# NACWA

# Winter Meeting

February 4, 2014

THE CITY OF COLUMBUS
MICHAEL B. COLEMAN, MAYOR

DEPARTMENT OF PUBLIC UTILITIES

BLUE PRINT COLUMBUS
Clean streams.
Strong neighborhoods.

# Blueprint Columbus

- Consent Order Overview
- What is Blueprint Columbus?
- Ongoing efforts to develop Blueprint Columbus:
  - Pilot areas and technical committee
  - Affordability
  - Community Engagement
  - Green Workforce Development
  - Legal

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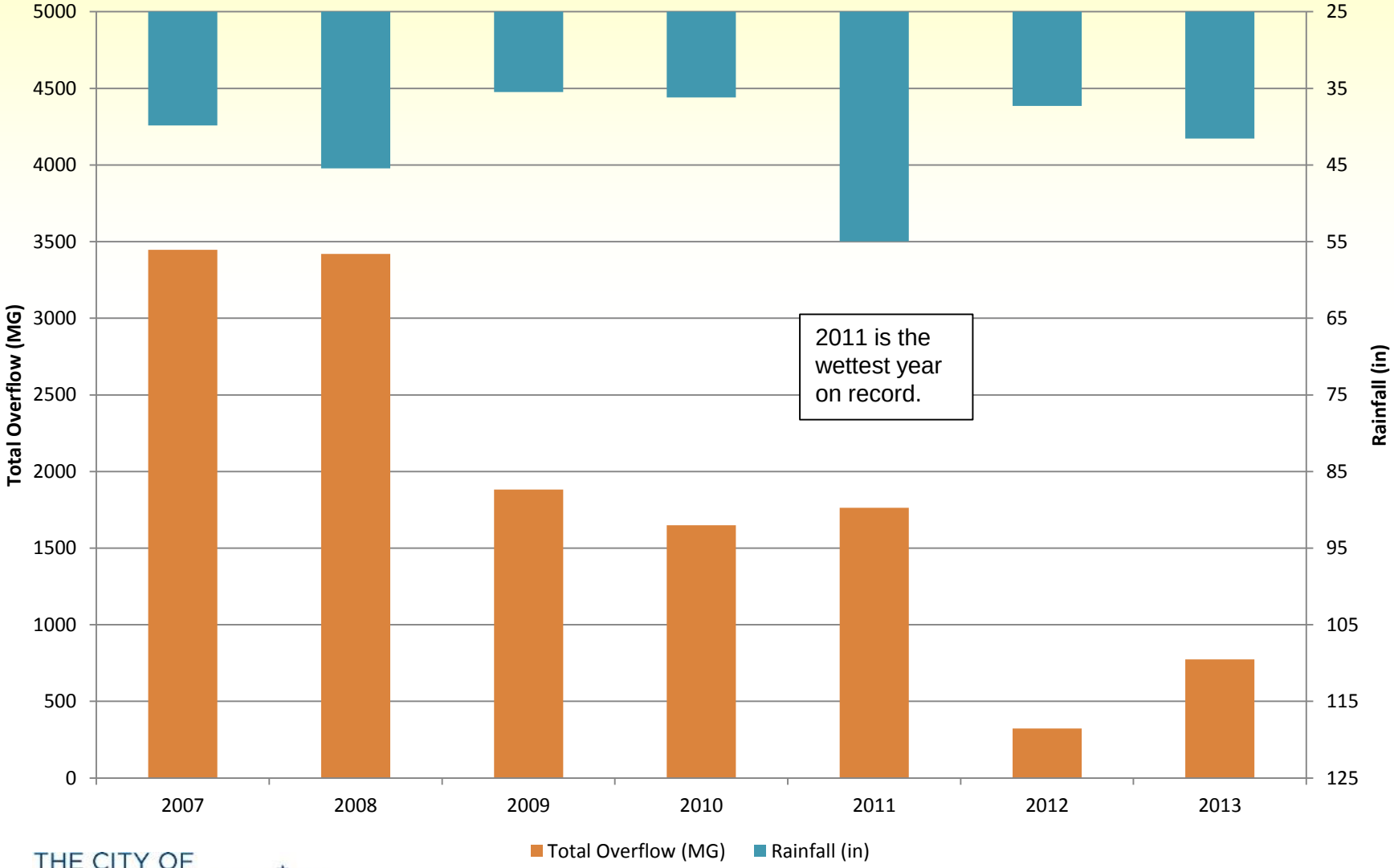
# Columbus' Wet Weather Plan

- Two consent orders with Ohio EPA (SSO, CSO)
- Wet Weather Management Plan (WWMP) submitted July 1, 2005
- Since the submission of the WWMP:
  - WWTP expansion – peak capacities increased by 50% at each plant
  - CSO tunnel – 20 foot tunnel under construction to address a significant number of CSOs
  - $1B spent

# Total Overflow
## WWTP Bypass and Overflow from the Largest SSO and CSO

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# A Better Way: Blueprint Columbus

