

STORM WATER MANAGEMENT PROJECTS



Drainage Area: Primary — 37.3 acres (20.6 U-M acres) Additional — 59 off-campus acres during storms greater than the 2-year recurrence interval event

Watershed Protected:

Storm sewers in this area discharge to Allen Creek at Hill St. and Hoover Ave.

Soil:

Well-drained sandy soil

Construction Completed: 2015

Storm Water Control Measures:

- Underground infiltration basin [170 ft (length) x 12 ft (width) x 7 ft (height) concrete box structure]
- Water quality device

U-M Maintenance:

Removing sediment from water quality device and basin



Monroe Mall Underground Infiltration Basin

U-M installed an elective underground infiltration basin and water quality device in 2016 as part of the construction of Jeff T. Blau Hall to help alleviate flooding on E. University Ave. due to undersized storm pipes (See related Stephen M. Ross School of Business project sheets). The project is in response to recommendations from the City of Ann Arbor Storm Water Calibration and Analysis Project (2015). The basin is located beneath the pedestrian corridor known as Monroe Mall north of Jeff T. Blau Hall.

Requirements: U-M Storm Water Permit Post Construction requirements for the Monroe Mall disturbed area are accounted for in the post construction storm water control measures for the Jeff T. Blau Hall new building project.

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 |
|---|-----------------|
| Minimum Treatment Volume Required: | 119,000 gallons |
| The minimum treatment volume is accounted for in the Jeff T. | (15,900 cubic |
| Blau Hall new building project. | feet) of treat- |
| Channel Protection Volume Required (no increase to runoff | ment and infil- |
| and peak rate through the 2-year storm): | tration for the |
| The channel protection volume is accounted for in the Jeff T. | 100-year storm |
| Blau Hall new building project. | event |

Performance: The basin effectively reduces the runoff from U-M properties in the primary drainage area by 6% to 11%. For the 2-year and 100-year storm events, 98% and 29% of the runoff routed to the basin is infiltrated, respectively. *Note that this drainage area functions with two additional secondary outlets, which release flow outside of the drainage area when pipes are overflowing. Thus for larger storms, some flow does not route to the basin.*

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

