

# LICK RUN WATERSHED MASTER PLAN

Community Design Workshop #2

October 26, 2011

# Agenda

- Overview from Design Workshop #1
- Design Team will share:
  - technical challenges & opportunities
  - concepts based on community input from Design Workshop #1
- Record feedback on strengths & weaknesses of concepts
- Report out from breakout groups (time permitting)

# Development of a Lick Run Master Plan

## Workshop #1 (August)

- Visual preference and surveys

## Workshop #2 (October)

- Review alternatives and concepts

## Workshop #3 (February)

- Review Preliminary Master Plan

## Draft Master Plan

- Submittal to Policy Makers for Consideration



# Community Design Workshop #2

- Overview from Design Workshop #1
- Design Team will share:
  - technical challenges & opportunities
  - concepts based on community input from Design Workshop #1
- Record feedback on strengths & weaknesses of concepts
- Use feedback to incorporate strengths into preliminary Lick Run Master Plan (Winter 2012)

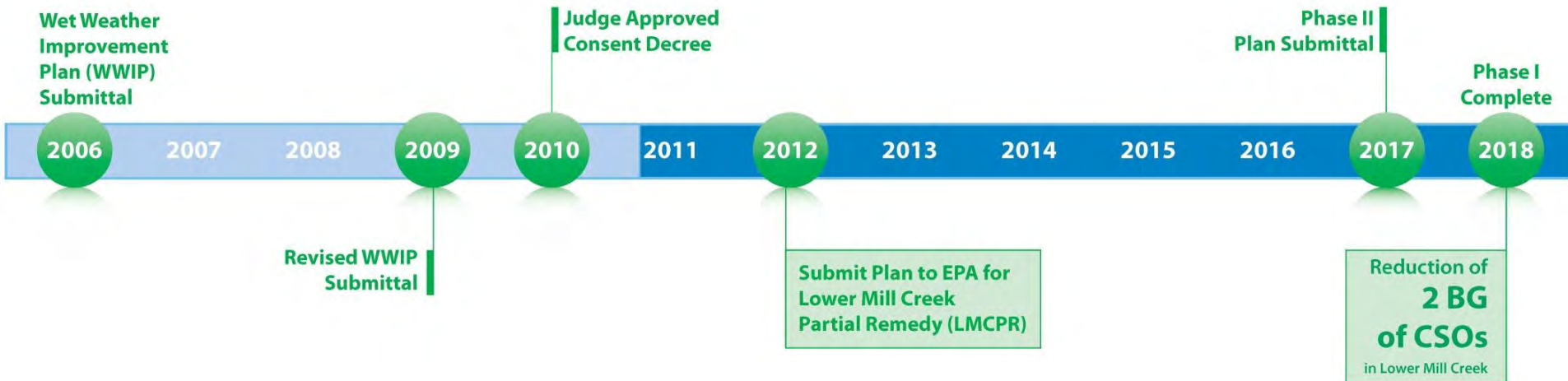




# Consent Decree

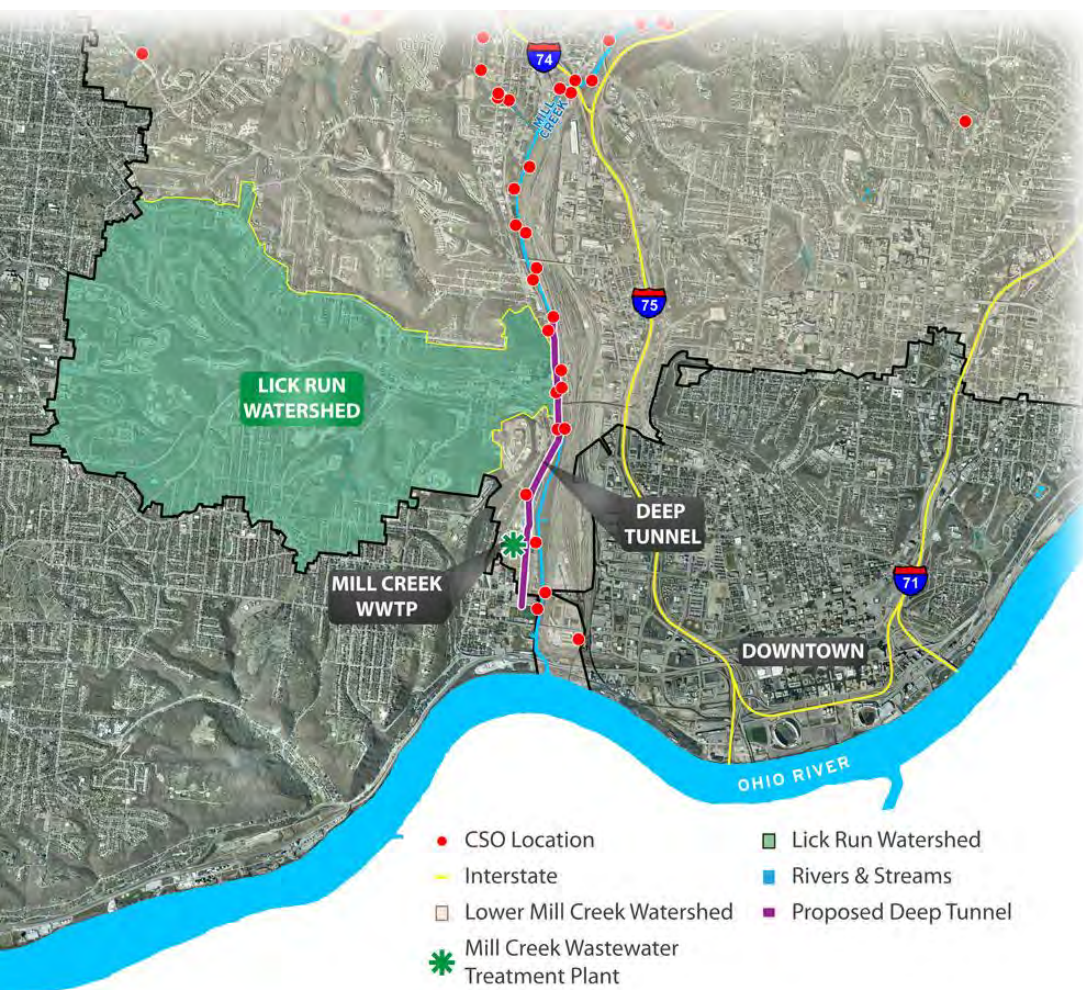
The Consent Decree mandates that MSD:

- (1) Capture, treat, or remove at least 85% of the 14 billion gallons of annual overflows from combined sewers (CSOs)
- (2) Eliminate all sanitary sewer overflows (SSOs)



# “Default” Solution

The “default” solution specified in MSD’s Consent Decree is an underground storage tunnel parallel to Mill Creek.



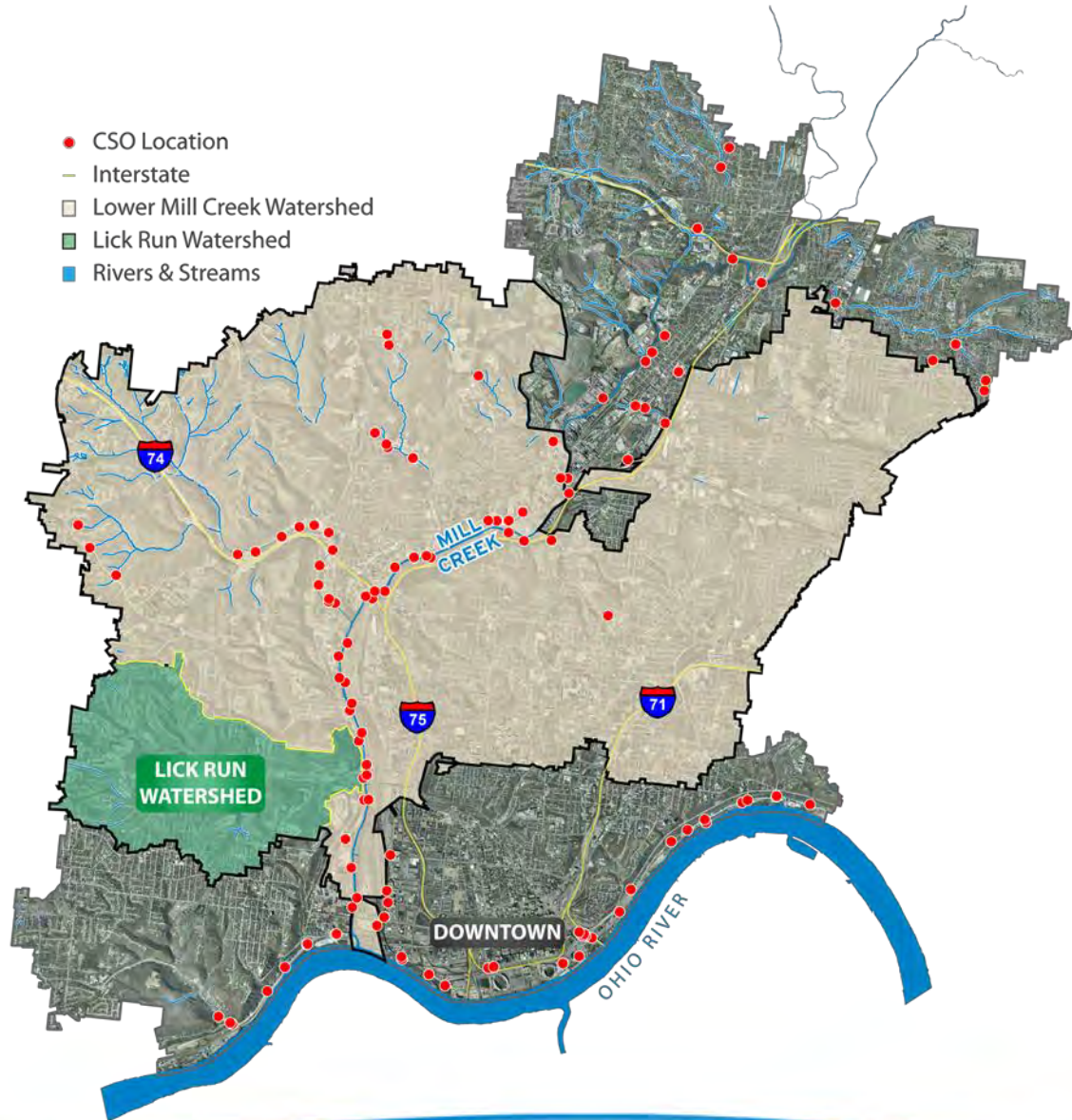
Estimated cost (in 2006 dollars)

**\$244 million**



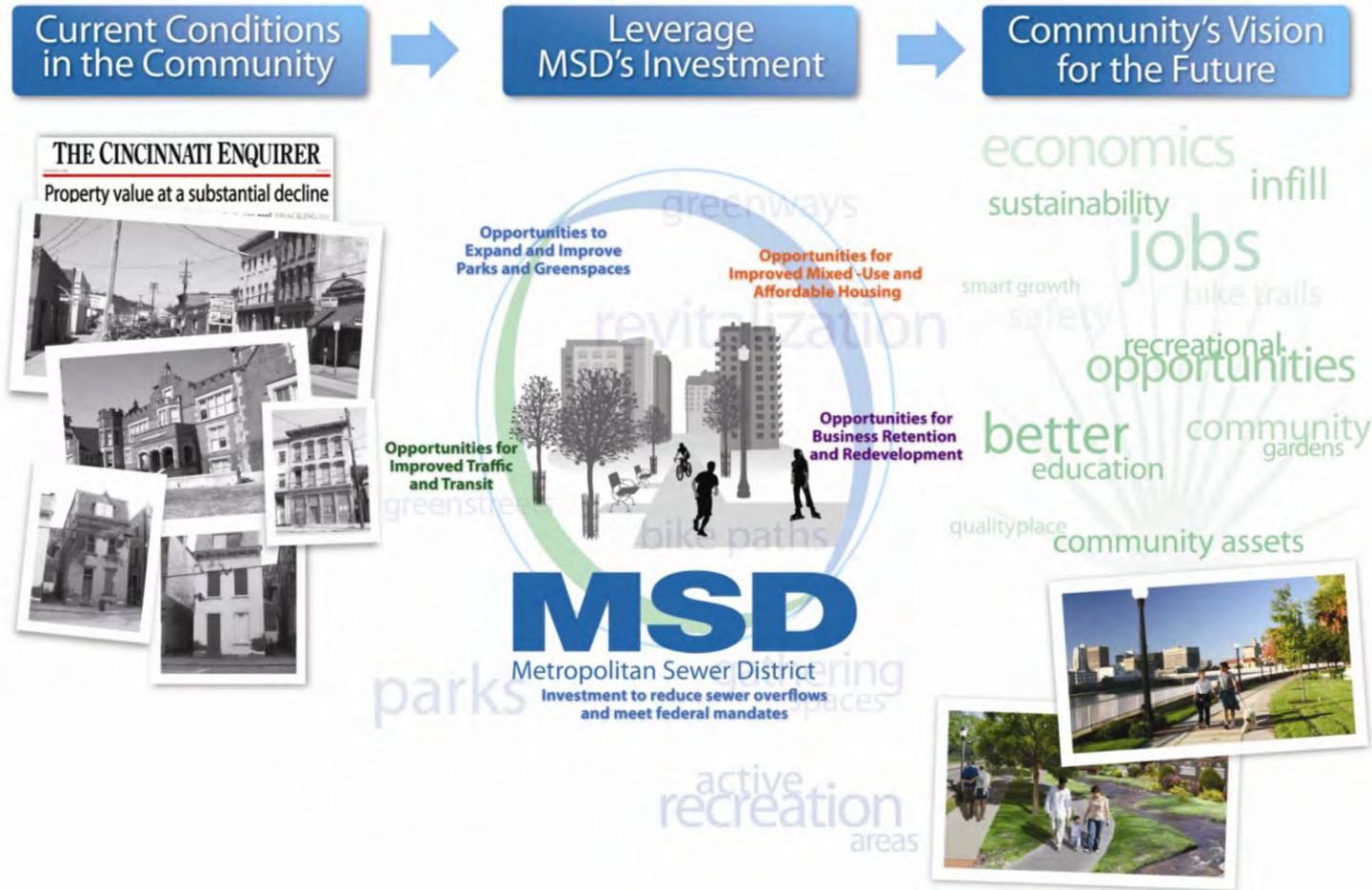
# Focus on the Lower Mill Creek Watershed

MSD is focusing on watersheds within the Lower Mill Creek that experience high volumes of CSOs.