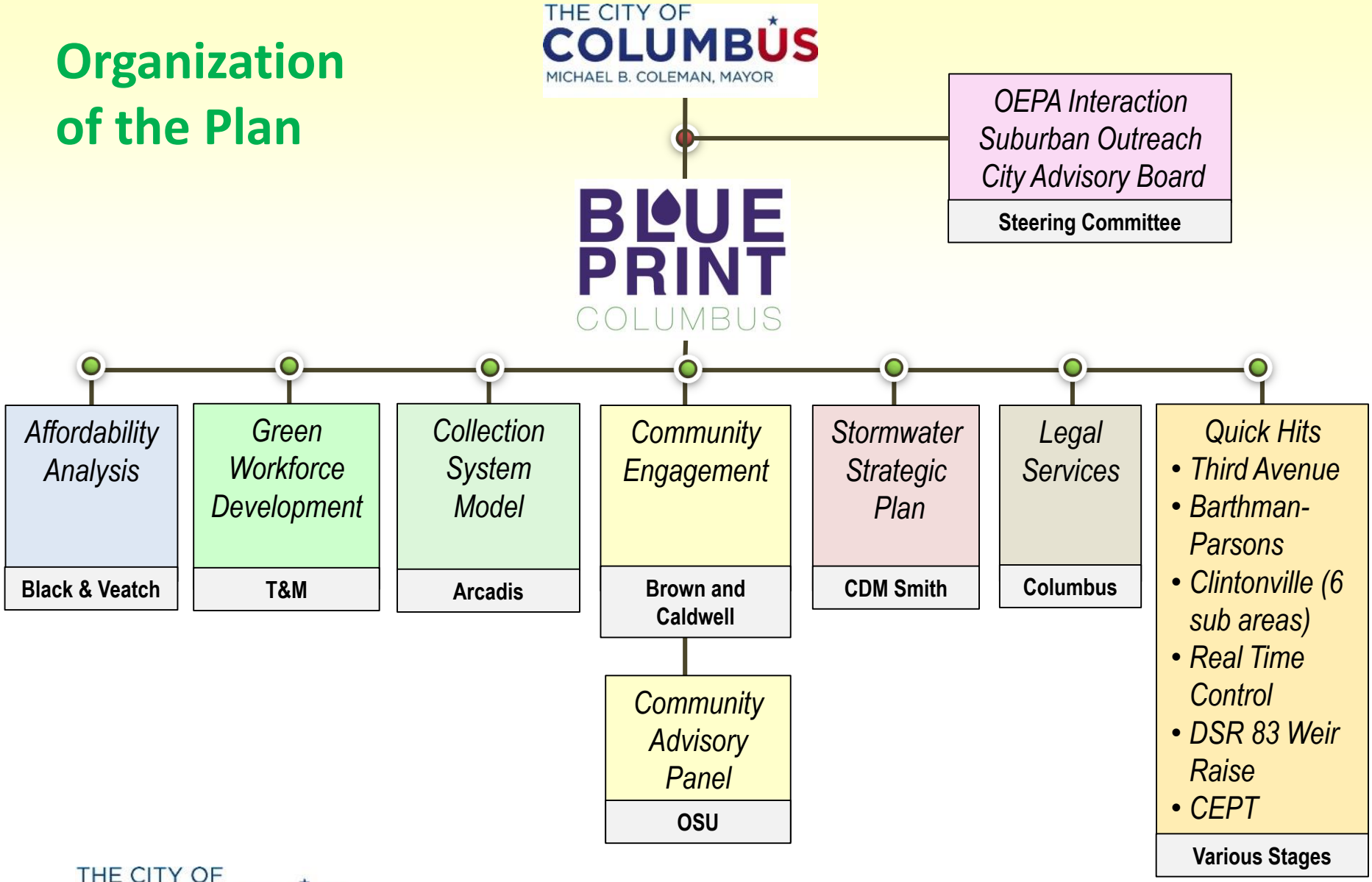
- Remaining Wet Weather Management Plan is oriented to SSOs
- Increasing stormwater regulations were not part of the original plan
- Blueprint Columbus is a new plan that will address both **SSOs and Stormwater**
  - An Integrated Plan
- OEPA granted permission to delay major consent order projects (SSO tunnel)

# Blueprint Columbus Video

# A Better Way: Blueprint Columbus Benefits

- Neighborhood improvements – gardens, porous sidewalks, trees, mini parks (with porous basketball courts), vacant homes
- Increased home values (lateral renewal and beautification)
- Creates more opportunities for local contractors and consultants
- Permanent local maintenance jobs
- Getting ahead of anticipated stormwater rules
- I/I work will provide extended asset life
- **Cleaner waterways**

# Organization of the Plan



# Clintonville Pilot Area

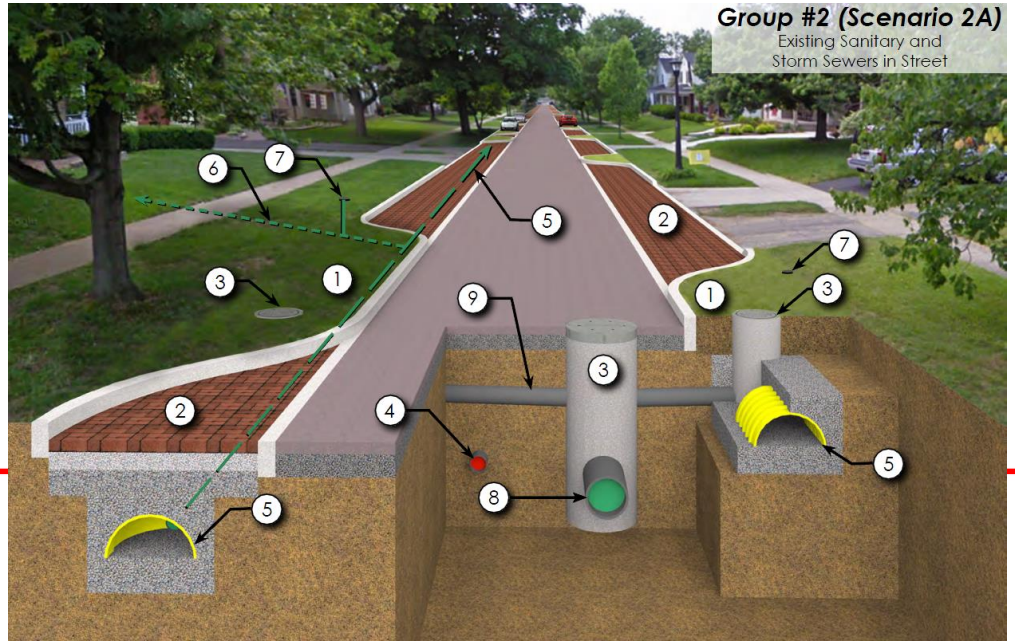
- Mandatory Lateral Lining and Sewer Main Lining
- Voluntary Sump Pump Program
- Mandatory and Select Roof Leader Redirection
- Green Infrastructure in Right-of-Way

