

Ellicott City Watershed Master Plan

Public Meeting— October 25, 2018

Mahan Rykiel | Arnett Muldrow | RK&K | Land Studies | SouthCoast Consulting
Preservation Consulting

AGENDA

Welcome + Introduction

Recap of the Ellicott City Master Plan Process + Next Steps

Presentation

- Master Plan Recommendations Overview
- New and Refined Concepts / Recommendations

Discussion

Adjourn

Recap of Ellicott City Master Plan Process + Next Steps

Meeting Process

- You'll see new and refined master plan concepts (in response to five-year plan)
- Multiple ways to provide input tonight
 - Online input option – early next week through mid-November
 - Input form – turn in at end of night OR take home for online survey
 - Index cards – write a question/comment, pass to roving staff
- Please hold questions/comments until the end of the presentation – we have a lot to cover

Make sure you're on our email list to receive master plan notifications:

www.howardcountymd.gov/ECMP



Pre-2018 Flood

Why a master plan?

Purpose in May 2017:

- Needed a comprehensive, community-driven vision for rebuilding Ellicott City
- Had to address multiple objectives with a focus on infrastructure to alleviate flooding and potential changes to the community's design character
- Had to be broad – the downtown had to be part of a look at the entire watershed



The master plan team

Conducted a nationwide search to hire master plan consultants

- Nationally recognized facilitator with post-Katrina and 9-11 NYC experience
- A team of experts in urban design, engineering, historic preservation, economics, environmental planning, and community outreach
- Been involved with other flood impacted communities



An extensive outreach effort

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- Formed a Community Advisory Group following the July 30th flood



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- Hosted four public workshops at key milestones



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- Interviewed dozens of stakeholders
- Did an online community survey



Vision

Ellicott City and its watershed is a model, resilient community that thrives by protecting its people, commerce, history, culture and natural environment.



Core Goals

“Four Pillars”



Rebuilding: *Emphasize resilience and placemaking in rebuilding*

Resilient Infrastructure | Attractive Downtown | National Model | Walkable and Accessible Destination



Environmental: *Protect the environment*

Healthy Natural Resources | Embrace Rivers and Tributaries | Interventions Address Flood Mitigation and Increased Green Space



Preservation: *Preserve Ellicott City’s heritage*

Distinctive Elements | Buildings, Terrain, River Valleys | Importance of Historic Preservation | Social, Physical and Cultural Resources | History, Environment, Creativity and Culture



Economy: *Revitalize the downtown economy*

Balanced Economic Growth and Commercial Success | Investment – Existing and New Businesses | Thriving Small Businesses | Targeted Economic Development to Strengthen Main Street and West End | Leverage Baltimore County and Oella

Process – Project Ideas

We were refining ideas that met the vision when the 2018 flood hit.

CAG/Rebuilding Process: 300+ ideas for projects (2016)

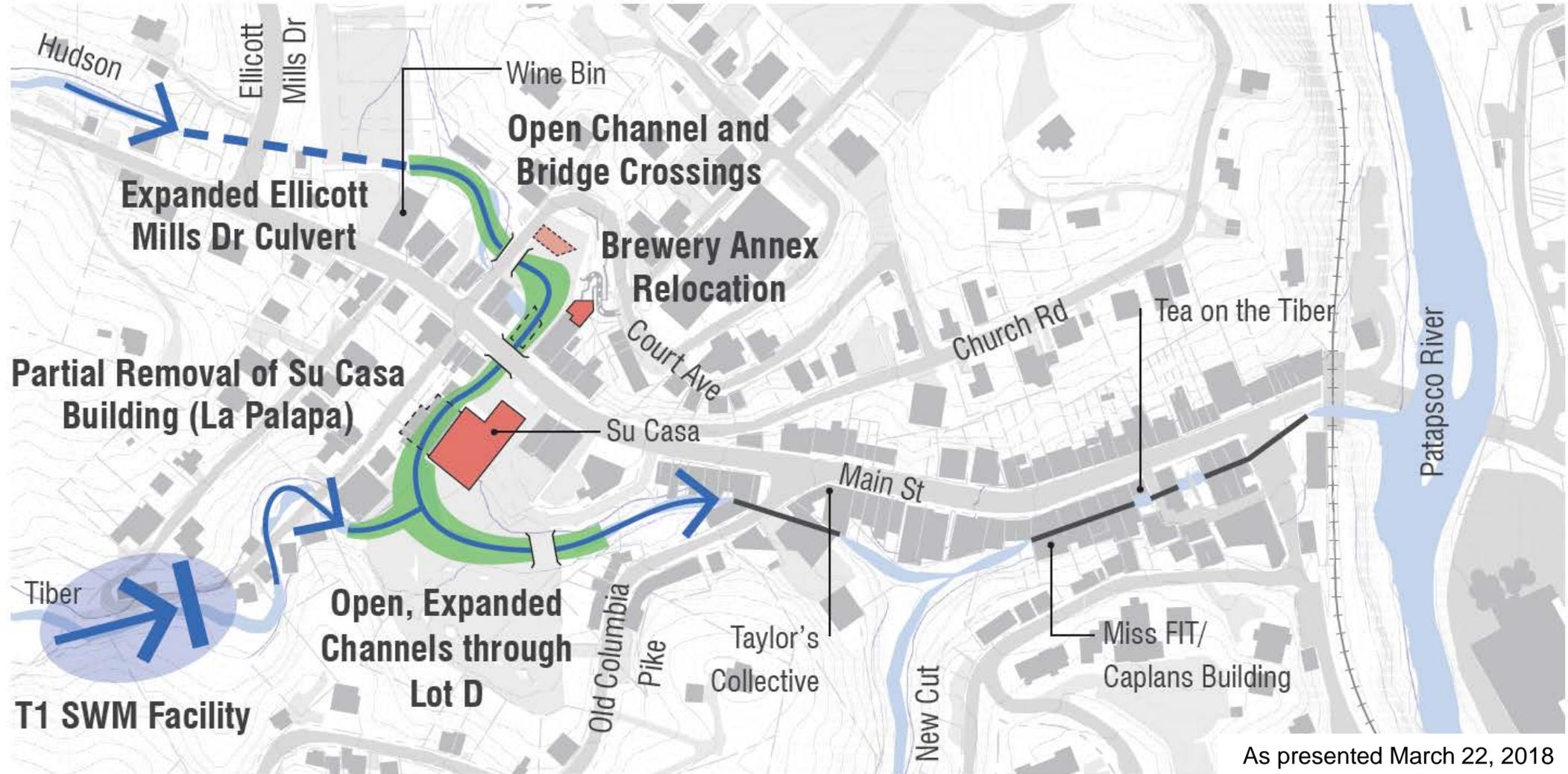
“Hydrology &Hydraulics” Study: 2D model of watershed (May 2017)

“H&H” Phase 1: 4 projects in design/engineering (July 2017)

Master Plan: “Hudson Bend” open channel (March 2018)

Upper Main Conveyance - Recap

A.k.a. "Hudson Bend"



As presented March 22, 2018

The H&H 2D Model

The **H&H model** is a **computer model** that helped **inform our decisions**

- Used to identify and test opportunities to better convey storm water and where to store it – like within a stream channel, or underground, or use a tunnel conveyance

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Not considered:

- Constructability of projects
- Cost - \$85M estimated for 18 projects and +\$60M-\$?? for tunnel bores
- Complexity of planning and permitting

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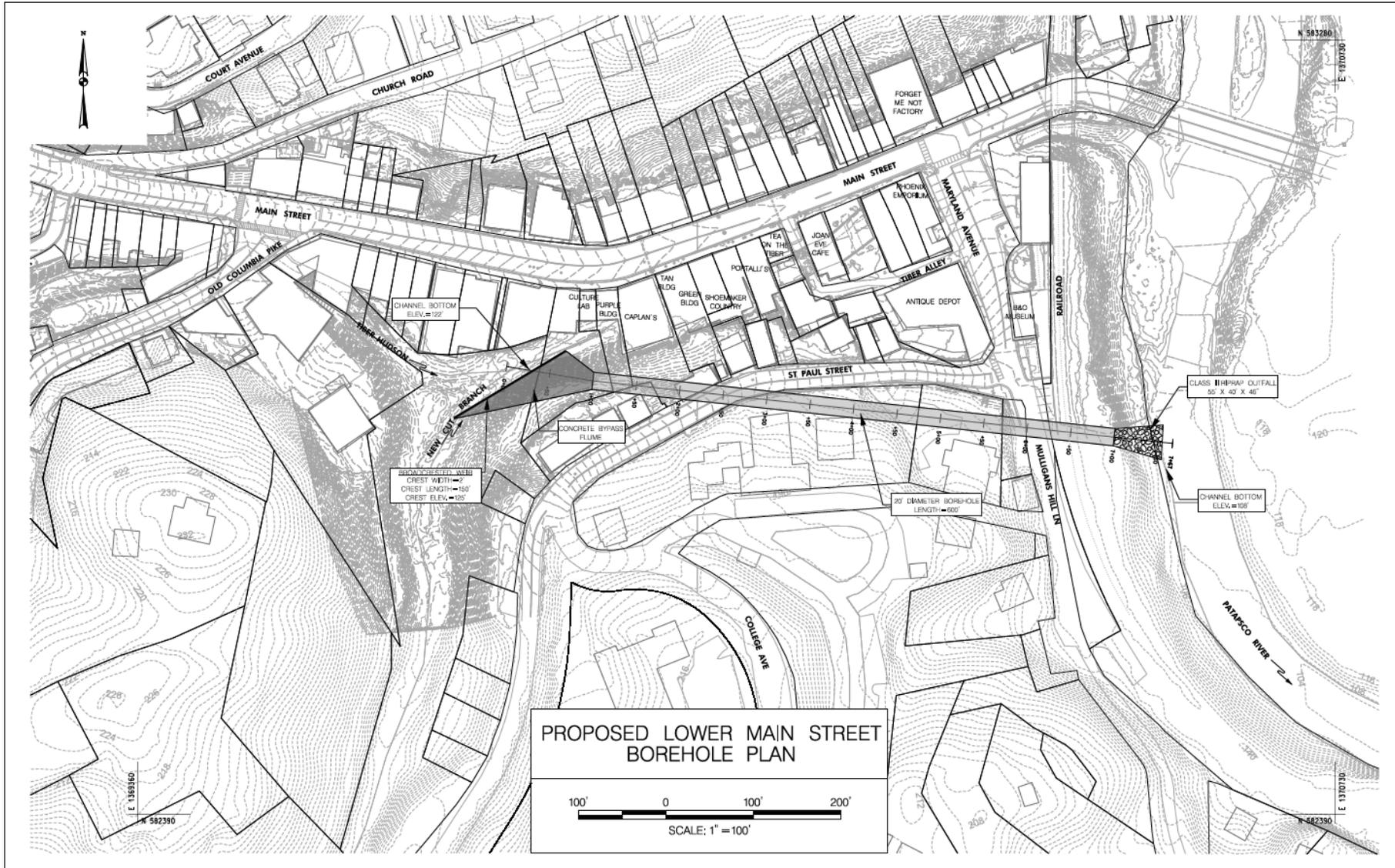
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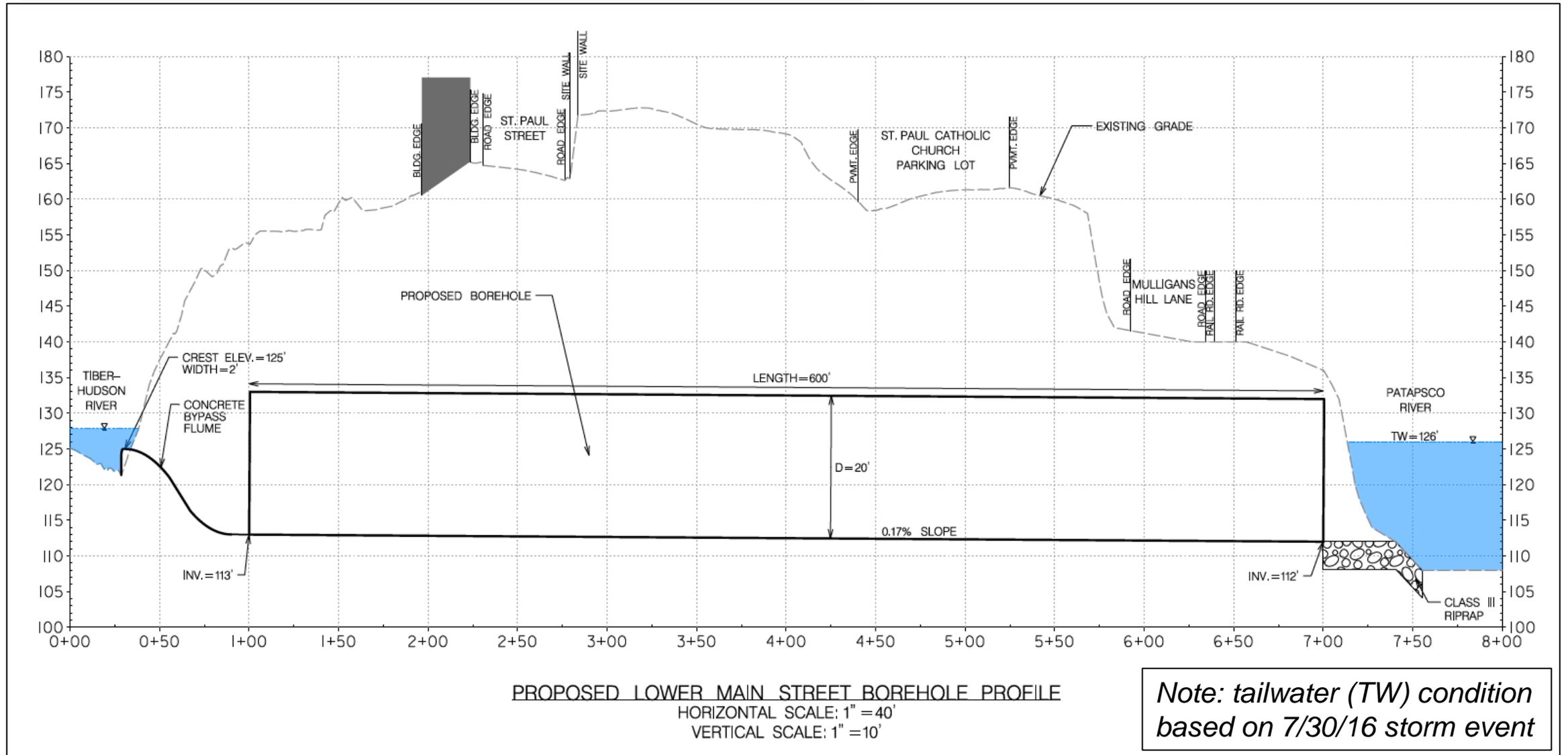
Model has been **an important baseline** for the master plan

- Tested “Hudson Bend” which opened the stream channel to improve flow
- It was **not meant as a substitute for the Ellicott City master plan**

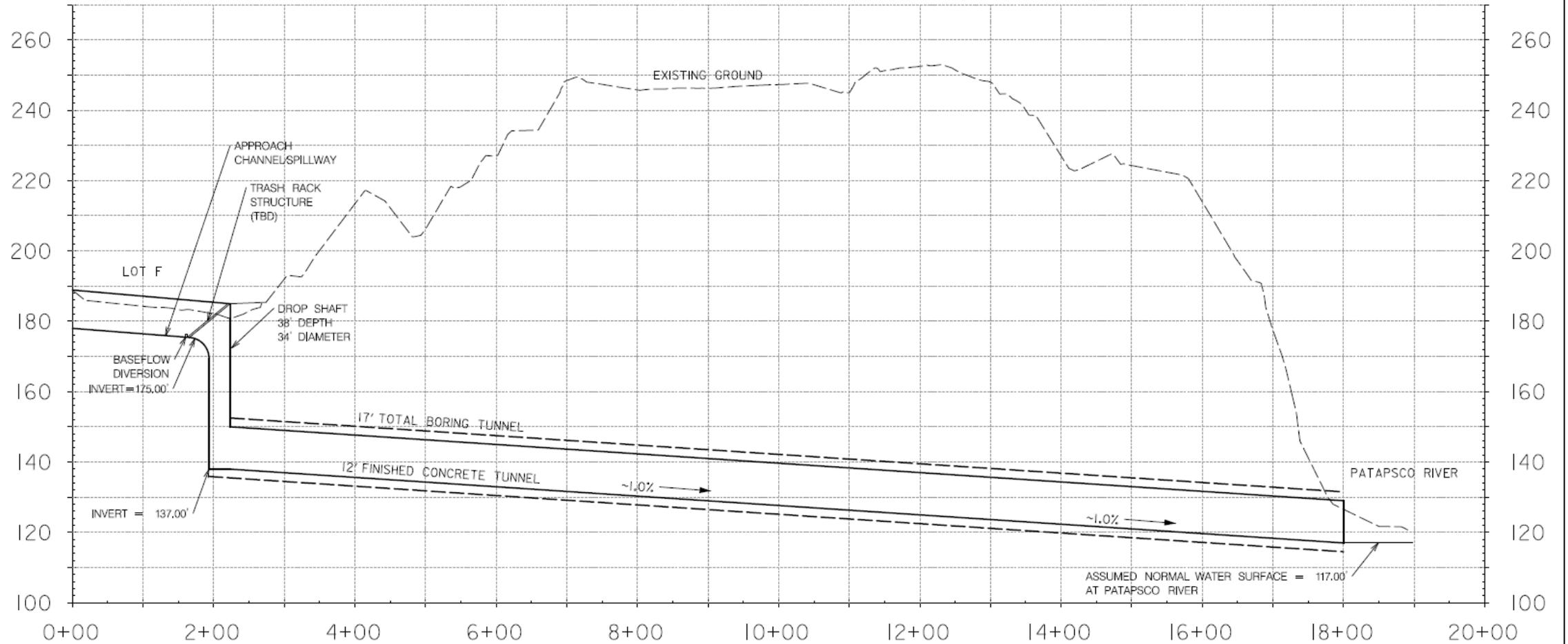
South Tunnel Bore – Site Plan



South Tunnel Bore - Profile



North Tunnel Bore



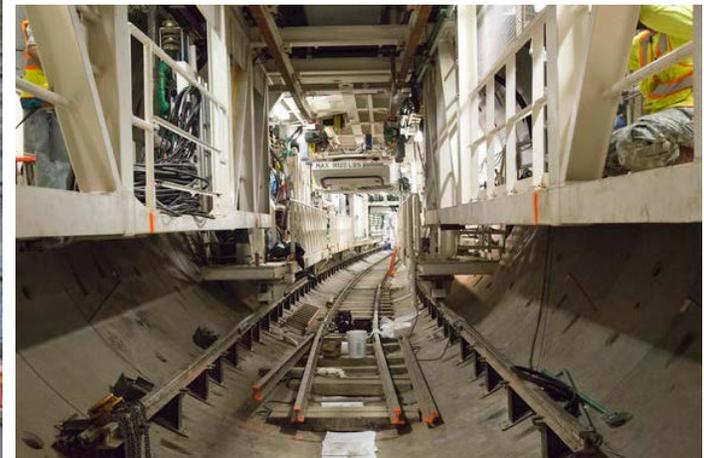
LOT F TUNNEL/SHAFT BORING PROFILE

HORIZ. 1" = 100'

