



Civil Engineering  
Landscape Architecture  
Community Planning  
Surveying

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November 28, 2007

Mr. Phillip Ciesielski, P.E.  
Utility Engineer  
City of Lawrence Utility Department  
720 West 3<sup>rd</sup> Street  
P.O. Box 708  
Lawrence, KS 66044

**Re: KU Boathouse – Fire Protection – Waterline Variance**

Dear Phillip,

We request that the fire protection connection for the KU Boathouse be the same size as the existing main line. The existing line size is a 6" main line and the required fire protection main line is a 6" fire line. The required fire line is based on both insurance fire rating and on the building code requirements. Chapter XIX, Article 19-122, of the City Code stipulates that "the maximum size of any fire connection shall be at least two inches less in diameter than the main from which the fire connection is made, provided; that the City Commission may waive this requirement."


The existing waterline in the park is only a 6" waterline located south of the new facility. We are extending an 8" waterline from the 6" waterline to the new facility. To replace the existing 6" waterline would require boring under the existing railroad tracks and installing 500 L.F. of 8" waterline, 50 foot of boring under the railroad and crossing 2<sup>nd</sup> Street.

The existing fire hydrant at the end of the existing 6" waterline was tested on October 10, 2003; the actual flow was 855.36 at 77 PSI. The calculated flow at 20 PSI is 2655 gpm.

The design engineer, Darrell E. Stein II, P.E. with Henderson Engineers Incorporated, is the record design engineer for the fire protection system. Please review the attached letter on sizing of the fire protection system.

Feel free to call this office with any questions or comments you may have regarding this or related matters. Thank you for your time and attention.

Respectfully,

  
C.L. Maurer, RLA, ASLA  
Landplan Engineering, P.A.