

Rosemary Terrace Infrastructure Improvements

*Replacement of
aging
infrastructure
without
destroying
existing
environment*

RJN Group, Inc was hired by the Village of Deerfield to design and construct infrastructure improvements along Rosemary Terrace within the Village. Rosemary Terrace is located in a residential area with older homes and large trees. The Village's goal was to replace the aging water main and sanitary sewer that served these homes without destroying the existing environment. Additionally, the existing storm sewer capacity needed to be upgraded and the existing roadway had deteriorated.



The RJN Design Team identified and performed design improvement for approximately 3,500 linear feet of water and sewer lines, studied the existing storm sewer capacity and prepared upgrade recommendations and design to accommodate greater capacity. Because of the restricted easement in the area, directional drilling was used for the water main improvements. The preliminary engineering tasks included:

- Topographic survey and tree survey which was used to determine the best construction methods for the line upgrades
- Design of roadway profiles
- Preparation of alternative roadway alignments and widths
- Storm sewer modeling

The design engineering tasks included preparation of all contract plans and documents for construction. RJN also facilitated a public meeting to explain the proposed construction to community members and how the construction would affect them.

The RJN team also was responsible for the construction administration services for this project including bid preparation, bidding documents and resident engineering services.



This project was completed on time and the final improvements included new sanitary sewers and services, new storm sewers and services, new water main and services, re-grading of steeply pitched driveways with temporary grading easements, and a reconstructed and widened roadway.