



STORM WATER PROGRAM



Maywood Ave, Toledo Green Streets Revitalization



Green Streets Webinar

April 13, 2011

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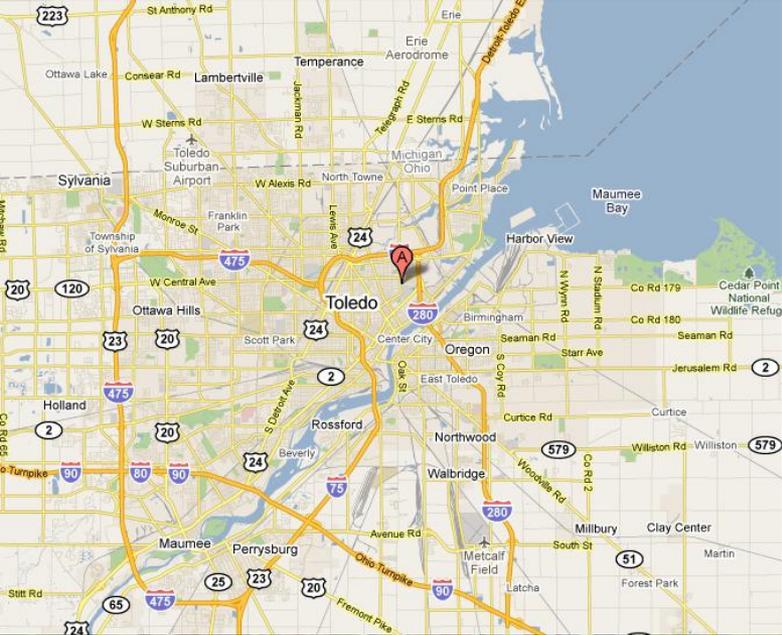
Katie Swartz, American Rivers