VERT. 1" = 20'

Tunnel Boring – Construction Considerations

- Example: Clean Rivers Project in Washington, DC (23 foot diameter tunnel)



Post-2018 Flood

Master Plan Objectives

Post May 2018



Life Safety: *Protect Lives*



Rebuilding: *Emphasize resilience and placemaking in rebuilding*

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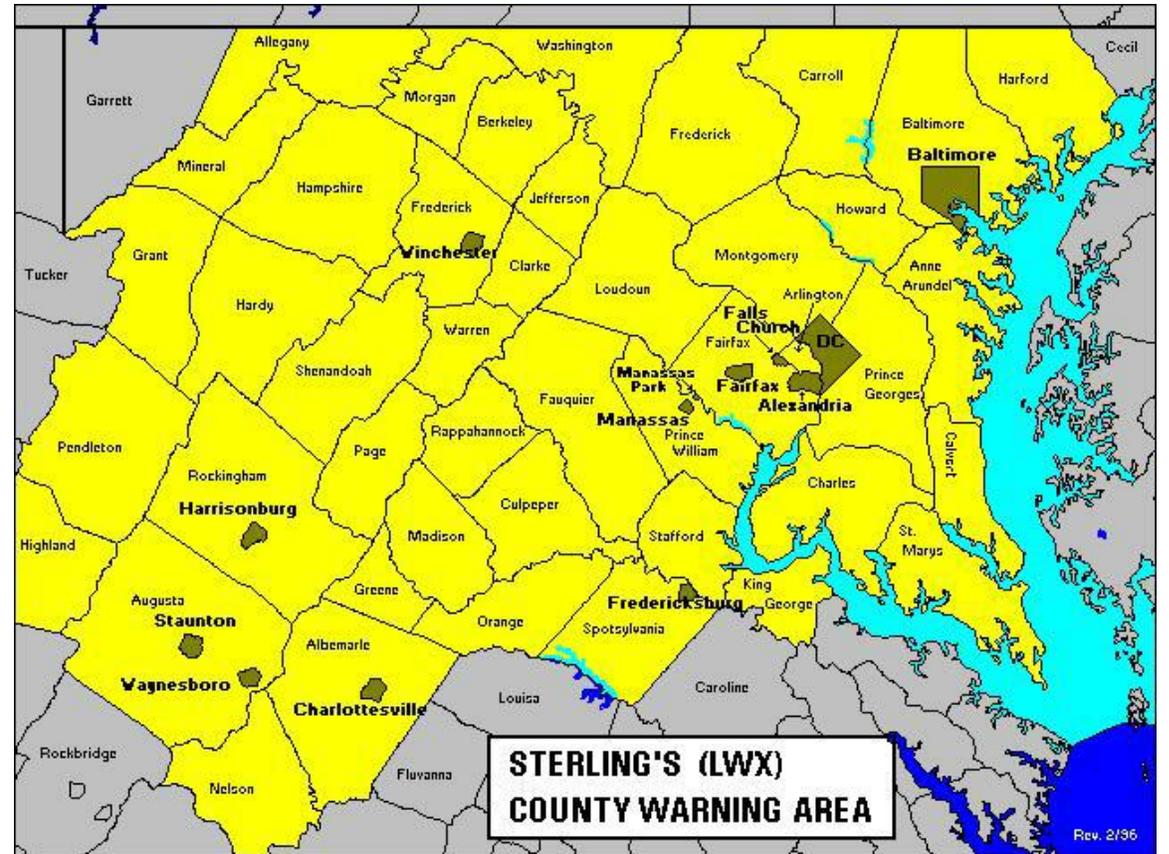
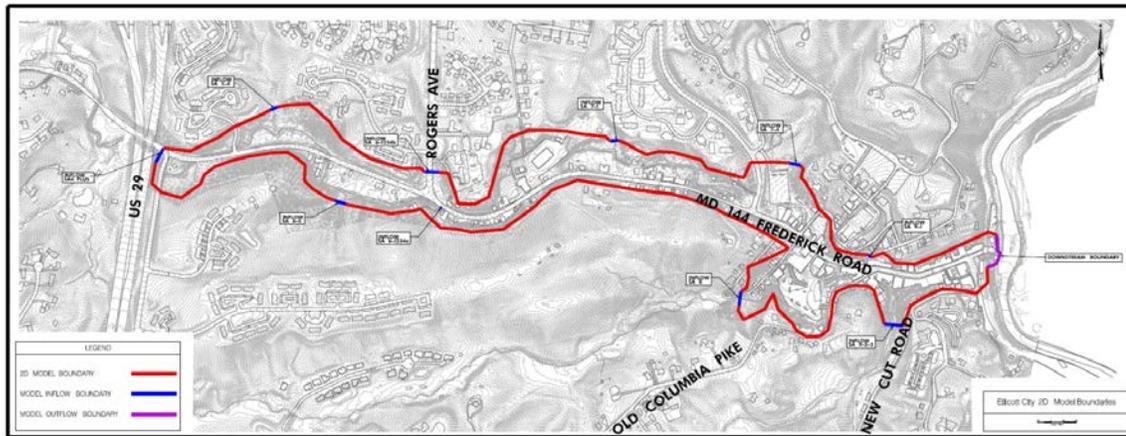
Balanced Economic Growth and Commercial Success | Investment – Existing and New Businesses | Thriving Small Businesses | Targeted Economic Development to Strengthen Main Street and West End |

Time is of the Essence



Weather doesn't wait

- According to the National Weather Service's Baltimore/Washington Weather Forecast Office, Old Ellicott City is the **most vulnerable location** for catastrophic flash flooding in its 44-county forecast region



Flash Flooding in 2018

- We were not alone

Dam breaks, roads crumble after destructive flooding across Michigan, Wisconsin and Minnesota

By Kevin Byrne, AccuWeather staff writer
June 19, 2018, 1:21:04 PM EDT

Share this article: [f](#) [t](#) [e](#) [p](#)



1 remains missing following deadly Virginia flash flooding; Landslide kills 2 in North Carolina

By Amanda Schmidt, AccuWeather staff writer
June 04, 2018, 3:10:39 AM EDT

Share this article: [f](#) [t](#) [e](#) [p](#)



Flood immerses roads, cars as heavy rains soak Md.'s Frederick Co.

By Patrick Roth and Teta Alim
May 15, 2018 10:26 am

[f](#) [t](#) [e](#) [p](#) [+](#)

"We could be looking at some more flooding problems between now and the end of the workweek," said Storm Team 4 meteorologist Matt Ritter. "We could be looking at an additional 4 to 6 inches of rainfall between now and the start of the weekend."



CBS/AP / June 21, 2018, 9:44 AM

Heavy rains spur flooding, havoc in western Pennsylvania

[f](#) Share / [t](#) Tweet / [e](#) Reddit / [f](#) Flipboard / [e](#) Email

BETHEL PARK, Pa. -- Strong storms containing heavy rains have caused severe flooding in parts of western Pennsylvania, spurring dozens of evacuations and damaging numerous vehicles and other property. No injuries were reported.

Chicago Tribune

SPORTS BREAKING MOST POPULAR OPINION ENTERTAINMENT BUSINESS 66°

Flash flooding in Rockford prompts numerous rescues; Fox and Des Plaines rivers on the rise

Mark Pickett, left, and Ryan Craig, right, work to rescue Bruce Bailey, who was trapped in his car by floodwaters in a supermarket parking in Rockford, on June 18, 2018. (Arturo Fernandez / Rockford Register Star)

By The Associated Press, Chicago Tribune staff

JUNE 18, 2018, 2:50 PM | ROCKFORD

The Washington Post
Democracy Dies in Darkness

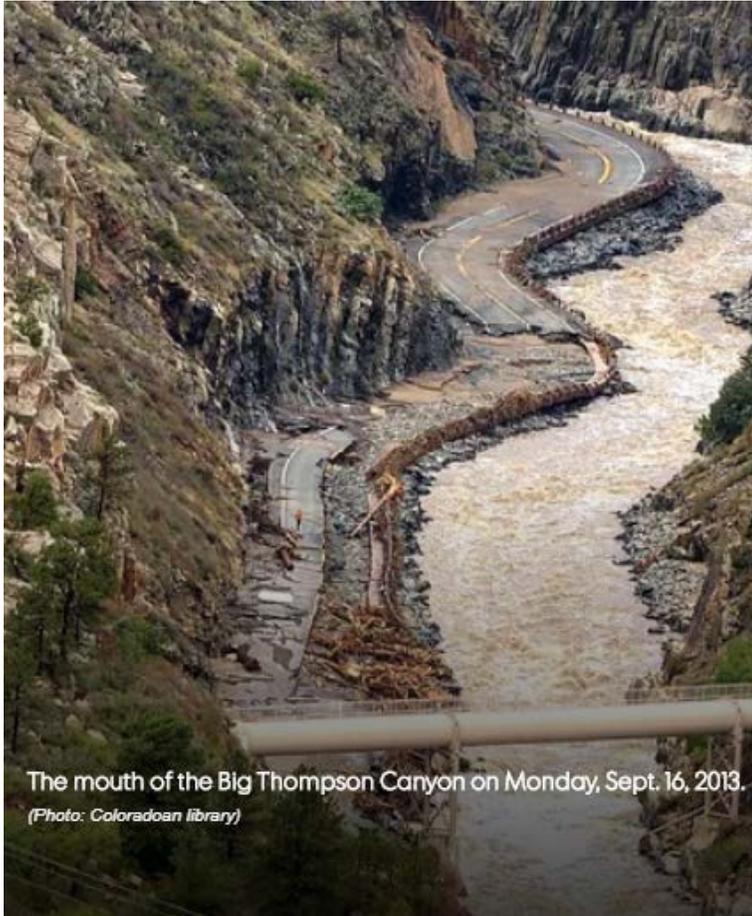
Capital Weather Gang

Flash flood emergency in parts of coastal Texas from over a foot of rain

By Jason Samenow [e](#) Email the author
June 20 at 12:46 PM

Other Flash-Flood Prone Communities

- Risk of destructive damage is greater in steep and rocky terrain



**Boulder, Colorado
(September 2013)**
A year's worth of
rain in 8 days. 9" in a
single day.

Other Flash-Flood Prone Communities

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Vermont River Towns (2011)
Got hit twice in a single season (May, and August).

Other Flash-Flood Prone Communities

- Risk of destructive damage is greater in steep and rocky terrain



**Calderdale Region, UK
(2015)**
Also flooded in 2012

Strategic Acquisition and Removal

- **Boulder:** restoring greenways by acquiring property and removing high hazard structures
- **Vermont River Towns:** removing buildings to restore floodplain and create parks
- **Calderdale, UK:** buildings overhanging river being demolished as part of flood mitigation



FILE: JEB WALLACE-BRODEUR

This is why the timber cabins in Mytholmroyd are being demolished



The demolition will take place this month

By
ABIGAIL KELLETT
Email

Published: 12:39
Tuesday 14 August 2018

Share this article



Three timber cabins, built overhanging the river, are being demolished so that a flood defence scheme in Mytholmroyd can be built to protect residents and businesses.

Time is of the Essence

- Following the May flood, the County focused on near term flood mitigation that:
 - Could be initiated **before** the next thunderstorm/hurricane season
 - Would reduce flood depths and velocities to levels that could be addressed by floodproofing buildings
- Result was the near term or five year plan



The Ellicott City Flood Mitigation Plan



Allan H. Kittleman, Howard County Executive

Jonathan Weinstein, Howard County Council, District 1

August 23, 2018

Five-Year Flood Mitigation Plan

The approach is the most effective of all those explored because it addresses:

- Protecting Lives- reduces risks
- Urgency- a significant portion of the plan can be accomplished soon
- Feasibility/Constructability- some level of engineering has been done for most near term projects
- Cost-effectiveness- by far it results in the greatest benefits per dollar spent

This plan allows strategic action within the first year.

Five-Year Plan & Master Plan

- **Master Plan is the long-term comprehensive plan**
 - Typically implementation projects are recommended as near, medium or long-term
 - Following May 2018 the focus became near term ideas to mitigate flooding

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- **Five-Year Plan is the near-term, accelerated action plan**
 - Includes the “Hudson Bend” concept developed through the master plan
 - Extends the concept of a widened stream channel from Ellicott Mills Drive to Maryland Avenue
 - Includes selected first-phase H&H projects – focused on retaining and conveying water
 - Projects tested through H&H model
 - Will be nested into the longer-term master plan

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 - Projects tested through H&H model
 - Will be nested into the longer-term master plan
- **Through public input the master plan will provide guidance on:**
 - The design of the expanded stream channel as major amenity and focal point for the community – which is the purpose of tonight’s meeting
 - Longer-term opportunities for additional projects - including flood mitigation

Five-Year Flood Mitigation Plan

Council Voted to fund Phase 1 of the plan on Oct 1, 2018

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The application triggers **Section 106** review which considers impacts to historic properties and the County has hired consultants to help with this process

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The application triggers **Section 106** review which considers impacts to historic properties and the County has hired consultants to help with this process

As the County looks to remove certain buildings in hazardous, flood-prone locations a **Historic Structures Review Committee** has been formed to advise on preserving key historical elements so that they may be somehow re-used or relocated

Development Moratorium: CB56

- **Council Bill 56-2018 requires DPW & DPZ to essentially:**
 - Study flood mitigation and regulatory options for both the Tiber-Hudson Watershed in Ellicott City AND the Plumtree Watershed in Valley Mede.
 - The Department of Public Works (DPW) and the Department of Planning and Zoning (DPZ) have already met to discuss the process to study these two watersheds in response to CB56.

Courthouse Reuse

- **Courthouse Public-Private Partnership Moving Forward**
 - Courthouse will move to Bendix Road by 2021
 - The goal is to soon undertake a competitive developer solicitation to reuse the historic courthouse and parking lot following the move



Master Plan Next Steps

- Early next week: online input open to the public
- Mid-November: online input closes
- November-January: draft plan to be prepared
- February 2019: draft plan open house
- Draft master plan completed to begin formal review process
- General plan amendment process underway
- Monitoring, reporting and implementation - continuous

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Master Plan Overview

Overview

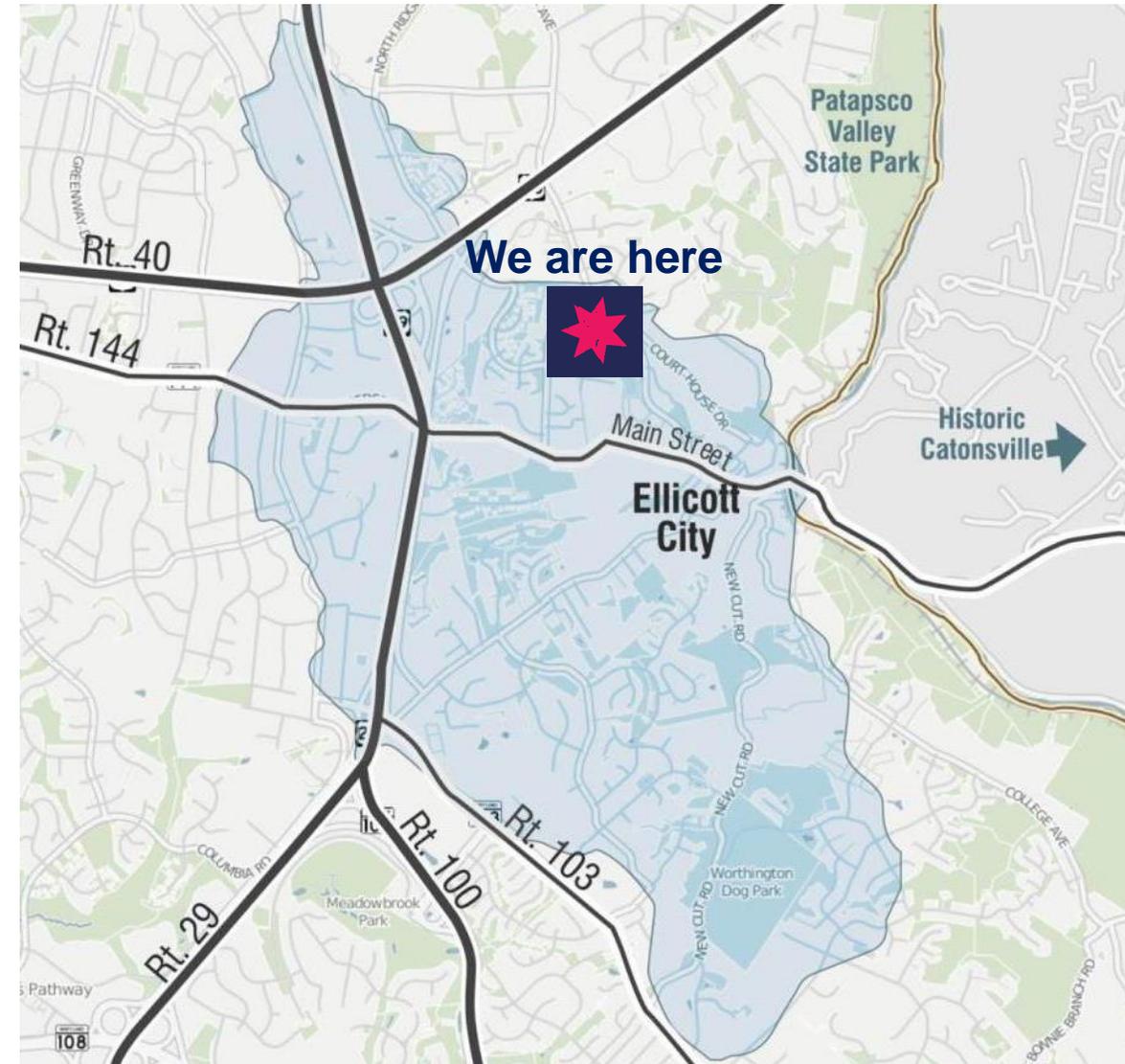
Where We Were:

- March, 2018 Public Workshop
- Submission of Draft Planned for June, 2018

May, 2018 Flood

Where We Are:

- County Explored Additional Modeling with McCormick Taylor and through H&H Study
- County Developed 5-Year Strategy
- Master Plan Team Re-Engaged to Complete Master Plan, Informed by 5 Year Strategy



Overview

What are the Boundaries and the Focus of the Ellicott City Watershed Master Plan?

Tiber-Hudson Watershed (and Regional Context) | Series of Recommendations Organized Around Inter-Related Strategies

What is the Timing?

