



#### Education

BS, Civil Engineering, Worcester Polytechnic Institute, 1980

# Registrations and Certifications

Professional Engineer #GE38569, NJ, 1994

Certified Municipal Engineer #0559, NJ, 1996

Confined Space Entry OSHA Certification, 1993

Years of Experience - 23

## **Experience Summary**

Since joining Hatch Mott MacDonald's (HMM) Freehold office in 1990, Ms. Marcelli has been involved in the municipal engineering sector including design of numerous stormwater and wastewater collection systems, force main designs, pump station rehabilitations, roadway reconstruction and the design of water treatment plants.

Ms. Marcelli's background includes an extensive array of private development and municipal design projects. She has experience in the design and review of subdivisions and site plans, including those submitted to the respective Zoning and Planning Boards for Red Bank, Rumson, Allentown, Farmingdale and Keansburg Boroughs and Freehold, Middletown, Marlboro and Cranbury Townships for conformance to Ordinance requirements. Projects have included the design of subdivisions ranging up to 2,500 units and site plans up to a 1,000,000 sf buildings, including the design of all supporting utilities, roadways, lot layout and grading and the procuring of all related permits.

Ms. Marcelli is experienced in providing consultation and review services relating to the broad spectrum of municipal engineering. She is also experienced in the design of various roadway improvement projects, including associated drainage facilities and traffic control devices.

Ms. Marcelli also has experience in serving Municipal Planning Boards and Boards of Adjustment, reviewing numerous site plans and subdivisions for technical compliance, preparing developer agreements, coordinating efforts to resolve litigation issues relating to municipal engineering and engineering agreements and providing expert testimony at public hearings.

## **Selected Project Experience**

## Cranbury Township, Wright Property, Middlesex County, NJ

Coordinated efforts to assess the existing site conditions of a 12-acre parcel. The site consisted of abandoned greenhouses, a single family dwelling, and an operations building which the Township is considering for future Public Works site. During the site investigations, it was determined that asbestos was present. Responsibilities included preparing bid documents and managing construction inspection activities during asbestos abatement and the demolition of the greenhouse and residential dwelling.

NJ Dept. of Transportation, Bridge Inspection Rating Program, Monmouth County, NJ Analyzed structural integrity and rated various bridges in Monmouth County according to NJDOT standards.

Brainerd Lake Dam, Emergency Action Plan and Dam Assessments Report, Cranbury, NJ Preparation of hydraulic analysis to develop concepts for new bridge crossing of stream corridor.

### Carteret Borough, CSO Program, Middlesex County, NJ

Developed construction plans for the elimination of the combined storm and sanitary facilities in the Borough.

#### Cranbury Township, Millstone Park, Middlesex County, NJ

Upon the Township being notified of existed abandoned drums within a stream corridor located on Township property, recommendations were made to investigate any possible contamination prior to removal and cleanup. Efforts were coordinated to perform sampling and procure bids to remove the abandoned drums. Sampling analysis indicated elevated levels of arsenic within the soil of the stream corridor. Additional sampling was performed to delineate the horizontal and vertical extent of arsenic contamination. It was subsequently recommended to the governing body to enter into a Memorandum of Agreement with the NJDEP to receive the DEP's recommendations in pursuit of any cleanup activities. Responsibilities included coordinating all efforts between the Township, the NJDEP and the selected environmental consultants to proceed further on this project.



# NJ Dept. of Transportation, NJ State Highway Route 33 Extension, Monmouth County, NJ Design of roadway alignment and storm drainage facilities for the extension of Route 33.

#### Cranbury Township, Master Roadway, Middlesex County, NJ

Layout and design of a Master Plan Roadway including roadway alignment, storm drainage and funding applications.

### Cranbury Township, Municipal Engineering Services, Middlesex County, NJ

As Township Engineer, responsibilities included reviewing site plans and subdivisions, attending Board meetings and Township Committee meetings, providing expert testimony at hearings, providing performance guarantees and inspection fee estimates and providing inspections of on-site and off-site improvements for compliance with approved plans. Prepared sanitary sewer master plans for the Township. Designed and implemented construction of all NJDOT Municipal Trust Fund projects. Responsible for the design and coordination with NJDEP Environmental Trust Program for sanitary sewer improvements including two pump stations and force mains.