Regina Collins, City of Toledo

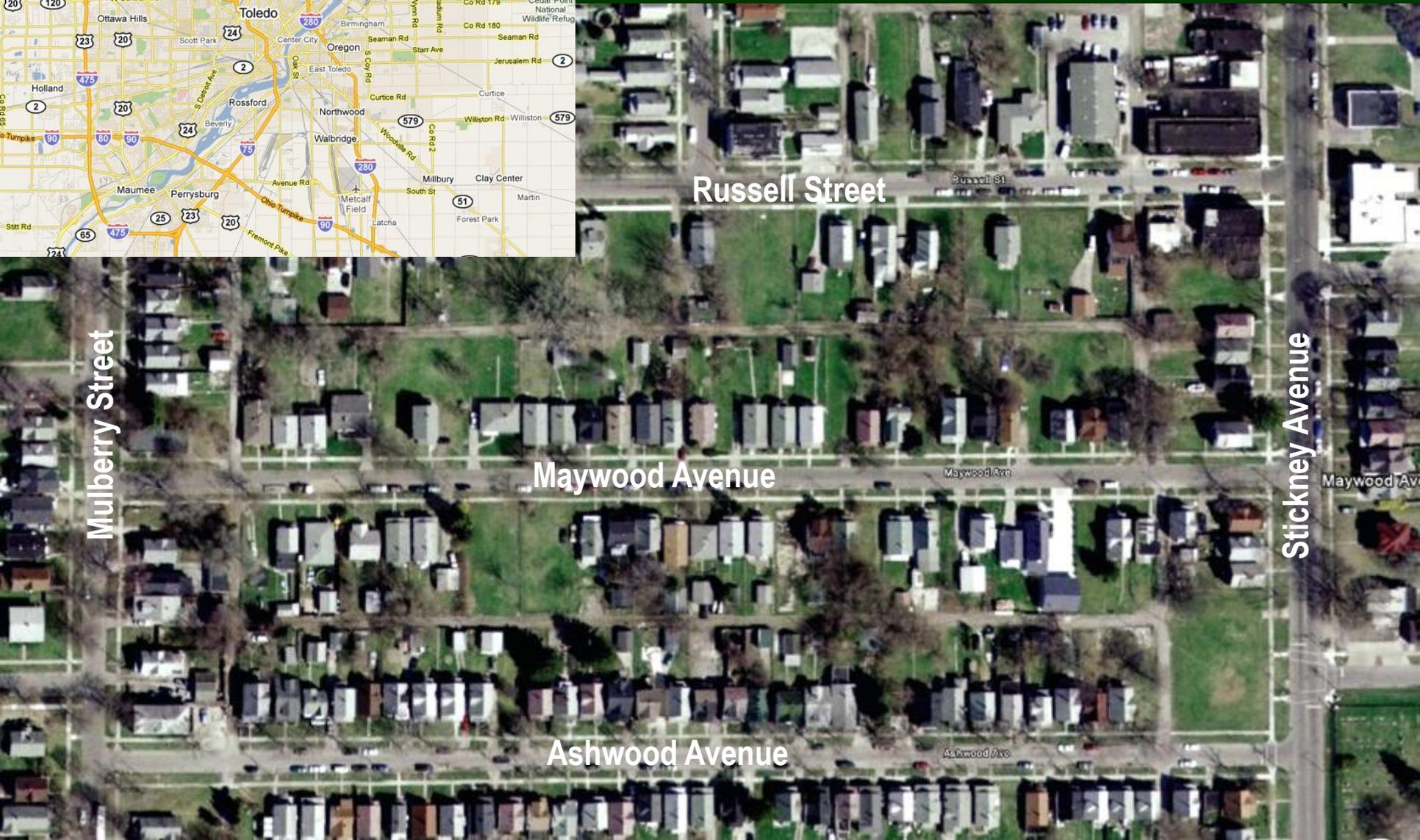
Project Goals



- Revitalize the neighborhood
- Community involvement
- Reduce stormwater runoff entering the CSO
- Improve water quality using green infrastructure



Location



Demographics

- Single family residential
- Median home income \$25,384
(average income in Toledo \$32,546)
- 1/12 acre lots (30 by 120-ft)
- 66 lots (46 with houses)
- 25% Homeowners*



*Based on Lucas County Auditor AREIS Information





Green Streets

- Identify criteria for location of projects
- Review codes and make changes if necessary
- Empower the residents
- Removal of vacant properties
- Coordinate with other neighborhood services

