is partially funded through ARPA funds and is estimated to be \$1.6 M in construction costs.

Lisle, IL*

Village Center North Storm Sewer Improvements

Project Manager overseeing the Phase 2 design of 3,400 feet of 24" to 30" storm sewer through the residential neighborhood of Lisle south of the BNSF. This neighborhood has limited, undersized storm sewer and is primarily served by a ditch and culvert drainage system. Residents report structural flooding during rainfall events in fall 2019 and spring 2020 (approximately 5- to 10-year events). ERA used XPSWMM-2D to determine the downstream storm sewer has capacity for storm water conveyance improvements before ultimately discharging to the East Branch of the DuPage River. The storm sewer improvements will provide a 25-year level of service in the neighborhood. ERA attended public meetings and worked with residents during the design of the storm sewer and incorporated resident feedback into the design. Molly helped the Village obtain \$500,000 in ARPA funding for the construction of the project. The total cost of construction is \$1.35 million.

Glen Ellyn, IL*

Stormwater Management Assistance

Project engineer assisting the Village in addressing drainage and flooding related calls. Village staff received a high volume of phone calls following heavy April 2020 rainfall events. To provide a high level of service to their residents, the Village hired

ERA to complete site visits and drainage investigations. Site visits with residents resulted in recommendations to homeowners to improve flood resiliency at their homes and properties. Molly worked with Village staff to schedule site visits with residents and research drainage and utility conditions prior to each site visit. Molly performed site visits from June through August 2020.

Downers Grove, IL*

Downers Grove Stormwater and Floodplain Reviews

Project Engineer for site plan review of proposed commercial and residential projects in Downers Grove ensuring compliance with DuPage County and the Village of Downers Grove Stormwater and Floodplain Ordinance. Molly conducted site visits to better assist in the review of grading, wetland impacts, BMPs, detention volumes and compensatory storage. Molly generated stormwater, floodplain, wetland, LPDA and BMP comments for applicants to comply with Village and County codes.

Wheaton, IL*

Cadillac-Wakeman Storm Sewer Improvements

Project Manager overseeing the Phase 2 design of a storm sewer improvement comprised of 2,500 feet of 48" storm sewer and 600 feet of 11'x5' box culvert to convey stormwater to the Winfield Creek from the residential neighborhood between President St and Main St in North Wheaton. The proposed box culvert height and invert elevations were designed to match the existing elliptical sewer (to be removed) and will be aligned with the south curb of Cole Ave to reduce utility service conflicts. Project required coordination with residents, DuPage County Stormwater, USACE and Kane/DuPage SWCD. Project included a new end section at the box culvert that comprised a headwall at the existing culverts under Cole Ave and scour protection and streambank restoration of Winfield Creek downstream of the outfall. The storm sewer improvements were model in XPSWMM-2D and included a tailwater condition to incorporate the effects of the Creek. ERA prepared an ARPA grant application to partially fund the improvements. The total estimated construction cost is \$2.5 million.

Wheaton, IL*

Dorset Drive Flood Improvements

Project Engineer tasked with modeling storm sewers with a 2D XP-SWMM model to reduce the risk of structural flooding at the residential properties on Dorset Dr. This residential area experiences drainage problems and structural flooding during moderate and heavy rainfall events. This design required utility relocation to adjust gas and water mains so the proposed 60" equivalent elliptical storm sewer can be installed in the right-of-way. Outfall design included velocity dissipation and erosion control measures. This storm sewer improvement was constructed 2022.

Northbrook, IL*

Master Stormwater Management Plan Addendum #3

Project Manager for Phase I stormwater design for the Village of Northbrook. ERA utilized XPSWMM-2D to design 9.75 acre-feet of storage and 5,500 linear feet of storm sewer improvements that will alleviate flood risk throughout the Village. The proposed improvements utilize school district property for additional underground storage solutions to the limited space available in Northbrook. ERA prepared a cost-benefit analysis to help the Village prioritize improvements and identify projects that merit capital improvement investment.