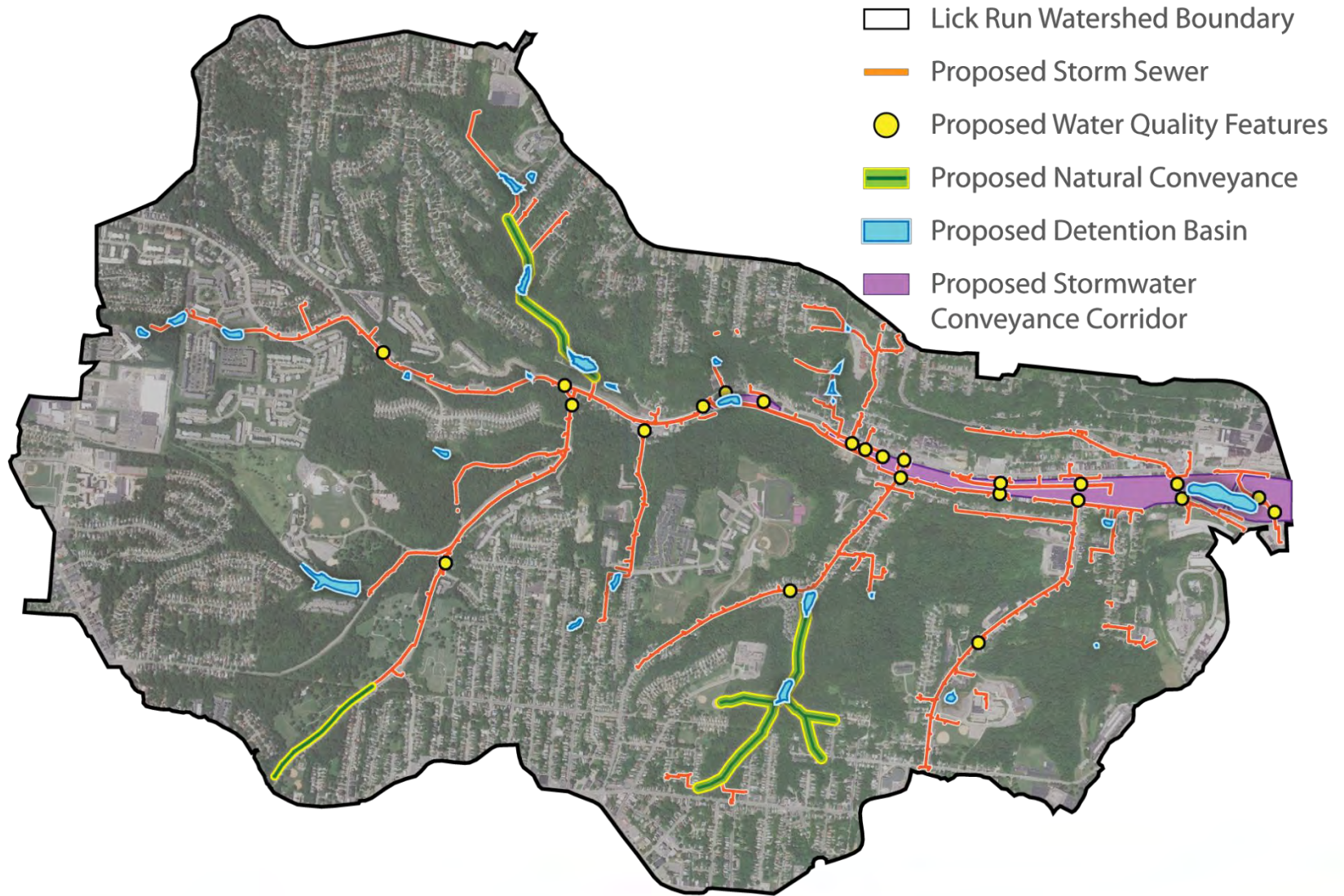
# Sustainable Solutions

MSD is working to create a more sustainable model for meeting CSO compliance mandates.





# Sustainable Solutions: Lick Run Watershed



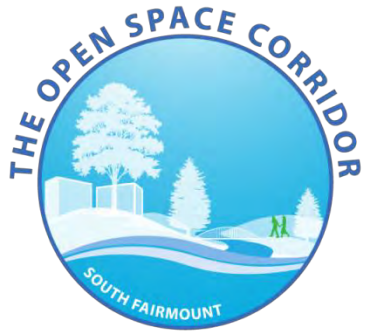


# Community Design Workshop #1

August 11, 2011  
Roberts Paideia Academy



# Break-out Sessions



## Introduction

Facilitators provided a brief overview of the content and objectives of the break-out session

## Visual Preference Survey

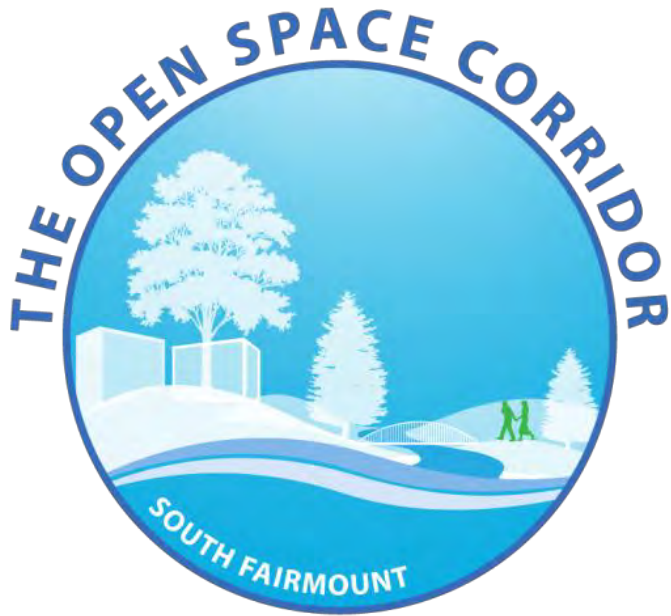
Facilitators explained VPS displays

## Questions

Attendees responded to questions to provide feedback about priorities, ideas, and concerns







“Make Lick Run beautiful and exciting and bring it into a very urban setting, where many people can enjoy it.”

- *Citizen employed in South Fairmount*

natural  
urban  
water  
community  
gathering spaces  
functional

## Waterway Character



Natural-looking waterway that is compatible with an urban setting.

## Water Quality Features



Well-planted, green infrastructure features to improve water quality.

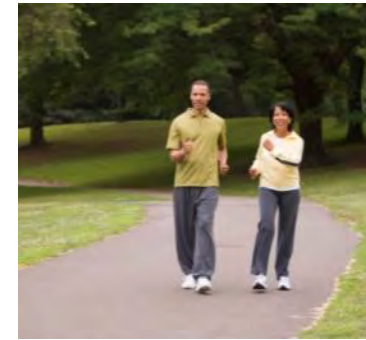


## Special Water Features



In-stream water features like mini waterfalls, pools and riffles; interactive elements.

## Gathering Spaces & Recreational Uses



Open gathering spaces that allow for passive recreation and for community events.  
An assortment of active recreational uses, with an emphasis on bike and pedestrian trails.



“Focus on destinations, safety, walkability, local foods and community amenities.”

- *South Fairmount Resident*

pedestrian  
character  
street  
trees  
neighborhood  
business  
historic  
green



## Architectural Types & Styles



Architectural types and styles should primarily be historic and traditional with the potential for well-integrated modern architecture.

## Building Uses



Respondents preferred mixing uses as part of a vibrant live/work zone, reusing existing buildings where possible, and including basic services (e.g., grocery store, pharmacy) in the business district.



## Parking



Parking needs in the business district would be best served by a mixture of on-street and surface lots integrated between buildings.

## Streets



Respondents preferred neighborhood-scale street corridors with spaces for gathering, improved lighting, and plenty of amenities. Nearly all respondents said existing traffic patterns need to change for the business district to be successful.







“Historic buildings are important, but it is also about the people, the culture.”

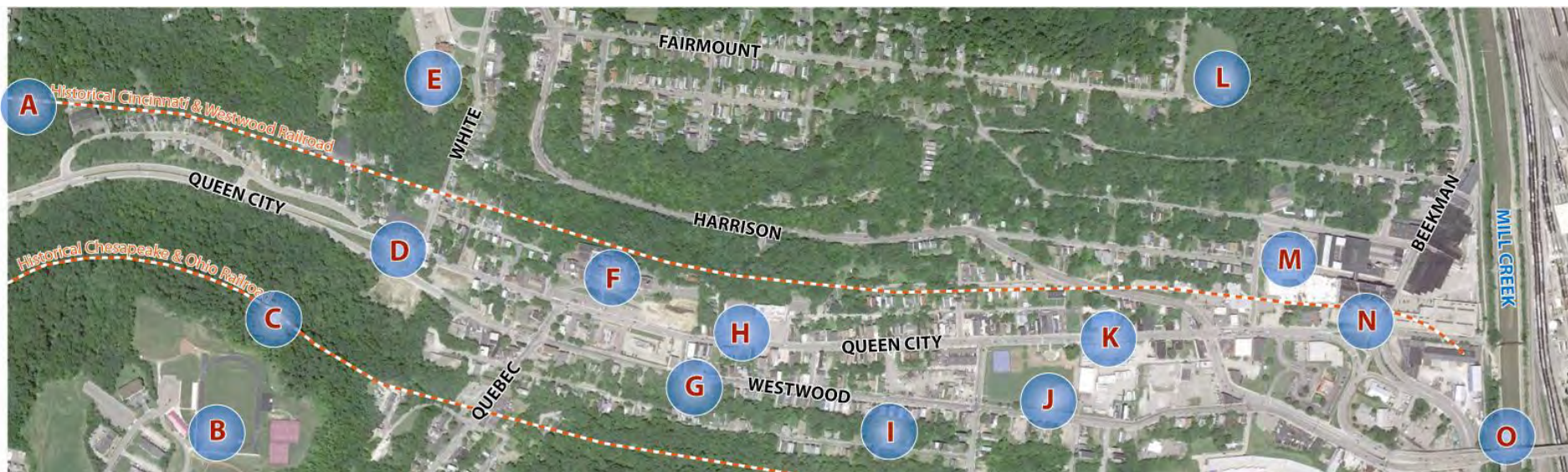
*-Citizen’s comment during break-out session*

San Antonio Church  
Little Italy  
St. Francis Hospital  
Harrison  
Italian  
Westwood Railroad  
German  
Westwood Avenue  
Annie Oakley gun show  
Lunkenheimer



- A Cincinnati & Westwood Railroad
- B Panther Athletic Complex
- C C&O Railroad
- D San Antonio Church
- E Central Fairmount School
- F St. Francis Court Apartments
- G Vitt & Sterner Funeral Home
- H Orion Academy

- I Row Houses on Westwood
- J South Fairmount Recreation Area
- K Water Works Pumping Station
- L St. Clair Park
- M Theodore Roosevelt School
- N Lunkenheimer Factory
- O Western Hills Viaduct





“Green planning should be the overall vision for the community.”  
- South Fairmount Resident

natural  
Keep development  
green  
trees  
hillSides  
bike lanes  
development

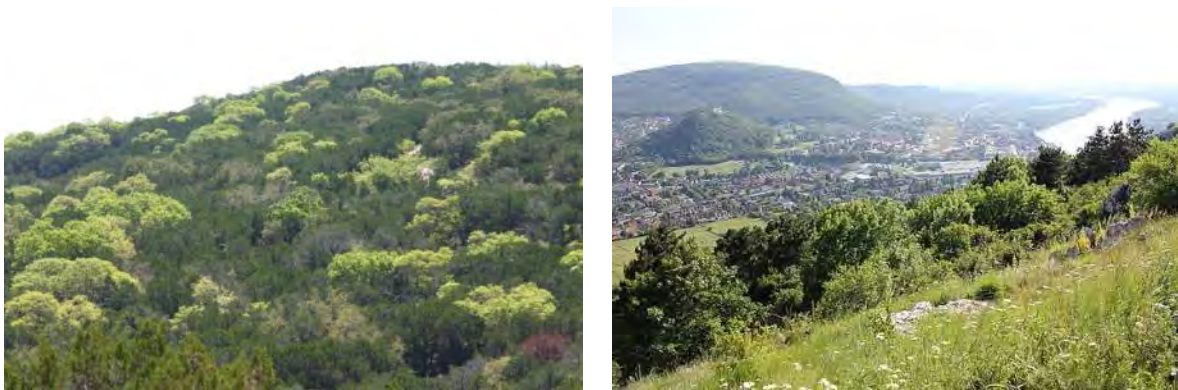


## Green Planning Principles



Integration of green planning principles for sustainable stormwater management.

## Natural Resources



Preservation and responsible management of the watershed's physical assets (e.g., forested hillsides, parks, and open spaces)

## Connecting different areas of the watershed



Complete streets concepts, pedestrian safety improvements, and accessible trail networks

## Aesthetics



Natural materials like wood and stone; structures well integrated with the watershed's unique physical characteristics.

# Community Design Workshop #2

Tonight's plan :

## Technical/Design Constraints & Conceptual Alternatives

### Overview (approximately 30 minutes)

Learn about opportunities and constraints for the Lick Run Watershed and the urban waterway corridor

### Small Group Discussions (approximately 90 minutes)

Review conceptual alternatives for the proposed urban waterway

Evaluate long-term watershed opportunities

Create a Lick Run Watershed planning framework



# Design Team overview

- ❖ Technical challenges & opportunities
- ❖ Concepts based on community input from Design Workshop #1

# Lick Run Master Plan

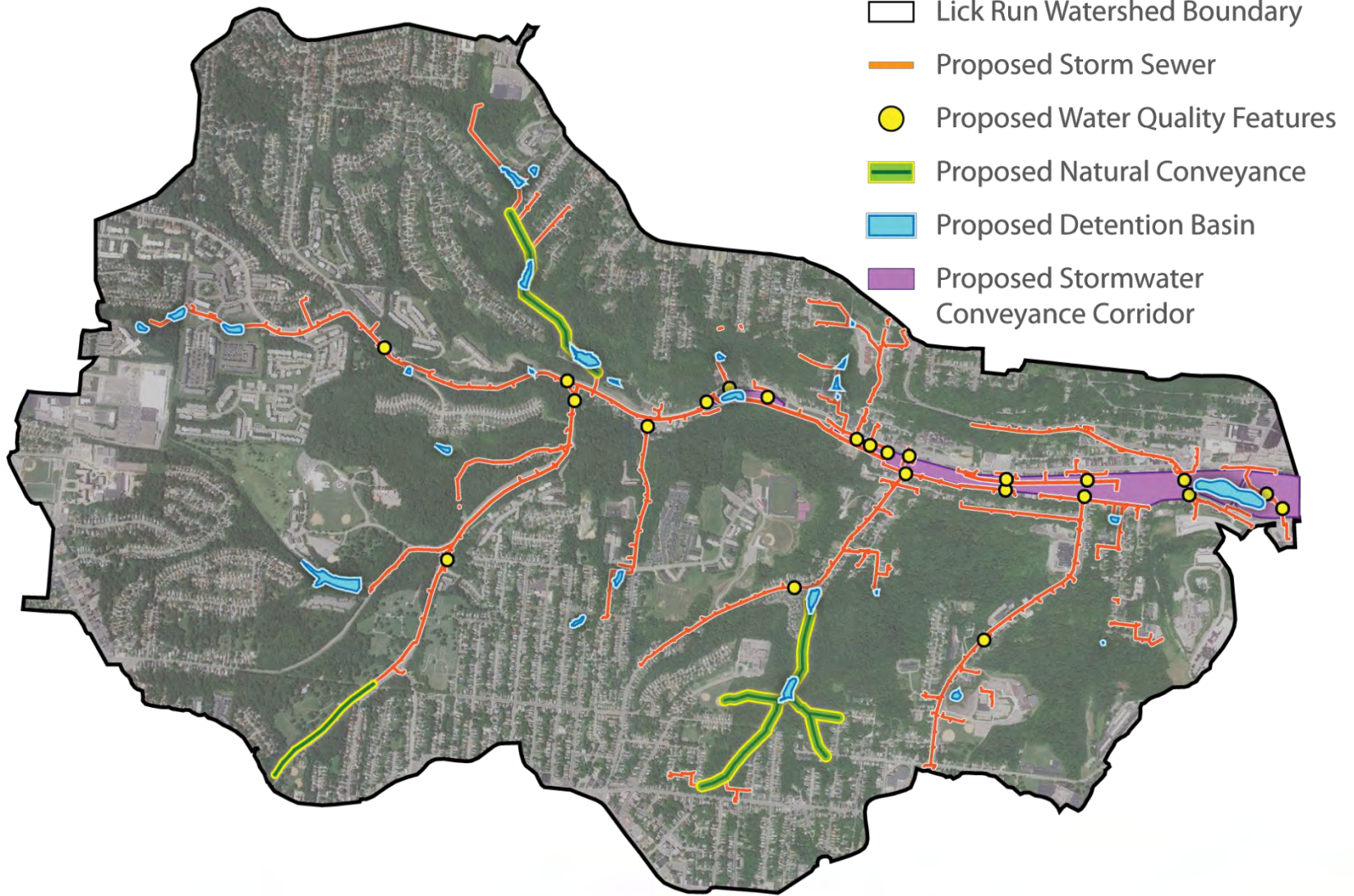
## Long-term Vision: Watershed-Wide Opportunities

