



**Department of Public Works & Utilities**

September 29, 2014

Doug Powers  
Superintendent of Schools  
Maize USD 266  
905 W. Academy Avenue  
Maize, KS 67101

Re: Maize School South Campus Addition  
Fox Ridge Plaza Addition  
Stormwater requirements


Dear Mr. Powers:

The USD 266 detention pond that has been partially constructed within Reserve A of Fox Ridge Plaza Addition and will continue to serve the entirety of the school property that is tributary to the stormwater facility.

The Drainage Plan filed for the Fox Ridge Plaza Addition by MKEC dated February 5, 2014 indicates on page 3, attached, that "The detention basin will be expanded to provide compensatory storage, detention for the proposed development plus 10%, and detention for future development on the remaining school property plus 10%." Water Quality and Stream Channel volume are also accounted for within the proposed drainage system. This drainage plan is on file at the City of Wichita and is approved.

As the School District would further develop its property, drainage from this new development would be satisfied by the planned expansion of the detention pond within Reserve A of the Fox Ridge Plaza Addition. The City would require the continued expansion of the detention pond to its full build-out condition upon development. It is suggested that an agreement between property owners be prepared to allow future pond construction by the School District on the Fox Ridge Plaza Addition property if the developer does not construct the pond.

Sincerely,

  
Scott Lindebak, P.E.  
Stormwater Utility Engineer

cc: Marv Schellenberg  
Greg Allison, P.E.

**Stormwater Management Division**

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# ENGINEERING SUCCESS

## DRAINAGE REPORT FOR



411 N. Webb Rd.  
Wichita, KS 67206  
316.684.9600

**Fox Ridge Plaza Addition  
Wichita, Kansas**

PROJECT NUMBER: 1101010577  
DATE: December 2011  
REVISION 1: January 2014  
REVISION 2: February 2014



## **Tab 1. General**

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### **Location**

The subject property is in the City of Wichita, Sedgwick County, Kansas. The proposed development is on Maize Road between 29<sup>th</sup> Street North and 37<sup>th</sup> Street North. The site is the southwest quarter of the northwest quarter of Section 32, Township 26 South, Range 1 West of the 6<sup>th</sup> P.M. The Stonebridge Commercial Addition borders the site to the north, the Maize School South Campus Addition borders the site to the east, and the Fox Ridge Addition borders the site to the south. The plat area is 48.3 acres. The site is shown on the USGS Map, Appendix 1.1. The site is also shown on the aerial photograph, Appendix 1.2.

### **Discussion of Project**

#### **Existing**

The site was previously platted as Maize School South Campus with the area developed with school land usage. The site was included in the drainage report for Maize School South Campus.

The site is adjacent to the Maize School South Campus and Stonebridge Commercial Additions as shown on the preliminary plat, Appendix 1.3. The site is part of the Cadillac Lake Basin and a series of interconnected detention facilities. During an observed rain event on September 12, 2008 that was equal to or greater than a 100-year event, the water surface elevation of Cadillac Lake was observed to be 1351.6. A detention pond has been constructed on the eastern portion of the site. This provides back flow storage capacity for Cadillac Lake and the surrounding areas. This pond is part of the Cadillac Lake Basin and has the 100-year water surface elevation of 1351.6. The pond flows to the south under 34<sup>th</sup> Street and into a smaller pond. This pond has a riser outlet structure that controls the flow from this site.

#### **Proposed**

##### **Development Type**

The proposed development is a commercial development with 8 lots. The six lots that front onto Maize Road have areas of 1.0-1.2 acres. The two larger lots are approximately 9.2 acres in size. The basic site is shown on the final plat, Appendix 1.4. Existing dry detention in Reserve A will be modified to fill in a portion and expanded to provide additional detention. The dry pond will also be modified to a wet pond. Existing downstream structures will continue to control this pond and the basin. Compensatory storage will be provided for the volume of existing pond which is proposed to be filled. Detention is also proposed for the remaining school property along 37<sup>th</sup> Street. This remaining school property is planned for highly dense commercial development.

Preliminary site grading is shown on the Master Grading Plan, Appendix 1.5.

##### **Impacts on Stormwater**

A portion of the existing dry detention basin will be filled. The detention basin will be expanded to provide compensatory storage, detention for the proposed development plus 10%, and detention for future development on the remaining school property plus 10%. The pond will also be expanded to include wet detention. The site will be graded to drain to the detention.

##### **Permanent Structural Stormwater Management Facilities**

The detention pond will provide detention, water quality, and channel protection for all remaining undeveloped property within the north half of this section.

##### **Offsite**

The site is bounded by Maize School South Campus, Stonebridge Commercial, and Fox Ridge Additions. All of these developments are part of Cadillac Lake Drainage Basin and have interconnected detention ponds.