

City of Decatur Flood Study

DeKalb, Georgia



CLIENT

City of Decatur, GA

SCOPE OF SERVICES

GPS Surveys of Hydraulic Structures, Channels and Floodplain

Cross Sections

Hydrologic/Hydraulic Analysis and Modeling

Model Calibration

Model Calibration

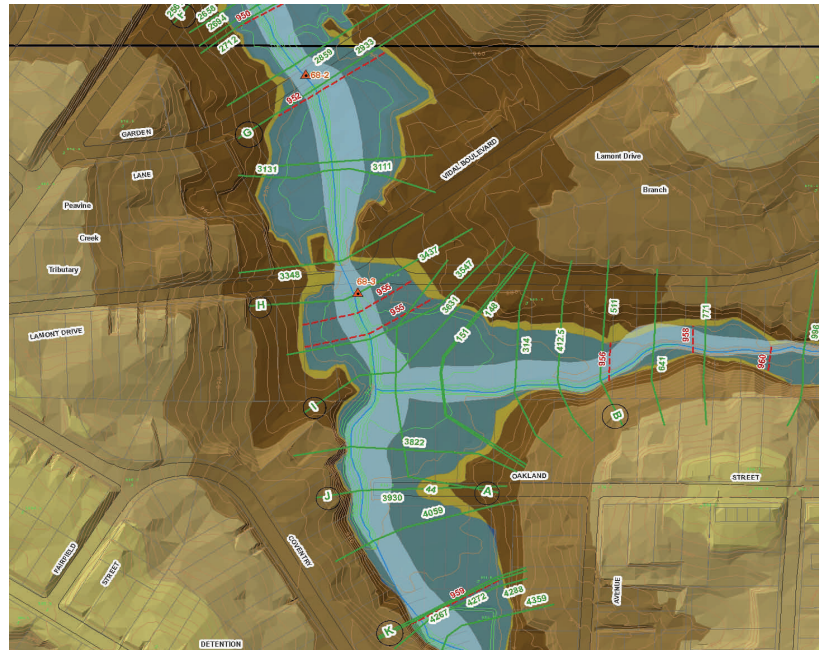
GIS based Floodplain/Floodway Mapping

Mapping

Mapping

PROJECT DURATION

7/2005-2/2006



The City of Decatur retained Manhard Consulting to prepare “regulatory” floodplain maps that reflect “built-out” conditions for the City and to prepare necessary documents to obtain Federal Emergency Management Agency (FEMA) acceptance of the updated, detailed flood studies. The City is completing this mapping effort to comply with the Metro North Georgia Water Planning District’s (MNGWPD) regional Watershed Management Plan that requires mapping of built-out condition floodplains for all streams with a drainage area greater than 100 acres.

The City of Decatur is a highly urbanized, small city of about 18,000 residents. Decatur covers about four square miles of area and is one of the most densely populated cities in Georgia. The City includes four primary watersheds: Shoal Creek Watershed, Tributary to Peavine Creek Watershed, Tributary to South Fork Peachtree Creek Watershed, and the Tributary to Sugar Creek Watershed; and is bisected by the subcontinental drainage divide with water on the north side of the City flowing toward the Gulf of Mexico and water on the south side flowing towards the Atlantic Ocean. To accomplish the two objectives, the Manhard mapped each of the City’s four watersheds. Mapping floodplains at this level will provided a comprehensive inventory of all major existing and potential flooding areas within the City. Through a detailed study, localized drainage issues can be addressed on a case-by-case basis.

The results of Manhard’s study will establish the regulatory 100-year floodplain limits that are more stringent than the FEMA requirements and will provide the communities with conservative flood hazard boundaries. These new floodplain maps are intended to be maintained separately from the effective FEMA Flood Insurance Rate Maps (FIRMs). These flood hazard boundaries, based on built-out watershed conditions, will allow reviewing authorities to assess the effects of a proposed development in a “worse case” scenario.