- Watershed Planning
- Trail Network
- Urban Design Analysis
- Transportation Network

## Near-term Vision: Proposed Urban Waterway

- Challenges and opportunities
- Concepts for consideration

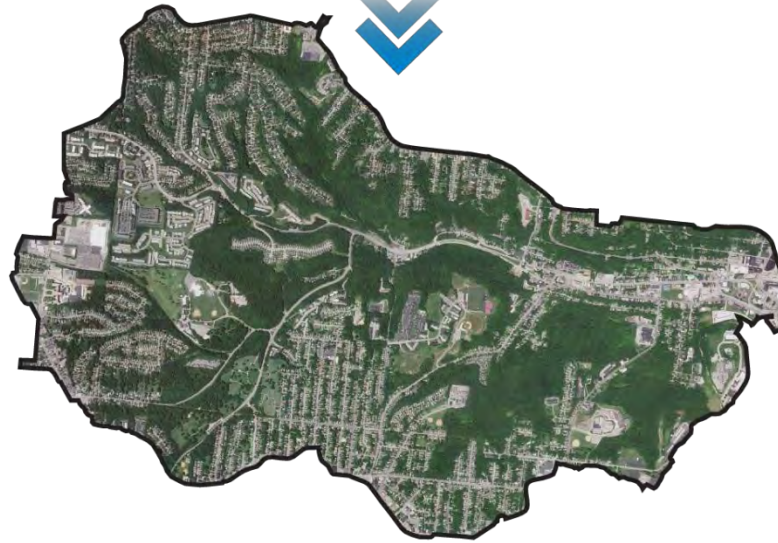
# Lick Run Master Plan





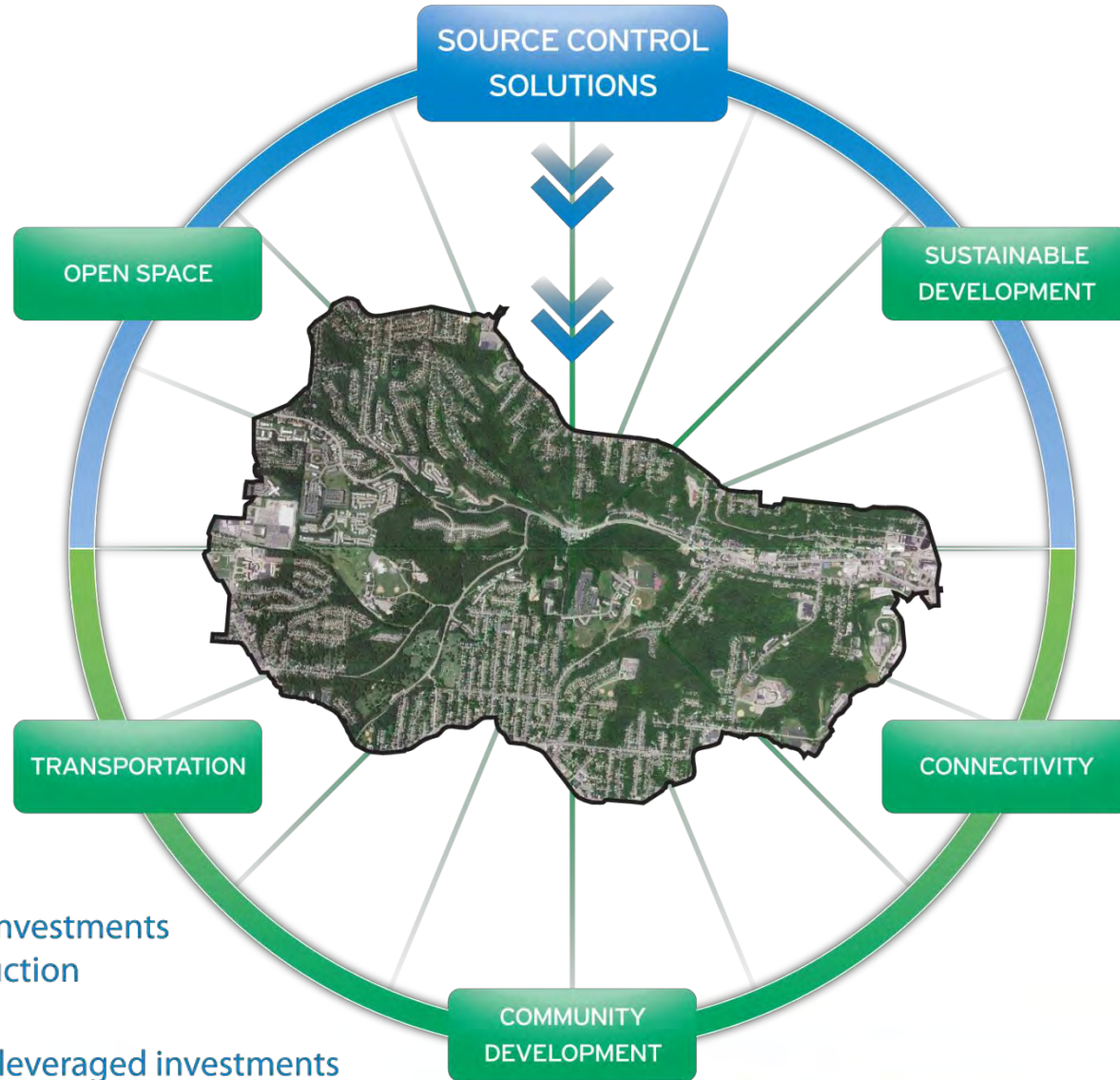
# Lick Run Master Plan


SOURCE CONTROL  
SOLUTIONS




**Near-term** investments  
for CSO reduction

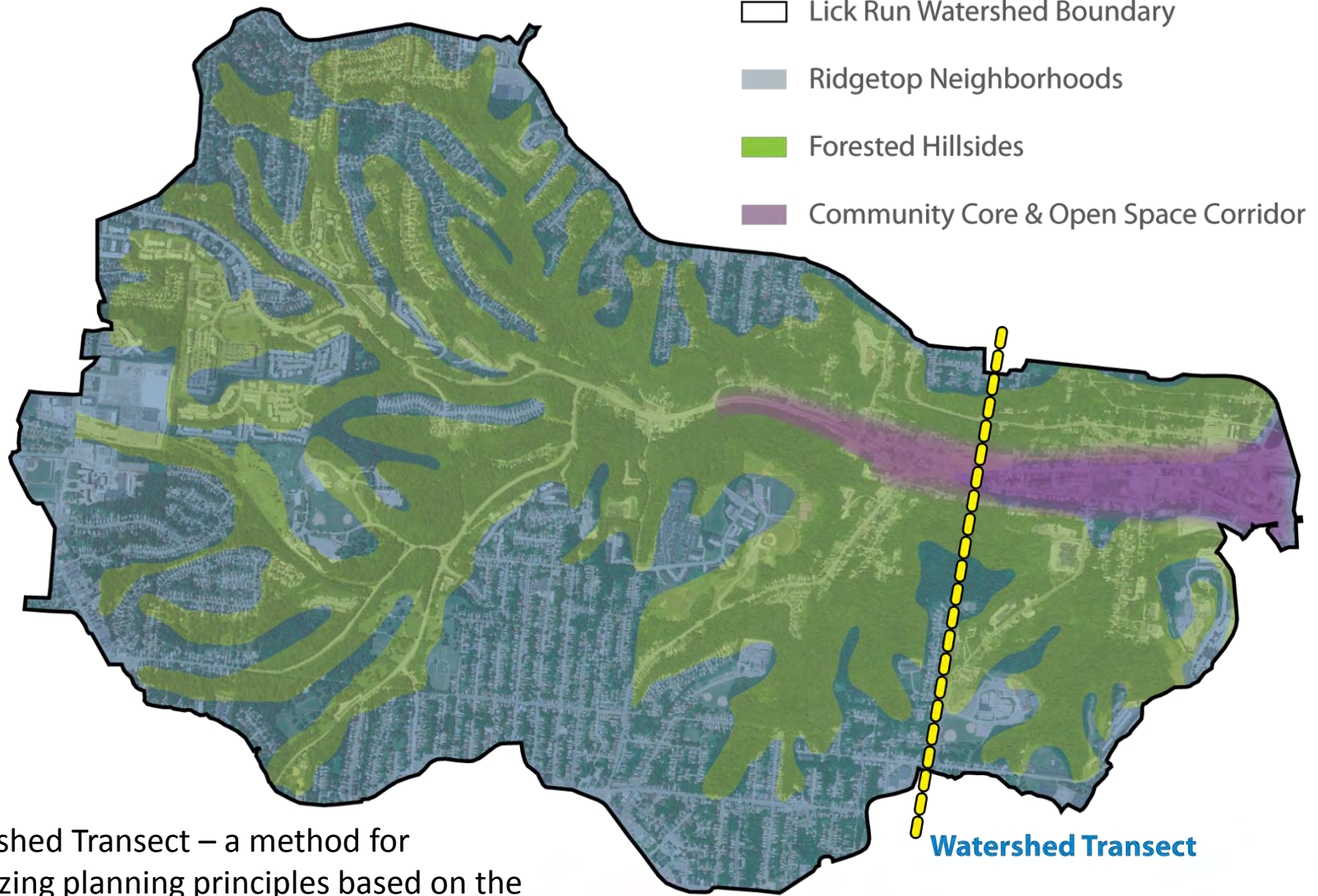
# Lick Run Master Plan



 **Near-term** investments for CSO reduction

 **Long-term**, leveraged investments through partnerships and collaboration

# Watershed Planning: Guiding Principles



Watershed Transect – a method for organizing planning principles based on the watershed’s unique physical characteristics



# Watershed Planning: Guiding Principles

Coordinate policies and leverage investment.

Promote an integrated network of green infrastructure.

Revitalize the economy through creation of jobs and growth opportunities for local businesses.

Support existing communities.

Benefit the watershed communities through environmentally, socially, and economically sustainable solutions.

Provide more transportation choices.

Promote a balanced mixed-use neighborhood.

Use quality design to create an attractive public/private realm.

Guiding principles based on :

- Feedback from Community Design Workshop #1
- Project Groundwork community benefits
- HUD Livability Principles

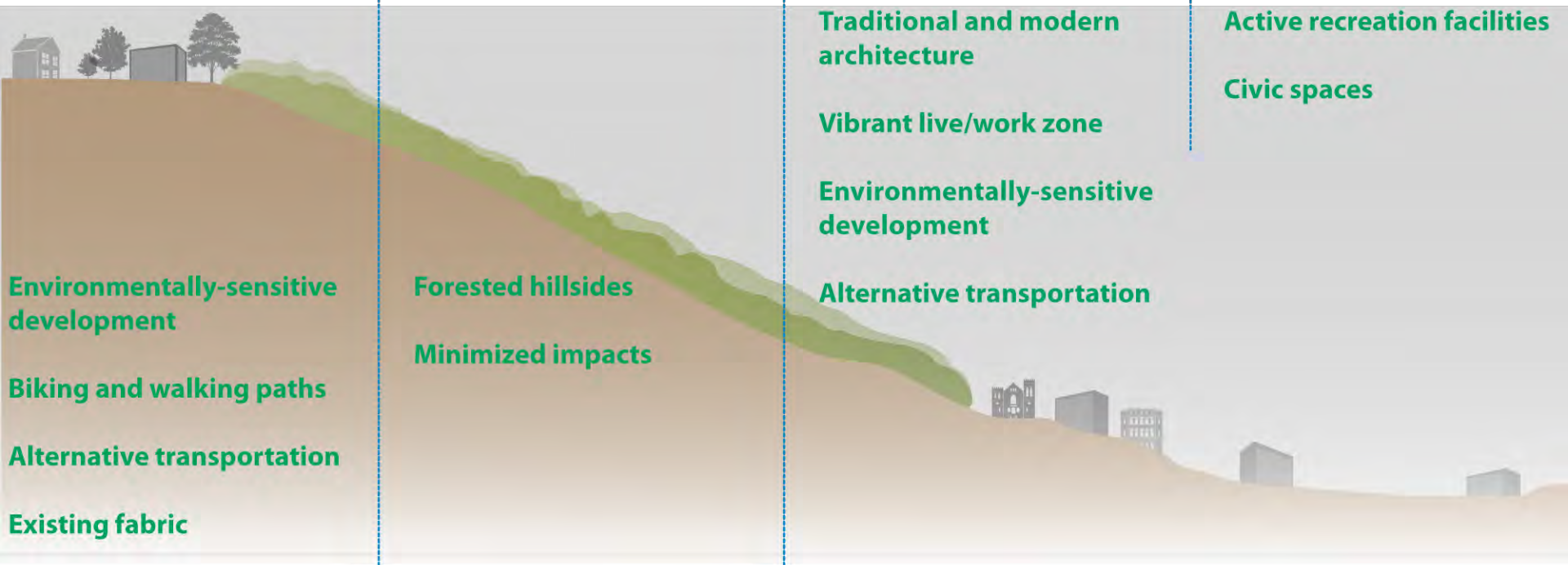
# Watershed Transect

## RIDGETOP COMMUNITIES

## FORESTED HILLSIDES

## COMMUNITY CORE

## OPEN SPACE CORRIDOR



- Existing fabric
- Parking
- Improved connectivity
- Traditional and modern architecture
- Vibrant live/work zone
- Environmentally-sensitive development
- Alternative transportation

