

City of Walker Storm Water Master Plan

Owner: City of Walker, Kent County, Michigan

Contact Person Name/Phone: Mr. Scott Conners, City Engineer
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Location of Project: City of Walker
Kent County, Michigan

Date of Completion: 2005

Dollar Value: \$30,000

Project Team: Robert E. Bruggink, P.E., Principal in Charge
Justin F. Longstreth, P.E., C.F.M., Project Engineer

Project Description: Storm Water Master Plan developed as a planning tool for both the Planning Commission, Township Board and the Kent County Drain Commission which provided support for storm water management requirements imposed on developers for any developments within the Township. The Plan included a breakdown of subdrainage districts varying in size from 60 acres to 600 acres. Maps were prepared showing the drainage basin boundaries combined with parcel lines to help developers identify which drainage basin they are in. Management techniques for each subdrainage district were provided in a summary table for designers to know at the beginning of the design process what type of management is expected for the proposed development. Computer hydraulic models were developed for expected runoffs from 10 year to 100 year storm events. This information was then utilized to establish potential flood constrictions to be included in a long range improvement plan. Such a long range improvement plan is important because drainage improvements can be made in a relatively inexpensive manner when they are accompanied with road projects. All existing road cross culverts were catalogued and reviewed for any potential maintenance. Also, known drainage problem areas within the Township were summarized on a single document and an implementation plan was developed to begin addressing problems in an orderly fashion. Funding for the study was made possible by a 50% grant provided by the Kent County Drain Commission.