# Clintonville

- Survey work in progress
- Analyzing runoff from each house
- Video each lateral
- Design underway
- Pilot Area Technical Committee (PATC) convened to determine level of service targets

# Pilot Area Technical Committee

- Pilot Area Technical Committee (PATC)
  - Steering Committee, Franklin County SWCD, Modeling team, Clintonville 6, Barthman Parsons, Third Avenue, Stormwater Strategic Plan, City PMs
- Selected modeling tools
- Developing tools and Level of Service (flow and water quality) for stormwater management

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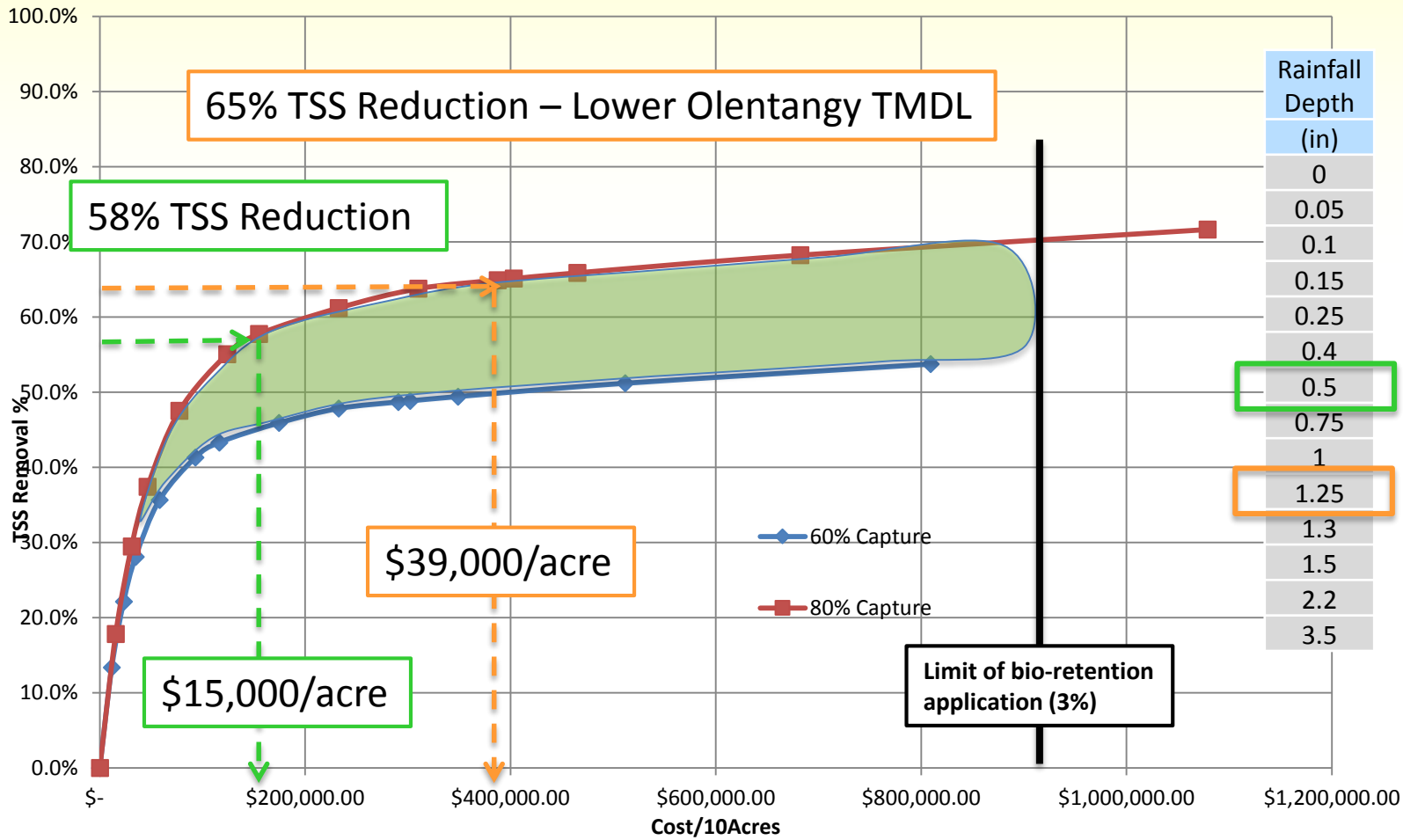
# Pilot Area Technical Committee

