



PUBLIC MEETING

West Drewry Lane Culvert Replacement

Preliminary Design Meeting

April 17, 2014, 6:30pm

Kiwanis Park Community Building



WELCOME!

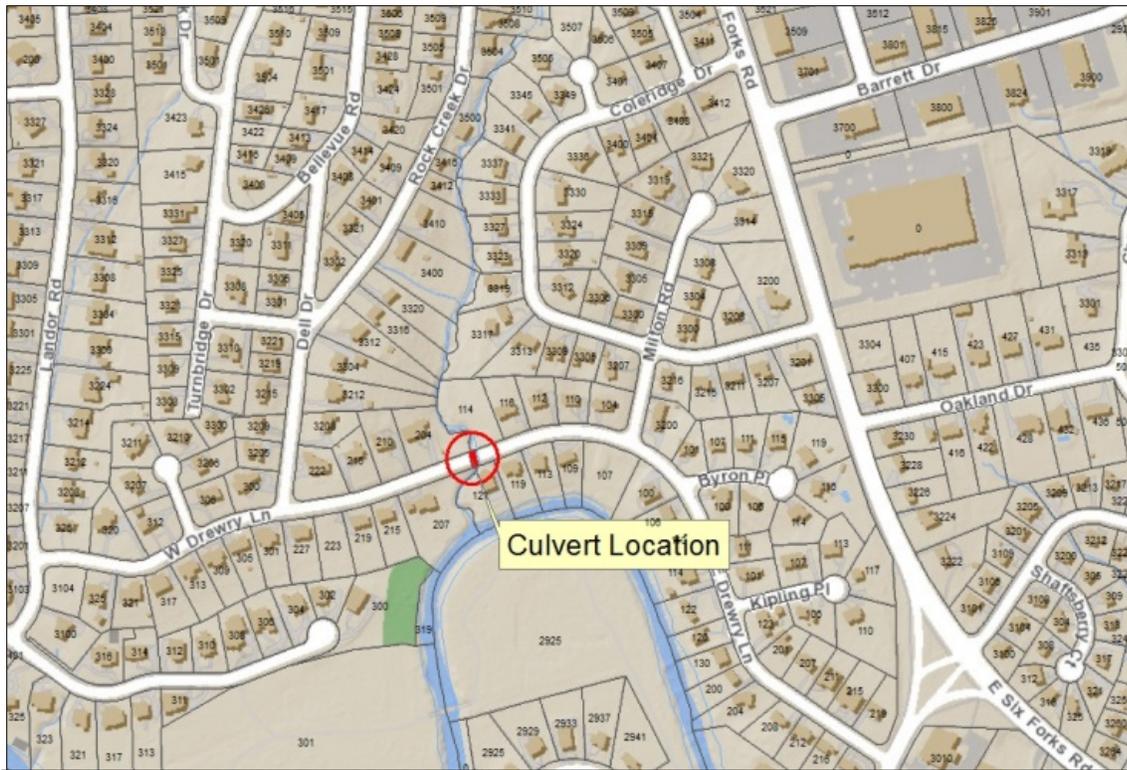
Thank you for attending the 1st Public Meeting for the **West Drewry Lane Culvert Replacement Project**. This meeting, sponsored by the City of Raleigh, will discuss the following:

- background information related to the project.
- preliminary design for improvements to the culvert.
- impacts to property owners and neighborhood.

