

**SITE AND PROJECT SUMMARY**

The Elmwood Park Diversion is part of the Aksarben Village Sewer Separation Project. The diversion was identified during the screening process for green infrastructure within the combined sewer system service area. The solutions diverts 29 acres in the upper reaches of the watershed into the adjacent watershed that contains Elmwood Park. The diversion allowed for the construction of smaller pipes at the bottom of the Aksarben Village watershed. The diversion is estimated to have saved \$550,000 on the project overall, which includes the costs associated with building the diversion.

The diverted stormwater runoff passes through a trash screening structure to minimize debris from entering the diversion. Access hatches and a driveway to the structure were also constructed to allow for easy removal of the built up debris. From the screening structure it then flows to a splitter structure. The structure directs a certain amount of flow, up to approximately 23 cfs, through surface bioswales and bioretention gardens, beginning at the top of the park ravine. Flows exceeding the capacity of this pipe are diverted into a 42" concrete bypass pipe that extends to the bottom of the ravine.

Seven slotted-weir structures were constructed within the ravine to reduce stormwater velocity and lower erosion potential. The weir structures have vertical drops that vary from one to three feet. Three bioretention gardens are located just above three of the weir structures. Runoff is directed within a native grassed channel separated from the bioretention gardens with a mico-berm. After runoff reaches the weir structure, it back flows into the bioretention system. The design is intended to create off-line bioretention structures and decrease shear stress on the garden soils and plantings.

At the base of the ravine, a dry detention basin collects flows into an outlet structure that connects with the bypass pipe and directs flows into Elmwood Creek.

**PROJECT DETAILS**

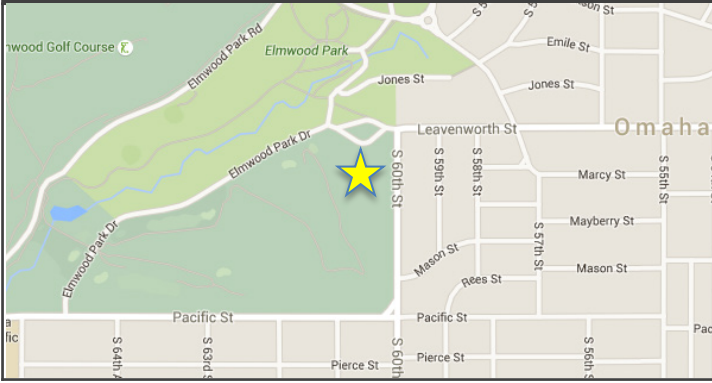
	<b>BIORETENTION SYSTEM</b>
System Footprint	1,500 sf
Under-Drain	4" perforated underdrain with valve
Pre-Treatment System	Screening structure
Outlet Control	Bypass pipe; area inlet
Contributing Area	29 acres
Predominant Land Use	Residential
Percent Impervious (%)	45%
Predominate Soil Types	Contrary-Marshall silty clay loam

**FIRST BIORETENTION LOOKING NORTH**



<b>DESIGNED BY</b>	<b>CONSTRUCTED BY</b>	<b>MAINTNANCE BY</b>
Veenstra & Kimm Big Muddy Workshop	Graham Construction	City of Omaha Stormwater Program & Sewer Maintenance

# SITE LOCATION – 60<sup>th</sup> & Leavenworth St



# STOP LOG MODIFICATION



# PHOTOS



# PROJECT LAYOUT