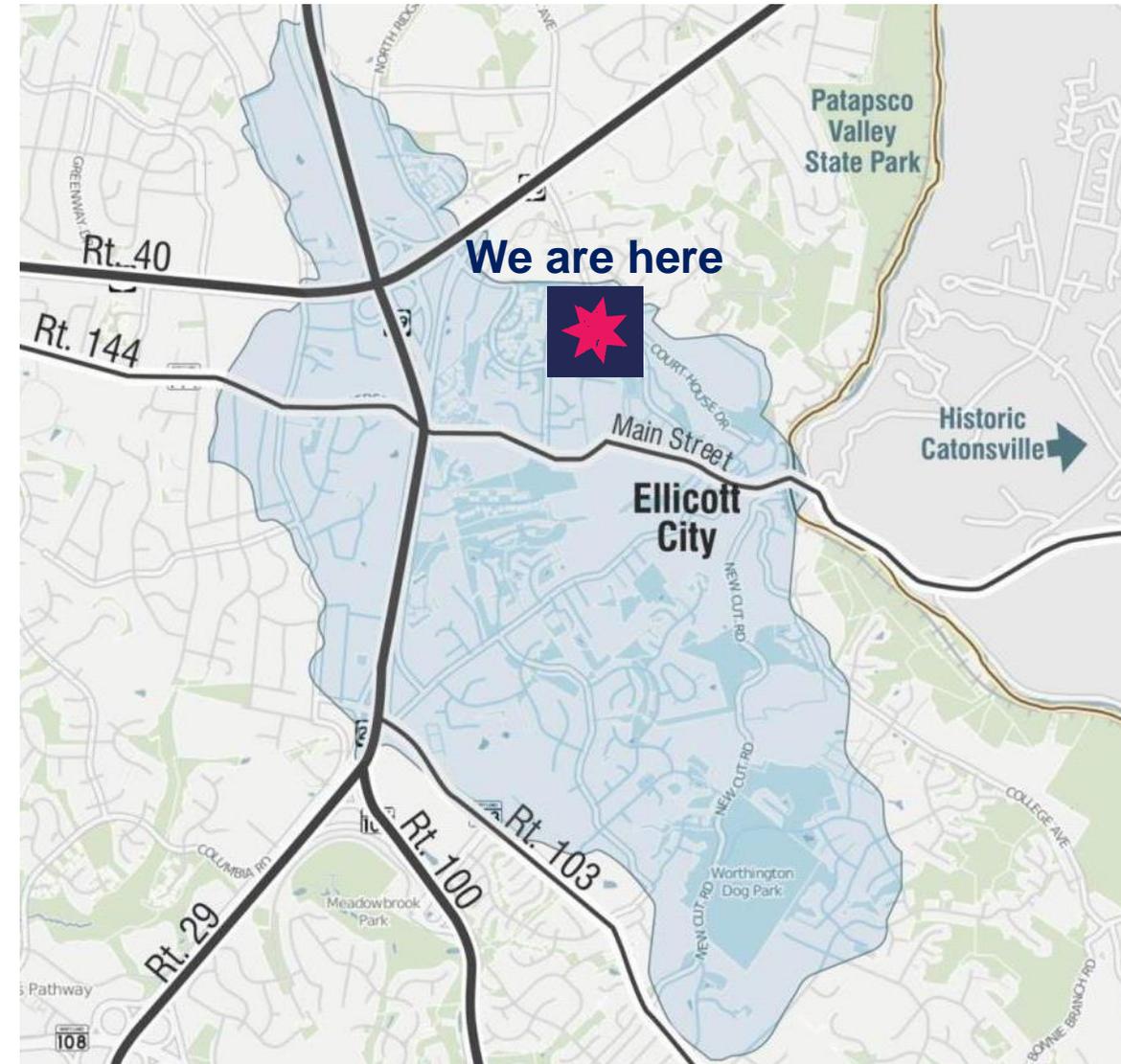
1-30 Years (Short, Mid, and Long-Term Projects and Initiatives, Including 5-Year Strategy)

How are Priorities Determined?

Life Safety | Cost-Benefit | Ownership | Inter-Relationship with Other Priorities | Funding | Constructability | Phasing

What is Particularly Unique About this Master Plan?

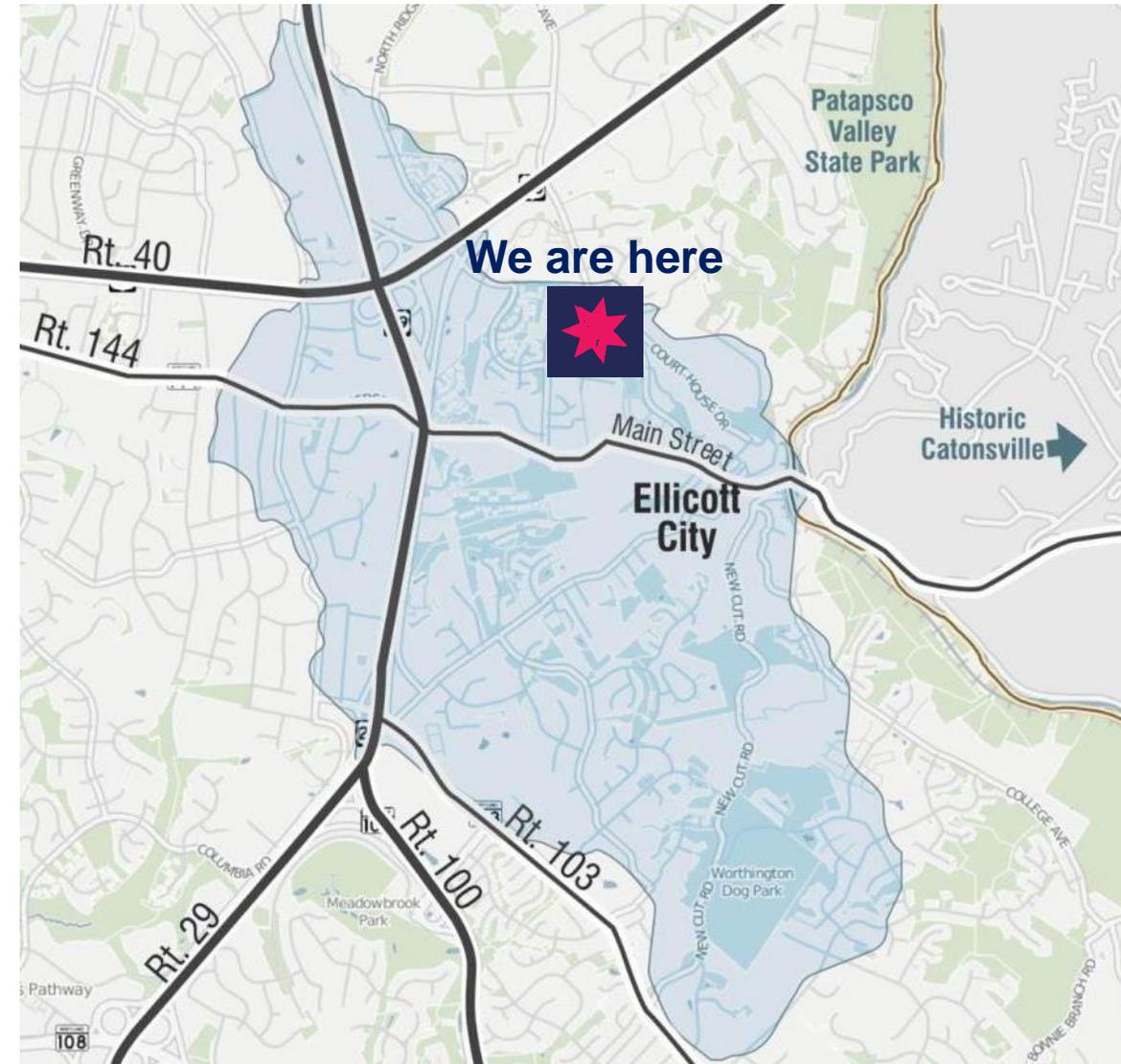
Interconnected Set of Challenges and Opportunities



Overview

Presentation for this Evening

- High level summary of overall master plan strategies to make Ellicott City more resilient
- Provide context for focused discussion on concepts for Lower Main | Riverfront
- Concepts grounded in additional modeling and 5-Year Strategy
- DESIGN INTENT – NOT FINAL DESIGNS
- Need to Recognize the Section 106 Historic Preservation Process



Early Foundations



Ridgetop,
Relatively flat,
developable

Tributary
valley,
steep,
challenging
access

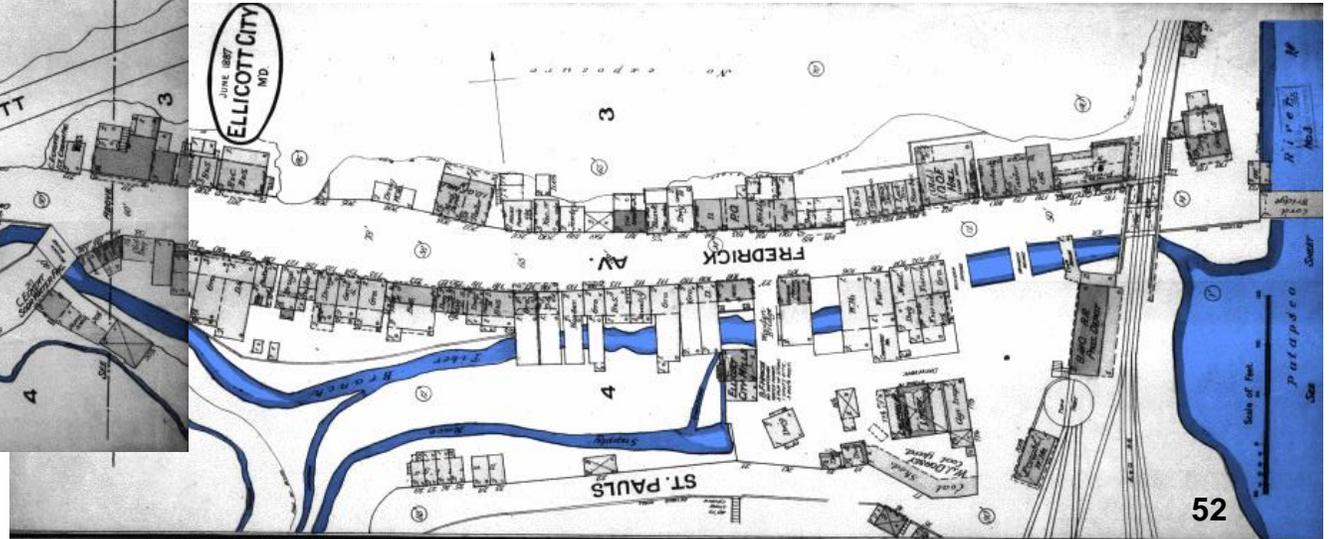
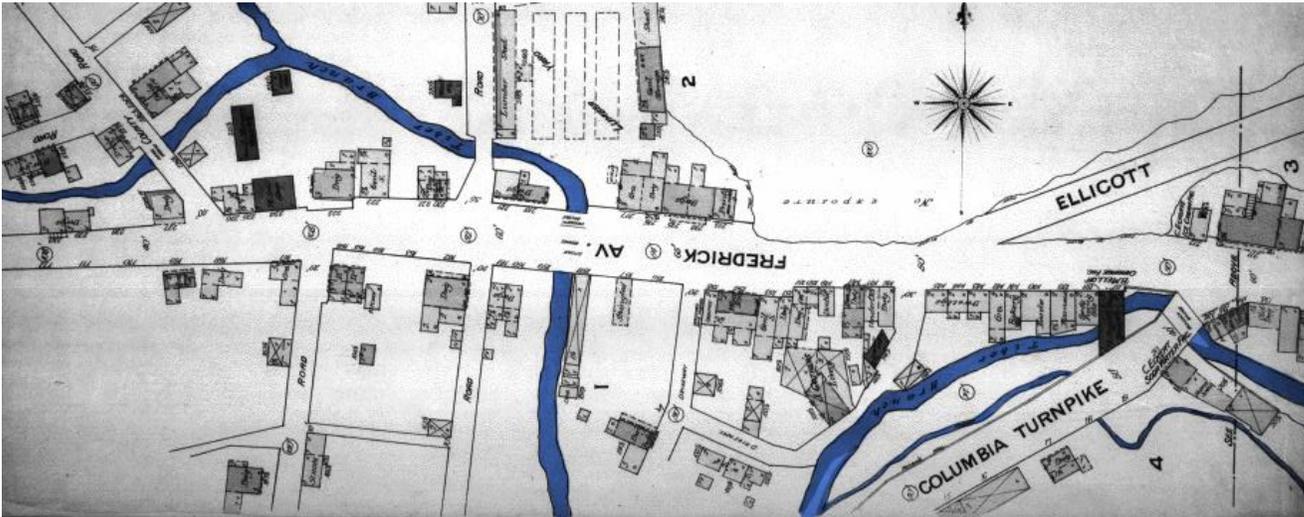
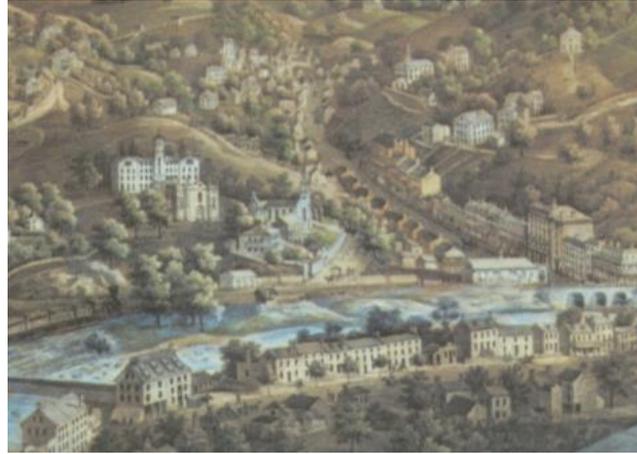
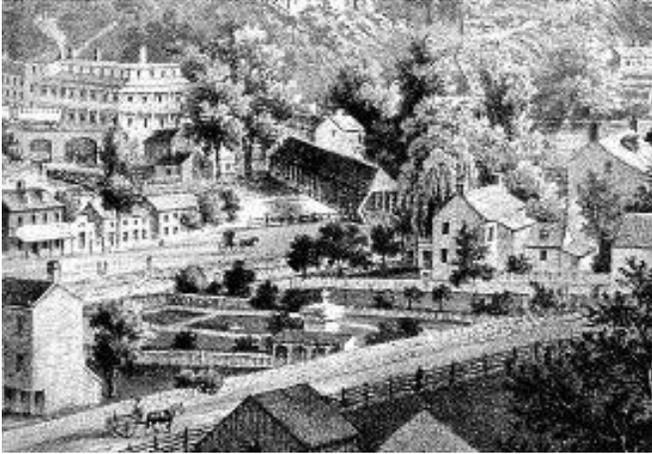
Tributary confluence,
Utility as mill site?
More expansive floodplain,
Room for town settlement



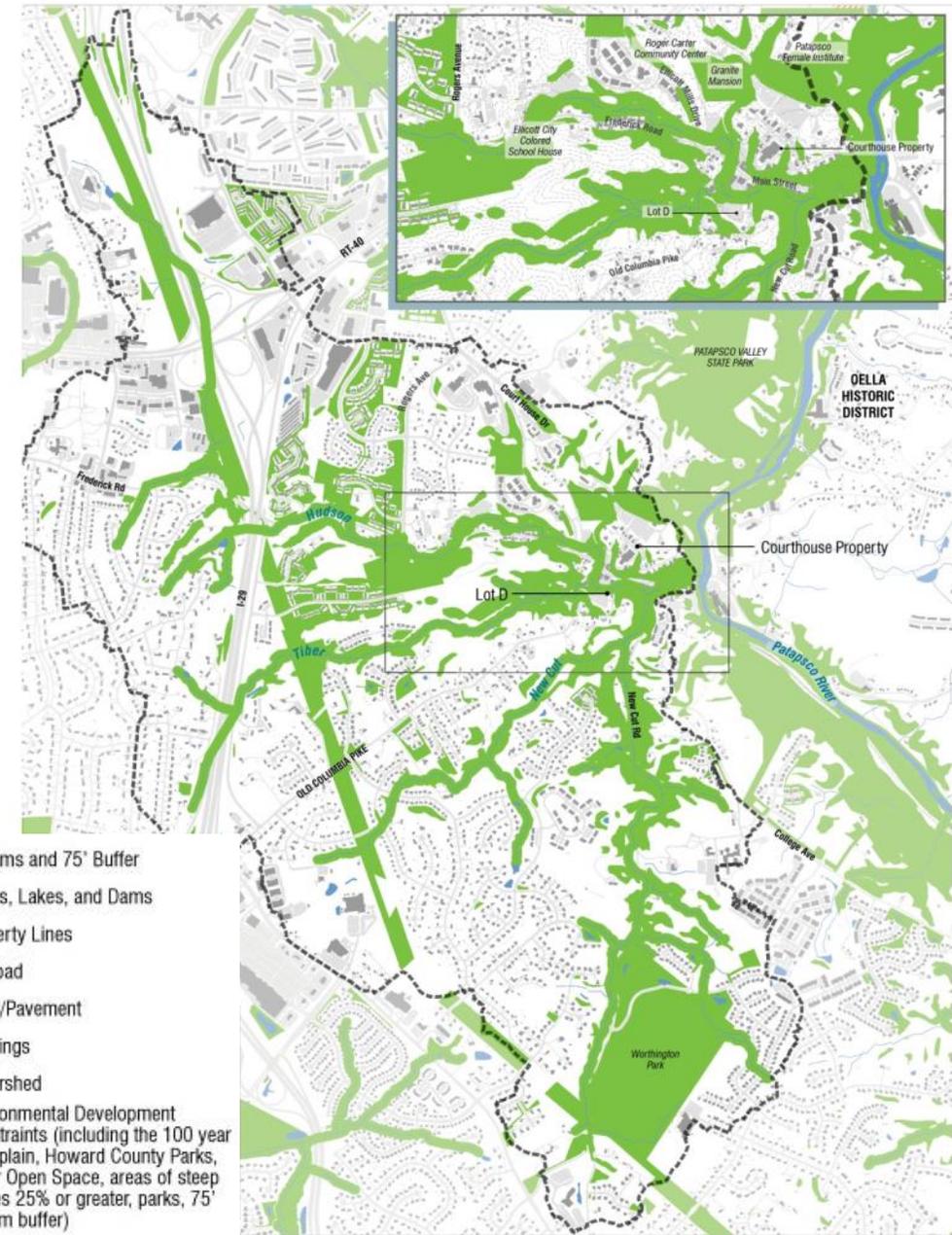
Present Day Ellicott City

Historic mills of Ellicott City

Early Foundations

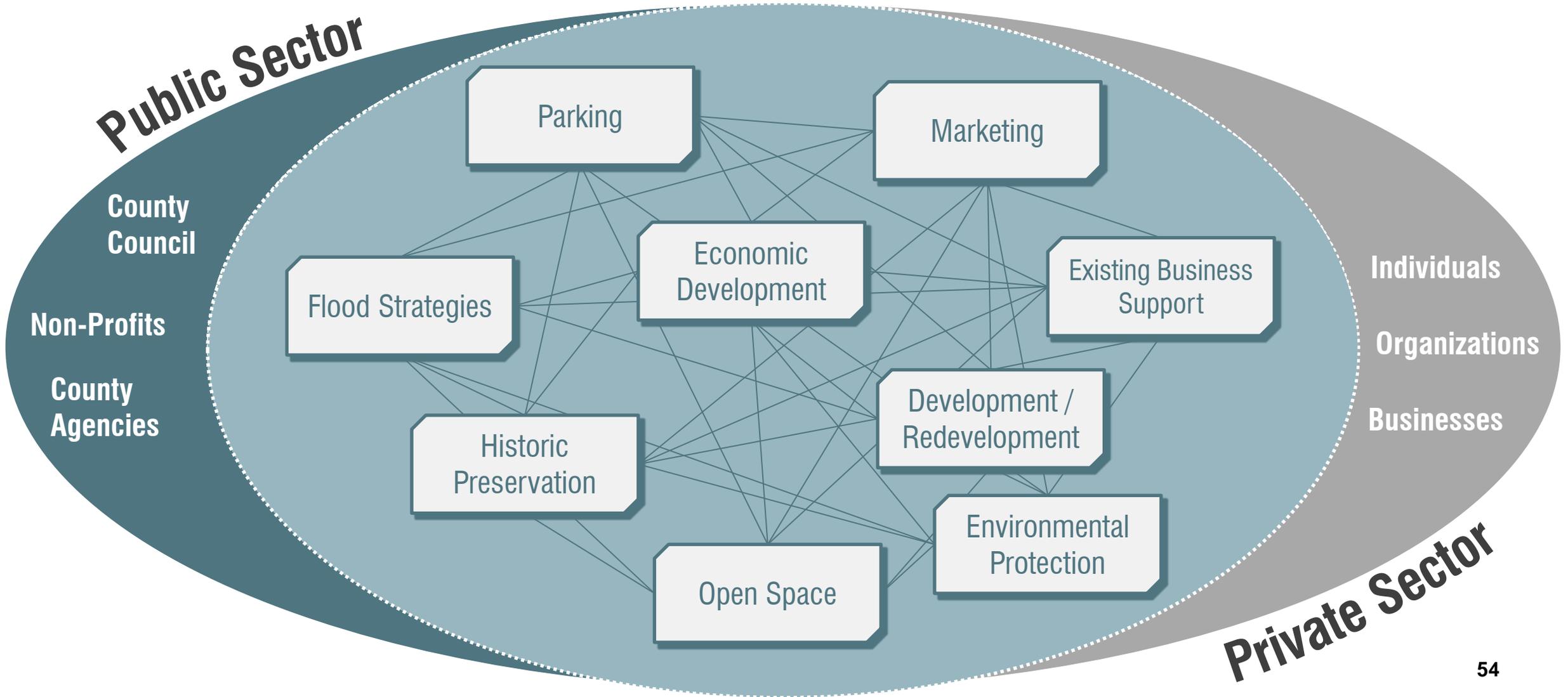


Watershed



-  Streams and 75' Buffer
-  Ponds, Lakes, and Dams
-  Property Lines
-  Railroad
-  Road/Pavement
-  Buildings
-  Watershed
-  Environmental Development Constraints (including the 100 year floodplain, Howard County Parks, Other Open Space, areas of steep slopes 25% or greater, parks, 75' stream buffer)

Moving Forward



Vision

Ellicott City and its watershed is a model, resilient community that thrives by protecting its people, commerce, history, culture and natural environment.