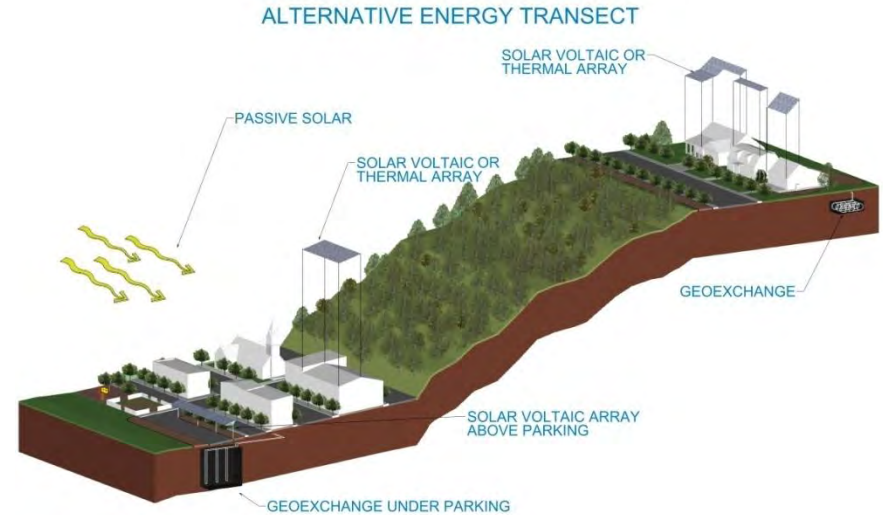
- Natural qualities
- Water quality
- Open gathering spaces
- Active recreation facilities
- Civic spaces

- Environmentally-sensitive development
- Biking and walking paths
- Alternative transportation
- Existing fabric

- Forested hillsides
- Minimized impacts



# Watershed Transect



## Application of the watershed transect to sustainable systems

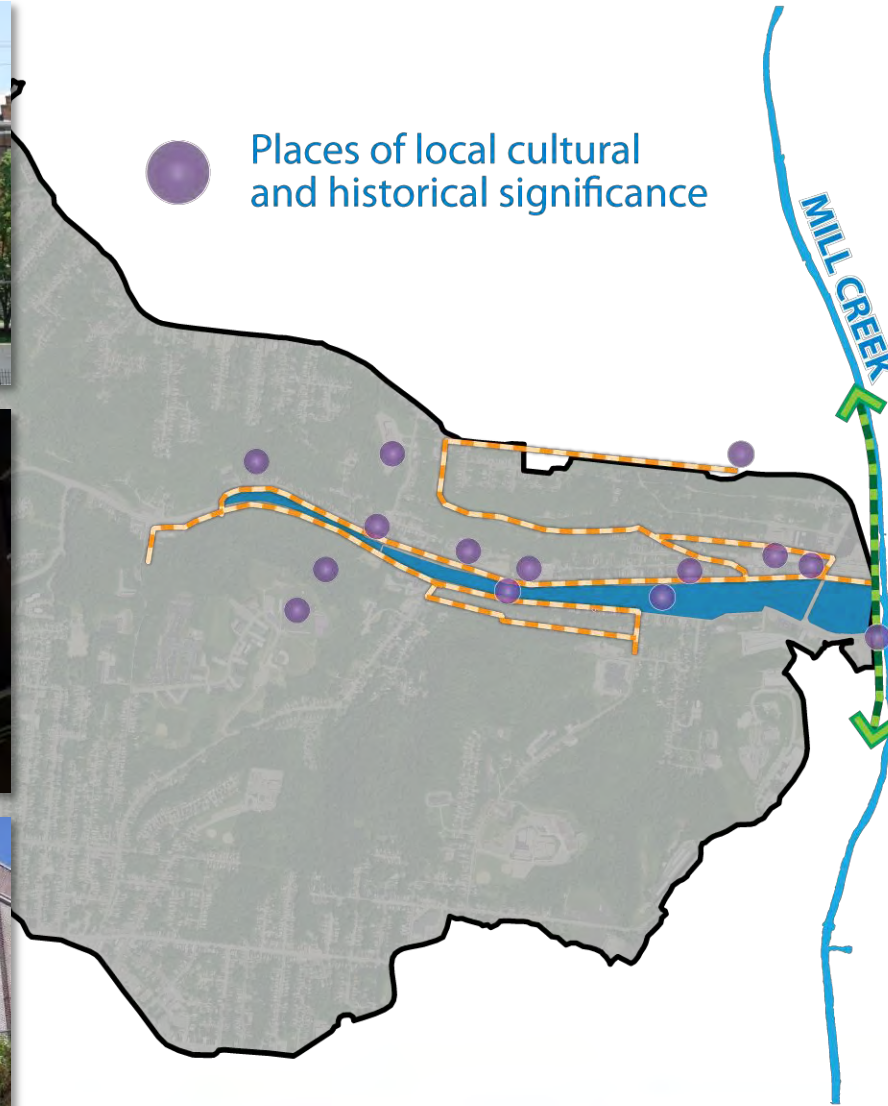
- Alternative energy
- Stormwater management features
- Land use
- Building codes



# Trail Network: Community Core



Places of local cultural and historical significance



Proposed Mill Creek Greenway Trail



# Trail Network: Watershed Connectivity



Proposed Mill Creek Greenway Trail



Watershed Connectivity – connecting areas within the watershed

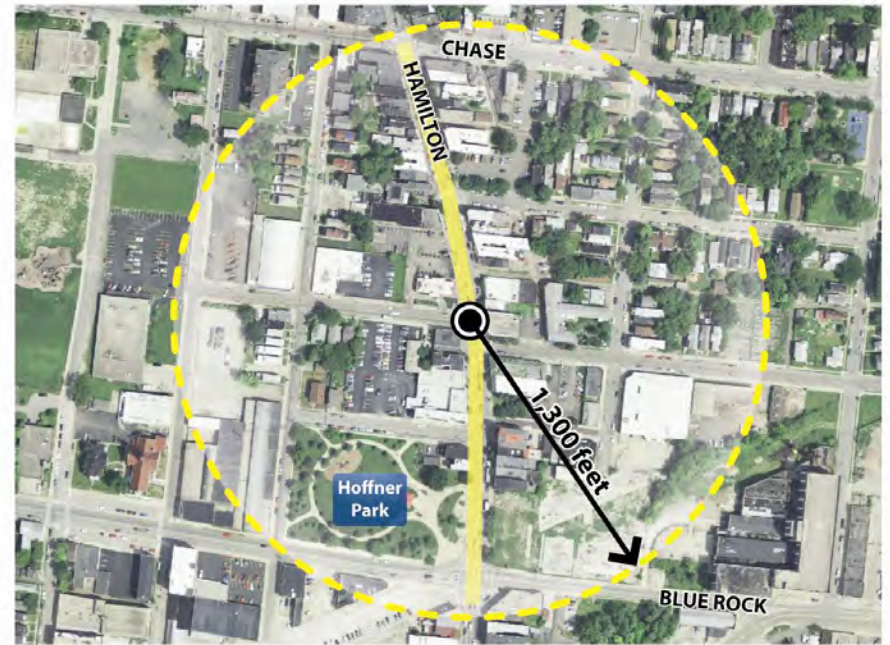


# Urban Design Analysis

**Scale:** Examples of local neighborhood business districts



**Ludlow Avenue (Clifton)**

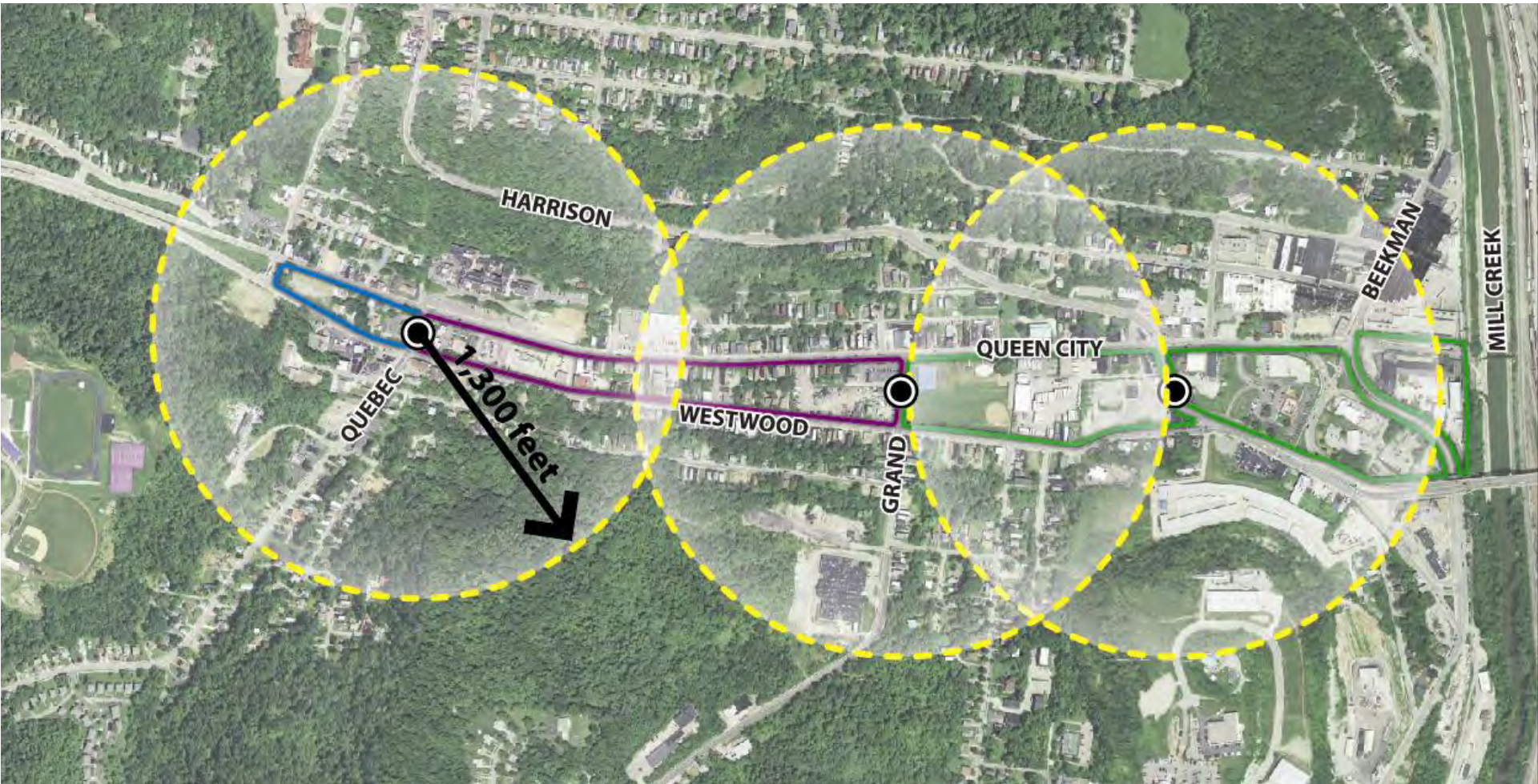


**Hamilton Avenue (Northside)**



# Urban Design Analysis

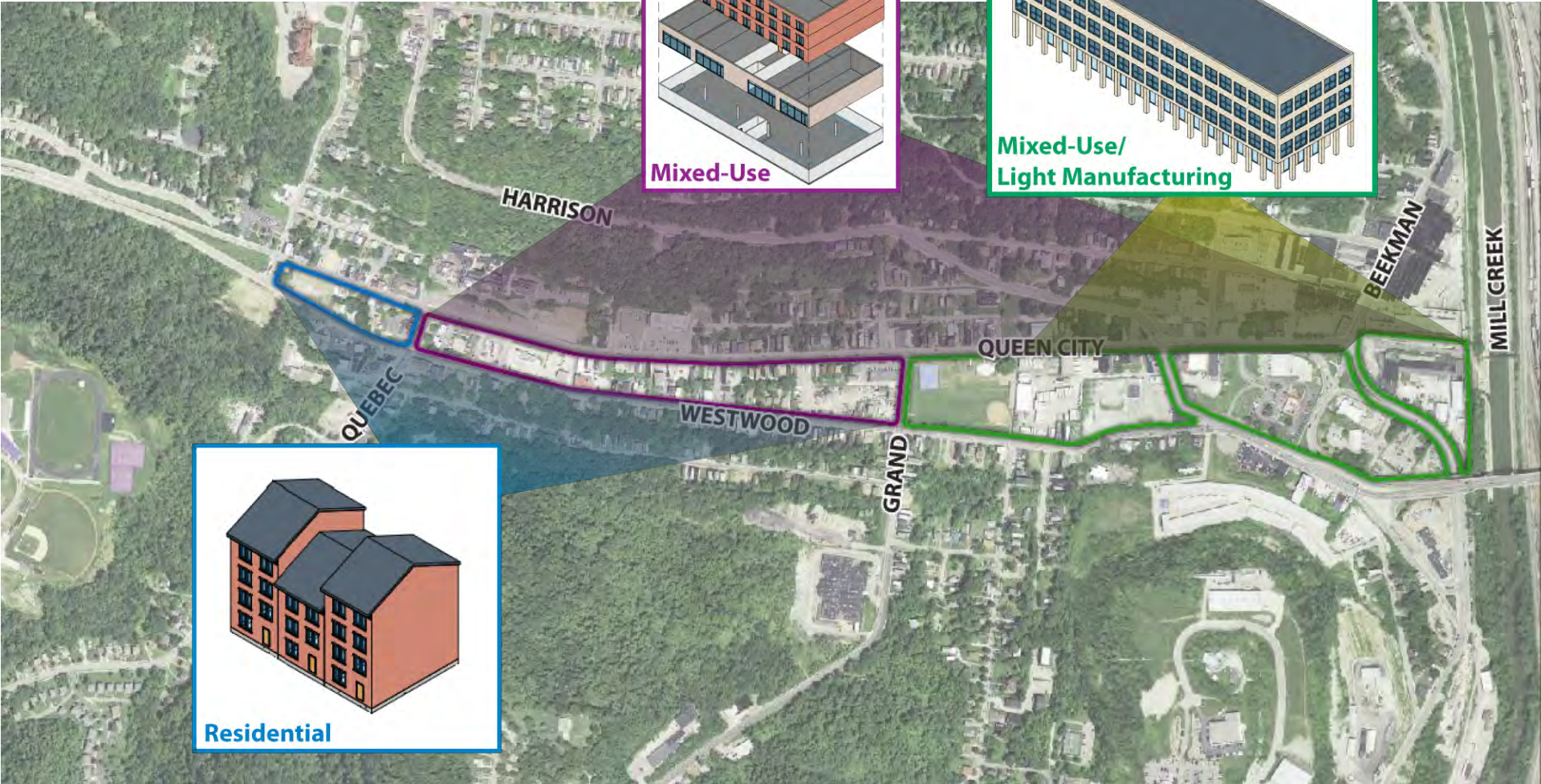
**Walkability:** 1,300-foot radius





# Urban Design Analysis

Uses: Live/Work/Play Zone



Mixed-Use

Mixed-Use/  
Light Manufacturing

Residential





# Transportation Network: Queen City Avenue



## Queen City Avenue

### Existing Conditions

- Average right-of-way: **60 feet**
- One-way Travel lanes: **3 total**
- Dedicated parking lane: **1 total**
- Traffic Volume: **16,000**  
vehicles per day





# Transportation Network: Queen City Avenue

## Concept 1: Curb-to-Curb

- One-way traffic remains with 4 existing lanes (3 travel, 1 parking)
- Pedestrian safety improvements (sidewalks, crosswalks & lighting)

## Concept 2: Reduced Roadway Width

- One-way traffic remains with 3 wider lanes
- Pedestrian safety improvements (sidewalks, crosswalks & lighting)
- Stormwater planters

