



# **City of Grand Island**

**Tuesday, August 26, 2008**

**Council Session**

## **Item H2**

**Consideration of Adding Storm Management System along Stolley  
Park Road to the FY 2008/2009 Budget**

**Staff Contact: Jeff Pederson**

# **Council Agenda Memo**

**From:** Steven P. Riehle, Public Works Directore  
**Meeting:** August 26, 2008  
**Subject:** Brentwood Lake Storm Sewer Outlet  
**Item #'s:** H-1  
**Presenter(s):** Steven P. Riehle, Public Works Director

## **Background**

Discussion on this item was postponed from the August 20, 2008 Council meeting to the August 26, 2008 Council meeting.

### **Brentwood Lake**

The lake was pumped as a gravel pit along the Warm Slough in southwest Grand Island. Residential housing with concrete curb and gutter streets and storm sewer was built around the lake. The lake also functions as a wet detention cell for the area.

### **1978 Storm Drainage Improvement Plan**

Consulting engineers McGaughy, Marshall & McMillan prepared a storm drainage plan for the Stolley Park Road outfall & drainage system and the southwest outfall & drainage system. The plan provided for the outlet from Brentwood Lake to go south along the power plant railroad spur towards the community college and then east to the Wood River. The project to build the outlet towards the Wood River is in the last year of the 1 & 6 year Street Improvement Plan.

### **1980's Project**

There was no outlet for the Brentwood Lake or the ditch along the power plant railroad tracks when the lake was built. The 1983 Stolley Park Road widening project included construction of an outlet for Brentwood Lake by installing a 24" diameter culvert that drains into the Stolley Park Road storm drainage system. The culvert was intended to provide an outlet for the Brentwood Lake until the above project was built.

### **Stolley Park Storm Drainage System**

The storm drain pipe from the wet detention cell by the bike trail up to Blaine Street is a 24" diameter concrete pipe. The storm drain pipe east of Blaine Street is a 36" diameter concrete pipe past the dry cell at Blaine Street.

### **June 8, 2008 Storm**

After the June 8<sup>th</sup> rainfall event, the level in the 36" storm drain pipe east of Blaine Street was down and the 24" storm drain pipe west of Blaine Street was running full. An irrigation type of pump was installed into a manhole on Stolley Park Road south of the wet cell to pump storm water to the 36" pipe at Blaine Street. The irrigation well helped lower the storm water level in Brentwood Lake and the wet detention cell along Stolley Park Road.

## **Discussion**

### **Engineering**

Sufficient funds are in the proposed 2009 Streets Division budget to do an engineering study of the Stolley Park Road storm drainage system.

### **Construction**

Two possible projects have been discussed.

1. Construction of a second 24" diameter storm drain pipe along Stolley Park Road west of Blaine Street. The construction cost is estimated at \$250,000.
2. Construction of an outfall ditch and storm drain pipes south from Brentwood Lake and then east toward the Wood River. The cost for the project in the 1 & 6 year Street Improvement Program was listed as \$425,000.00. The project estimate would need updated as the route for the project that was used to generate the cost estimate is no longer desirable as it would drain through the existing wet detention cell along Stagecoach Road east of Blaine Street.

## **Conclusion**

This item is presented to the City Council to allow for any questions to be answered and to create a greater understanding of the issue at hand.