Master Plan Objectives | Core Goals



Life Safety: *Protect Lives* (Added Post-May 2018 Flood)



Rebuilding: *Emphasize resilience and placemaking in rebuilding*

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Strategies (Multiple Core Goals Apply to Each)

#1 MANAGING AND PROTECTING THE WATER

#2 PLANNING FOR ECONOMIC SUCCESS

#3 ENHANCING THE EXPERIENCE

#4 PROTECTING AND PROMOTING THE IDENTITY

#5 ORGANIZING FOR SUCCESS



Managing and Protecting the Water

Strategy 1 Considerations

Greatest Public Improvements to Reduce Flood Impacts

1. Address conveyance and retention;
2. While balancing: life safety, water quality, cost benefits, constructability and polices for appropriate growth and revitalization.

Strategy 1

Recommendations

1. Flood Management (Including 5-Year Strategy)
2. Emergency Management
3. Non-Structural Flood Proofing
4. Tiber-Hudson Watershed Special Protection District
5. Water Quality Improvements



Strategy 1

Emergency Management (On-Going Work Sessions with OEM)

1. When flash flooding is imminent, options are to **shelter in place** or **evacuate**
2. Elements:
 - Risk awareness
 - Sensors/Cameras integrated into streetscape
 - Alert warning integration
 - Access control and evacuation



Lower Main | Riverfront

Messaging and Preparedness

- In coordination with Public Safety entities
- “High Ground” maps
- Emergency Response Plans for Individual Businesses
- Monitoring and Warning Systems





Planning for Economic Success

Strategy 2

Recommendations

1. Historic Preservation Program Enhancements
2. Market Attraction
3. Mixed-Use Opportunities
 - Relocation of businesses
 - New businesses
 - High standards/innovative design
4. Business Support Programs
 - Cooperative marketing
 - Business plan development





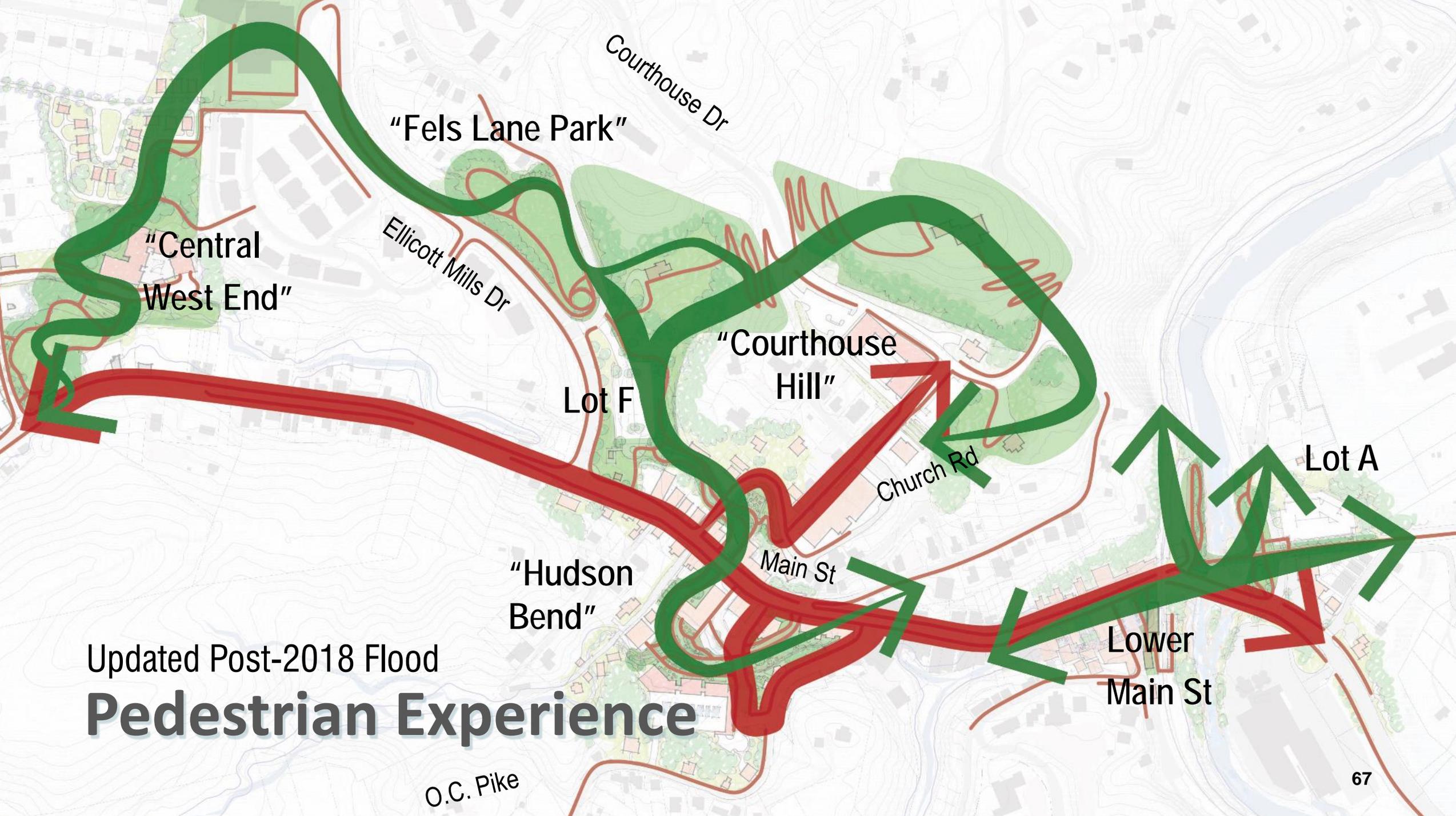
Enhancing the Experience

3 Recommendations

Recommendations

1. Transportation Network
2. Parking / Temporary Shuttles
3. Main Street Streetscape
4. Parks, Open and Amenity Spaces
5. Sidewalk / Trail Network
6. Wayfinding and Signage
7. Lighting and Public Art
8. Programming and Events





"Fels Lane Park"

"Central West End"

"Courthouse Hill"

"Hudson Bend"

Lot F

Lot A

Updated Post-2018 Flood
Pedestrian Experience

O.C. Pike

Primary Parking Resource Opportunities



Public Parking Decks

- Lots A and D
- Potential for Lot F

Street Parking

- Lower Main: Drop-Off / Pick-Up / Delivery Only
- Upper Main: Flexible Parking Zone
- Maryland Avenue: Flexible Parking

Temporary Shuttle



Protecting and Promoting the Identity

4

Strategy 4

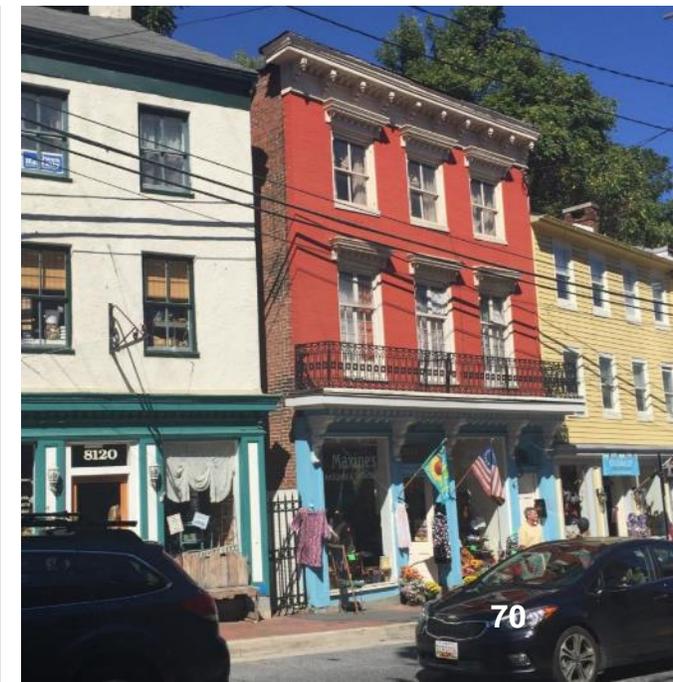
Recommendations

1. Physical Environment (Inside and Outside Core – Character-Based Codes)
2. Community Brand
3. Community Marketing Program



OLD 
ELICOTT
CITY

Individually Crafted
Since 1772



Promoting the Identity

**Pardon
Our Mess**

**Another Project
Making Our
Community
Better**

**OLD ★
ELICOTT
CITY**



An advertisement for Old Ellicott City. The top half shows a person's legs in grey shorts and blue sneakers walking down a set of stone stairs. The text "IT'S OBVIOUS HE SHOPS IN OLD ELLICOTT CITY" is overlaid in white and pink. Below the stairs, a pink banner contains the text "HEALTHY - IT'S HOW WE LIVE". The bottom half of the ad features the Old Ellicott City logo, the EC P Partnership logo, and a block of placeholder text: "Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim". At the bottom right, it says "VisitEllicottCity.com".

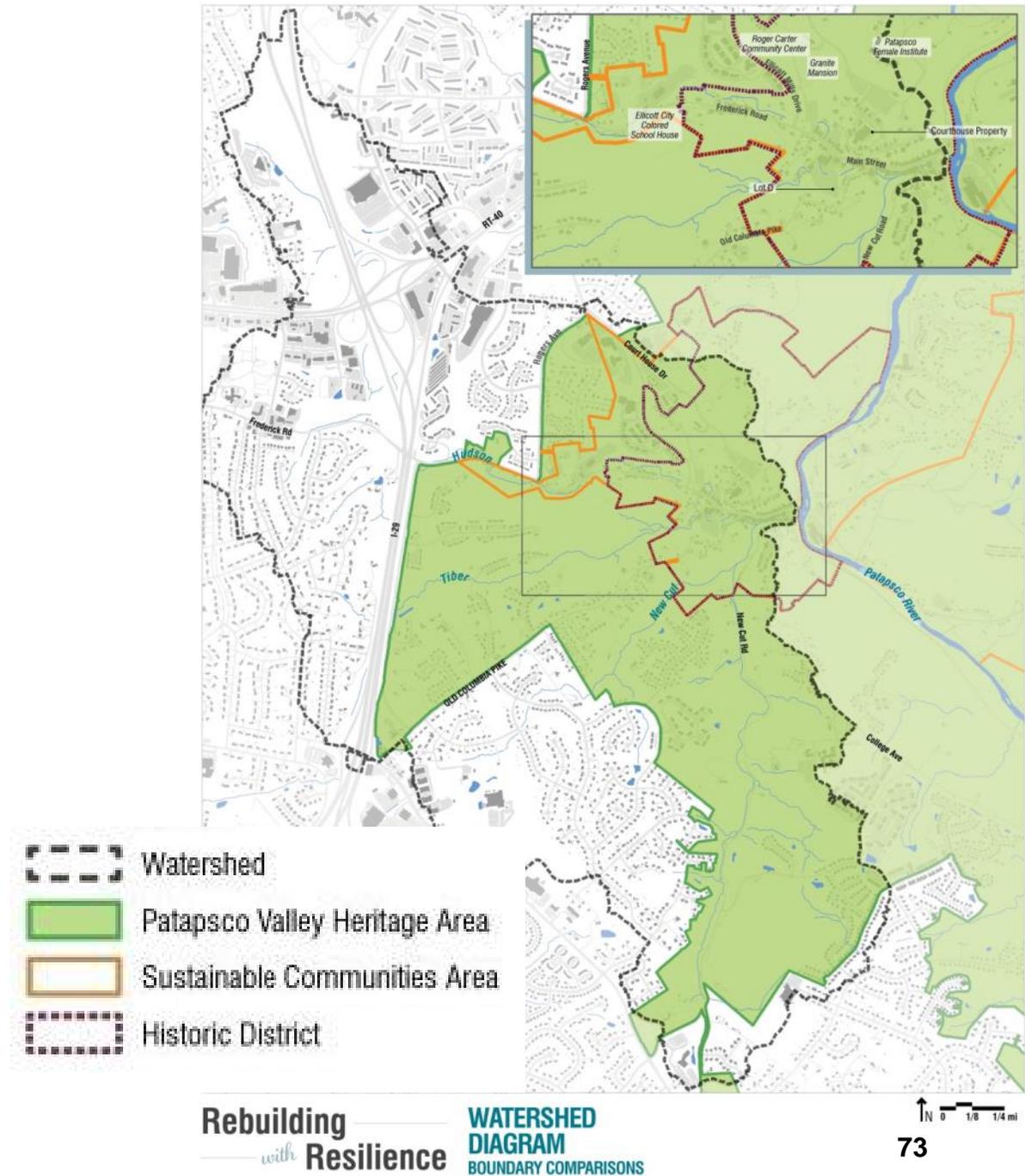


Organizing for Success

Strategy 5

Recommendations

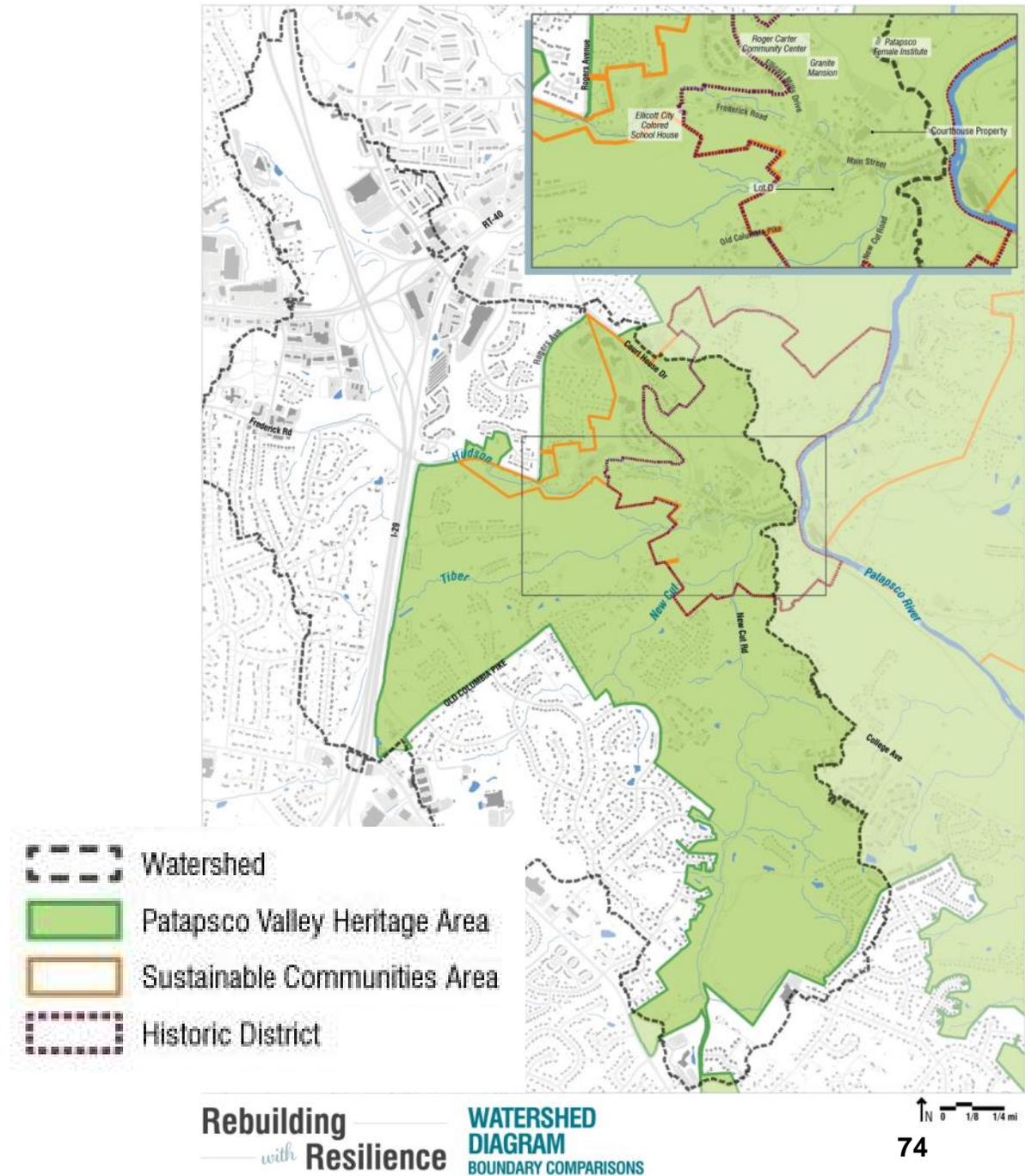
1. Organizational Entity – **Sole Focus: Ellicott City**
2. Explore Sustainable Funding (for Organizational Entity)
3. Ellicott City Forum
4. Bi-County Summit



