

Mary K. Sears
578 Quaker Ridge Court
Arnold, MD 21012

Education:

B.S., Civil Engineering, University of Maryland at College Park, 1997

Registration:

Engineer-In-Training Certificate, 1997, DE

Professional Engineers License, 2002, MD

Responsibilities:

Experience includes responsibilities as a Project Manager and Design Engineer on a variety of residential, commercial and industrial land development projects. Project Management experience includes communication and coordination with external and internal clients, sub-consultants, and review agencies. Tasks also involve project scheduling, billing, contract modifications and negotiations. Design Engineer experience primarily included water resources engineering. Designed stormwater management ponds, underground stormwater management, infiltration devices, hydraulic structures, storm drains, open channels and bioretention facilities. Computer application knowledge includes Microstation cadd program and stormwater management software such as TR-55, TR-20, HEC-1, HEC-2, HEC-RAS and PondPack.

Project Experience:

Greenhorne & O'Mara, Inc., Greenbelt, MD – Project Manager, January 2004 to Present

- Chesterfield Estates, Prince George's County, MD
Project Manager for a 22 lot, single-family subdivision. Responsibilities included engineering design plan preparation and processing to achieve agency approvals and permits. Project required wetland permitting with MDE and USACE due to extensive wetland impacts for the stormwater management pond and bioretention facility.
- Marlborough Station, Prince George's County, MD
Project Manager for a 19 lot single-family, in-fill development located in historic Upper Marlboro. Responsible for the engineering design plan coordination and processing to obtain plan approval with the Prince George's County, Maryland State Highway Administration and the Town of Upper Marlboro. Project required an extensive, offsite storm drain outfall design along Marlboro Pike (MD 725) using 48" and 54" pipe.
- Penn Mar Shopping Center, Prince George's County, MD
Project Manager for the construction of a Staples and Petco store that involved redevelopment of an existing shopping center. Oversaw numerous utility relocation plans. Stormwater management regulations entailed a 20% impervious reduction design. Worked with the architect, and sub-contractors during design & construction to meet an aggressive project schedule.
- Prince George's Community College, Prince George's County, MD
Project Manager for the 32,000 sq. ft. High Technology Center building constructed within an existing parking lot. Responsible for the redevelopment construction documents including design plans and specifications. Also involved coordination with the architect and sub-consultants during the review and approval processes for Prince George's County and the State of Maryland Department of General Services (DGS).

BOARD OF ZONING ADJUSTMENT
District of Columbia

CASE NO. 17309 Board of Zoning Adjustment
District of Columbia
EXHIBIT NO. 151 CASE NO. 17309
EXHIBIT NO. 151

Greenhorne & O'Mara, Inc., Greenbelt, MD – Project Engineer, December 1996 to January 2004
(Engineer III, Jan. '03 – Jan. '04 / Engineer II, Apr. '01 – Jan. '03/ Engineer I, Oct. '98 – Apr. '01 / Engineer Tech I, '96 – Oct. '98)

- Linwood Knolls, Prince George's County, MD. Responsible for the design of an in-stream stormwater management facility to accommodate the construction of a single-family residential development. The required stormwater management was achieved via the construction of a 22-foot tall dam embankment meeting MD-378 requirements. Also designed two culvert crossings that addressed stream erosion with riprap plunge pools at the outfalls.
- University Courtyard, University of Maryland at College Park, Prince George's County, MD. Project Engineer for the design of a water quality pond and four bioretention facilities for the student housing expansion. The site drains into the Paint Branch Floodplain, which has a 30.2 square mile drainage area. Completed a 100-year floodplain study to show no adverse impact. Also performed the construction inspection.
- Junior Tennis Champions Center, Maryland-National Capital Park & Planning Commission, Prince George's County, MD. Project Engineer responsible for designing two bioretention facilities, one water quality pond and storm drain for the construction of 15 outdoor tennis courts and 12 indoor courts, service buildings and parking located entirely within the 100-year floodplain of the northeast branch of the Anacostia River. Also performed the construction inspection.
- East Gate Shopping Center, Prince George's County, MD. Project Engineer for the storm drain/stormwater management design and 100-year floodplain analysis. This project involved the redevelopment of an existing shopping center and included a complex stormwater management facility that provided bioretention, 1-year extended detention and compensatory storage simultaneously within the 100-year floodplain of Folly Branch. Also designed a precast, three-cell 4'x8' box culvert in Folly Branch maintaining the 2-, 10-, and 100-year flood elevations.
- MD 193 Relocation from MD 202 to Keverton Drive, Maryland State Highway Administration, Prince George's County, MD. Project Engineer for the design of three stormwater management ponds that provide 2- and 10-year attenuation and/or water quality. One of the ponds required a retrofit design to accommodate the additional impervious area water quality requirement.
- S.R. 0032 Bridge over Paunacussing Creek, Pennsylvania Department of Transportation, Bucks County, PA. Project Engineer responsible for performing HEC-RAS modeling of the existing bridge and alternative bridge replacements. The final bridge was a 36" x 17" pre-stressed, adjacent box beam, single-span (45' - 6") bridge. The HEC-RAS model was used to determine the water surface elevations with respect to the proposed bridge and to verify that the road does not overtop during the 100-year storm.
- Kingsbury Center, Washington, DC. Project Engineer for the preliminary and final design of the on-site storm drain, an underground 48-inch stormwater management facility, and Stormceptor water quality device that discharged to an existing combined sewer and storm drain system.
- Vista Gardens, Phase III & Phase IV, Prince George's County, MD. Project Engineer for the design of bioretention facilities to treat water quality for a 400-unit townhouse development. Designed the onsite storm drain which included a flowsplitter structure to divert the water quality storm event to the bioretention and overflow the larger storm events to an outfall. Also analyzed the hydraulic affects of the bioretention facility on the existing MDSHA 72 inch cross-culvert under US 50.