

Miller Avenue Improvements Project

Stormwater Retention in Miller Park and Garden Homes Park

September 11, 2012

In 2013, the City plans to reconstruct Miller Avenue between North Maple Road and Newport Road. As part of this project, we would like to construct bioretention areas at two locations as described below in order to help better manage stormwater runoff in the Allen Creek watershed. These bioretention areas would slow down and help clean the stormwater runoff before either reentering the stormwater system or be taken up into the ground and/or vegetation.

Long term maintenance of these bioretention areas would be managed by the City's Natural Areas Preservation Unit.

An overall map of these areas is attached, as well as drawings showing the grading and planting plans for the proposed bioretention areas.

Miller Park Bioretention Area

This bioretention area is located at the easternmost "finger" of Miller Park where it borders Miller Avenue between 1553 and 1575 Miller Avenue. Work at this location would include removal of existing vegetation and regrading in the retention area indicated on the attached plan. Plantings will be native seed mixtures that will vary based on the part of the retention area in which they are planted (see drawing).

A portion of the flow from the storm sewer pipe would be diverted into the bioretention area from Miller Avenue, using a plunge pool at the outlet to reduce the velocity of the water prior to entering the retention area.

The existing path would be rerouted around the eastern perimeter of the bioretention area, over the outlet pipe for the retention area, to rejoin the existing path to the south of the retention area.

Garden Homes Park Bioretention Area

This bioretention area is located on an isolated fragment of Garden Homes Park at the northwest corner of Miller Avenue and Franklin Street. This is currently a low lying area with mostly covered with weeds and invasive species.

Work at this location would include removal of much of the existing vegetation, while protecting some of the more mature trees. Grading will be performed around these existing trees to create the bioretention area. Plantings will be native seed mixtures that will vary based on the part of the retention area in which they are planted (see drawing).

Stormwater will be routed off of Miller Avenue, under the sidewalk and into the bioretention basin. An existing storm structure in the southwest corner of the lot will be modified to serve as an overflow structure.

Plans also include the construction of a new pathway through the bioretention area that would "cut the corner" between Miller and Franklin and provide better public access to this piece of park land.