



August 14, 2014

TO: Board of Mayor and Aldermen

FROM: Eric Stuckey, City Administrator  
David Parker, City Engineer  
Mark Hilty, Water Management Director

SUBJECT: Harpeth River Interceptor Repair

**Purpose**

The purpose of this memorandum is to provide information to the Board of Mayor and Aldermen (BOMA) regarding the emergency sanitary sewer interceptor repair performed on the Harpeth River interceptor in the vicinity of 109 South Margin Street.

**Background**

On April 29, 2014, Water Management Department (WMD) received a customer call of a sinkhole at 109 South Margin Street and discovered an overflow that was occurring at a nearby manhole. Crews were immediately dispatched to investigate and respond to the issue. During the subsequent investigation to determine the cause of the overflow, it was determined that a significant and ongoing blockage was occurring between the upstream and downstream manholes on either side of the sinkhole.

As part of the line repair process, the City entered into two emergency contracts summarized below:

- Civil Constructors Inc. (Civil) to perform the repair work. Civil was selected based on their experience and ability to immediately start repairs.
- Smith Seckman Reid, Inc. (SSR) to provide engineering support. SSR was the original design and construction oversight consultant for this inceptor. SSR was engaged to provide historic information related to the design and construction of this line and to provide engineering support throughout the repair process.

SSR and Civil performed work from May 6, 2014 through July 29, 2014 totaling 84 days. The work involved continuous bypass pumping of the Harpeth River interceptor, stormwater management controls, site security, excavation to depths of approximately 25 feet, geotechnical engineering analyses and recommendations, and installation and backfill of approximately 80 linear feet of 54 inch diameter fiberglass reinforced pipe.

A representative of the Tennessee Department of Environment and Conservation (TDEC) visited the site several times during the repair process to inspect and to provide input. Various river samples were taken during the repair process and at no time was there an indication that sanitary sewer was entering the Harpeth River.



At this time, the site is functioning as it was prior to the line failure. The Water Management Department is in the process of identifying a firm to perform in-situ inspection of the installation and portions of the interceptor that are upstream and downstream of the repair site. This will be presented to the BOMA in a future meeting.

**Financial Impact**

The financial impact for Civil's and SSR's work is summarized below:

- Civil's work resulted in two invoices; \$449,809.50 and \$241,866.50 totaling \$691,676. Based on staff and inspector review, the invoiced value is appropriate for the work performed.
- SSR's contract initially was set at \$7,000 however the contract was amended to total \$14,900 due to the complexity of the repair and the need engage geotechnical engineering services.