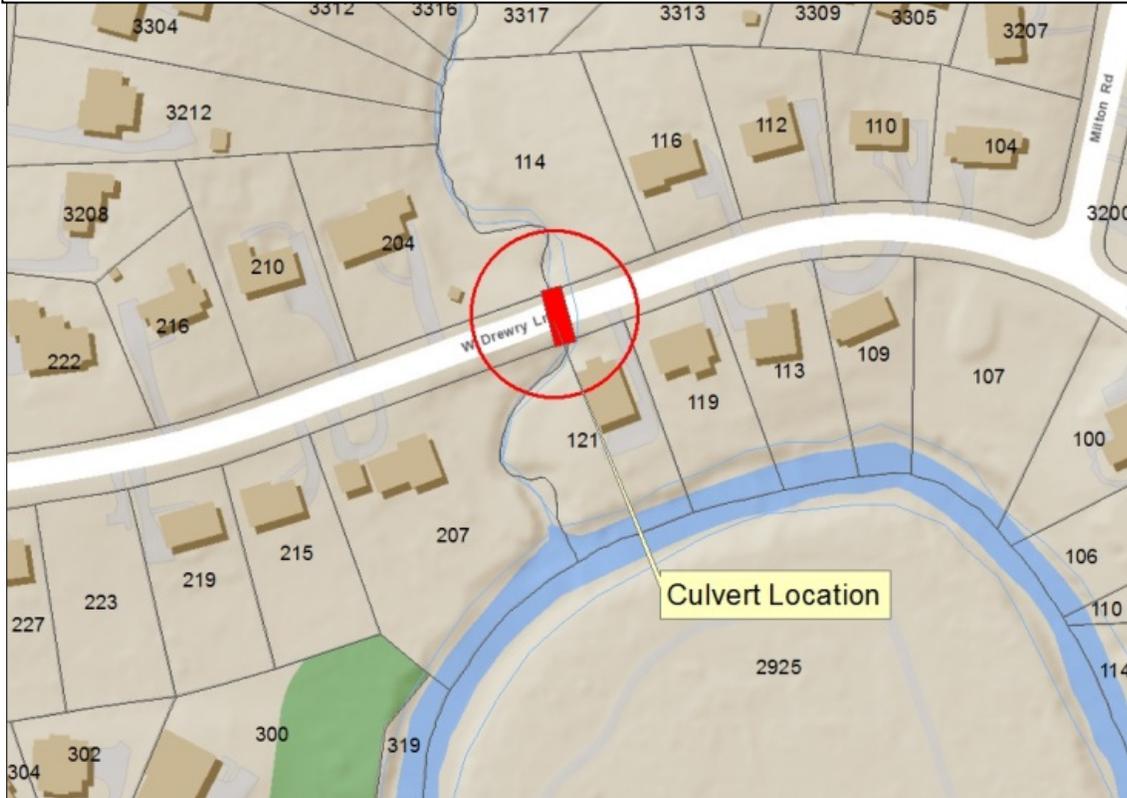
PURPOSE

In 2012, a large rain event occurred that resulted in the City's Public Utilities Department having to perform an emergency repair to an existing sanitary sewer main along Crabtree Creek. While investigating the sanitary sewer main, it was discovered that a section of the storm culvert had also structurally failed beneath West Drewry Lane. In an effort to make repairs to stabilize the culvert immediately and prevent catastrophic road failure, the City utilized a temporary repair method until further engineering analysis could be performed. The City has now hired a consultant, ARCADIS, to perform engineering analysis and propose a permanent solution and final design for the West Drewry Lane culvert.

Because the project site is located in an established neighborhood, many site constraints including utility conflicts and permitting, limit the possible improvements. The purpose of this project is to provide a stable culvert improvement that adequately conveys flows. The proposed preliminary improvements include an upgraded culvert replacement and stream channel stabilization to prevent erosion.



Culvert Location: along unnamed tributary of Crabtree Creek
located near 114 and 121 West Drewry Lane



PROPOSED IMPROVEMENTS

The proposed culvert improvements will be a 6 foot wide by 7 foot high reinforced concrete box culvert, approximately 80 feet long, that will replace the existing 72 inch corrugated metal pipe. The invert of the culvert will be buried to allow a natural channel bottom to develop over time and allow easier fish passage.

The proposed improvements will consist of new concrete headwalls and wingwalls both upstream and downstream of the culvert (N and S side of roadway.) The existing stream angle and natural meandering of the stream poses challenges to the culvert alignment. The proposed channel alignment is similar to the existing alignment, which helps to minimize changes to the stream channel hydraulics and minimize disturbances to nearby property owners and roadway improvements.

A concrete retaining wall at the downstream end of the proposed box culvert will help to dissipate energy and alleviate bank erosion and minimize substantial elevation changes in the yard at 121 West Drewry Lane.

In addition to the culvert improvements, stream channel improvements will also be made from the downstream headwall to Crabtree Creek. The stream channel improvements will help to stabilize the stream banks and improve the transition from the natural banks to the gabion basket retaining walls. New grading of the banks and the planting of new vegetation to help stabilize erosion will take place along the stream channel. During the replacement of the culvert, the existing sanitary sewer in West Drewry Lane will also be replaced. It is a clay material that will be upgraded to a ductile iron material

The proposed culvert improvements will increase flow capacity through the culvert. The increased flow capacity will pass a 50-year design storm without overtopping the roadway. A 50-year design storm has a 2% chance of occurring in any given year. The existing culvert, based on current calibration data, overtops the roadway in the 10-year design storm.