## Concept 3: Local Two-Way Street

- Two travel lanes and two permanent parking lanes
- Pedestrian safety improvements (sidewalks, crosswalks & lighting)
- Stormwater planters and bump-outs with street trees

# Concept 1: Curb-to-Curb

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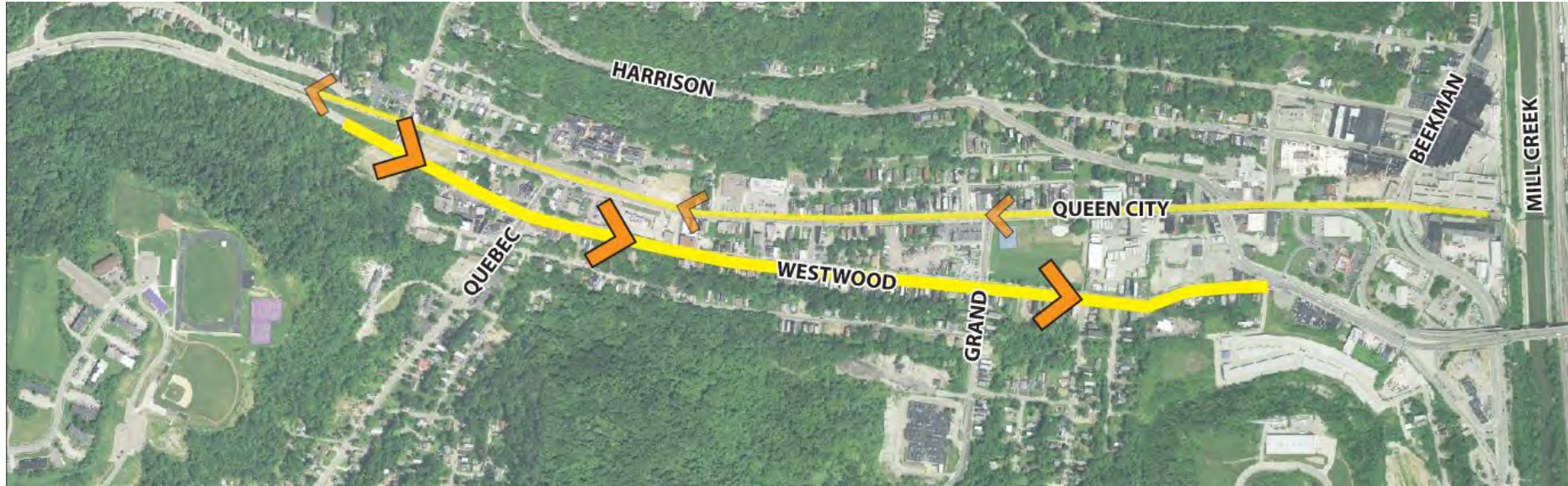
# Concept 3: Local Two-Way Street

- Two travel lanes and two permanent parking lanes
- Pedestrian safety improvements (sidewalks, crosswalks & lighting)
- Stormwater planters and bump-outs with street trees
- Requires improvements on Westwood Avenue





# Transportation Network: Westwood Avenue



## Westwood Avenue

### Existing Conditions

Average right-of-way:	<b>58 feet</b>
One-way Travel lanes:	<b>3 total</b>
Dedicated parking lane:	<b>1 total</b>
Traffic Volume:	<b>23,000</b>
vehicles per day	



# Transportation Network: Westwood Avenue

## Concept 1: Curb-to-Curb

- One-way traffic remains with 4 existing lanes (3 travel, 1 parking)
- Pedestrian safety improvements (sidewalks, crosswalks & lighting)

## Concept 2: Reduced Roadway Width

- One-way traffic remains with 3 wider lanes
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- Stormwater planters

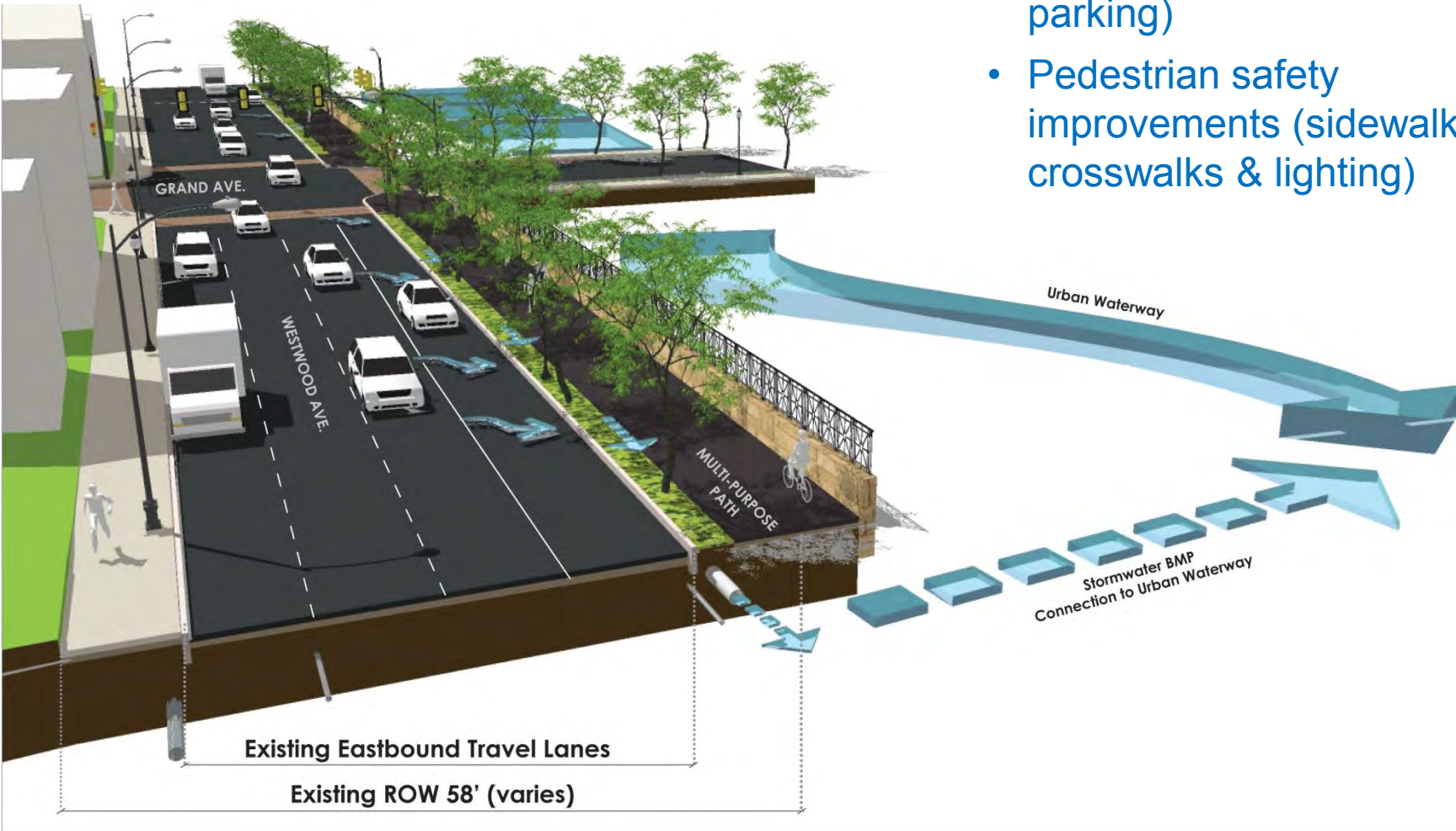
## Concept 3: Ecological Parkway

- Expands existing right-of-way
- 3 one-way lanes in each direction
- Pedestrian safety improvements (sidewalks, crosswalks & lighting)
- Stormwater planters and street trees



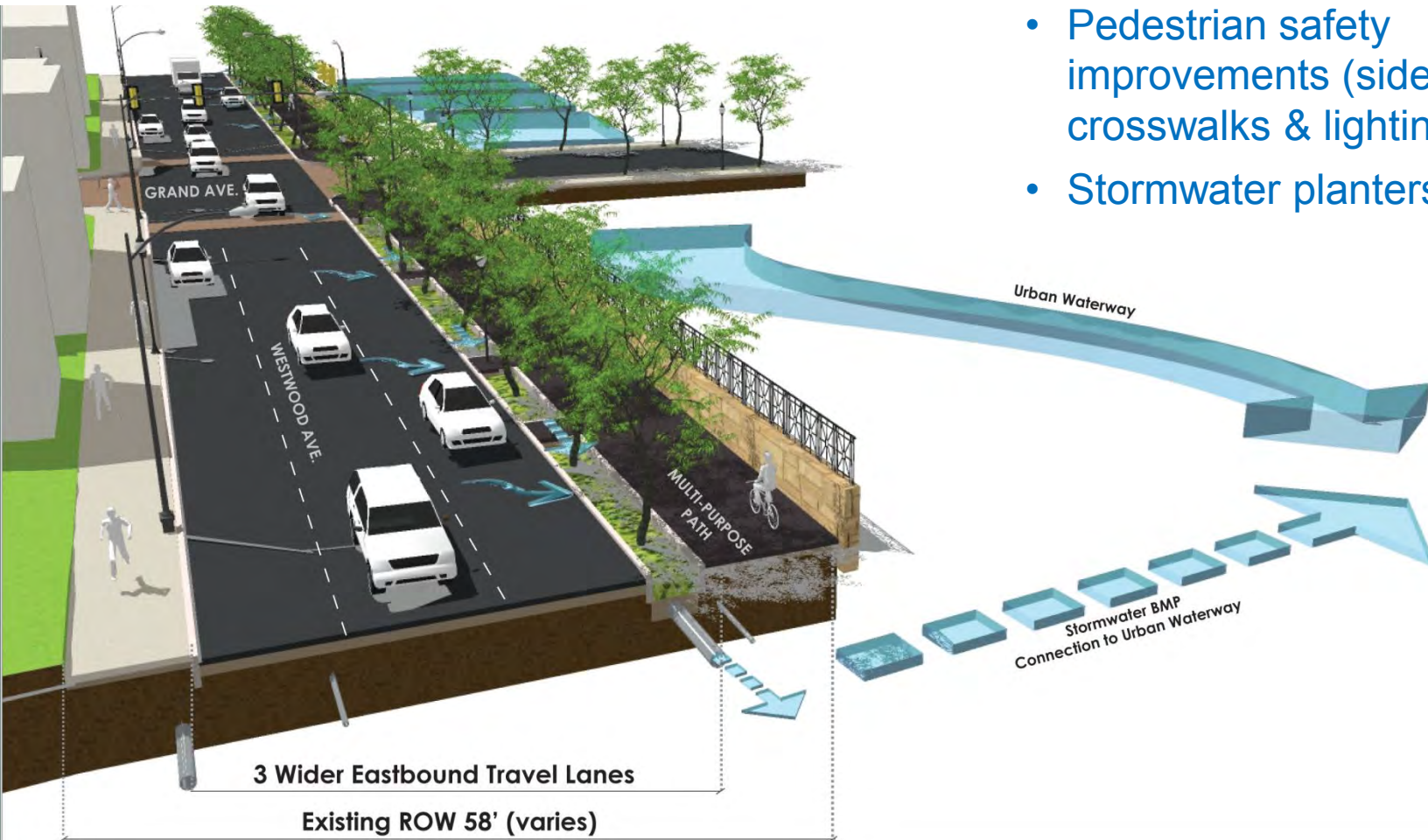
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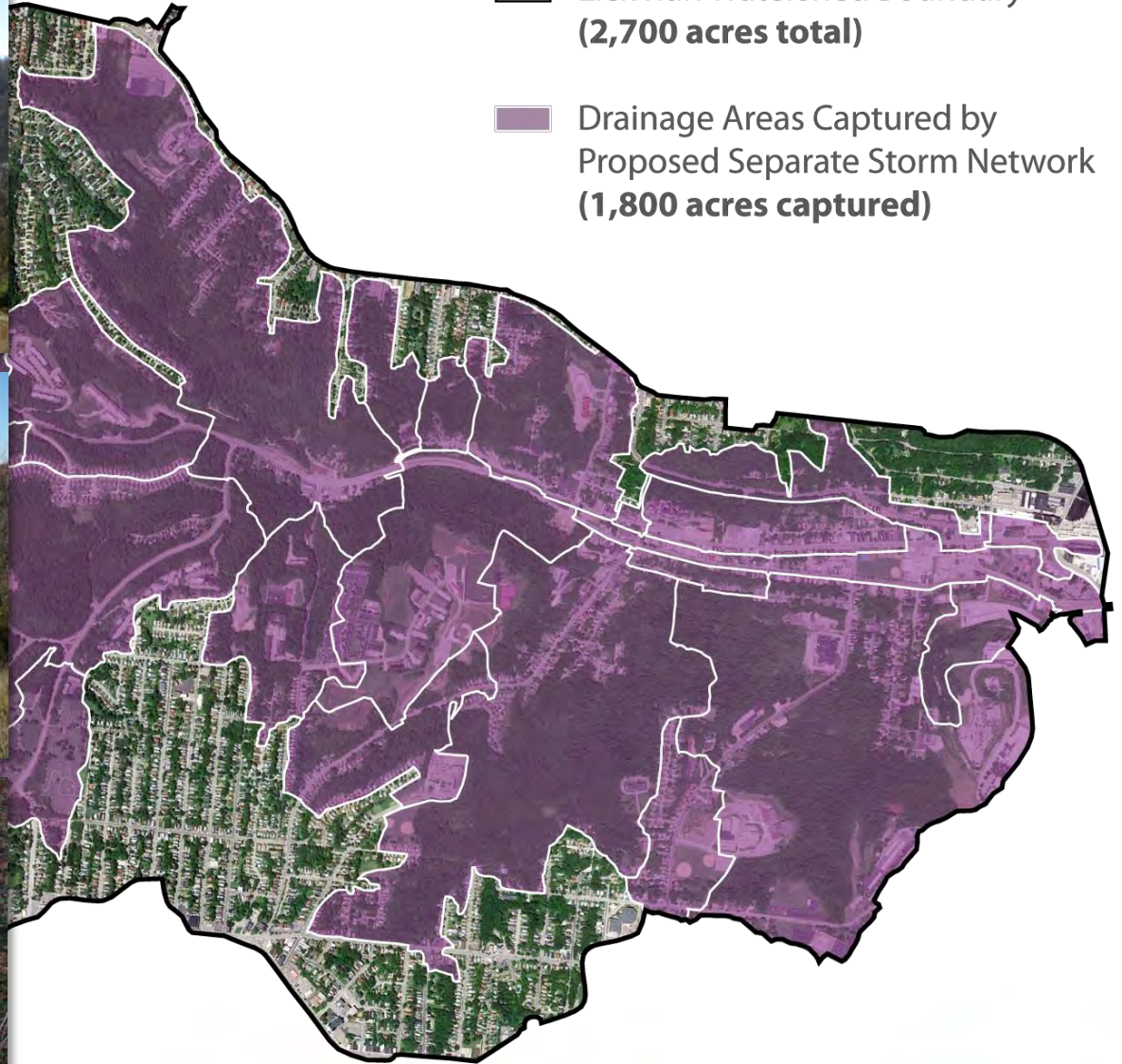
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# Urban Waterway Corridor