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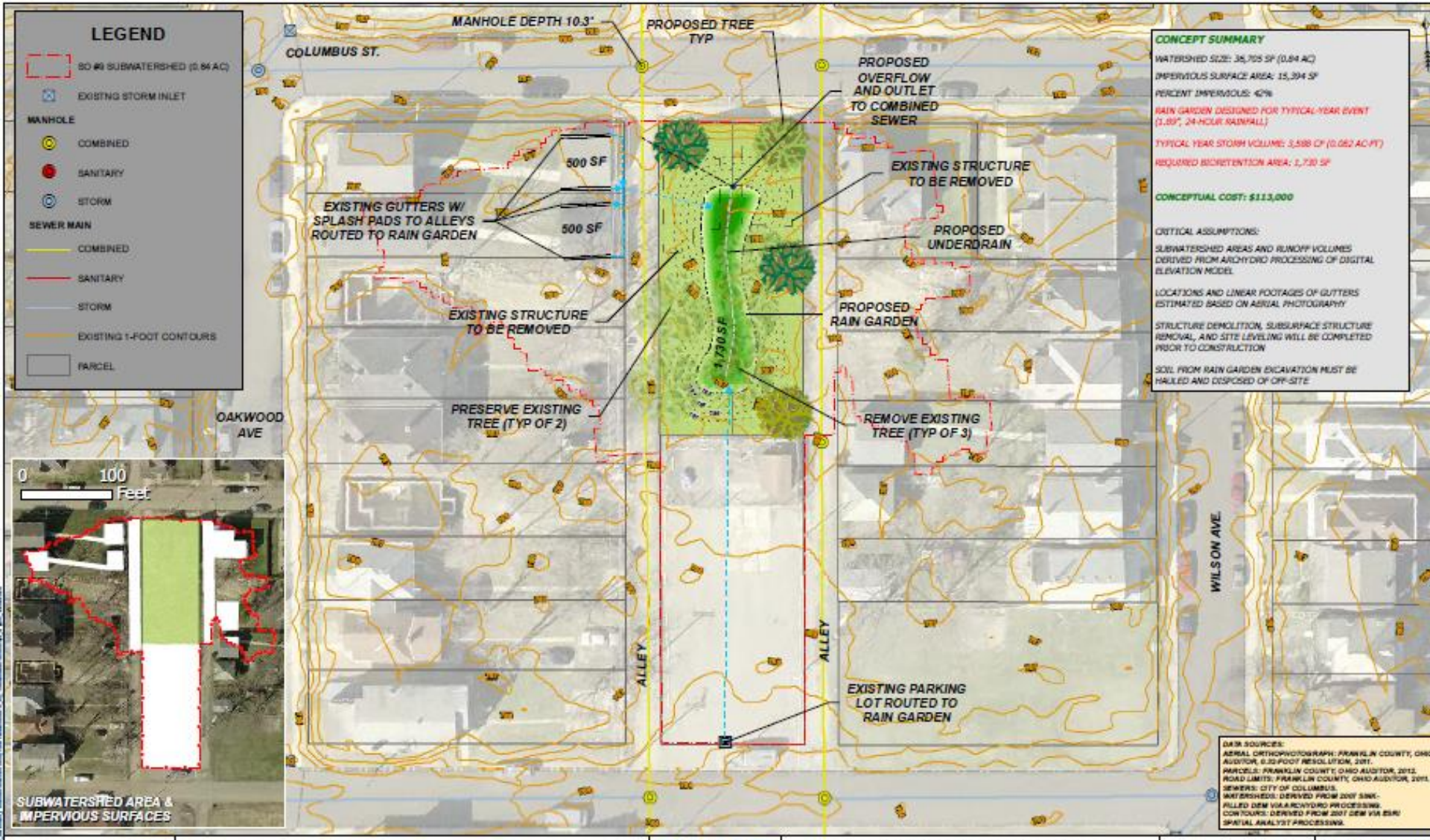
# Barthman Parsons

- Repurposing vacant lots to address CSO and SSO
- Design underway
- Working closely with City's Department of Development
- Identified locations that may provide viable options at a reasonable price
  - Preliminary estimates suggest control for stormwater as $75k/acre (controlling 1.5 to 2 inch storm)
  - Additional amenities will increase costs (playgrounds, basketball courts, etc.)
- Emphasis on variety of GI installations

# Barthman Parsons: CSO

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BARTHMAN / PARSONS
INTEGRATED SOLUTION