The proposed culvert improvements will not affect the FEMA requirements for flood insurance.

PERMITTING

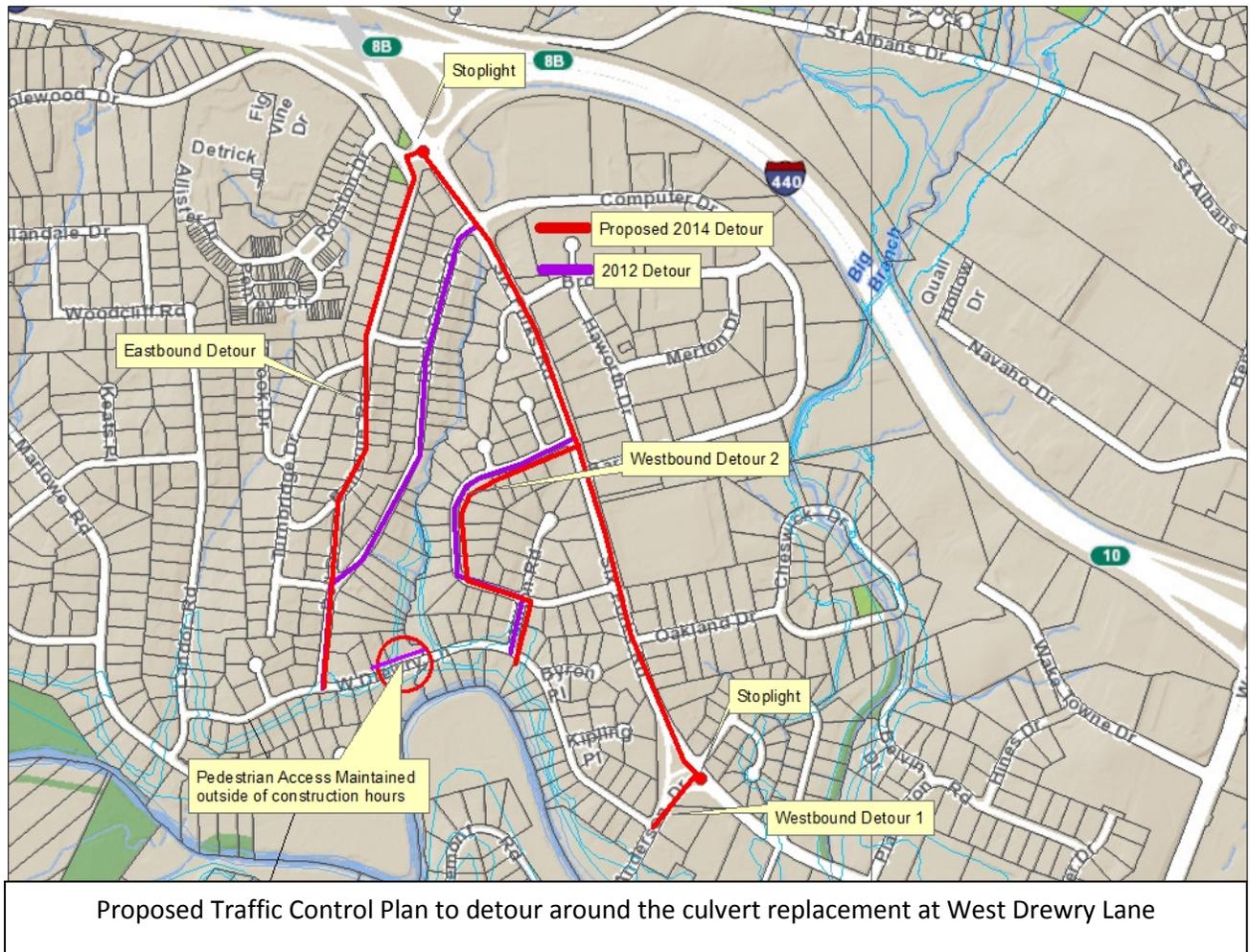
The City of Raleigh Public Works Department follows all NC general statutes and local regulations for permitting of this type of project. Applicable permits will be requested from North Carolina Department of Environmental and Natural Resources (NCDENR), United States Army Corps of Engineers, and the City of Raleigh.