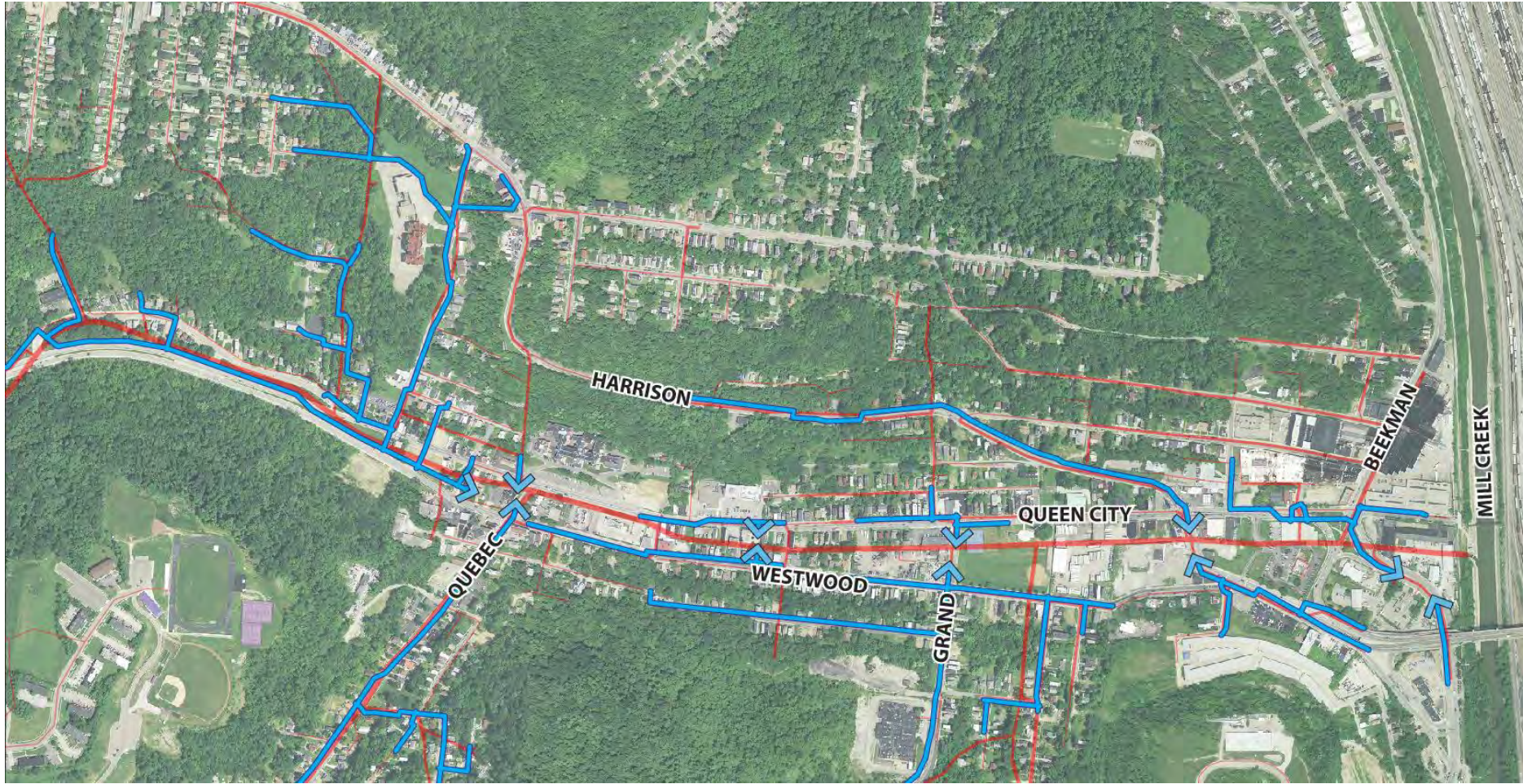


□ Lick Run Watershed Boundary  
(2,700 acres total)

■ Drainage Areas Captured by  
Proposed Separate Storm Network  
(1,800 acres captured)



# Urban Waterway Corridor



 Existing Combined Sewer

 Planned Storm Sewer  
(stormwater runoff directed to urban waterway)



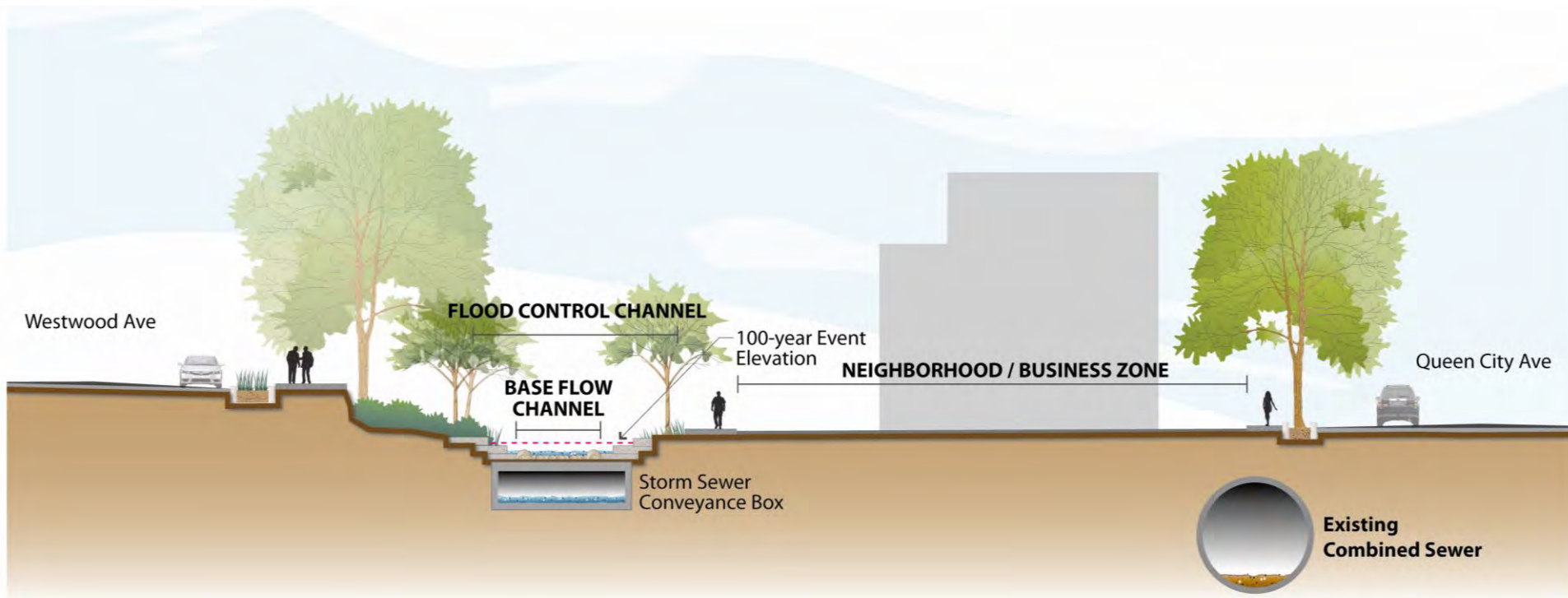
# Urban Waterway Corridor

## Goals

- Safely convey stormwater runoff to Mill Creek
- Maximize water quality improvement
- Maximize the potential for more green space, recreational uses, and community amenities
- Provide a potential catalyst for community reinvestment as part of MSD's Communities of the Future approach



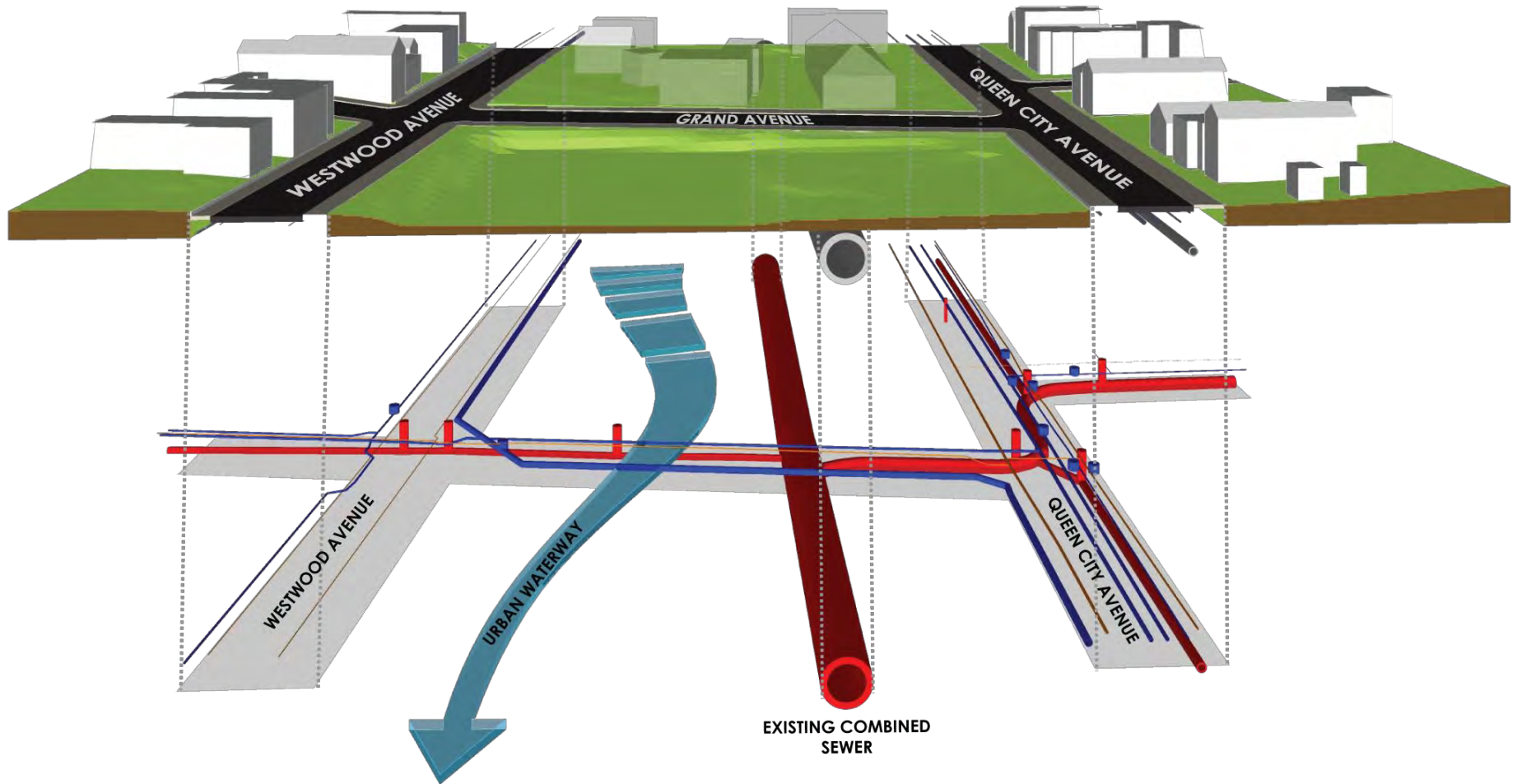
# Urban Waterway Corridor



## Hybrid System

- Includes surface waterway and underground storm sewer conveyance box
- Emphasis on features for water quality benefits
- Minimizes risks to public safety (fast water goes in the conveyance box)
- Provides opportunities for community amenities

# Urban Waterway Corridor



## Existing Conditions



# Urban Waterway Corridor



**Western Gateway Zone**  
1 Concept



**Narrow Channel Zone**  
3 Concepts



**Eastern Gateway Zone**  
3 Concepts



# Western Gateway Zone: Existing Conditions



## Design Constraints

- Existing combined sewer
- Existing roadways/traffic
- Existing underground utilities
- Existing buildings



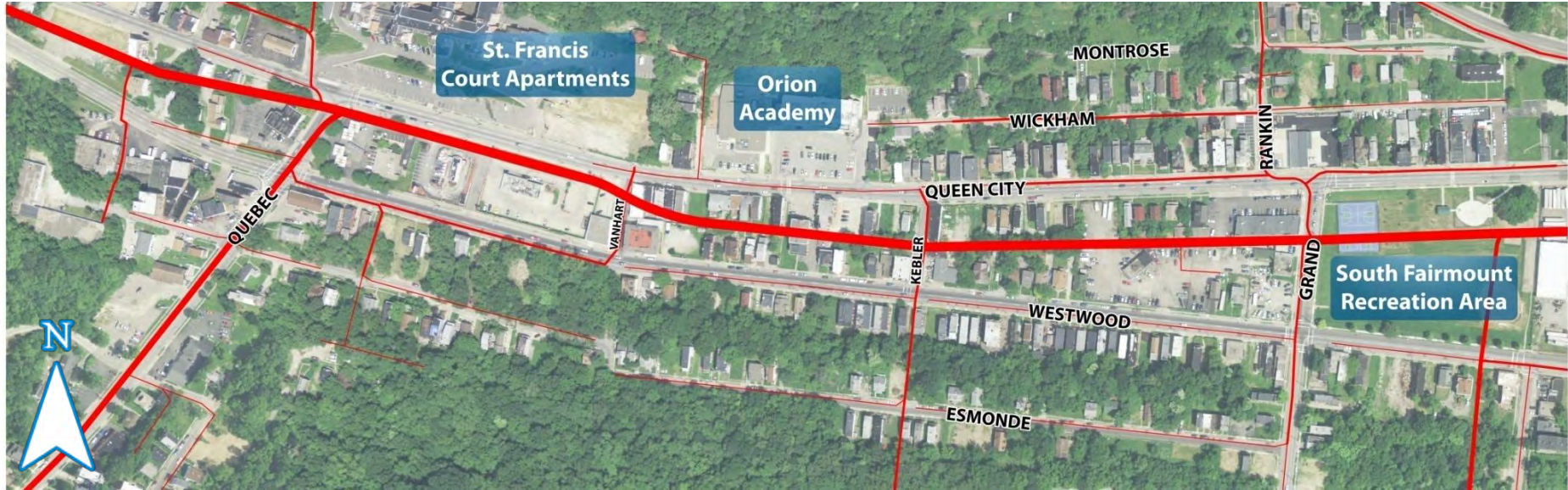
# Western Gateway Zone Concept



## Beginning the Urban Waterway

- Large wetland feature to improve water quality
- Outfall feature and smaller wetland near beginning of stream
- Potential for neighborhood gateway and educational signage
- Potential for neighborhood parking lot with trailhead access