Strategy 5

Organizational Entity

- Ellicott City – sole focus
- Manage Ellicott City and oversee deliberate partnerships to implement master plan
- Understanding of urban mixed-use revitalization and seeking innovative solutions
- Understanding of Ellicott City's unique character (distinct from suburban areas of county)



New | Refined Concepts

New | Refined Concepts: Focus Areas

LOWER MAIN | RIVERFRONT

UPPER MAIN | "HUDSON BEND"

WEST END MAIN

"COURTHOUSE HILL"

WATERSHED AND DEBRIS MANAGEMENT

Focus Areas



NOTE: Progress Plan. *Illustrative Plan to be updated to represent refinements to West End Main conveyance improvements, Lot F/Ellicott Mills Drive conveyance improvements, Barnard Fort House property planning and additional refinements to Lower Main*

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Lower Main | Riverfront

Tiber Channel Expansion – Design Opportunities

- DESIGN INTENT – NOT FINAL DESIGN
- Creation of an amenity – visual and functional – “Tiber Park”
- Historic and flood mitigation interpretation
- New commercial viability – Tiber Alley and lower St. Paul Street
- Expanded lower Main Street sidewalks

Understanding that open space will not replace what was there – but that this open space needs to be the best that it can be



Lower Main | Riverfront

Tiber Channel Expansion – Design Realities

- Hard surface
- Potential limited use of bedrock
- Limited base flow
- Maintaining hydraulic capacity while functioning as an amenity space
- Culvert openings



Lower Main | Riverfront

Tiber Channel Expansion – Design Realities *(cont.)*

- Balancing historic interpretation with hydraulic function
- Maryland Avenue constriction
- Potential for debris
- Maintaining appropriate scale
- Accessibility



Lower Main | Riverfront

Tiber Channel Expansion – Key Considerations for Design

- This place matters – intrinsic value of history - important stories to tell
- Appropriate historic interpretation
- Sensitivity to context for the reuse of building materials or reconstruction of buildings
- Building-by-building structural evaluation (106 Process) to determine materials for salvage and reuse – don't preclude use of facades
- Human scale and shade



Lower Main | Riverfront

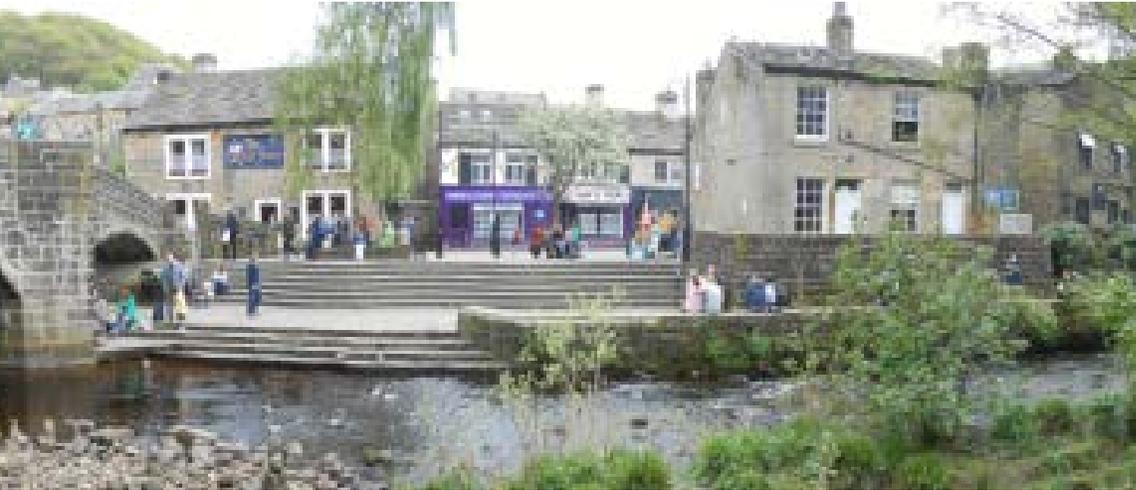
Tiber Channel Expansion – Key Considerations for Design (*cont.*)

- Life safety -flood hazard messaging and pedestrian evacuation routes
- Accessibility
- Channel flow to Maryland Ave culverts
- Multiple opportunities for interpretation and design – not finalized now but don't preclude options



Lower Main | Riverfront

Precedents



Hebden Bridge
West Yorkshire, England

Lower Main | Riverfront

Precedents



Battery Park, NYC



Cheonggyecheon River, South Korea



Donghao Chung
Guangzhou, China

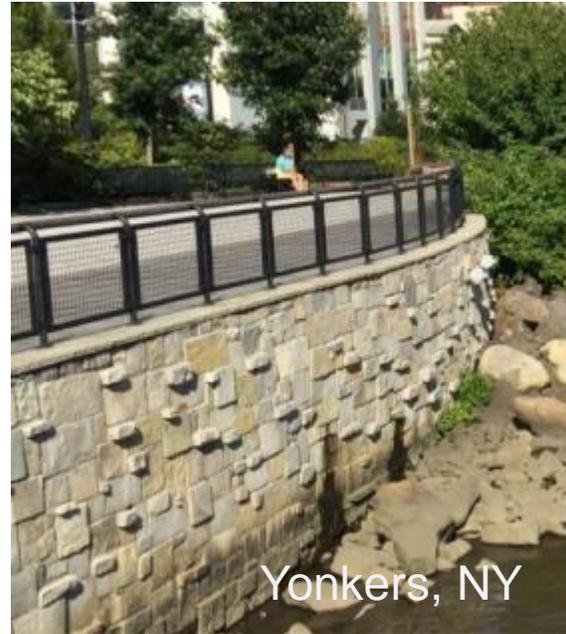


Lower Main | Riverfront

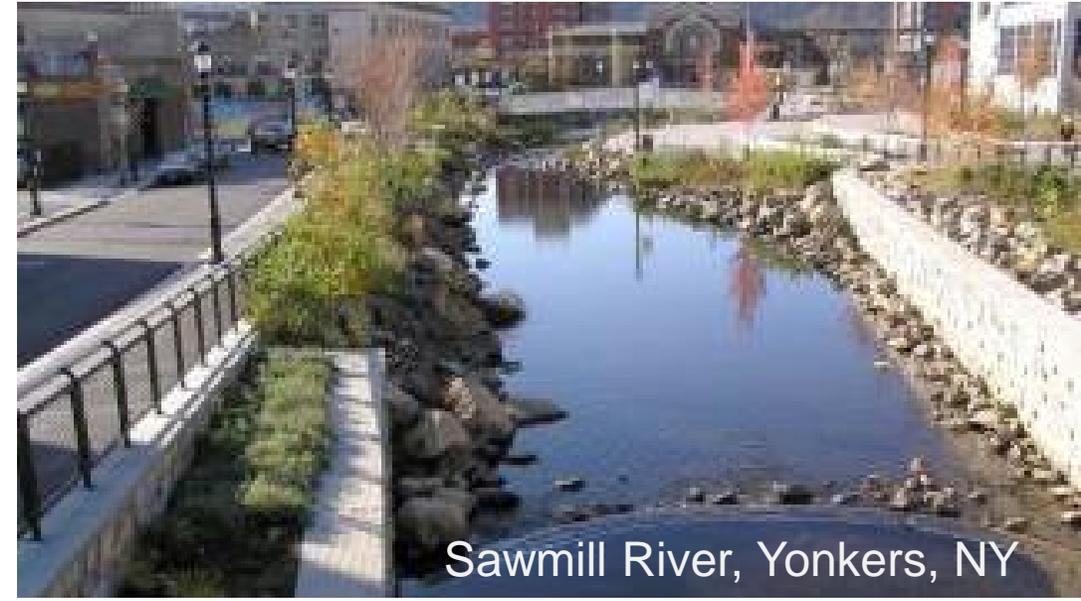
Precedents



Berkeley Springs, WVA



Yonkers, NY



Sawmill River, Yonkers, NY



Berkeley Springs, WVA



Ljubljana, Slovenia



86
San Luis Obispo

Lower Main | Riverfront

Precedents



Greenville, SC



Lower Main | Riverfront

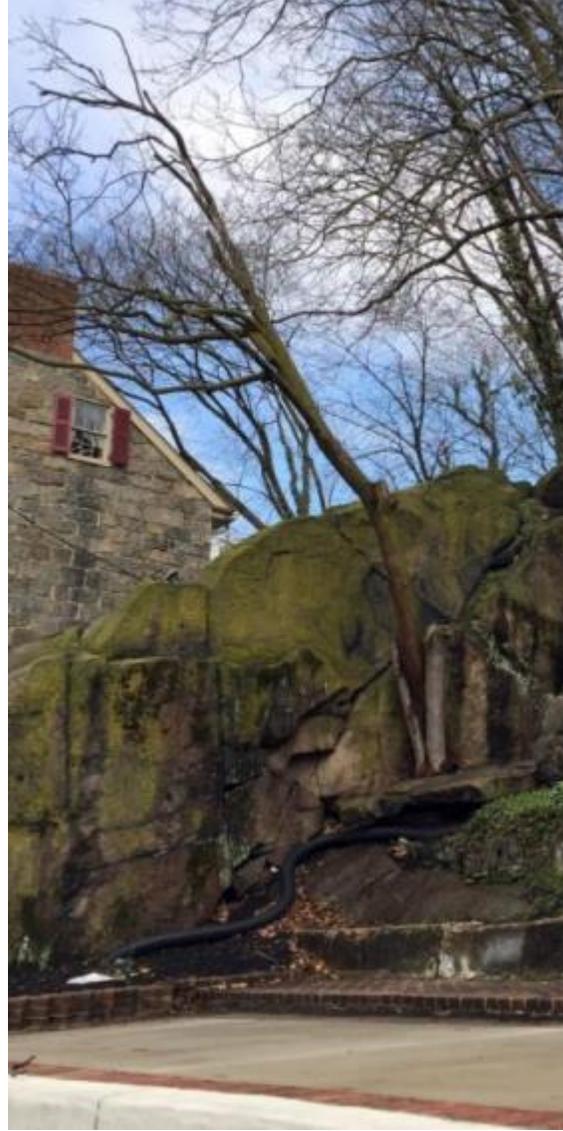
Ellicott City Influence

- Bedrock
- Stone walls
- Terracing | planted terraces
- Steps
- Fencing
- Architecture | remnant buildings
- Scale



Lower Main | Riverfront

Ellicott City Influences



Lower Main | Riverfront

Interpretive Opportunities

- Signage
- Pavement markings of former foundation walls – within sidewalk and / or channel
- Metal frame outline of buildings
- Thin cable outline of buildings and lighting
- Shade structures
- Flooding awareness



Lower Main | Riverfront

Interpretation Opportunities



Clipper Mill, Baltimore



Berkeley Springs, WVA



Clipper Mill, Baltimore

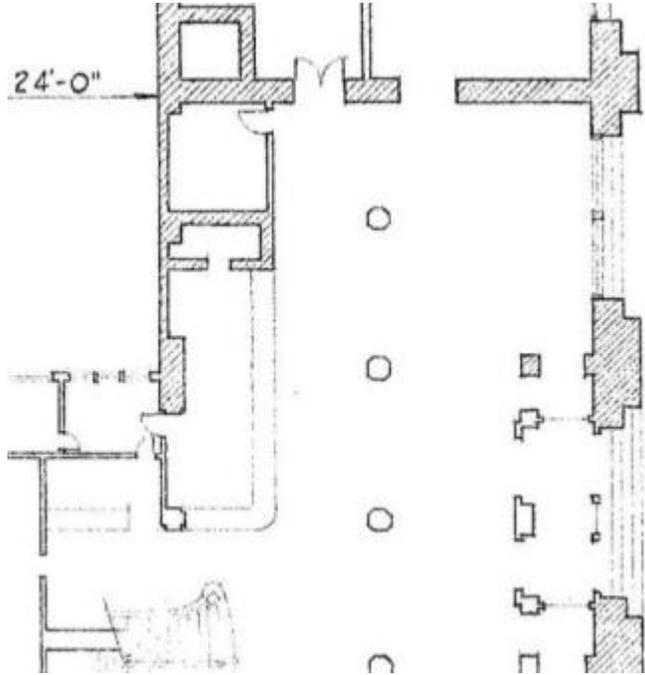


Clipper Mill, Baltimore



Berkeley Springs, WVA

Lower Main | Riverfront

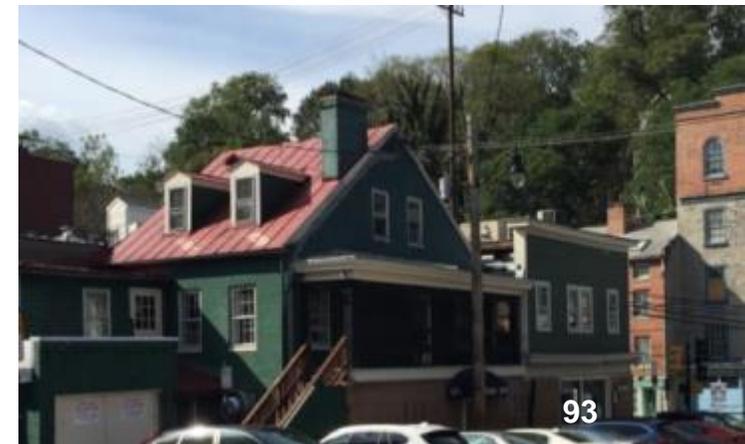


Interpretation Opportunities



Lower Main | Riverfront

Interpretation Opportunities



Lower Main | Riverfront

Philadelphia, PA



Philadelphia, PA

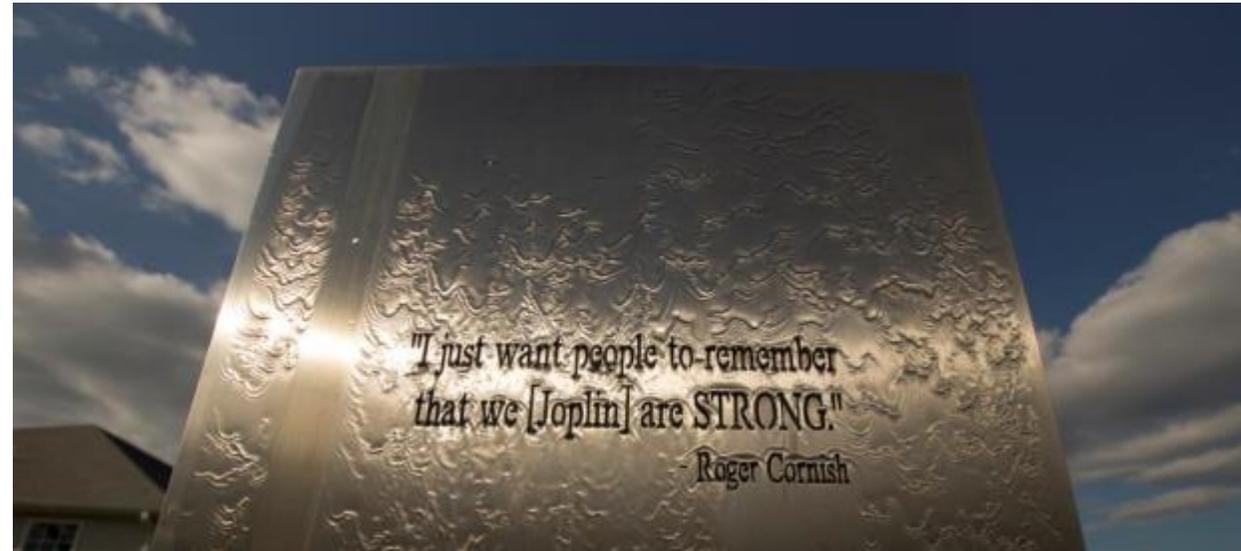
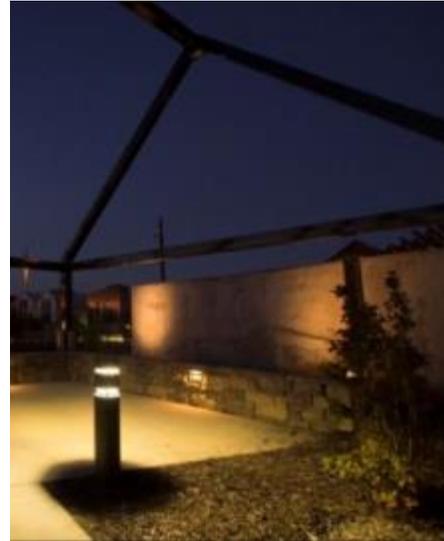
Interpretation Opportunities