SCHEDULE

The City of Raleigh is currently in the preliminary design and permitting phase of this project. The City anticipates having design and permitting complete by Fall of 2014. During this period the City will be contacting certain property owners to coordinate permanent drainage easements and temporary construction easements. It is anticipated the construction would begin in the Summer of 2015. Construction of the culvert should take between 3 and 6-months pending weather conditions.

NEIGHBORHOOD IMPACTS

During construction, West Drewry Lane will be closed and traffic detoured around the site. Below is a proposed traffic control plan which detours traffic, to the extent practicable, to stoplight locations along Six Forks Road. The City will work with the construction Contractor to maintain safe pedestrian access through the construction site outside of construction work hours. However, safety is of the highest priority and there may be times where access through the site may be limited.



EASEMENTS

Temporary Construction Easements (TCEs) will be required from property owners where the City will need access to construct the improvements. TCEs only apply during construction. They do not grant unlimited access to the property, but do allow access to specific areas on the property. Once the project is complete, the temporary construction easement will expire.

Permanent drainage easements (PDEs) will also be required around the culvert and portions of the channel improvements. PDEs are required for stormwater improvements that will be located outside of existing rights-of-way. PDEs do not grant unlimited access to the property, but do allow access to specific areas on the property. Once the project is complete, the permanent easement will remain to provide access for future inspection and maintenance. Vegetation or other impediments to access, placed within the easement by the property owner, may be removed by the City without compensation from the City.

MAINTENANCE

The City of Raleigh will maintain the stream and culvert once installed. However, fallen trees, debris, and trash in the stream are the responsibility of the property owner.

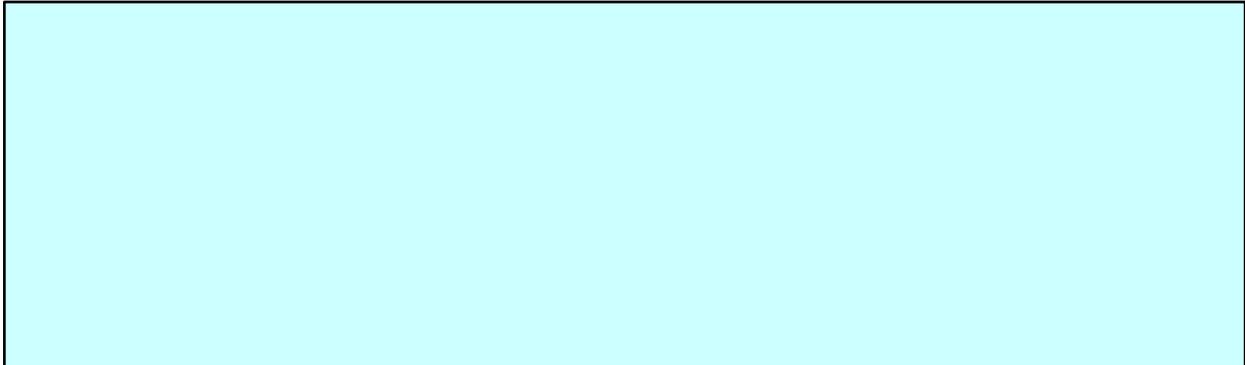
PUBLIC INVOLVEMENT

This meeting is a part of the public involvement process for the West Drewry Lane Culvert Replacement Project. Its purpose is to identify and address the concerns of local citizens during the design process. Participation by all interested parties is encouraged and all comments will be taken into consideration.

A pre-addressed comment sheet is attached for your use in providing us with your input. Please leave comments with one of the City of Raleigh representatives, or mail comments to Ms. Veronica L. High, EI, Project Engineer, at the following address.

City of Raleigh
Public Works Department, Stormwater Management Division
Attn: Veronica L. High, EI
Post Office Box 590, Room 301
Raleigh, North Carolina 27602-0590

In order to consider all comments, it is requested that you return your comments by **April 30, 2014**. Thank you for your attendance and participation. The City looks forward to receiving your comments and questions regarding this important project.



April 17, 2014

Veronica L. High, EI
City of Raleigh
Public Works Department
Stormwater Management Division
Post Office Box 590, Room 301
Raleigh, North Carolina 27602-0590

Dear Ms. High:

I would like to provide the following comments regarding the West Drewry Lane Culvert Replacement Project.

Please type or print name

Property Address:

Mailing Address (if different than property address)

Phone Number(s) and Email address

Comments

Affix
Stamp
Here

City of Raleigh
Public Works Department
Stormwater Management Division
Attn: Veronica L. High, EI
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