# Narrow Channel Zone: Existing Conditions

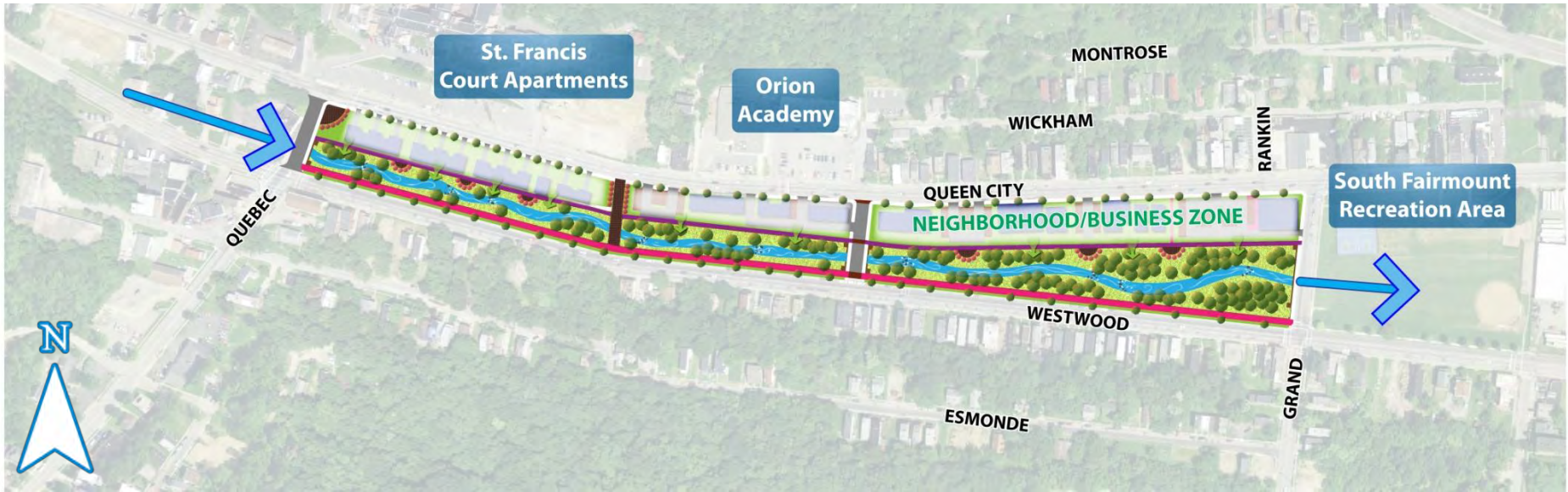


## Design Constraints (challenges)

- Existing combined sewer
- Existing roadways/traffic
- Existing underground utilities
- Existing buildings



# Narrow Channel Zone: Concept 1



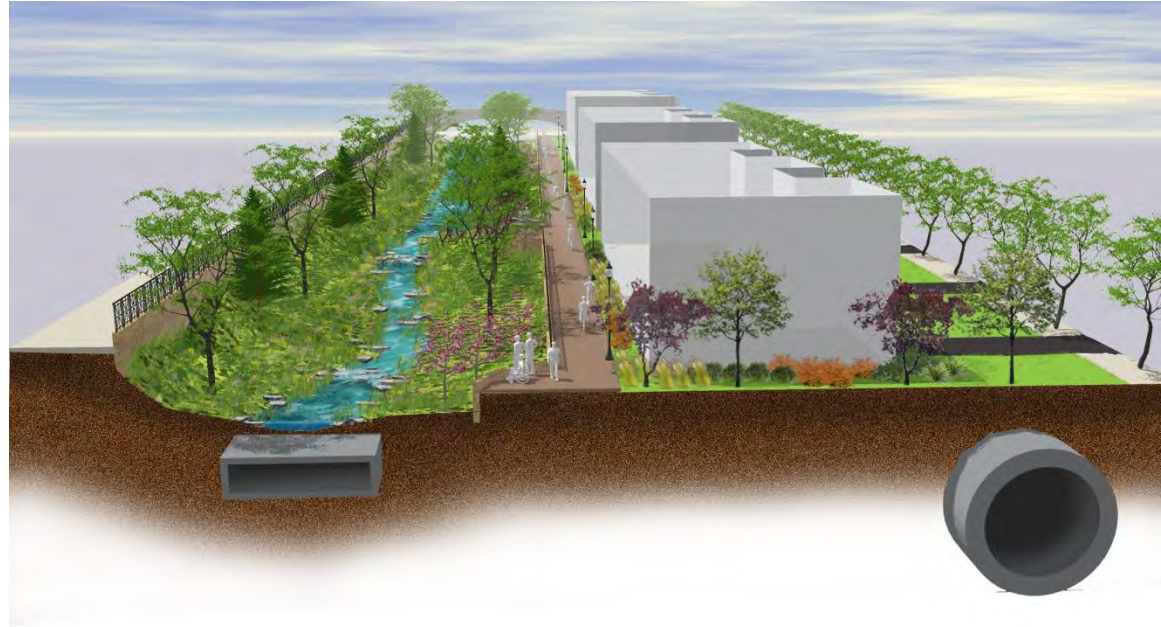
## Waterside Pedestrian Walkway

- Narrow waterway with retaining walls on both sides
- Pedestrian walkway, with overlooks and seating, on north side
- Multipurpose trail on south side
- Green infrastructure features integrated into surface parking lots
- In-stream features (e.g., pools, riffles) to improve water quality
- Opportunities for future residential/business development north of waterway



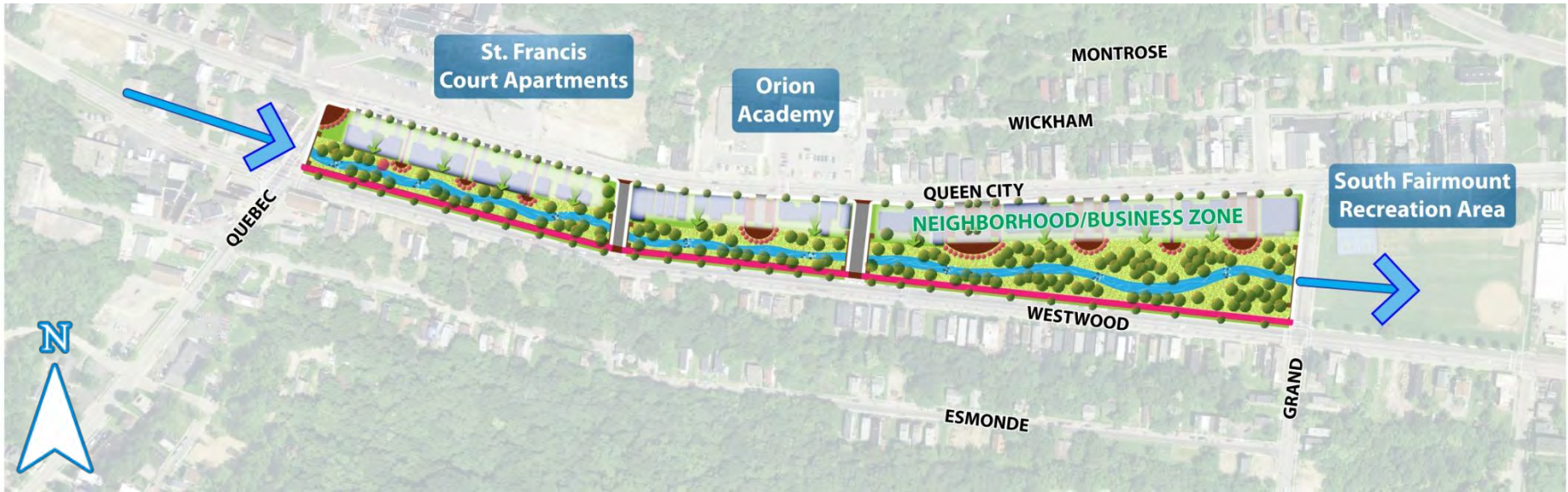


# Narrow Channel Zone: Concept 1





# Narrow Channel Zone: Concept 2

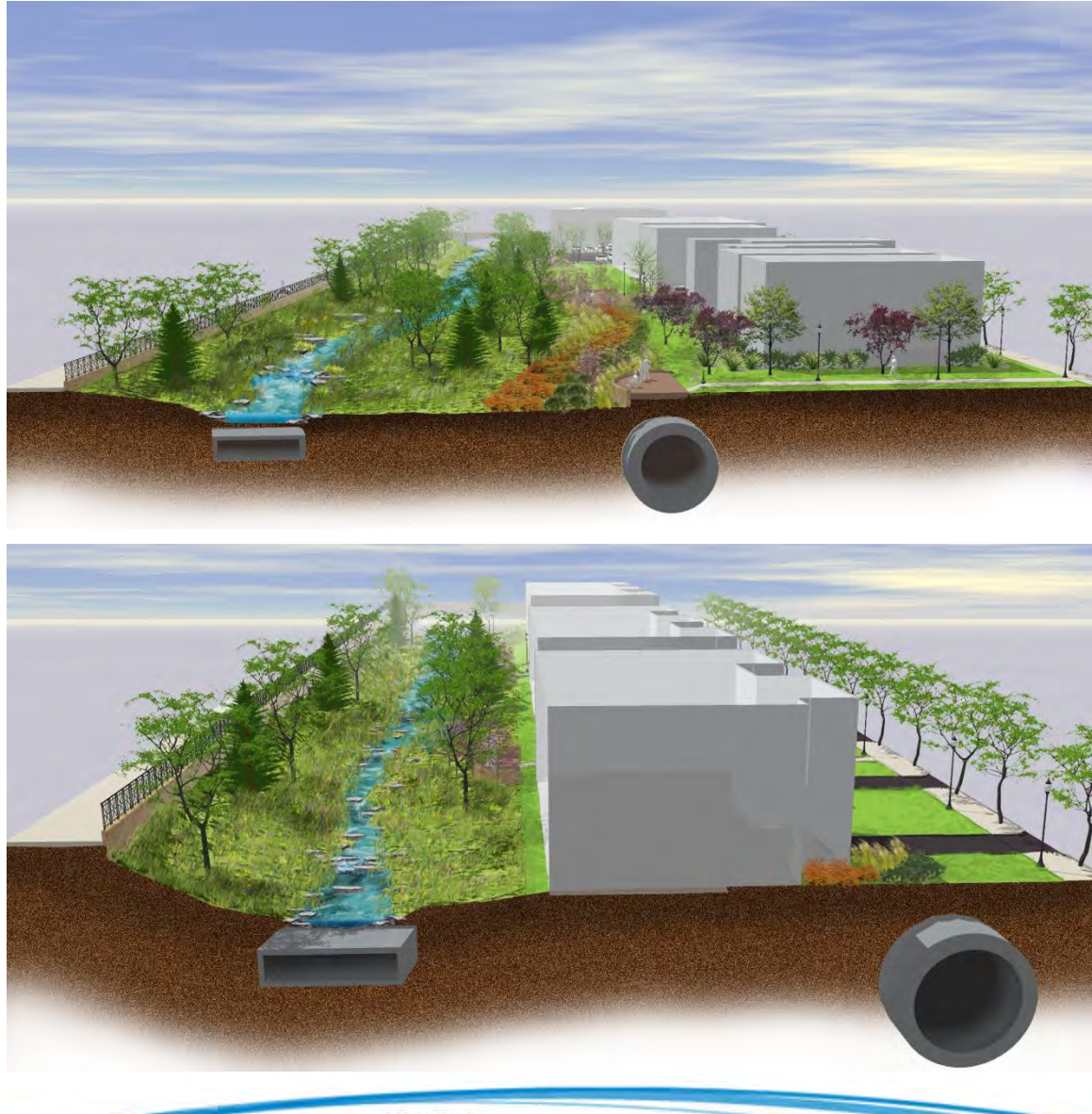


## Waterside Overlooks

- Narrow waterway with retaining walls
- Overlooks to waterway located near surface parking lots/civic spaces
- Multipurpose trail on south side
- In-stream features (e.g., pools, riffles) to improve water quality
- Opportunities for future residential/business development north of waterway



# Narrow Channel Zone: Concept 2





# Narrow Channel Zone: Concept 3

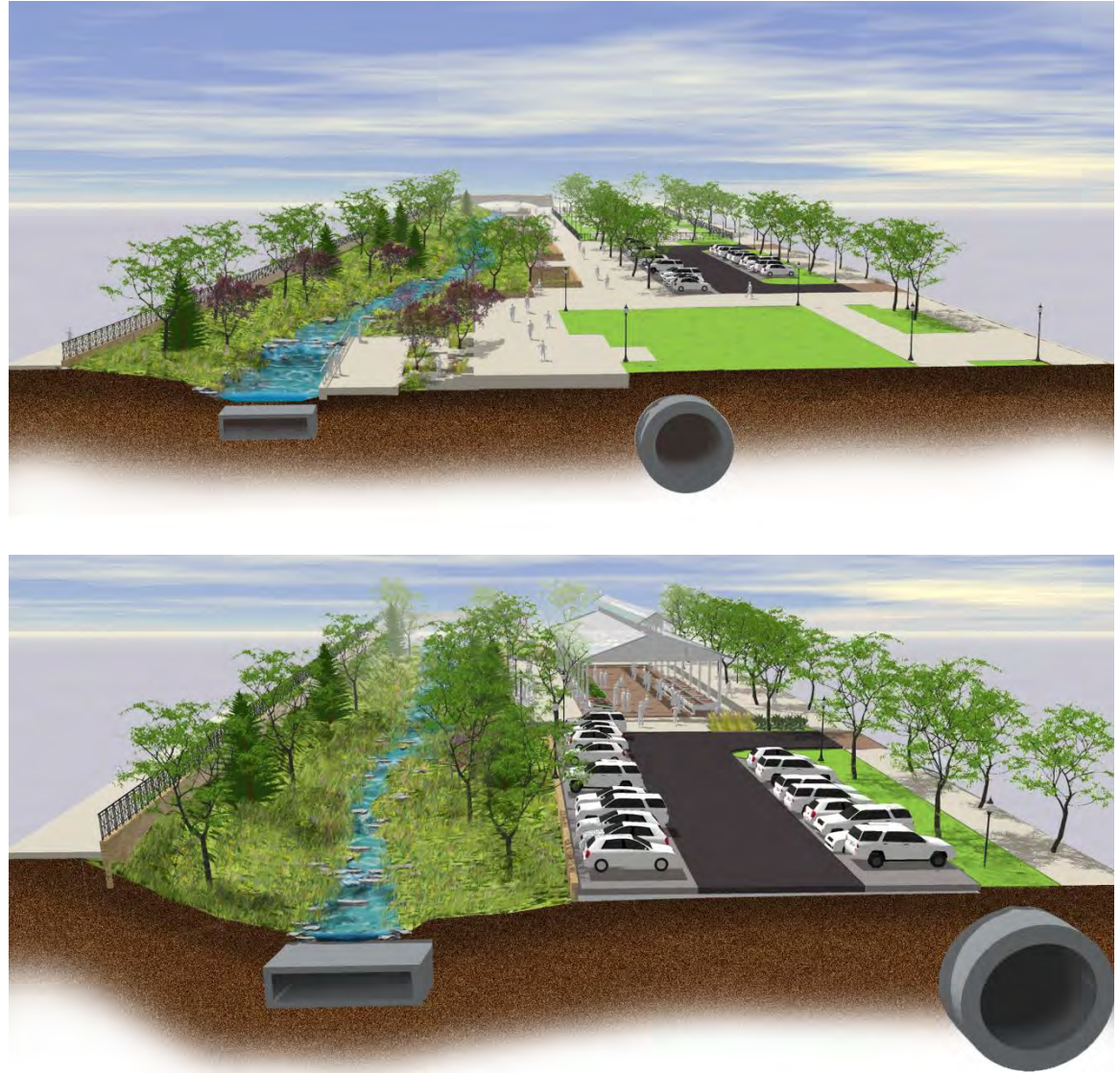


## Community Park

- Narrow waterway with retaining walls, terraces, and water access points
- Emphasis on public amenities (e.g., farmers market, community gardens, educational gardens, dog park, civic lawn, shelters, etc.)
- Multipurpose trail on south side of channel
- In-stream features (e.g., pools, riffles) to improve water quality

