



**PUBLIC WORKS DEPARTMENT
MEMORANDUM #2011 – 10**

DATE: February 24, 2011
TO: Honorable Mayor Joyce Downing and City Council Members
FROM: William A. Simmons, City Manager 
David H. Willett, Director of Public Works 
**SUBJECT: C & L Water Solutions, Inc (Emergency Contractor) Invoice
Repair of 20-inch Diameter Ductile Iron Water Main**

BACKGROUND

On December 6, 2010 C & L Water Solutions, Inc (C & L), mobilized labor and equipment at West 112th Avenue (near the Water Treatment Plant) to begin excavation and repair of the City's 20-inch diameter high zone water main. There are no service taps on the main. During the second day of the repair operation, upon reaching the water main, it was discovered that there were two leaks within 20 feet of each other. The first leak resulted from rusted connector bolts on a pipe coupling joining a very old valve. And the second leak was due to pipe deterioration. See attached pictures.

All of the parts required to make the repairs were available except the 20" valve which needed to be ordered from the manufacturer. The valve was included in the replacement schedule because of the significant deterioration. When the valve arrived on site three days later, C & L began making repairs. Water from the low zone water main was cross-fed to the high zone booster station while the high zone water main was out of service.

The two repairs were completed promptly, but the excavated soils were extremely saturated and could not be placed back into the excavation. Normally when time and safety permit, the contractor can dry soil at the job site. In this case the excavation was massive and extremely close to the roadway therefore working with the saturated material would not be a safe or practical option. The Public Works Maintenance and Operations field crew let the contractor know that they had a stock pile of dry soil nearby that could be used as backfill material alternatively to purchasing and trucking material from a gravel pit. The contractor utilized the nearby soil reduced trucking time and material cost.

The entire repair was completed in five days over a nine day period. The work time discontinuity occurred because the 20 inch valve was not in stock locally and had to be ordered. The total cost for the repair was \$27,854.56.

BUDGET/TIME IMPLICATIONS

The 2010 budget included contingency funding (\$40,000), if needed, for emergency repair/replacement of utility infrastructure. Two contractors are under contract to perform emergency repair work to the City's utility infrastructure. The funding is identified in the Water & Wastewater Fund, Distribution and Collection Division/Property Services.

STAFF REFERENCE

David H. Willett, P.E., Director of Public Works

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