



DEPARTMENT OF
PUBLIC WORKS

Project: **Drainage Improvements Contract 07-D01**
 Michael Road and Vicinity
Contact Person: **Antonio Fernandes, Engineering Division**

This project was designed by Ambient Engineering to improve drainage problems in the Michael Road area. The work for the project included detention pond improvements, the installation and remodeling of drainage systems, hot mix asphalt pavement installation, and other miscellaneous work. The roads included in this contract were Michael Road, Crooked Spring Road, Theresa Avenue, Hardwood Drive and Sheldon Street (from Michael Road to culvert).

The contract was awarded to J. Tropeano Inc. of North Andover, Massachusetts in May, 2007.



Preconstruction photo of the area

Construction began in July 2007. A new drainage system, including subdrains, was installed along Theresa Avenue, Crooked Spring Road, and Michael Road.





Drainage installation on Sheldon St



Drainage installation on Michael Rd



Drainage manhole installed for stormwater storage on Michael Road



Drainage pipe at Theresa Avenue

The roadways were totally reconstructed upon completed of the drainage work. The binder course of pavement was installed in 2007. Final paving was completed in June, 2008.



*Loam placement on Crooked Spring Rd
April 2008 before final paving*



Final Paving - Theresa Avenue

Also as part of this project, two detention basins on Hardwood Drive were cleaned and reconstructed.



Hardwood Drive Detention Pond