Tree trimming in the alley



Vacant and abandoned property

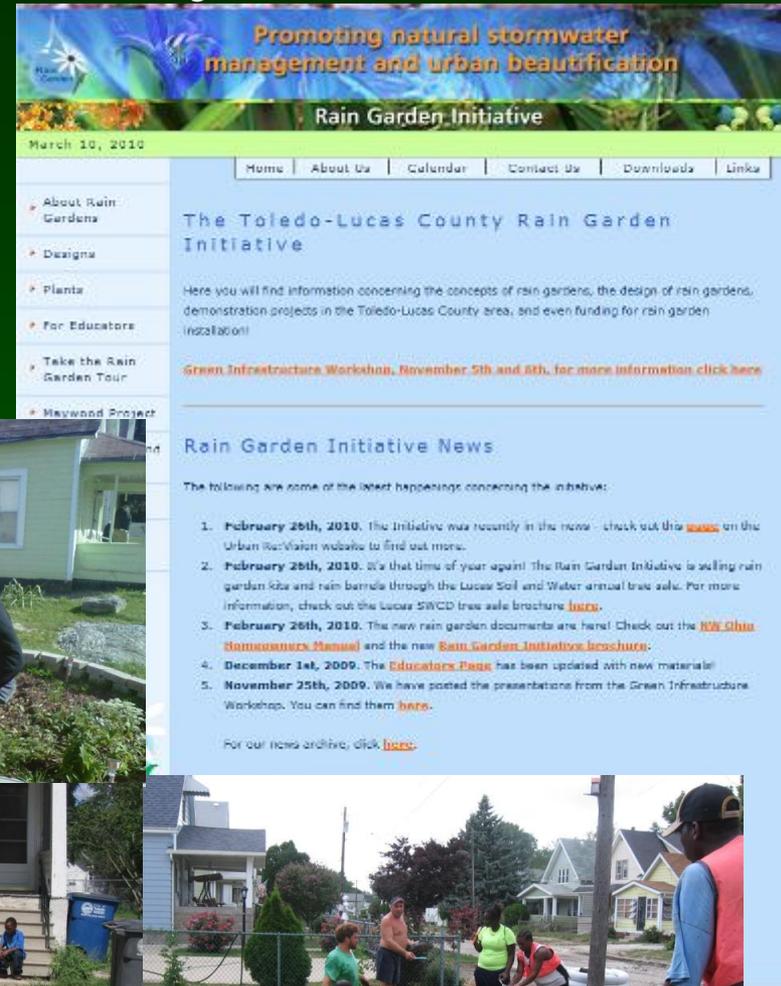


Postal worker attempting to deliver mail



Community Involvement

- Goal
 - full cooperation from the property owners
 - Connect people in urban areas to their water resources
 - Teach residents to be better stewards
 - Promote environmental education and awareness
- Methodology
 - City official presentations
 - Project factsheets and other literature
 - Website www.raingardeninitiative.org
 - Public Meetings
 - Coordinate with “Toledo Grows” Green Jobs Corps