## Farmingdale Borough, Municipal Engineering Services, Monmouth County, NJ

As Assistant to the Borough Engineer and as Planning Board and Zoning Board of Adjustment Engineer, responsibilities included reviewing site plans and subdivisions, attending Board meetings and providing expert testimony.

## Middletown Township, Municipal Engineering Services, Monmouth County, NJ

Served as Assistant to the Township Engineer. Responsibilities included reviewing site plans and subdivisions, providing performance guarantees and inspection fee estimates and providing inspections of on-site and off-site improvements for compliance with approved plans. Also met with Township residents to discuss issues of concern.

## Red Bank Borough, Municipal Engineering Services, Monmouth County, NJ

Served as Assistant to the Borough Engineer. Responsibilities included reviewing site plans and subdivisions, providing performance guarantees and inspection fee estimates and providing inspections of on-site and off-site improvements for compliance with approved plans. Also met with Borough residents to discuss issues of concern.

## Keansburg Borough, Municipal Engineering Services, Monmouth County, NJ

Served as Assistant to the Borough Engineer. Responsibilities included reviewing site plans and subdivisions, providing performance guarantees and inspection fee estimates and providing inspections of on-site and off-site improvements for compliance with approved plans. Also met with Borough residents to discuss issues of concern.

#### Rumson Borough, Municipal Engineering Services, Monmouth County, NJ

Served as Assistant to the Borough Engineer. Responsibilities included reviewing site plans and subdivisions, providing performance guarantees and inspection fee estimates and providing inspections of on-site and off-site improvements for compliance with approved plans. Also met with Borough residents to discuss issues of concern.

# Manasquan River RSA, Secure On-Call Emergency Response Motor Vehicle and Equipment Facility, Howell, NJ

Design and procurement of all approvals for the construction of a secure On-Call Emergency Response Motor Vehicle and Equipment Facility including expert testimony before the Township Planning Board for site plan approvals.

## Allentown Borough, Municipal Trust Fund Project, Monmouth County, NJ

Design and coordination of an NJDOT Municipal Trust Fund project. This project was taken from the initial submission to the NJDOT to final construction documents.



#### Howell MUA, Water and Sewer System Replacements, Monmouth County, NJ

Reviewed site plans and subdivision plans as submitted for water and sewer approval. Design of a 16-inch diameter water main interconnection and various extensions of water transmission and sanitary sewer mains.

# Cranbury Township, Sidewalk, Curb, and Handicap Ramp Evaluation Report, Middlesex County, NJ

Prepared a comprehensive report on the condition of the sidewalks, curbs and handicap ramps within a selected area. Over 20,000 lf of sidewalk, 16,000 lf of curb and all associated handicap ramps were evaluated and reported upon. This report provided the Township with an understanding of the conditions of a valuable Township resource. Currently assisting the Township in soliciting input from all property owners within the study area through survey forms. Responsibilities also include preparing summaries of the survey results and presenting said results to the public and Township Committee.

Holmdel Township, Realignment and Reconstruction of Middle Road, Monmouth County, NJ Design of roadway realignment and reconstruction for the improvement to the safety characteristics of Middle Road. Also appeared before the Township committee and made a presentation to all homeowners affected by the proposed construction.

### Middletown Township, Roadway Improvement Projects, Monmouth County, NJ

Design of various roadway improvement projects throughout the Township in conformance with AASHTO and NJDOT requirements including all roadway grading, drainage and utility layout. Intersection design and traffic control devices were also an integral portion of the design element.

## Avalon Borough, Roadway Projects, Cape May County, NJ

Prepared construction plans and specifications for various roadway projects within the Borough.

#### Cranbury Township, Various Roadway Projects, Middlesex County, NJ

Prepared construction plans and specifications for various roadway projects within the Township including the procurement of funding and initiating interlocal agreements to partner with Middlesex County.

### Farmingdale Borough, Various Roadway Projects, Monmouth County, NJ

Prepared construction plans and specifications for various roadway projects within the Borough.

