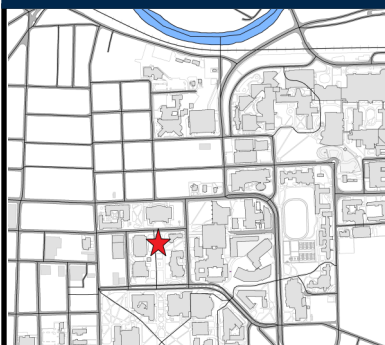




# STORM WATER MANAGEMENT PROJECTS



## Drainage Area:

3 acres

## Watershed Protected:

Storm sewers in this area discharge direct to the Huron River.

## Soil:

Well-drained sandy soil

## Construction Completed:

2016

## Storm Water Control Measures:

Gravel bed with HDPE storage chambers

## U-M Maintenance:

Removing sediment from forebay



## Ingalls Mall Underground Infiltration Basin

U-M installed an underground infiltration basin in conjunction with a utility and hard-scape upgrade project in Ingalls Mall just south of E. Washington Street. The basin location has well-draining sandy soil, which allows for complete infiltration of the 100-year, 24-hour design storm from the drainage area. The basin is designed to treat and infiltrate runoff well beyond the required storm water management for this site.

**Requirements:** The disturbed area is greater than one acre triggering adherence to U-M Storm Water Permit Post Construction requirements—> <http://ehs.umich.edu/construction-projects/environmental-considerations/storm-water-management>

U-M Storm Water Permit Requirements (based on site size and characteristics)	Constructed
<b>Minimum Treatment Volume Required:</b> 45,000 gallons (6,000 cubic feet) of runoff	Basin is able to treat and infiltrate runoff in excess of the 100-year, 24-hour design storm
<b>Channel Protection Volume Required (no increase to runoff and peak rate through the 2-year storm):</b> Because there is a slight decrease in runoff and peak rate due to the project, no storage is required.	

**Performance:** The basin is able to infiltrate the entire runoff volume from its 3-acre drainage area in excess of the 100-year, 24-hour design storm. For the 2-year and 100-year, 24-hour design storms, respectively, approximately 86,000 gallons (11,500 cubic feet) and 279,000 gallons (37,000 cubic feet) of runoff will infiltrate from the basin. There is additional capacity available to allow for future expansion of the drainage area.

**Benefits:** This system helps to remove volume and peak flow from City storm lines, provides water quality treatment, reduces flooding, and replenishes groundwater.

From E. Washington Street looking south