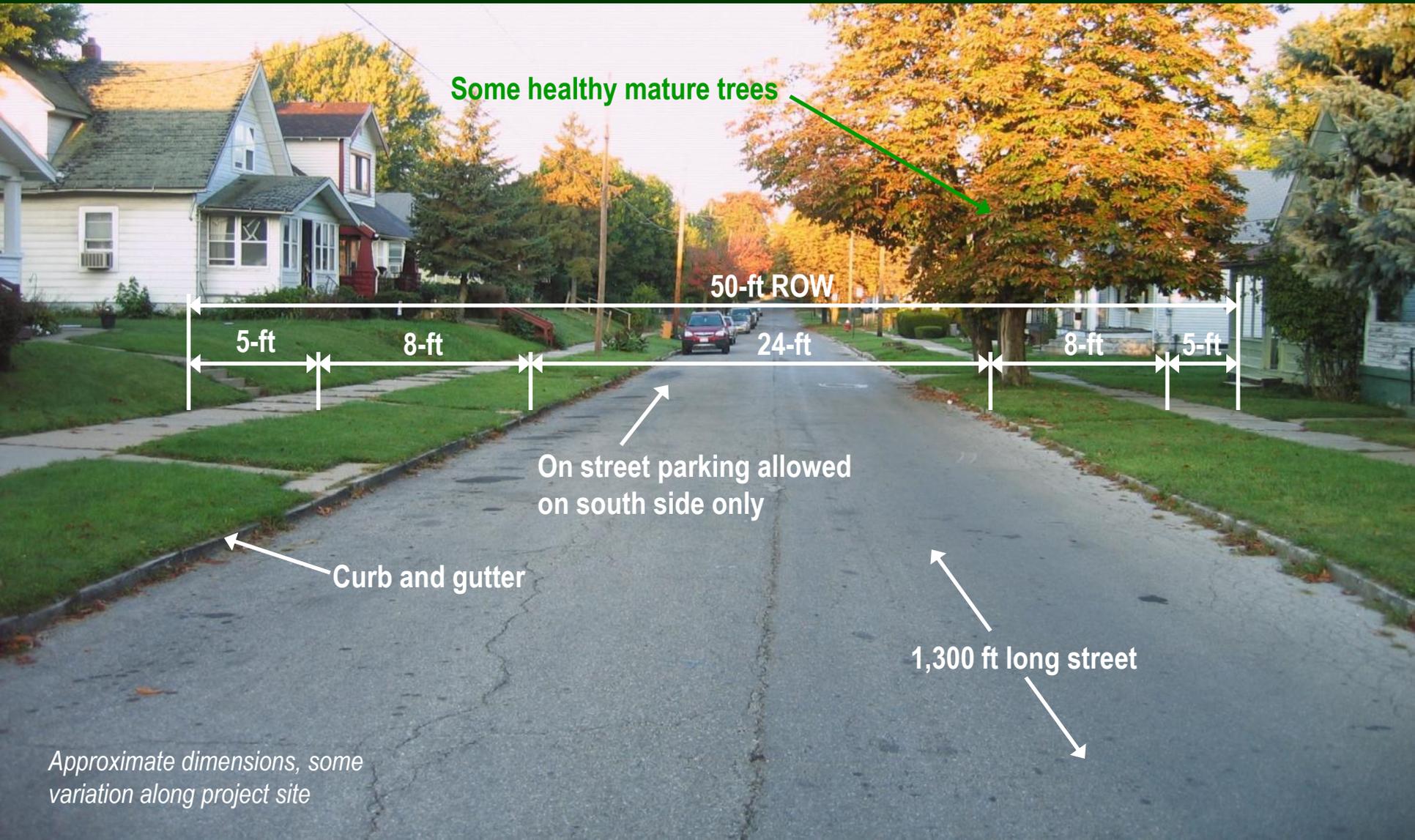




Funding Source

- Approached various government agencies
- Received 100% principle forgiveness subsidy
Water Pollution Control Loan Fund (WPCLF) Green Reserve
(20% Set Aside) American Recovery and Reinvestment Act
(ARRA) Stimulus Funds
- Green Jobs Corps Youth Program-U.S. Dept. of Agriculture,
NRCS and Lucas County funds

Site Characteristics





Some dirt/gravel driveway and alleys

Some driveways off Maywood
others accessed from alley
behind the houses



Oil stained pavement

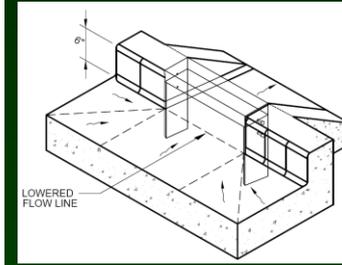
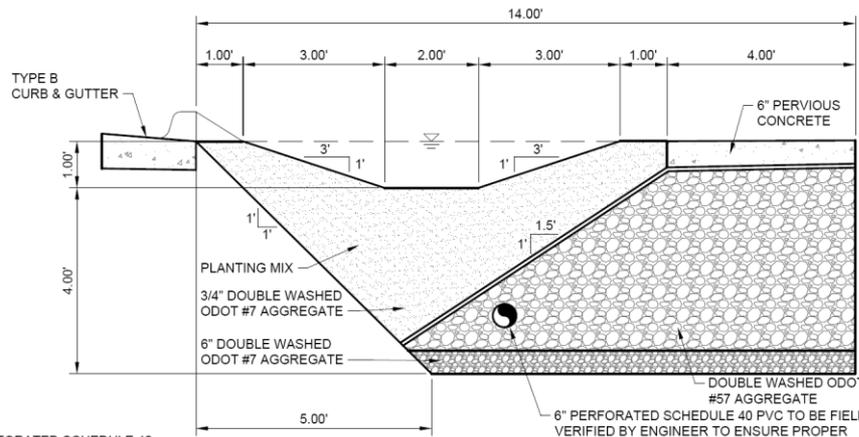