## Los Angeles County Road Department, Bike Pathway, Los Angeles, CA

Served as Staff Engineer responsible for the design of the extension of the bikeway system within Los Angeles County. The bikeway system in California extend along the entire west coast along the Pacific Coast Highway. Responsibilities included field determination of possible extensions of the system into the areas of Los Angeles County to provide connections to areas of scenic interest, access to the Pacific Ocean and connection to existing school related facilities including the University of California campuses.

# NJ Sports and Exposition Authority, Monmouth Park Racetrack Wastewater Collection System, Oceanport, NJ

Design of a wastewater collection system to capture contaminated runoff in the stable and barn area of the racetrack as stipulated by an Administrative Consent Order (ACO) with the NJDEP. The project included the controlled collection of all dry day flow and the "first flush" stormwater from rain events through a gravity collection system and meter chamber to be conveyed to an existing Northeast Monmouth County Regional Sewerage Authority 30-inch diameter interceptor. Responsibilities included procurement of all permits and construction documents.

## Ocean County Utilities Authority, Wastewater Facilities, Ocean County, NJ

Design of 23,000 lf of a sanitary sewer force main and modifications to existing pumping facilities in three municipalities. Responsibilities included procurement of all permits, coordination and layout of existing utilities and the preparation of design specifications.



#### Cranbury Township, Sewer Master Plan, Cranbury, NJ

Preparation of design documents to implement improvements identified in Township Sewer Master Plan.

## Design Services, Various Sites, NJ

Provided design for an office complex, office/warehouse complex and a 50,000 sf shopping center.

## New Jersey Sports & Exposition Authority, Monmouth Park Racetrack, Oceanport, NJ

Completed a Property Identification Plan for excess parcels owned by the NJS&EA including concept plans for each of the four identified tracts totaling 137 acres. In developing the concept plan, topographic, planimetric, environmental constraints associated with each parcel and the zoning requirements were considered. The data was used to determine the maximum development potential in accordance with the guidelines established by the NJS&EA and the Zoning Ordinance of Oceanport.

## Villages at Manalapan, Mount Laurel Housing Development, Manalapan, NJ

Design of a 2,500-unit mixed-use housing development, which included grading and layout of all lots, design of all on-site and off-site utilities, stormwater detention facilities and the procurement of all related permits and approvals.

## Hills Development Co., Housing Developments, Bedminster and Basking Ridge, NJ

Design and layout of various sections of single and multi-family developments.

## Michelfelder Development, Housing Development, Evesham Township, NJ

Design and layout of a 600-unit single family housing development.

## Kings Crossing, Housing Developments, North Plainfield/Watchung, NJ

Design and layout of a 200-unit multi-family housing development.

#### Highlands Borough, Master Drainage Plan, Monmouth County, NJ

Provided the Borough with accurate mapping of the existing storm sewer, analyzed drainage problem and provided general solutions to these drainage problems.

#### City of Long Branch, Master Drainage Plan, Monmouth County, NJ

Developed a Phase 1 Plan, which addressed all drainage problems in the City and presented possible solutions.

# Co-Steel Raritan Company (formerly Raritan River Steel), Stormwater Discharge Elimination System, Perth Amboy, NJ

Design and layout of a stormwater collection system including on-site detention and pumping facilities to eliminate stormwater discharges to the adjacent Raritan River. The collected stormwater was incorporated and utilized in the cooling process at the steel mill. A portion of the on-site roadway network was also re-graded and re-aligned to eliminate surface water run-off into the river.

## NJ Dept. of Transportation, Traffic Signal Design, Cape May County, NJ

Signal timing, system integration, signal elimination for the communities of Sea Isle City, North Wildwood, Stone Harbor and Avalon.

## South Plainfield Borough, Wastewater Facilities, South Plainfield, NJ

Design and layout of 43,000 lf of force main and an 8.2 MGD pumping station.

#### Cranbury Township, Wastewater Facilities, Middlesex County, NJ

Design and layout of two pump stations and associated force mains to accommodate growth of commercial zone of Township.

## Union Beach Borough, Water Storage Facility, Monmouth County, NJ

Design of an elevated water storage tank.



## Parkway Water Company, Water Treatment Plant, Monmouth County, NJ

Design of a water treatment plant including all testimony for procurement of approvals from the Township Planning Board.

## **Professional Societies**

American Society of Civil Engineers Society of Women Engineers