CITY OF COLUMBUS, OH

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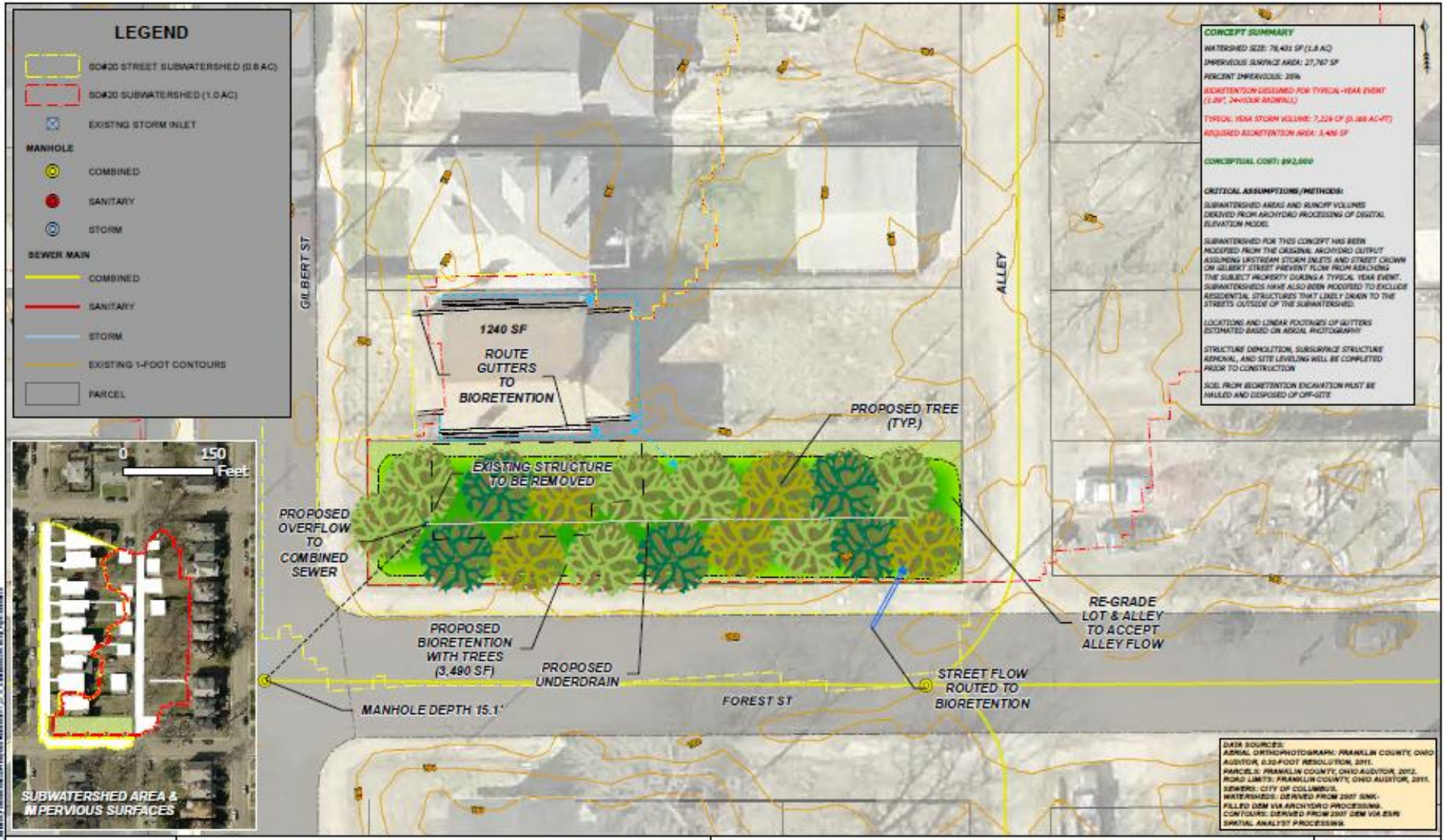
SOUTHERN ORCHARDS
PRIORITY AREA 9
OPTION #3

AECOM

DECEMBER 2013

FIGURE 28

# Barthman Parsons: CSO

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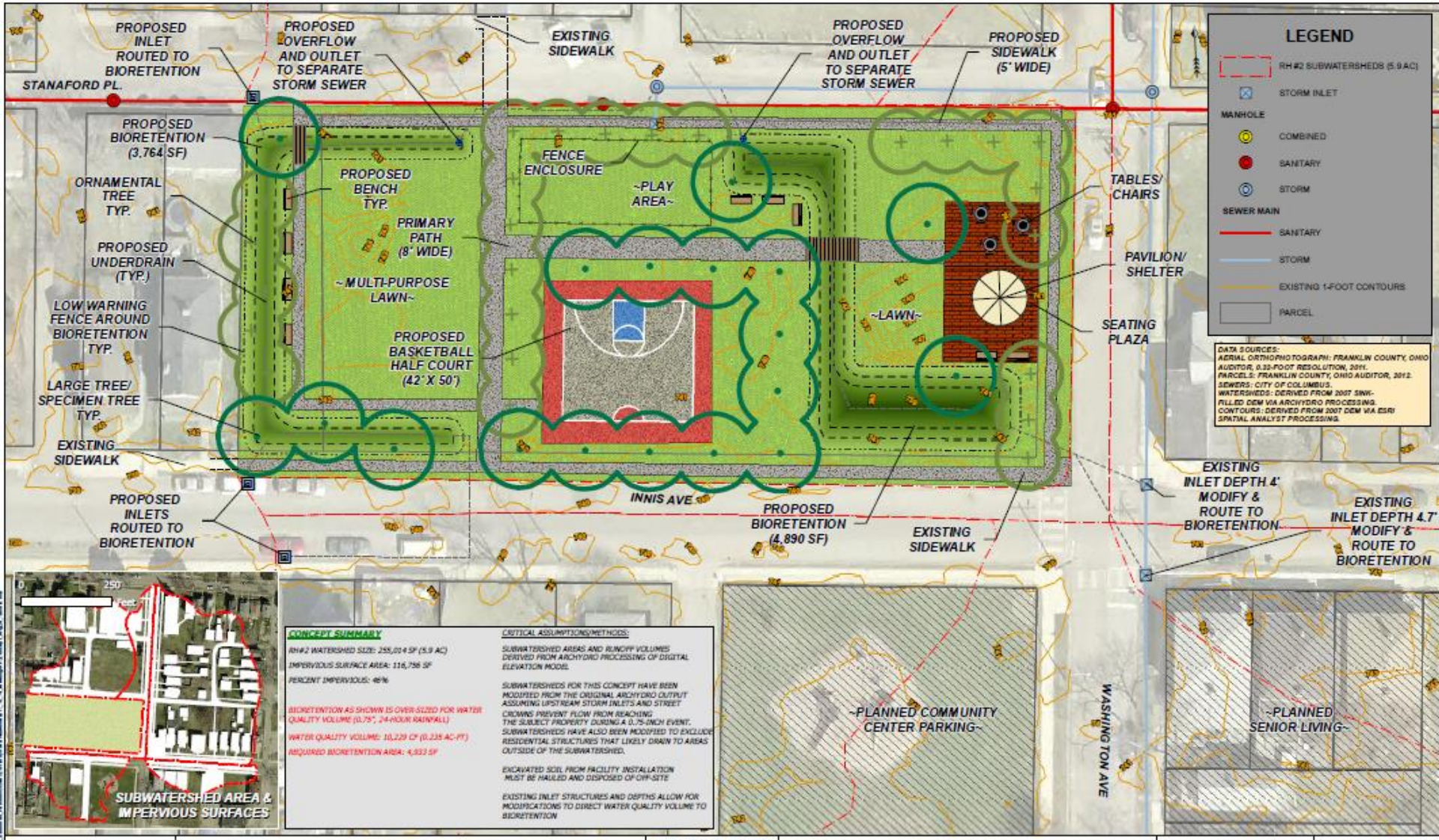
SOUTHERN ORCHARDS
PRIORITY AREA 20
OPTION #1

