



Clean Michigan Initiative
 Clean Water Fund
 DEQ Tracking Code #2005-9113

Ira Township
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Ira Township Low Impact Development

December 2005 through September 2008

Low impact development strategies, including detention of storm water, are an important solution to the problem of elevated storm water flows caused by accelerating development trends. Detaining storm water runoff nearer its point of origin will reduce peak flows and associated problems. If low-impact developments are practiced throughout the Anchor Bay watershed, flooding will be reduced, streams retain their natural flow characteristics, erosion and sedimentation problems will be curtailed, resulting in smaller quantities of pollutants reaching Anchor Bay.

Storm water control at the Ira Township complex was very fragmented. We took a campus-wide approach to our project in controlling storm water and discharge. By installing a green roof on the Ira Township Fire Hall and rain gardens adjacent to a newly designed parking lot we addressed these concerns.



Grant Amount: \$ 290,481
 Match Funds: \$ 290,482
 Total Amount: \$ 580,963



Best Management Practices:

- Green roof
- Detention basins
- Storm water conveyance channel



Partners involved:

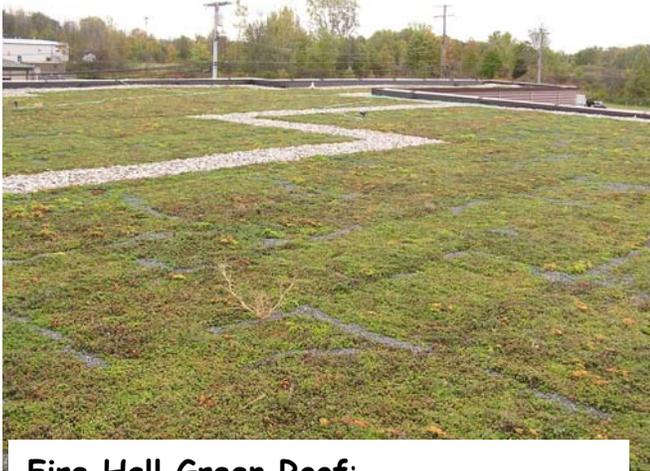
- Huron Consultants
- Kristen Jurs, St. Clair County Health Dept.
- Sheri Faust, St. Clair County Health Dept.



Interest and Education Activities:

Public Education Activities through St. Clair County:

- MPC Workshop October 30, 2008 "Planning and Zoning for Water Quality".
- Wales Township Presentation January 22, 2008, Encouraging LID through planning and zoning.
- September 17, 2008 Distribution of SEMCOG LID brochures.
- Watershed Newsletter - Winter 2007 edition, article "Spotlight: Green Developments".
- Presentation Feb 10, 2007 - SC4 Free College Day, topic "Green Roofs".
- Presentation March 5, 2007 Blue Water Garden Club topic "Green Roofs".
- Presentation April 3, 2007 - Master Gardener, topic "Groundwater/Pollution".
- Times Herald article "Ira Twp fire hall goes green".
- Times Herald article "Ira planting seeds for a green roof".
- Water Quality Table-top Display, Ira Twp Hall 2007, native landscaping.
- Ira Township Newsletter Spring 2007 edition "A new look for the Ira Township Parking lot and a green roof for the fire hall".
- SEMCOG University - "Go Nutty Go Native"! The benefits of designing with Native Landscaping attended by various Ira Township employees and volunteer Beautification Committee members.
- Beautification Committee members plant flowers in parking lot islands and helped with planting rain gardens.



Fire Hall Green Roof:

The conventional roof was replaced with a green roof. Water now runs through the green roof vegetative base, retaining water, and removing and absorbing sediments and other particulates in rain water.



Parking Lot/Rain Gardens.

The asphalt parking lot was re-engineered to direct sheet flow to the perimeter swales and rain gardens. The parking lot drains the rainfall via surface flow to vegetated swales that drain to the rain gardens. This allows runoff, contaminants, and transported solids to be filtered out through the vegetation. The vegetated swales also absorb some of the runoff and delays peak flows from storm events.