Layered Gallery by Gianni Botsford Architects

Lower Main | Riverfront

Interpretation Opportunities
Butterfly Garden, Joplin MO; Nancy Chikaraishi



Lower Main | Riverfront

Interpretation Opportunities
Shadowcatcher; Hood Studio

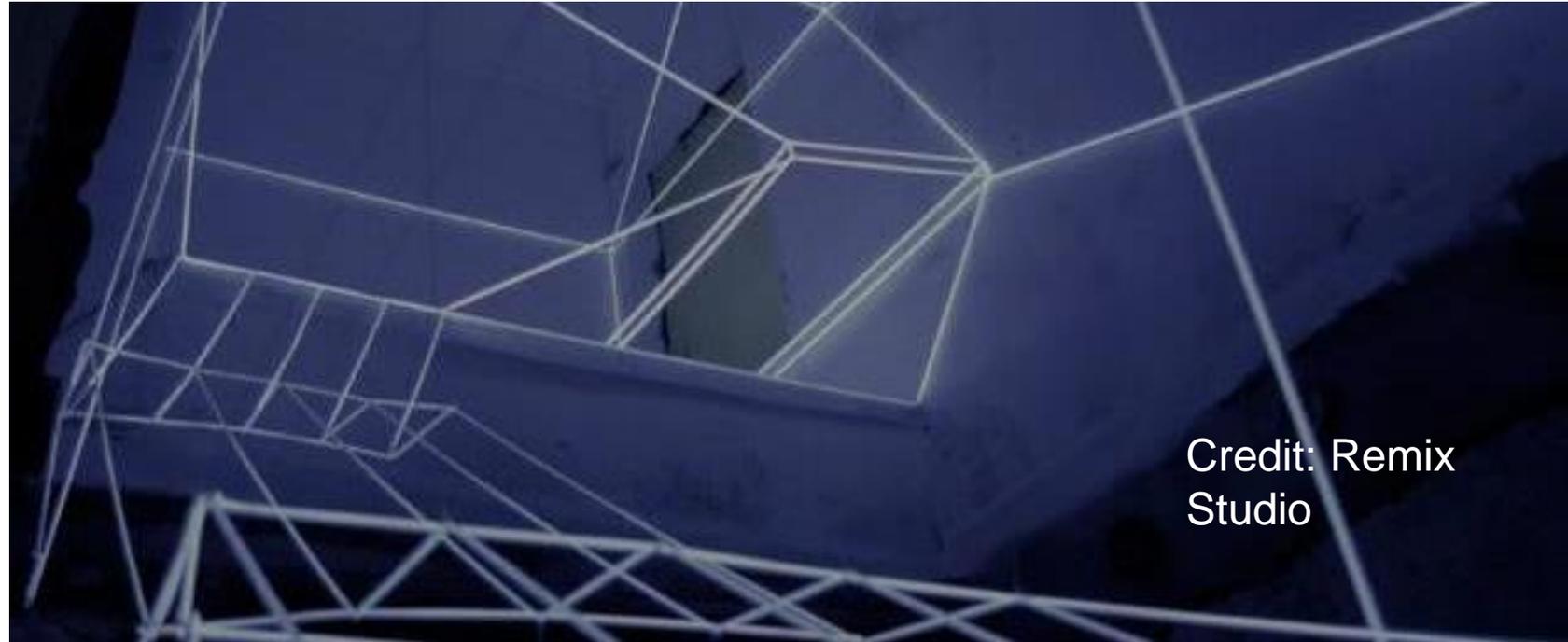


Lower Main | Riverfront

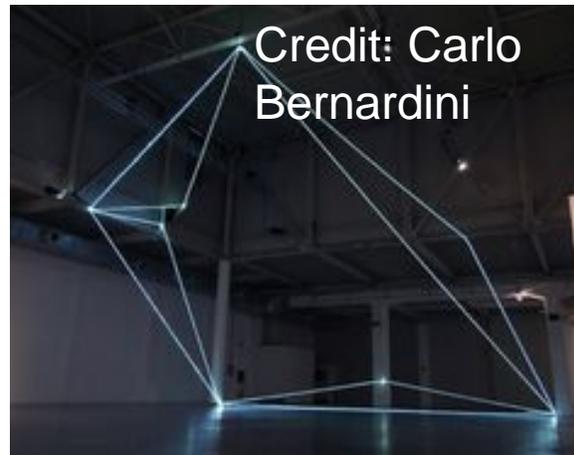
Interpretation Opportunities



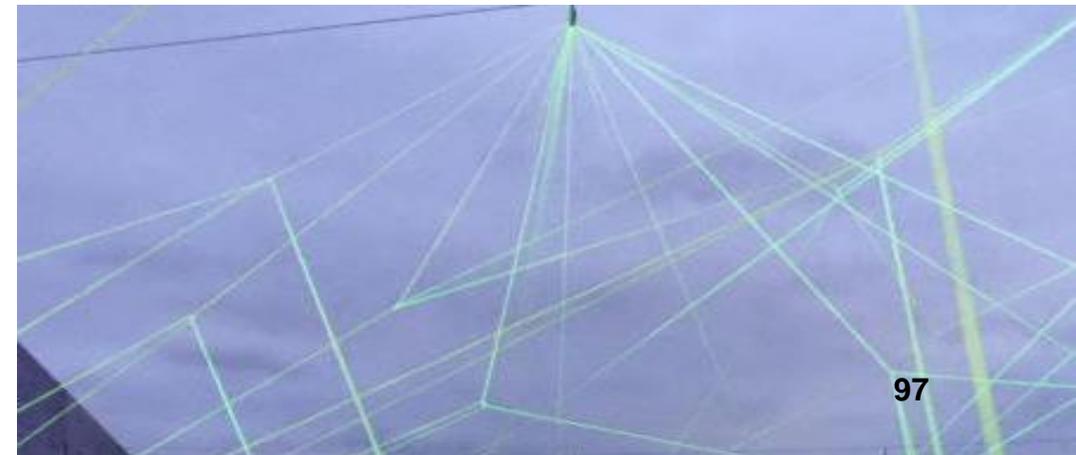
Credit: Remix
Studio



Credit: Remix
Studio



Credit: Carlo
Bernardini



Lower Main | Riverfront

Interpretation Opportunities
WovenShade; Rios Clementi Hale Studios

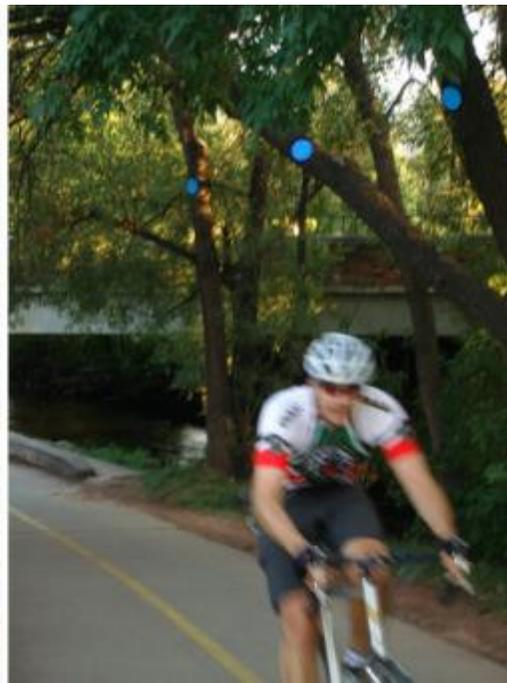
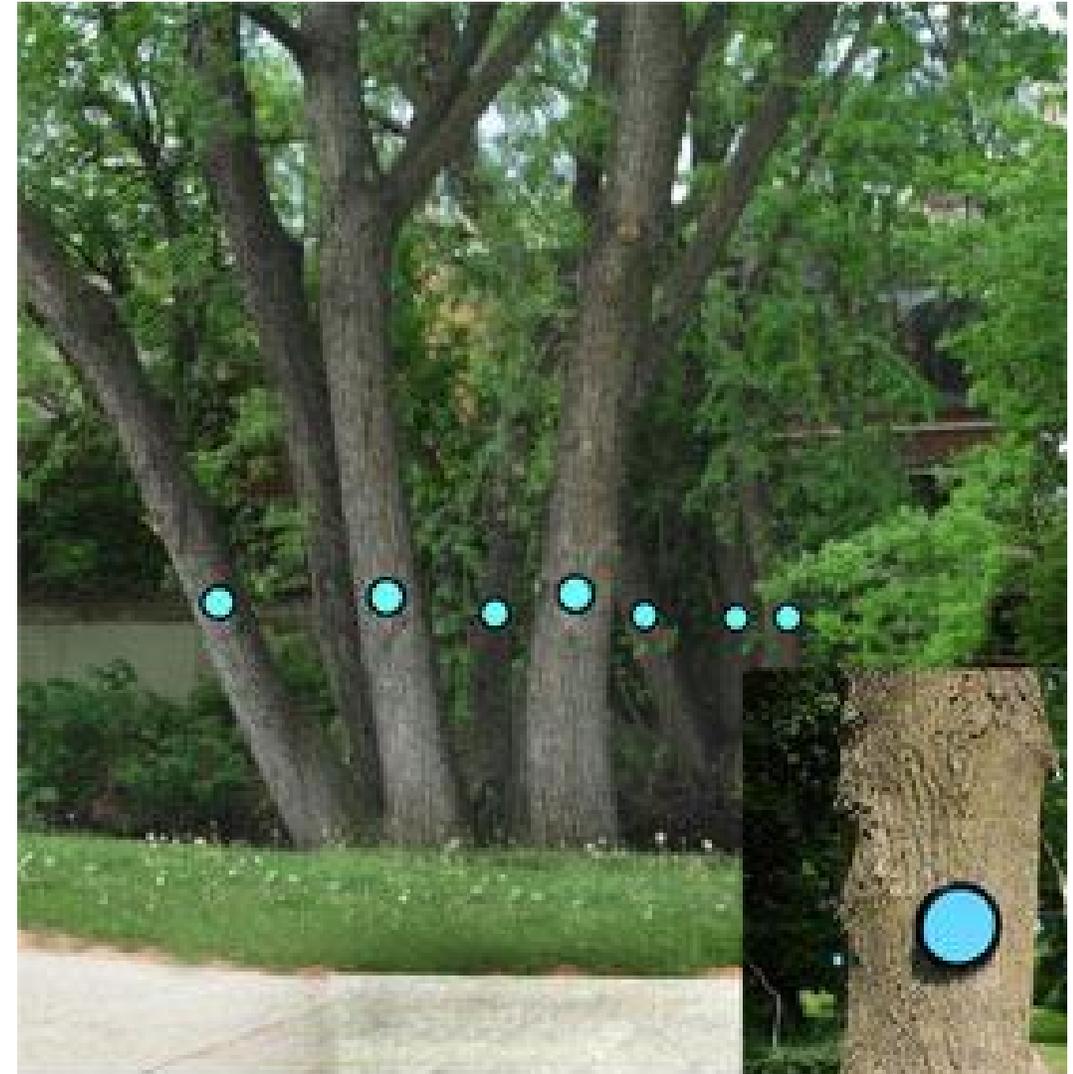


San Antonio, TX



Lower Main | Riverfront

Interpretation Opportunities



“Connect the Dots” Boulder, CO
Credit: Mary Miss

Lower Main | Riverfront

Site Elements

- Small trees (locations based upon hydraulics)
- Planters / pots
- Fencing
- Shade structures
- Bollards
- Messaging



Lower Main | Riverfront

Planters | Pots



New York, NY



Niagara-on-the-Lake, ONT



Greenville, SC



Niagara-on-the-Lake, ONT

Lower Main | Riverfront

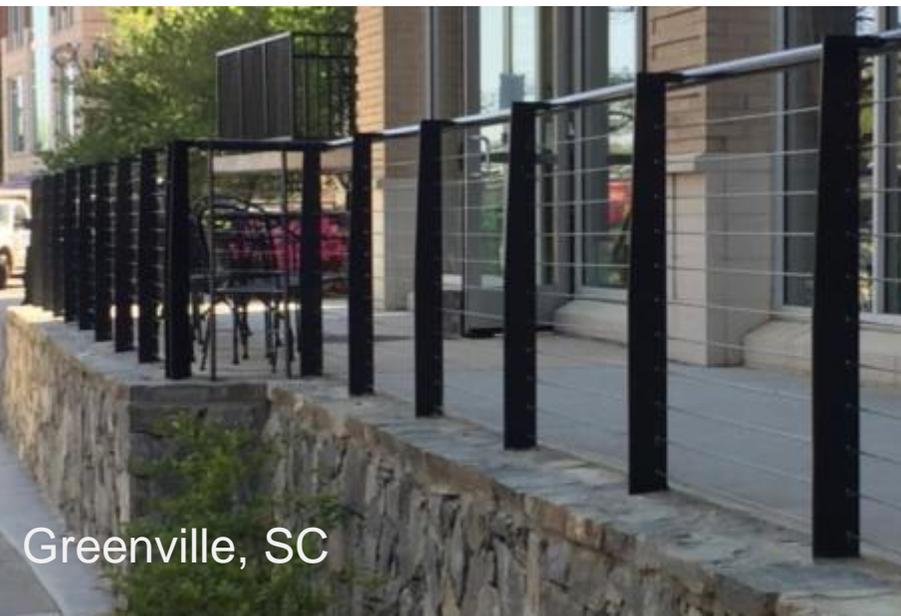
Fencing



Clipper Mill, Baltimore



Ellicott City



Greenville, SC



Hampden, Baltimore

Lower Main | Riverfront

Shade Structures



Lower Main | Riverfront

Surfaces



South Korea



New York, NY



Baden-Baden, Germany

Lower Main | Riverfront

Surfaces



Lower Main | Riverfront

Messaging



Greenville, SC



Austin, TX

Lower Main | Riverfront

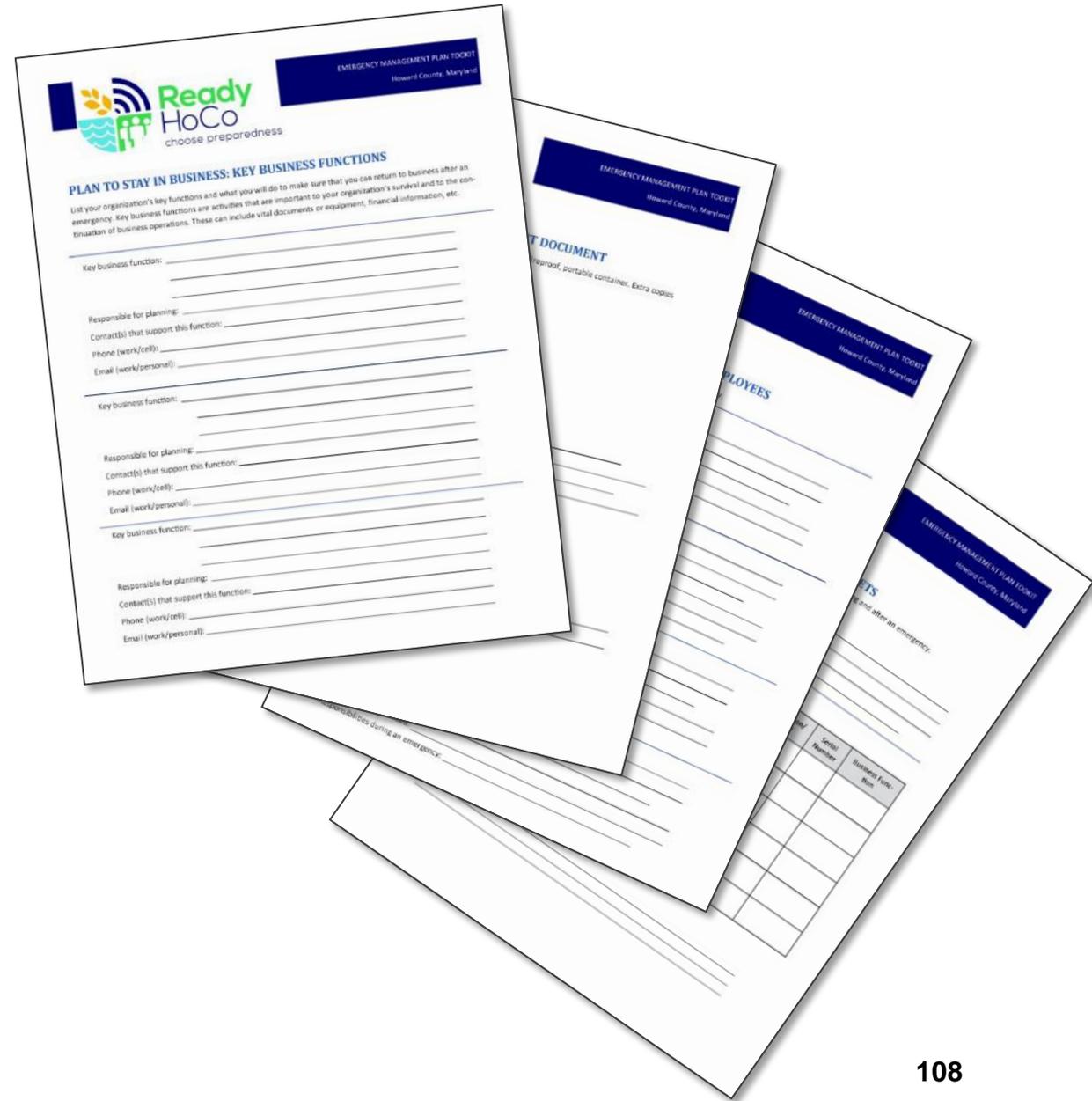
Messaging



Lower Main | Riverfront

Messaging and Preparedness

- In coordination with Public Safety entities
- “High Ground” maps
- Emergency Response Plans for Individual Businesses
- Monitoring and Warning Systems



Lower Main | Riverfront

Scenario #1: Terraced Channel

- Existing Main Street curb locations
- Terraces, steps and/or walls
- Use of foundation walls – seat walls, railings and interpretation