NOVEMBER 2013

FIGURE 15

# Barthman Parsons: SSO

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REEB-HOSACK
PRIORITY AREA 2
OPTION #9

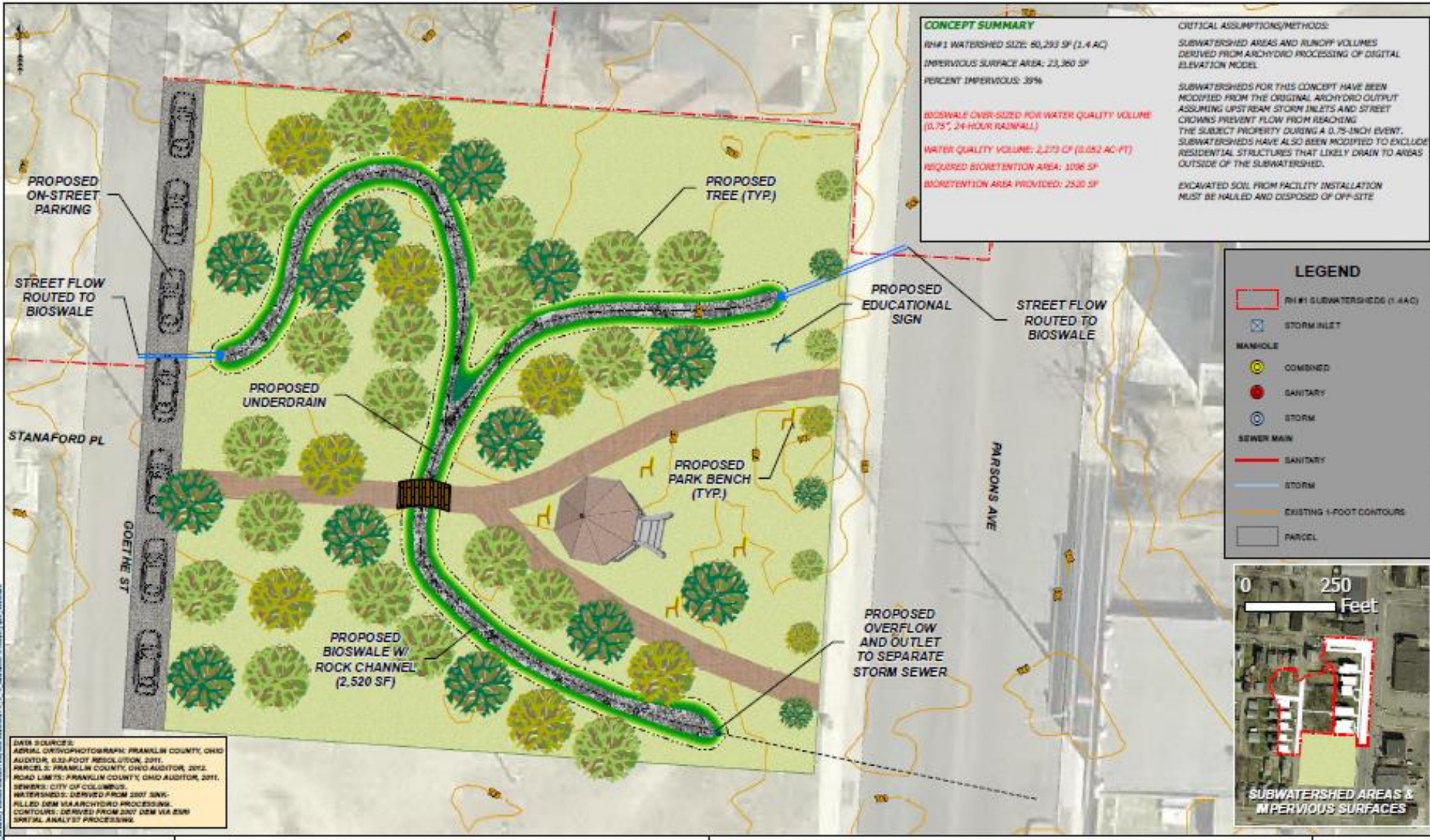
AECOM

JANUARY 2014

FIGURE 29

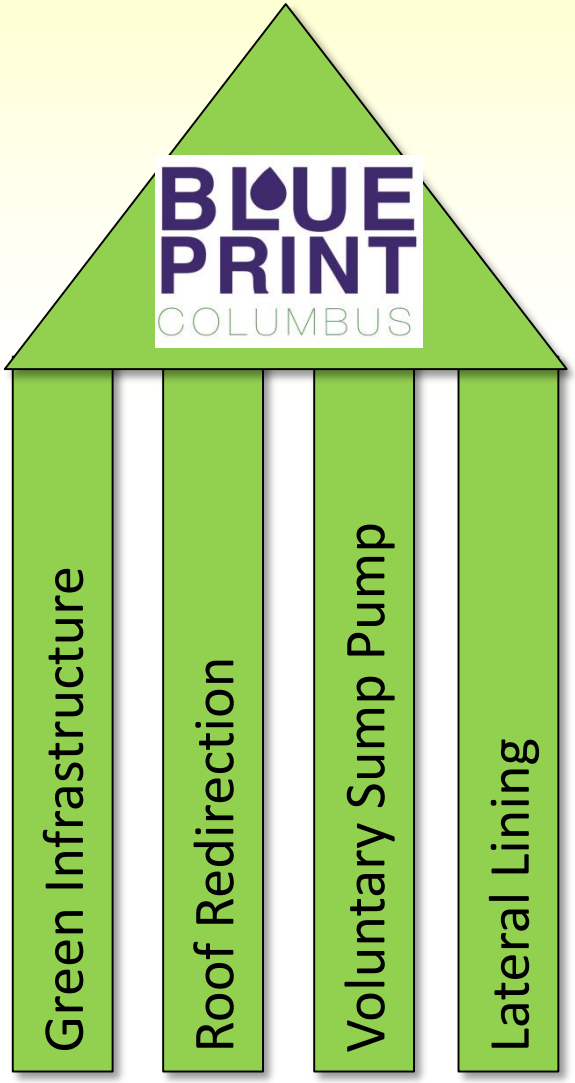
0 17.5 35 Feet

# Barthman Parsons: SSO



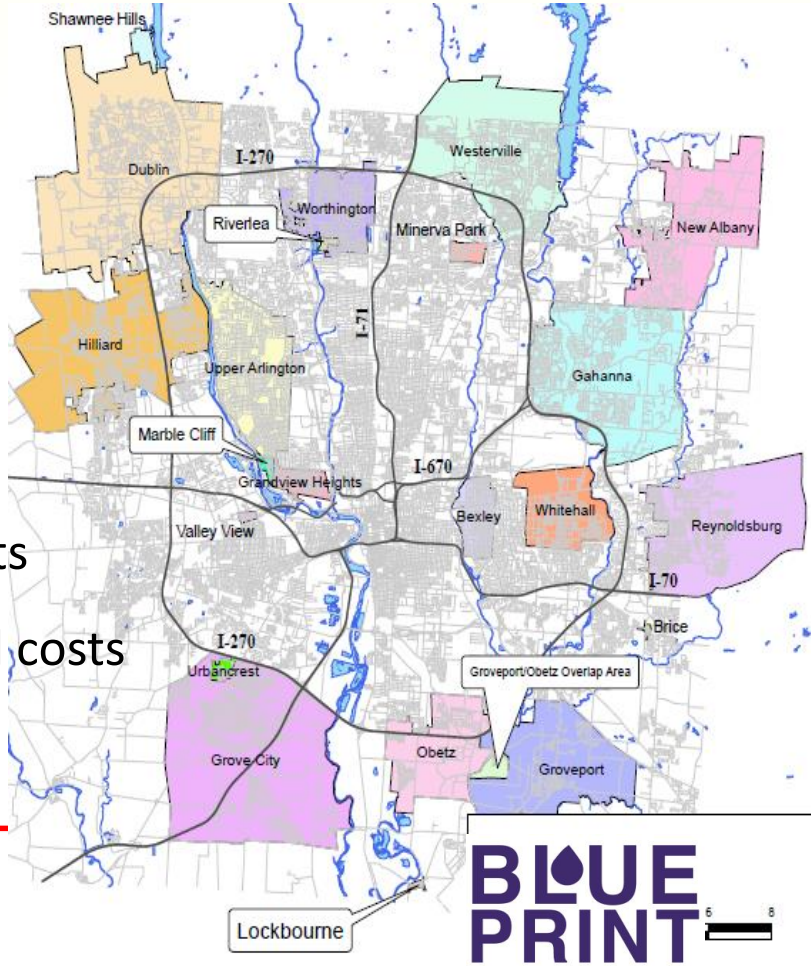
# Blueprint Areas

- Columbus will continue to add areas through and beyond the submission of the Blueprint Columbus Report (September 2015)
- Approximately 1000 acres each year
- A combination of Clintonville and Barthman-Parsons ideas
  - Implement the 4 pillars of Blueprint
  - Utilize vacant housing as available for green space



# Affordability Analysis

- Analyze the ratepayers' ability to afford higher rates
- Include elements (schedules) of the 2009 WWMP approval letter
- Analyze sensitive populations
- Will include:
  - Blueprint costs
  - Sanitary operating and capital
  - Stormwater operating and capital costs
  - Columbus water operating and capital costs
  - Suburban sewer capital costs