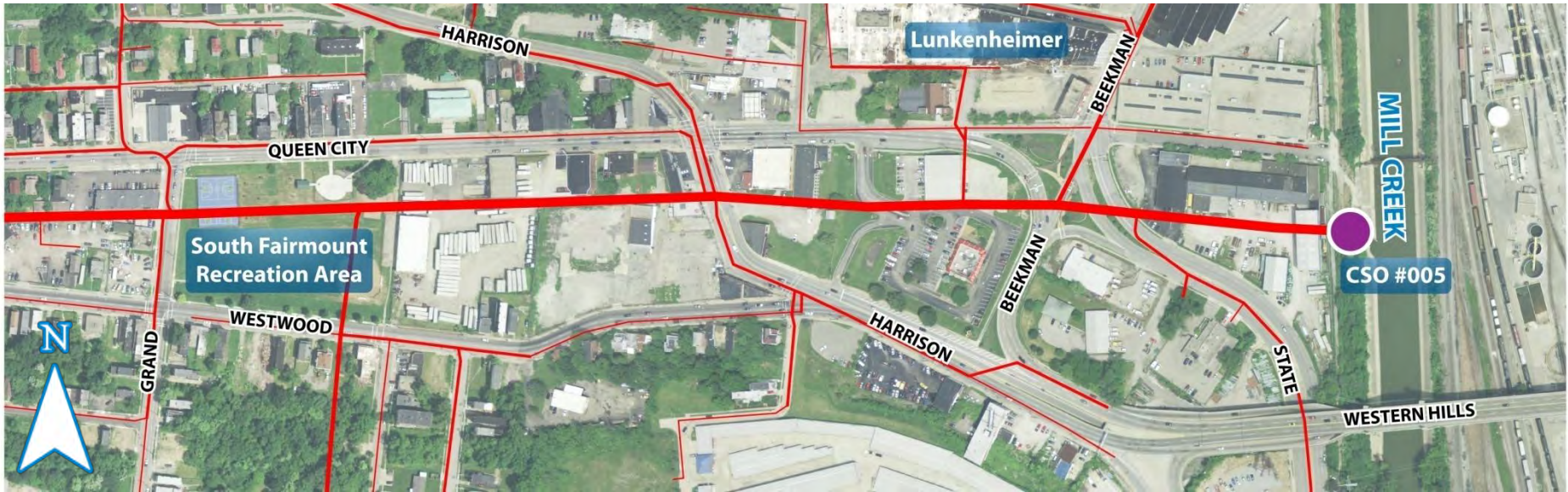


# Narrow Channel Zone: Concept 3





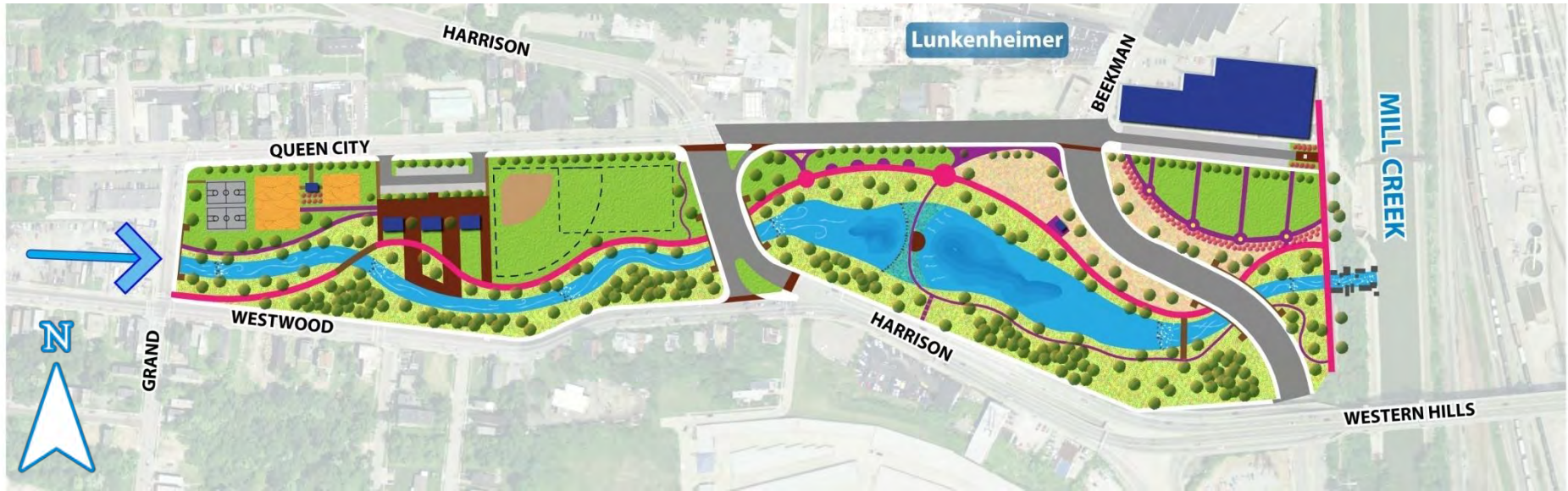
# Eastern Gateway Zone: Existing Conditions



## Design Constraints (challenges)

- Existing combined sewer
- Existing roadways/traffic
- Existing underground utilities
- Existing buildings

# Eastern Gateway Zone: Concept 1



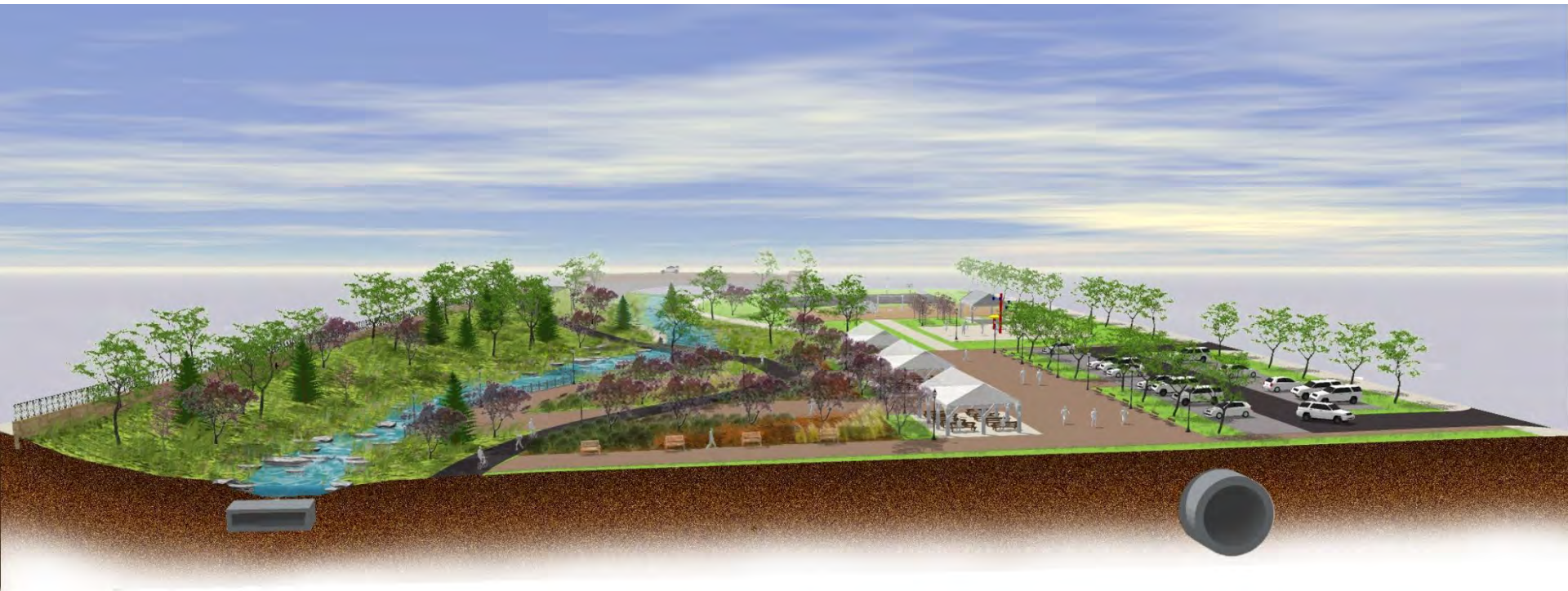
## Community Recreation and Open Space

- Lake with shallow pool and a deeper second pool (for water quality)
- Mix of recreation facilities: active, passive, and civic open space
- Multipurpose trail on north side of channel
- In-stream features (e.g., pools, riffles) to improve water quality
- Gathering places and pedestrian walkways
- Large community open space for large events





# Eastern Gateway Zone: Concept 1





# Eastern Gateway Zone: Concept 1



TOP PICK



TOP PICK



TOP PICK





# Eastern Gateway Zone: Concept 2



## Community Hub and Wetland

- Variable waterway width with large wetland (for water quality)
- Enhanced recreation hub with pavilion, amphitheater, and amenities
- Multipurpose trail creates hard edge for north side of waterway
- Opportunities for future business development north of waterway
- In-stream features (e.g., pools, riffles) to improve water quality
- Potential for other neighborhood businesses/services



# Eastern Gateway Zone: Concept 2





# Eastern Gateway Zone: Concept 2





# Eastern Gateway Zone: Concept 3



## Small Lake & Braided Wetlands

- Waterway widens to create small lake and braided wetlands
- Multipurpose trail on north side of channel crosses State Avenue with bridge
- Meadows surrounding natural-looking waterway
- Large multipurpose lawn for civic events and recreation
- In-stream features (e.g., pools, riffles) to improve water quality
- Opportunities for future business development north of waterway

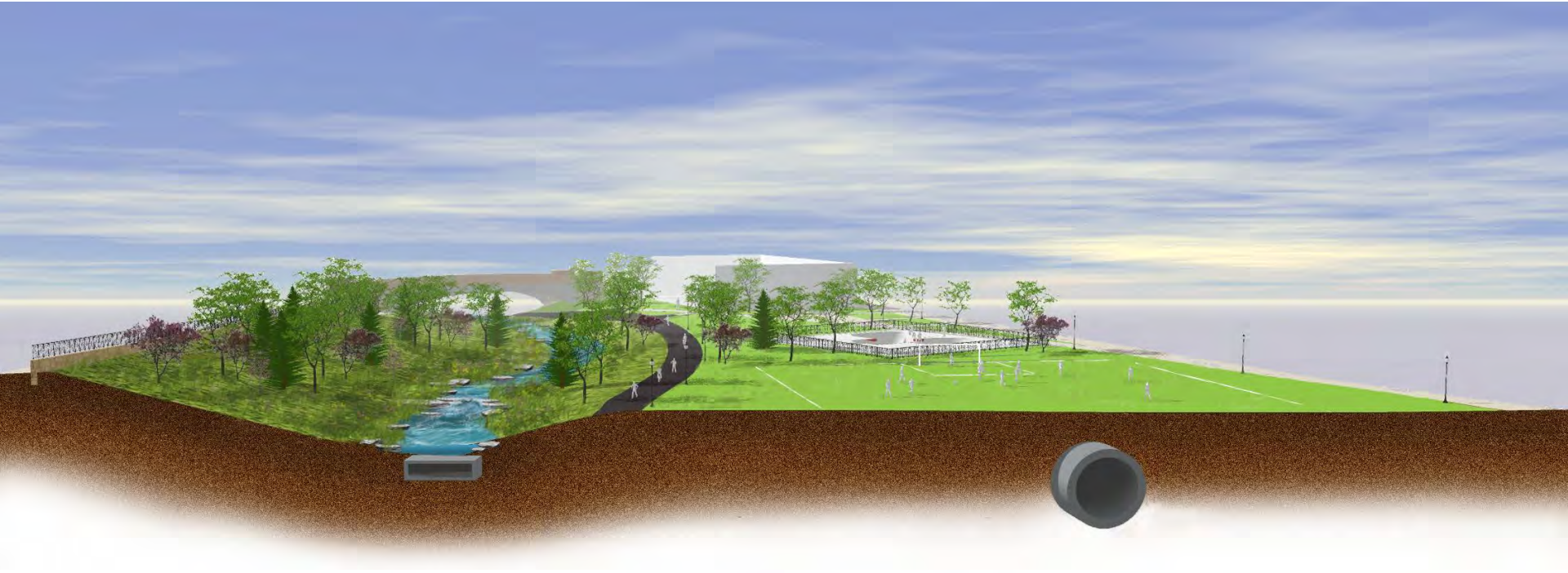


# Eastern Gateway Zone: Concept 3





# Eastern Gateway Zone: Concept 3



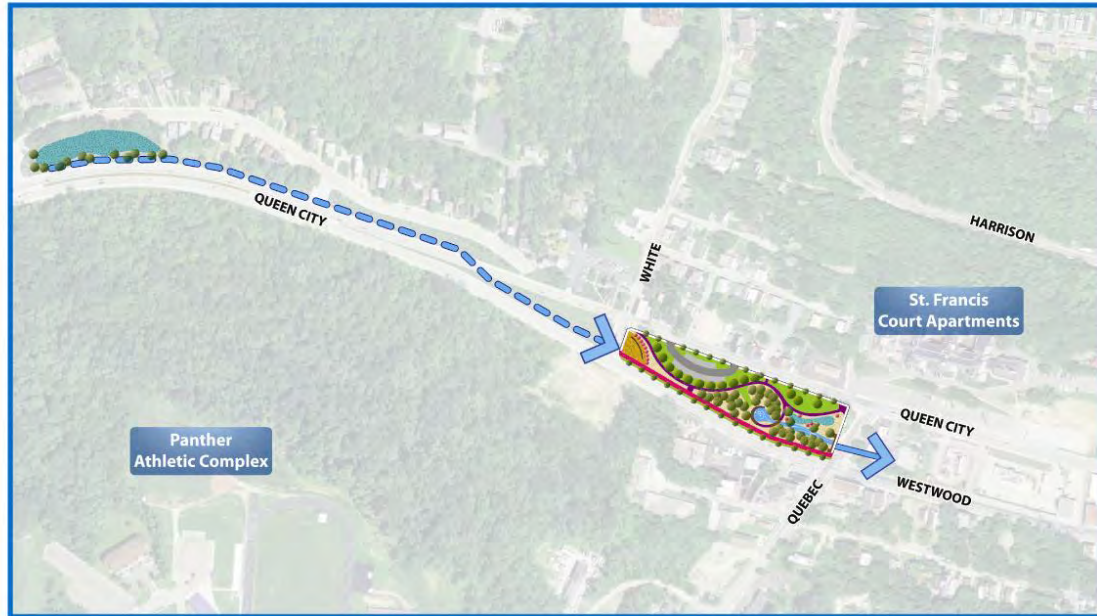




# Strengths & Weaknesses Evaluation



## WESTERN GATEWAY ZONE Beginning the Urban Waterway



METROPOLITAN  
SEWER DISTRICT  
of greater  
CINCINNATI



LICK RUN WATERSHED  
Strengths & Weaknesses Evaluation