Caplan's

Bean Hollow

Cacao Lane

Main St

B&O

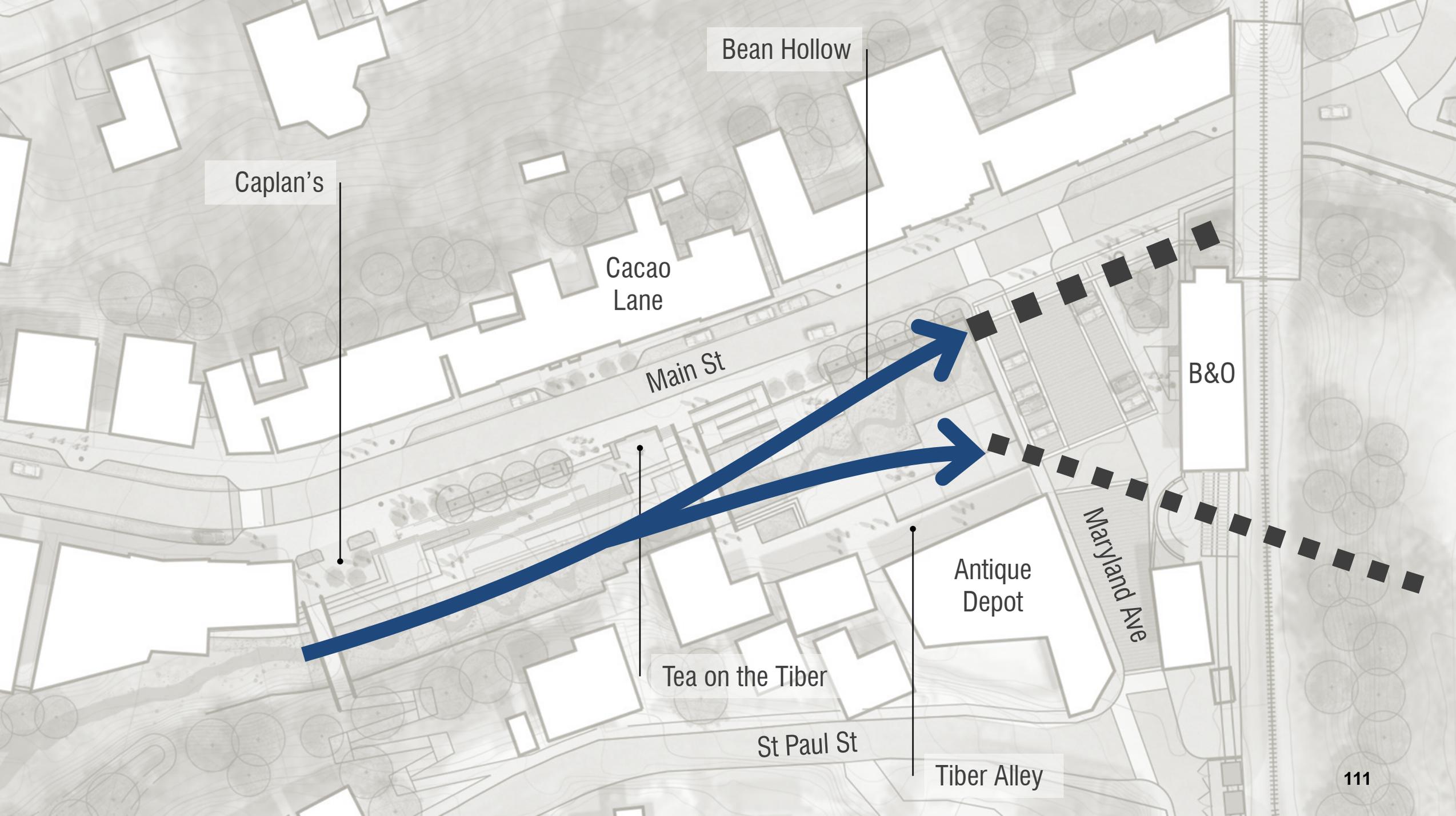
Antique Depot

Maryland Ave

Tea on the Tiber

St Paul St

Tiber Alley



Caplan's

Bean Hollow

Cacao Lane

Main St

Tea on the Tiber

St Paul St

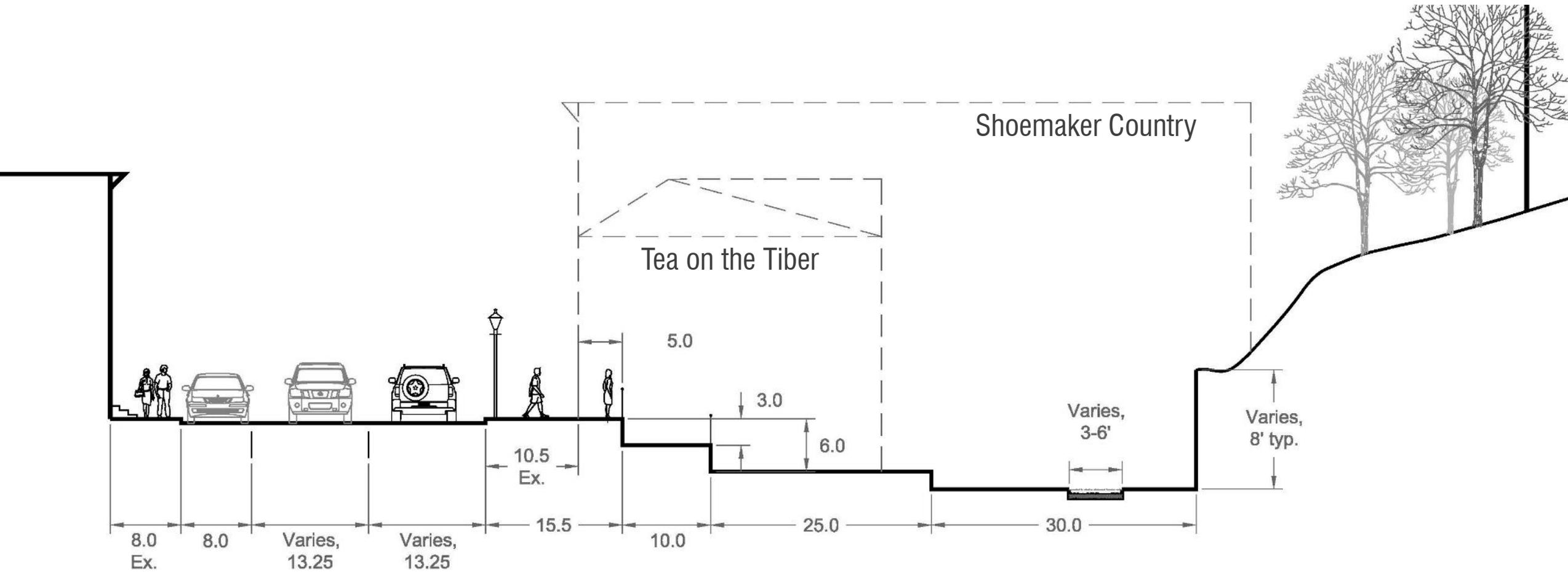
Antique Depot

Tiber Alley

Maryland Ave

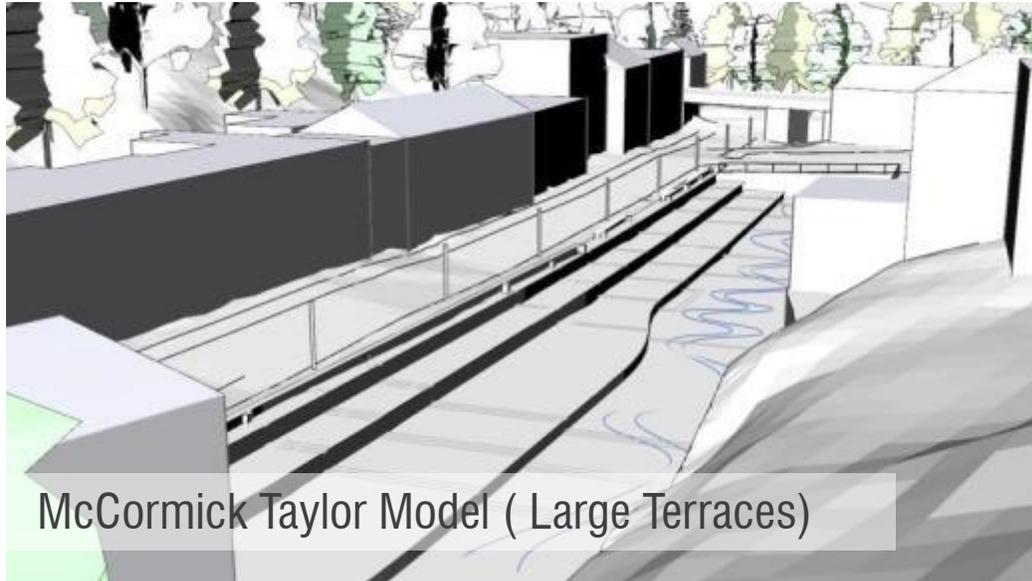
B&O

Lower Main | Riverfront

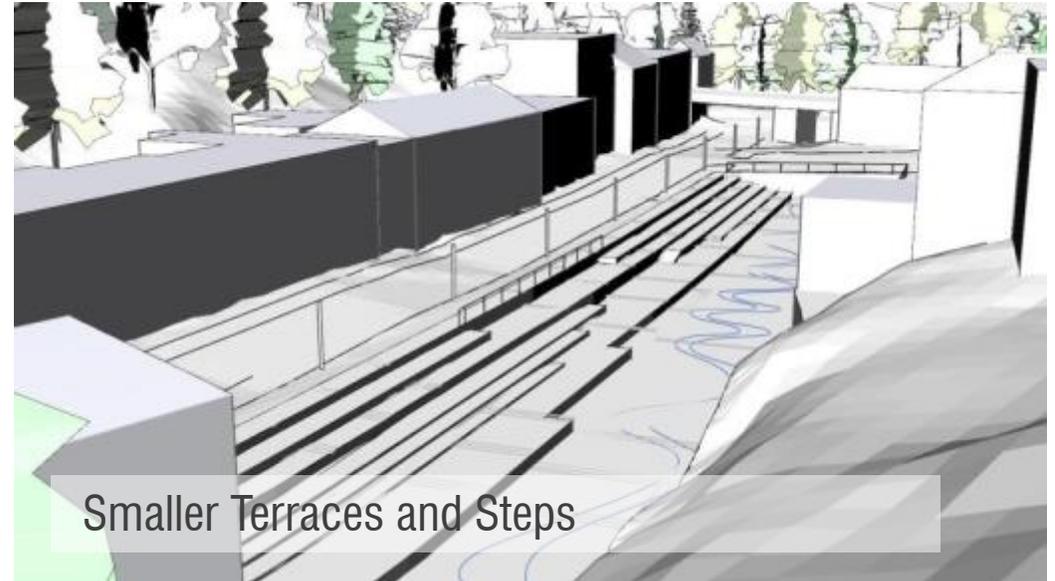


“Tiber Park” Cross Section A: McCormick Taylor Model (Terraces)

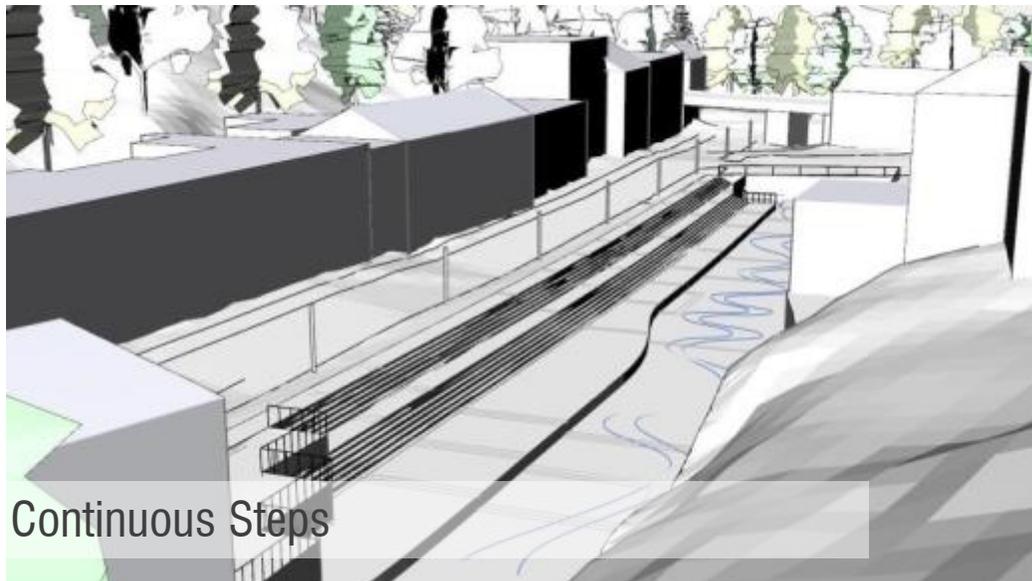
Lower Main | Riverfront



McCormick Taylor Model (Large Terraces)



Smaller Terraces and Steps

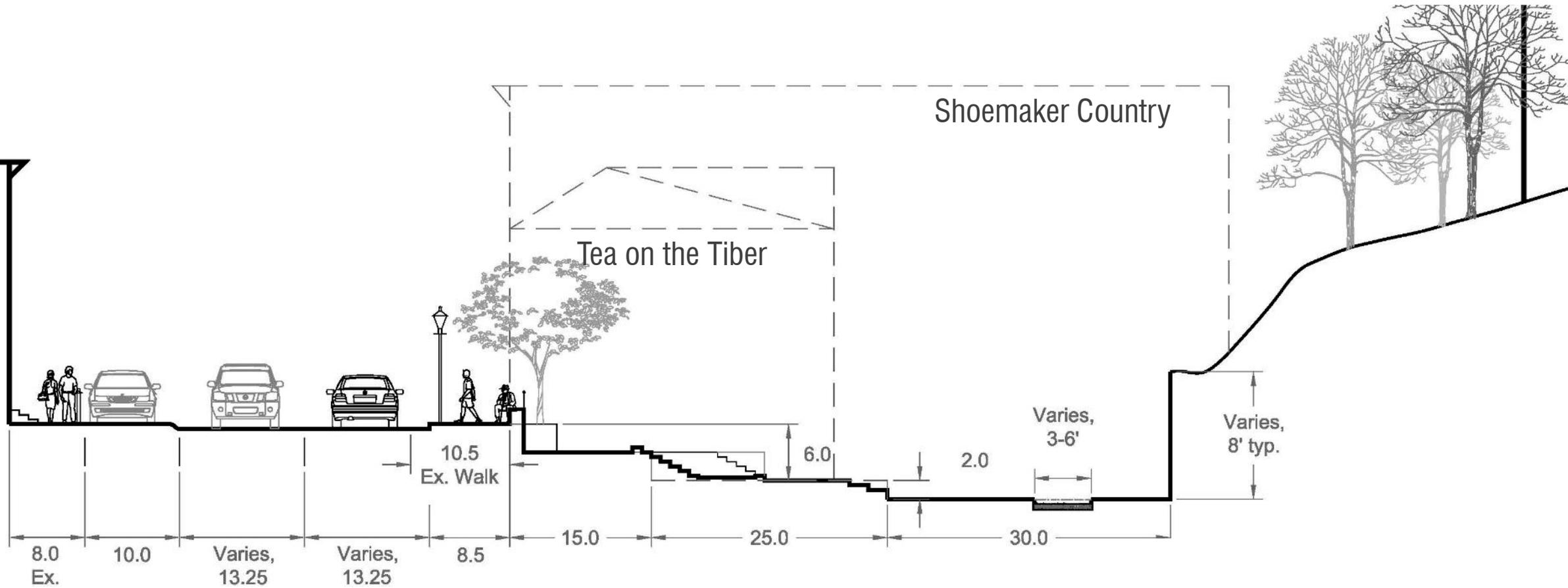


Continuous Steps



Wide Channel / Expanded Sidewalk

Lower Main | Riverfront



“Tiber Park” Cross Section B: Steps and Terraces



Caplan's

Bean Hollow

Cacao Lane

Main St

B&O

Antique Depot

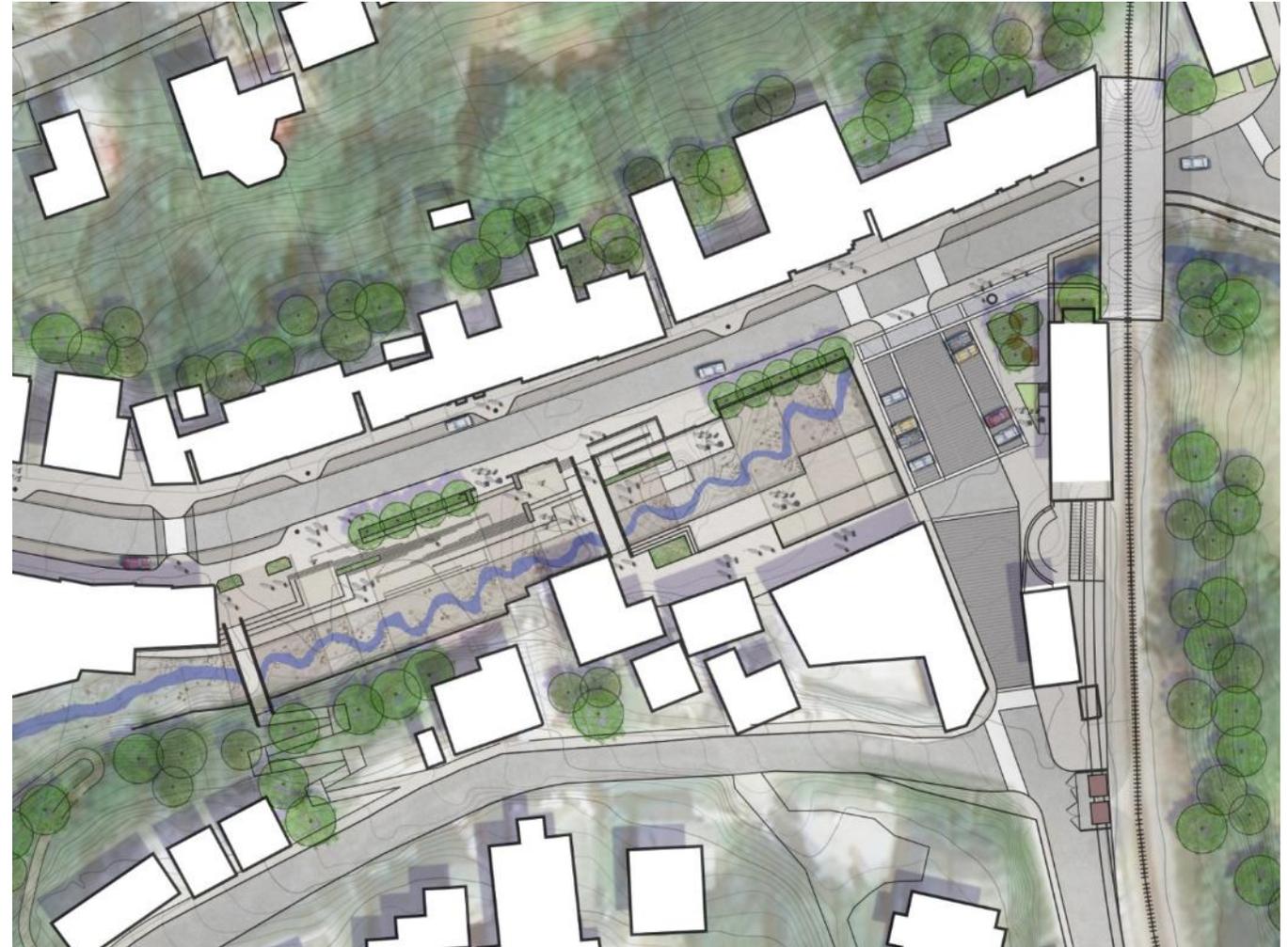
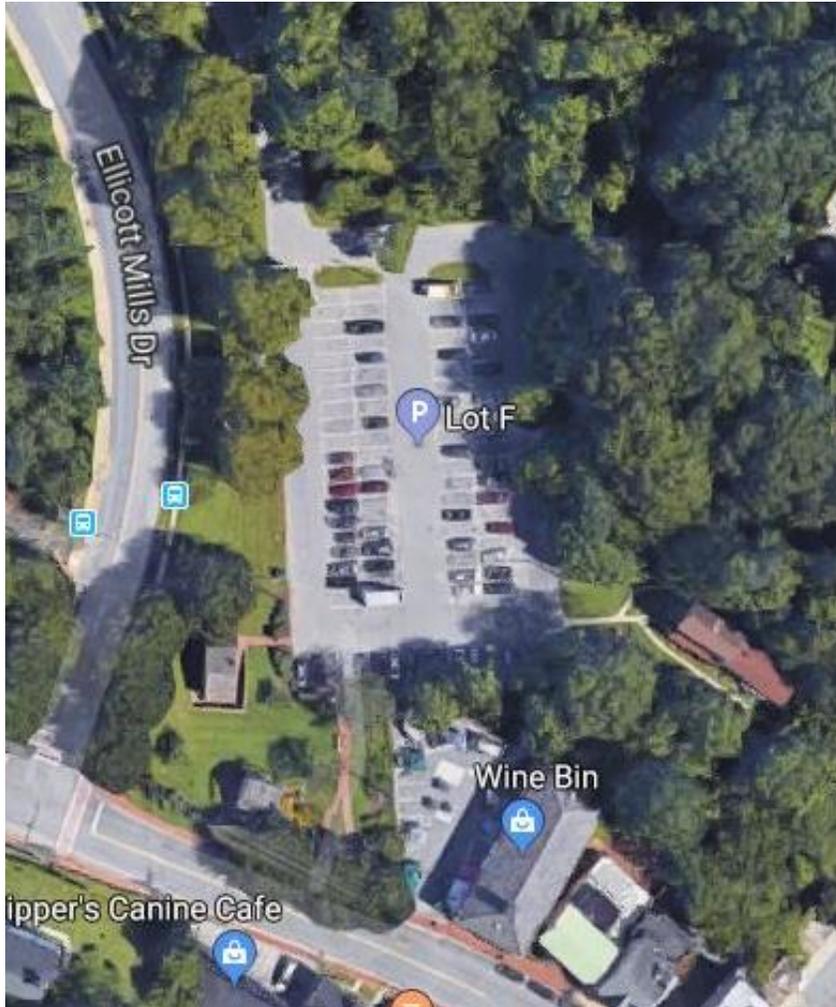
Maryland Ave