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# Community Engagement

- Community Advisory Panel
- Neighborhood Engagement
- High-level outreach
- Focus groups with previous pilot areas

# Clintonville Lateral Lining Post-Project Focus Group

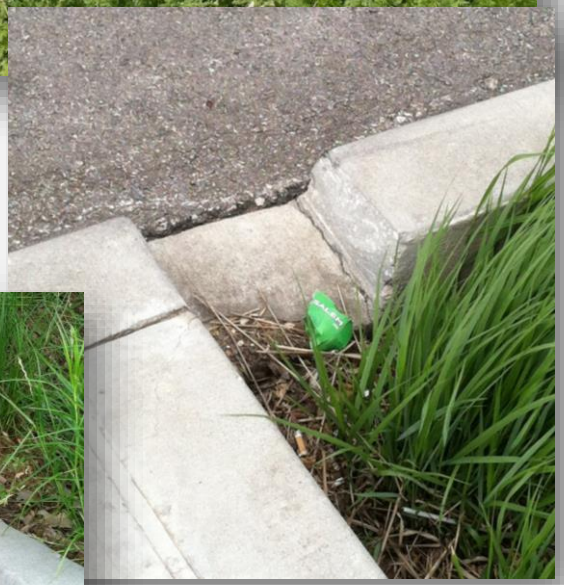
- Talked to residents that took part in a voluntary lateral lining project in the Clintonville area
- Gathered information on how to "sell" this idea to other residents
- Lessons learned from these interviews for Blueprint Columbus effort:
  - Don't want anything that is "free"
  - Interested to know if it worked
- Early results show 30% reduction by lining laterals

# Community Advisory Panel

- Learning about the 4 pillars of Blueprint
  - Mandatory Lateral Lining and Sewer Main Lining
  - Voluntary Sump Pump Program
  - Mandatory and Select Roof Leader Redirection
  - Green Infrastructure in Right-of-Way

# Green Workforce Development

- Working with under employed populations to provide them skills necessary for a green infrastructure maintenance program
  - Invasive species identification and removal
  - Rain garden maintenance
- Creating permanent, local jobs



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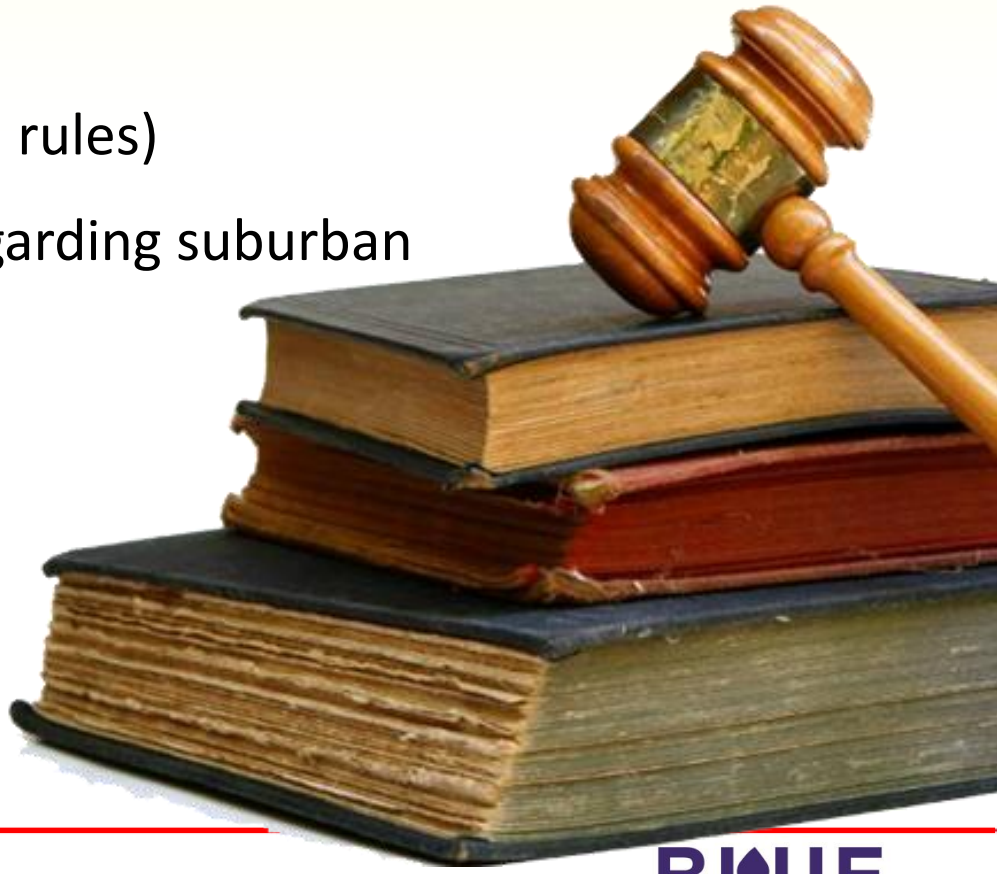
# Blueprint Legal Challenges

- Investigating legal authority and legislative needs for private I/I and stormwater redirection from homes
- Developing tools (ordinances, rules)
- Investigating legal options regarding suburban contribution



# Blueprint Columbus

- Columbus has made some great progress with gray infrastructure so far
- Future investments in gray will bring ever smaller benefits
- Blueprint Columbus is our new approach to address current and future water quality challenges
- Blueprint Columbus also brings more benefits to the community