Community Garden



Roof drains discharge on lawns

Design

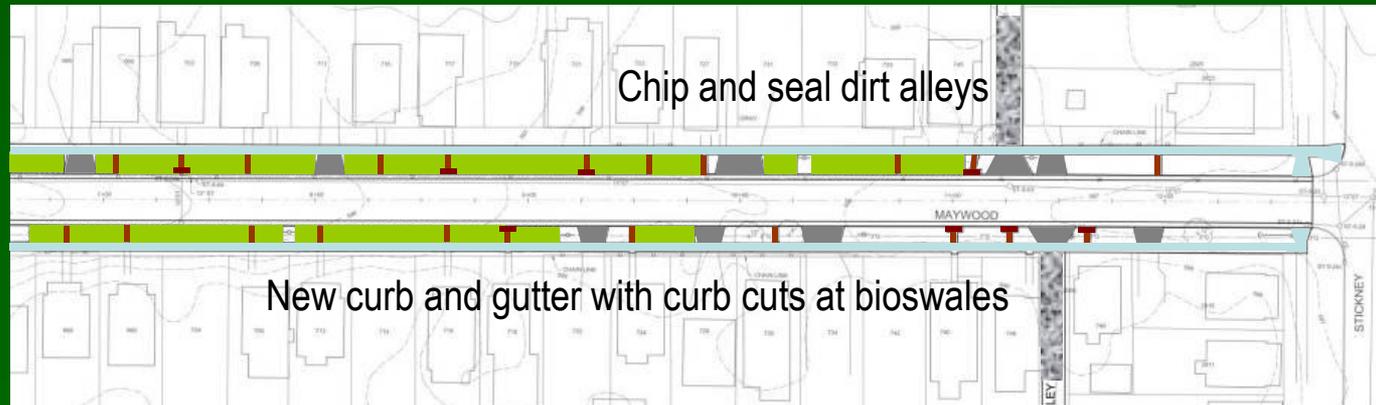
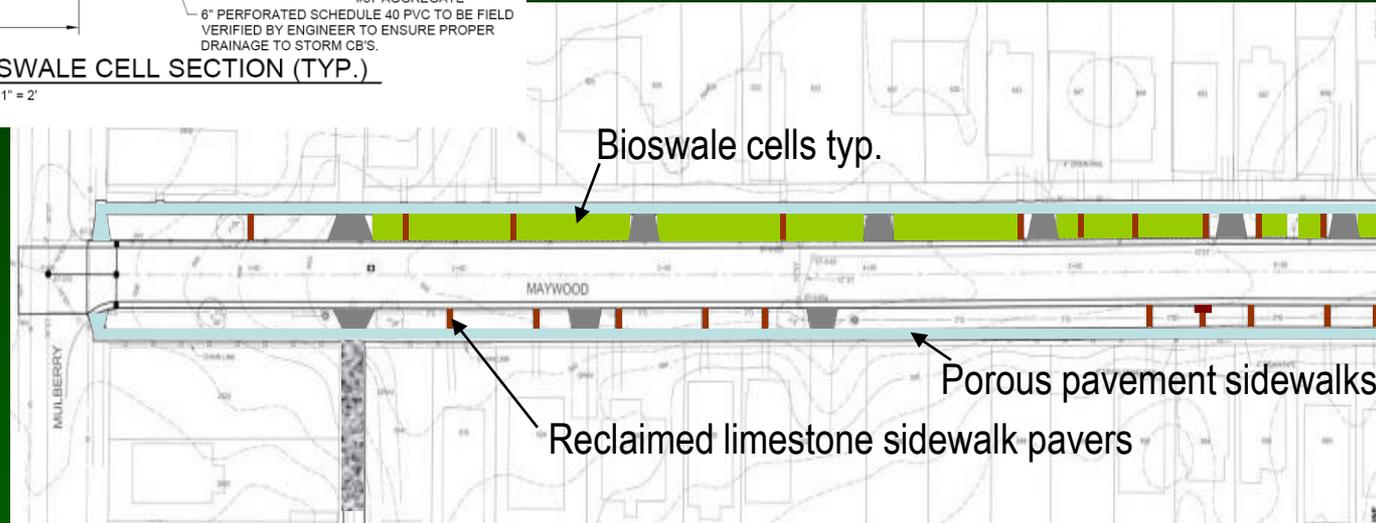


