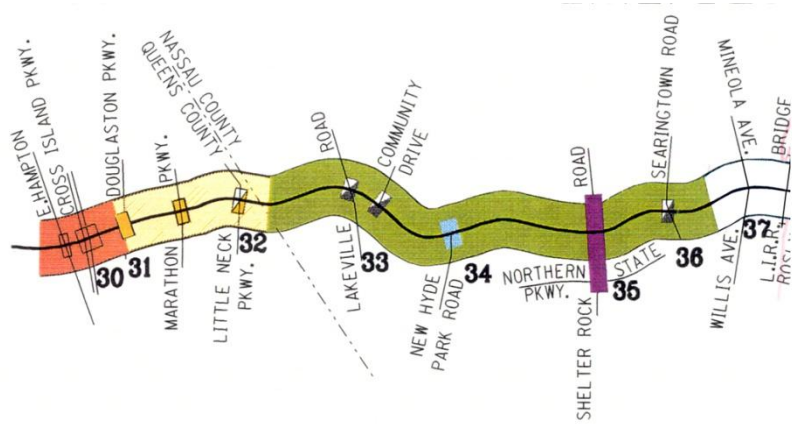


Stormwater Mitigation and Capacity Improvements

Long Island Expressway (I-495), Exits 32-36



Client/Owner: New York State Dept. of Transportation
Project Location: Nassau County, NY

GPI provided final design services to add a fourth lane that will serve as an HOV facility along I-495 from Little Neck Parkway in Queens County (Exit 32) to Searingtown Road in Nassau County (Exit 36), a length of 4.2 miles. Due to extensive pavement widening, the project required significant stormwater runoff mitigation. GPI designed six large concrete closed drainage structures for a system of over 650 drainage structures and over 30,000 lin ft of stormwater pipes. The design also included the retrofitting of existing drainage facilities to handle the proposed stormwater runoff and included the use of BMP's (Best Management Practices) including grassed channels and swales to provide on-site retention and detention measures. GPI also provided the design for the modification and rehabilitation of four existing recharge basins in the design corridor. GPI prepared a Drainage Report for the design.

GPI conducted a watershed study for Shelter Rock Road and its interchange with the Long Island Expressway and the Northern State Parkway. This detailed evaluation of existing hydrologic and hydraulic conditions made recommendations to improve the severe flooding conditions on the Northern State parkway and surrounding communities. These recommendations were carried out in the project construction.

GPI assisted the NYSDOT in the preparation of the **Stormwater Pollution Prevention Plan** including the qualitative and quantitative analysis of the first flush, the design and implementation of BMP's (Best Management Practices) to control water quality and the design of soil and erosion control measures during construction as well as for the final built condition. GPI also assisted the Department in preparation of the Notice of Intent (NOI) to comply with the **SPDES** General Permit covered under the **EPA Phase I regulations** enforced by **NYSDEC**.