Brookshire/Beasley Stormwater Improvements – Project Information
May 30, 2013

What is the project history?	The Brookshire/Beasley project area was identified as Problem Area VIII in the *Stormwater Master Plan for the 1998 Annexation Area of the City of Wilmington, North Carolina*, dated November 18, 2002. The recommendations of improvements included culvert replacement, channel improvements, bridge replacement and a regional BMP. The regional BMP, JEL Wade Constructed Wetland, was constructed in 2008-2009. The current URS project intends to address the other recommendations.
What are the project goals?	• Reduce flooding caused by undersized culverts and channels • Protect property by reducing flood levels • Improve channels to reduce flooding • Improve water quality within the Hewletts Creek watershed • Provide for future maintenance access and obtain easements as required
What efforts have been completed on the project so far?	As mentioned above, the regional BMP has been constructed. URS has completed a majority of the data collection for the project area existing conditions, including topographic survey of the project area, and has developed the existing conditions hydrology and hydraulics models including: • FEMA floodplain data collection • watershed delineations • soils and impervious area analysis • curve number and time of concentration calculations • peak flow calculations • manning's 'n' calculations • cross section delineations • floodplain mapping URS has developed property maps with aerial imagery, easement areas and historical flood limits for use at the public meeting. URS has conducted the jurisdictional determination, met with USACE and NCDENR onsite and has submitted the JD plats for approval. URS has conducted subdivision plats and deed research, site visits, and utility investigations.

How is the project funded?	The project is funded through Stormwater Services stormwater fees paid by City residents.
What engineering solutions will be proposed for the project?	Conceptually, the project will replace the existing culverts to increase flow area using either reinforced concrete box culverts or aluminum box culverts. The Beasley Road bridge will be replaced with a larger opening to increase flow area and minimize overtopping. Channel improvements will include the removal of flow restricting debris and trash, grading activities to stabilize banks and increase flow area and possible profile adjustments. The project will also identify existing easement areas and locations where additional easements may be required.
What is the timeline of the project?	After the completion of Public Meeting #1, the project will move into the design phase: • 25% design submitted at the end of August 2013 • 90% design submitted in early 2014 • 100% design and permitting completed spring 2014 • Construction
What permits will be required for the project?	• USACE and NCDENR 401/404 permits • NCDENR Sediment and Erosion Control permit • City of Wilmington Stormwater Services review and approval
What type of impacts will the project have on the neighborhood?	• Limited street closures • Utility relocation work • Heavy construction machinery