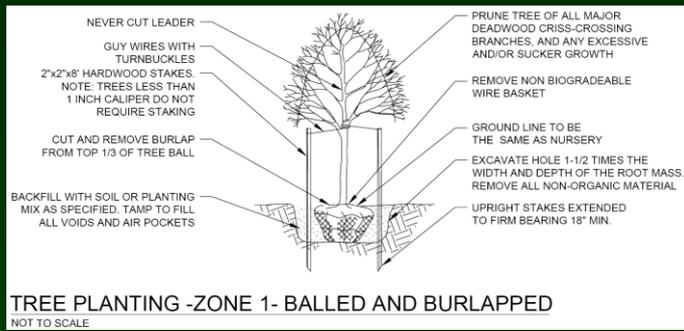
NOTE:
POSITION OF 6\"/>

BIOSWALE CELL SECTION (TYP.)

SCALE: 1" = 2'

- Bioswales
 - Curb cuts
 - Underdrain
- Pervious Concrete Pavement
 - Sidewalks
 - Driveway apron
 - Alley apron



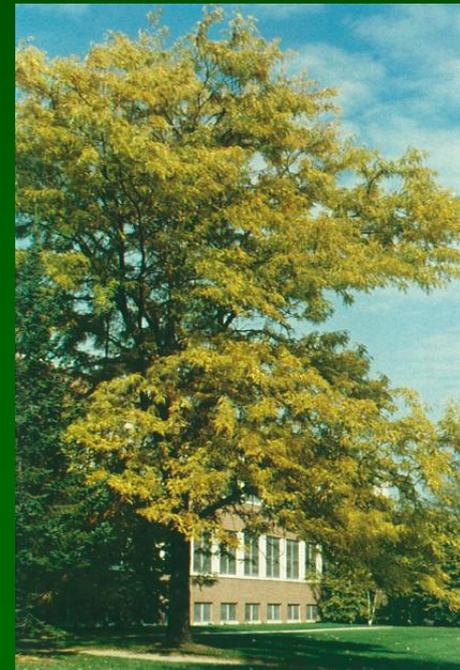


Plants and Soil

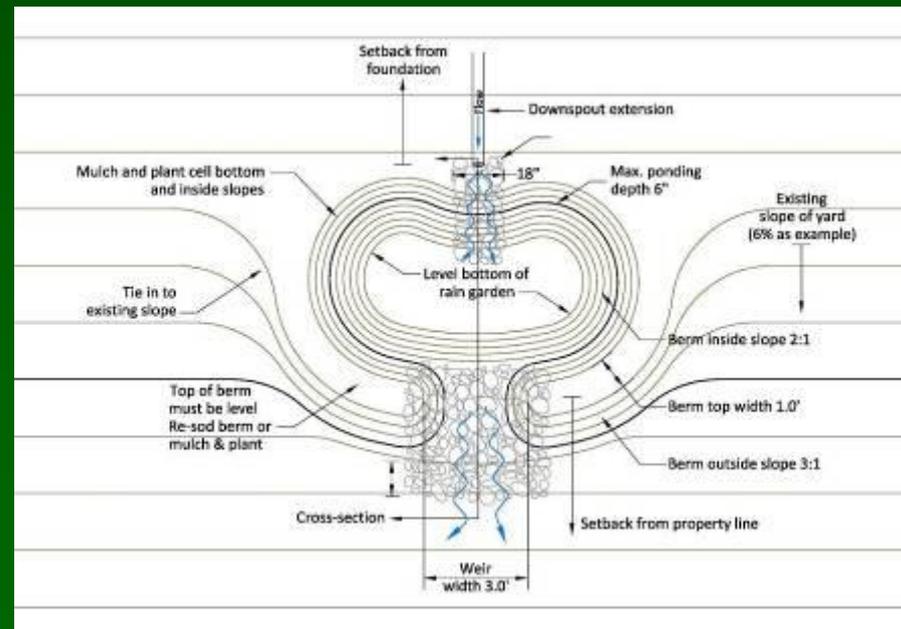
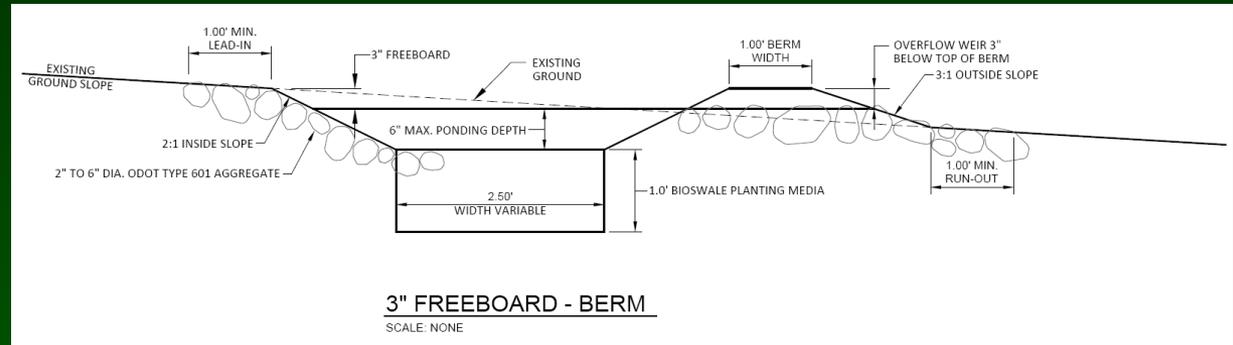
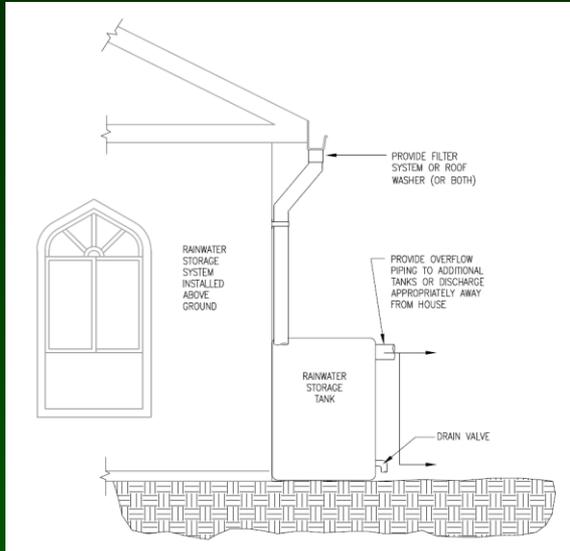
Planting Soil Mixture

- City Forester tree assessment
- Trees (2.5" caliper, 30-ft spacing)
 - Honeylocust
 - Black Cherry
 - Shingle Oak
- Ground Cover
 - Buffalo Grass

- 50% sand
- 30% topsoil (<5% clay)
- 20% leaf compost



Residential rain gardens and rain barrels









Cost



- Total Cost
 - ~\$500k total project (swales, sidewalks, driveway approaches, curb and gutter, plantings, etc.)
 - ~\$278k green infrastructure
- Highlights
 - Bioswales ~ \$150/lf
 - Pervious concrete sidewalk 6-inch ~ \$5/sf

Summary



- Early neighborhood involvement
- Coordinate with other agencies and departments
- Low Maintenance (mostly mowing grass)
- 0.58-in storage (of runoff, not rainfall)



Contact

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www.raingardeninitiative.org



Questions