Tea on the Tiber

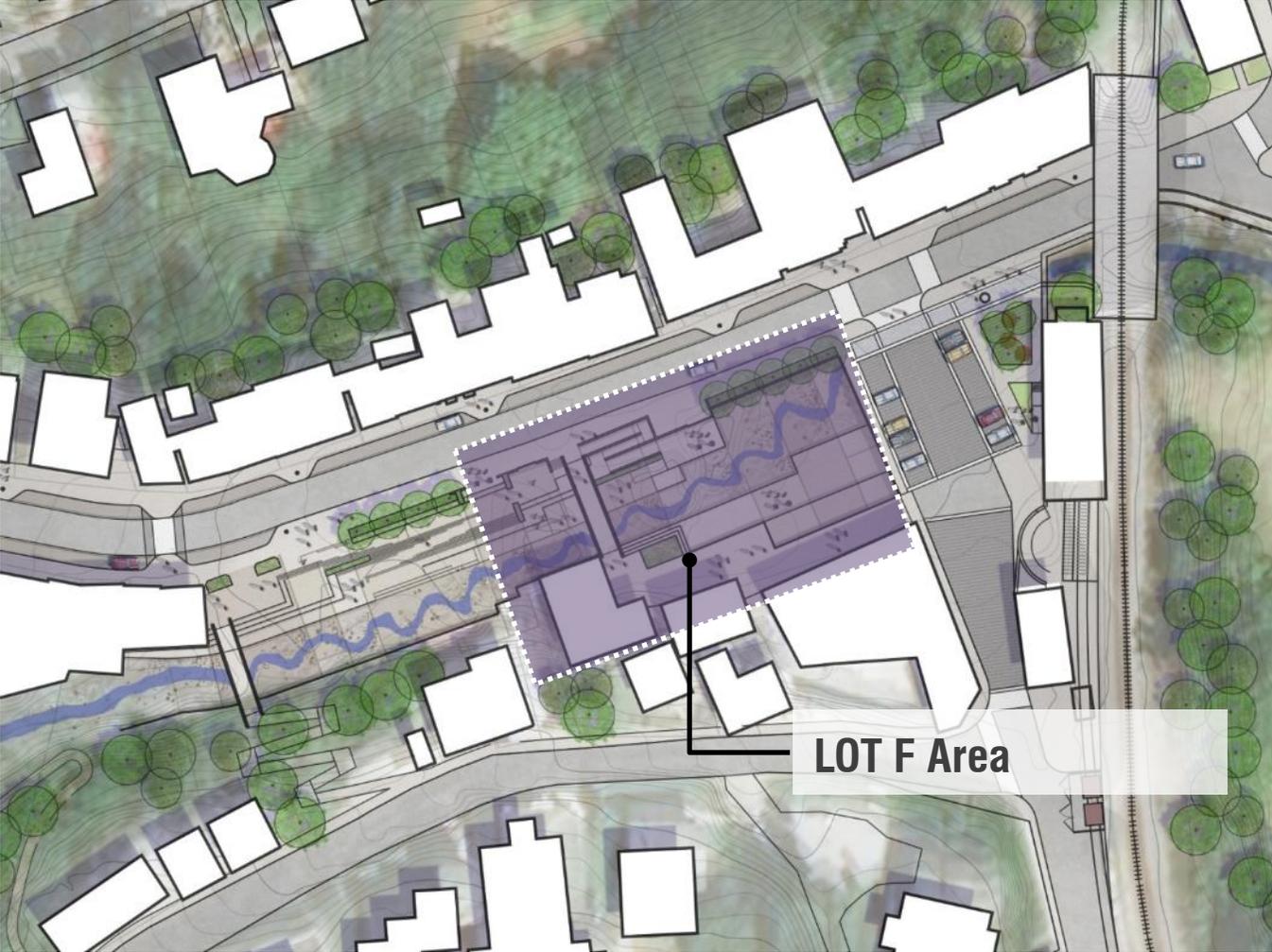
St Paul St

Tiber Alley

Lower Main | Riverfront



Lower Main | Riverfront





Tea on the Tiber

Bean Hollow

B&O
Museum

Cacao Lane

Caplan's

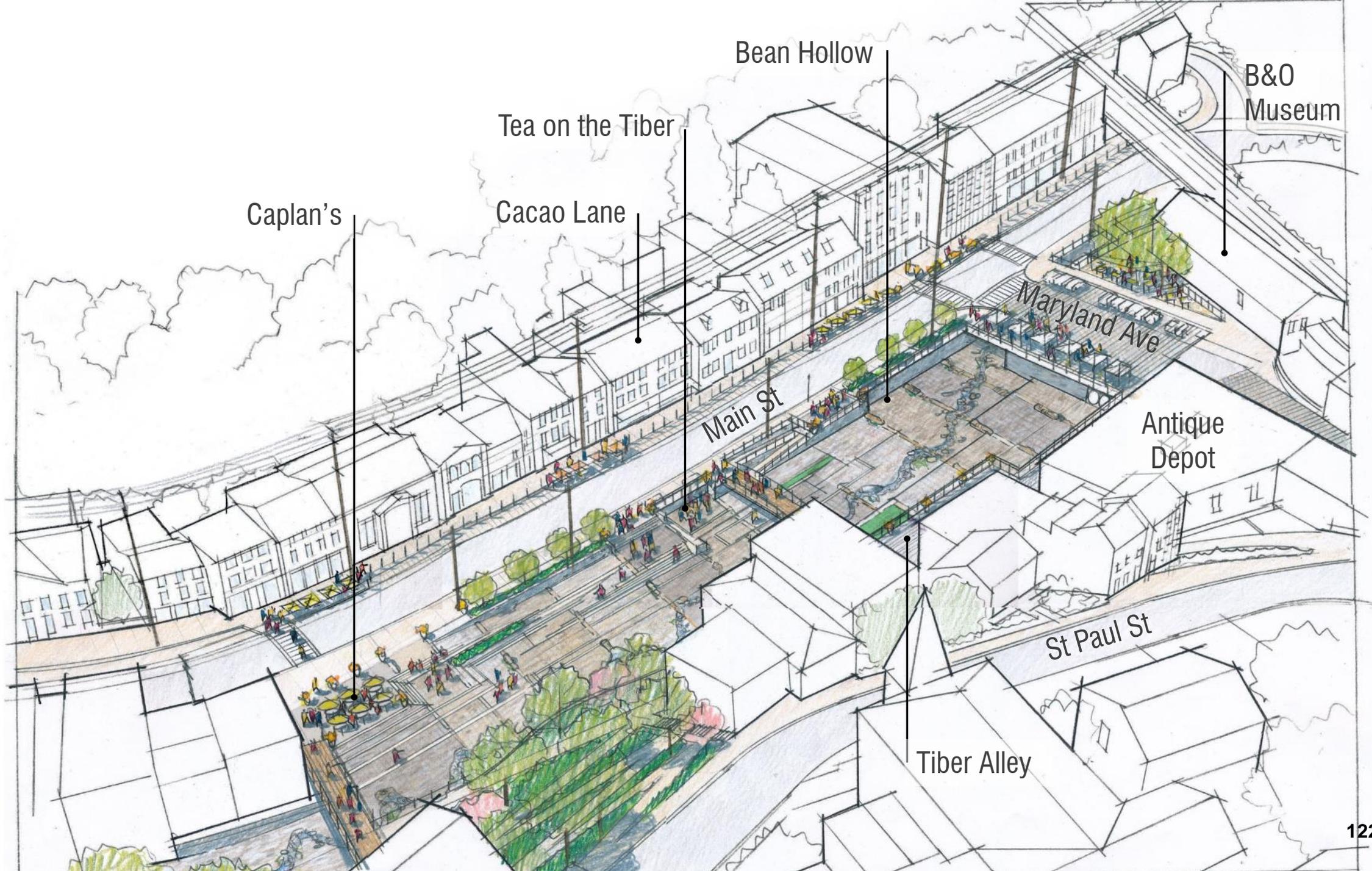
Main St

Maryland Ave

Antique
Depot

St Paul St

Tiber Alley



Caplan's

Tea on the Tiber

Cacao Lane

Bean Hollow

B&O
Museum

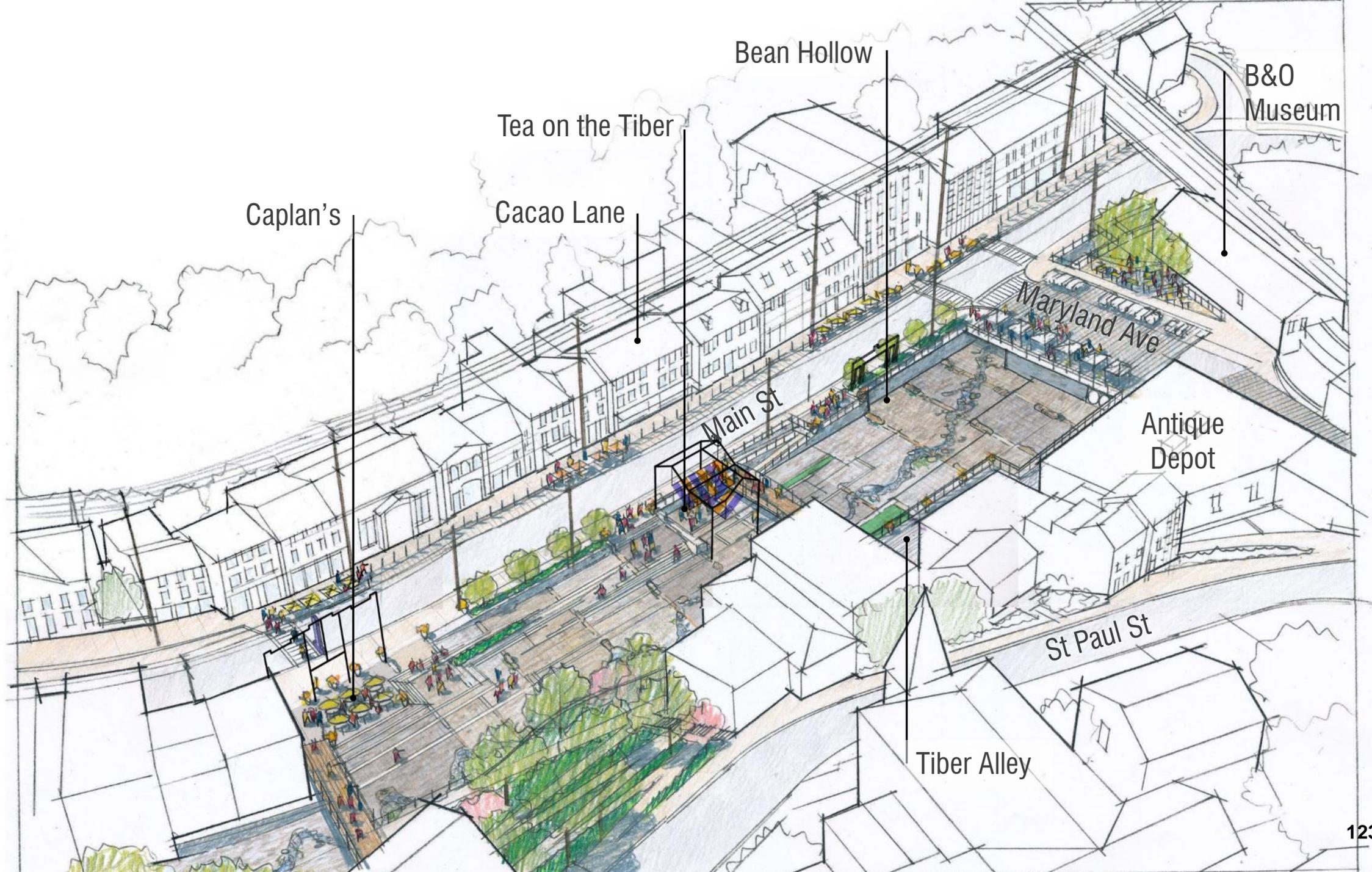
Main St

Maryland Ave

Antique
Depot

St Paul St

Tiber Alley



Bean Hollow

B&O
Museum

Tea on the Tiber

Caplan's

Cacao Lane

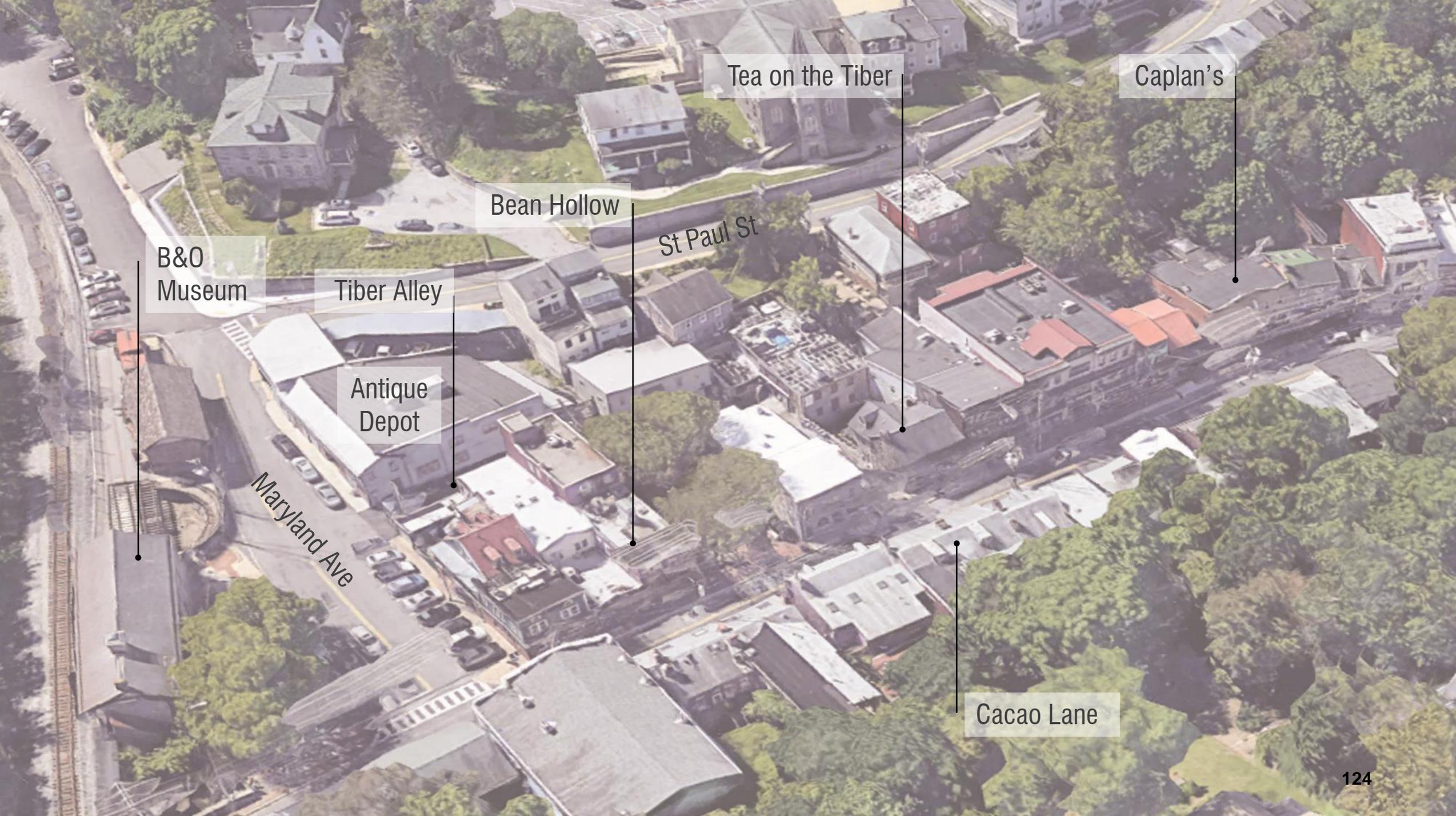
Maryland Ave

Main St

Antique
Depot

St Paul St

Tiber Alley



Tea on the Tiber

Caplan's

Bean Hollow

B&O
Museum

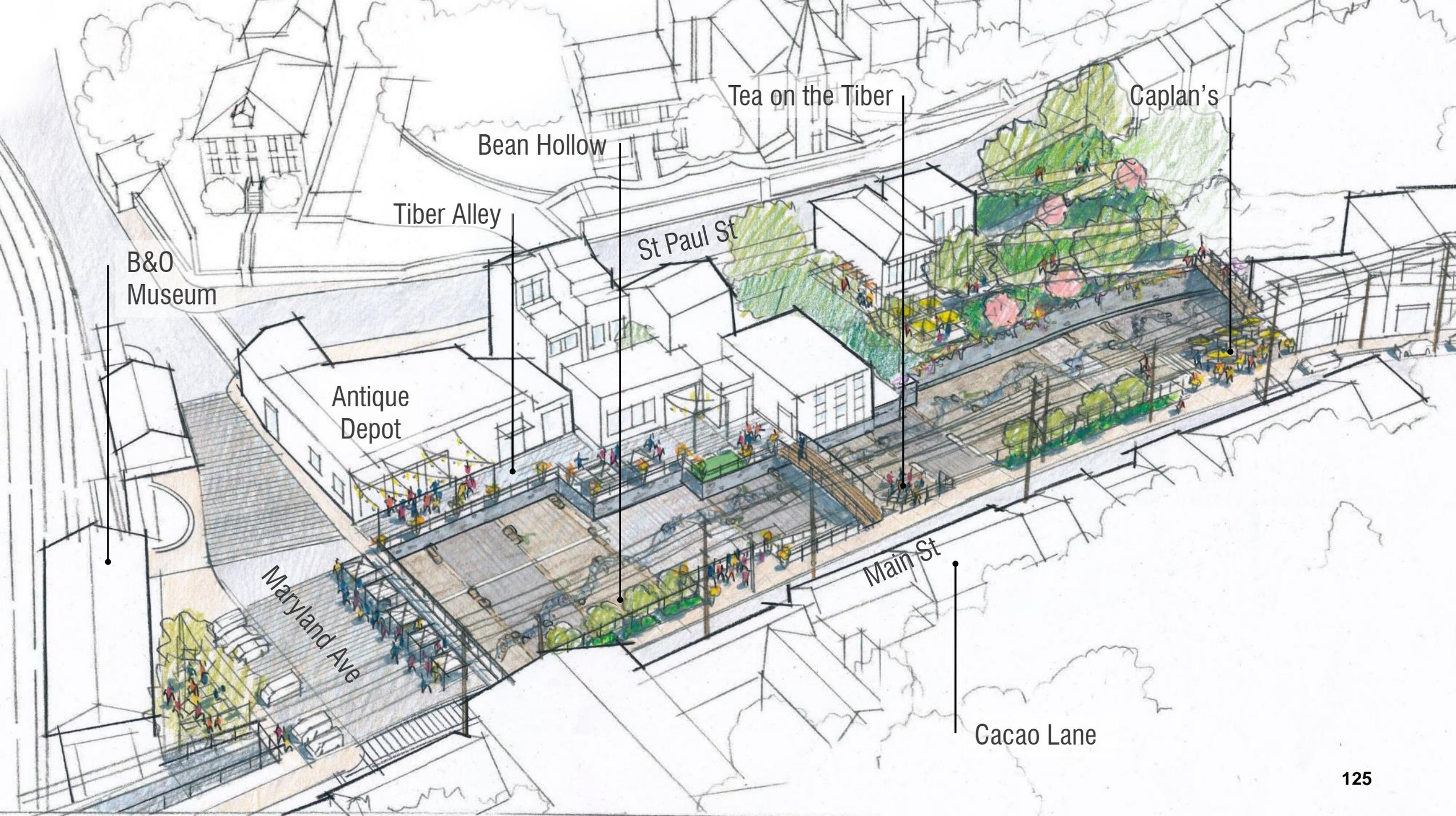
Tiber Alley

Antique
Depot

Maryland Ave

St Paul St

Cacao Lane



B&O
Museum

Bean Hollow

Tea on the Tiber

Caplan's

Tiber Alley

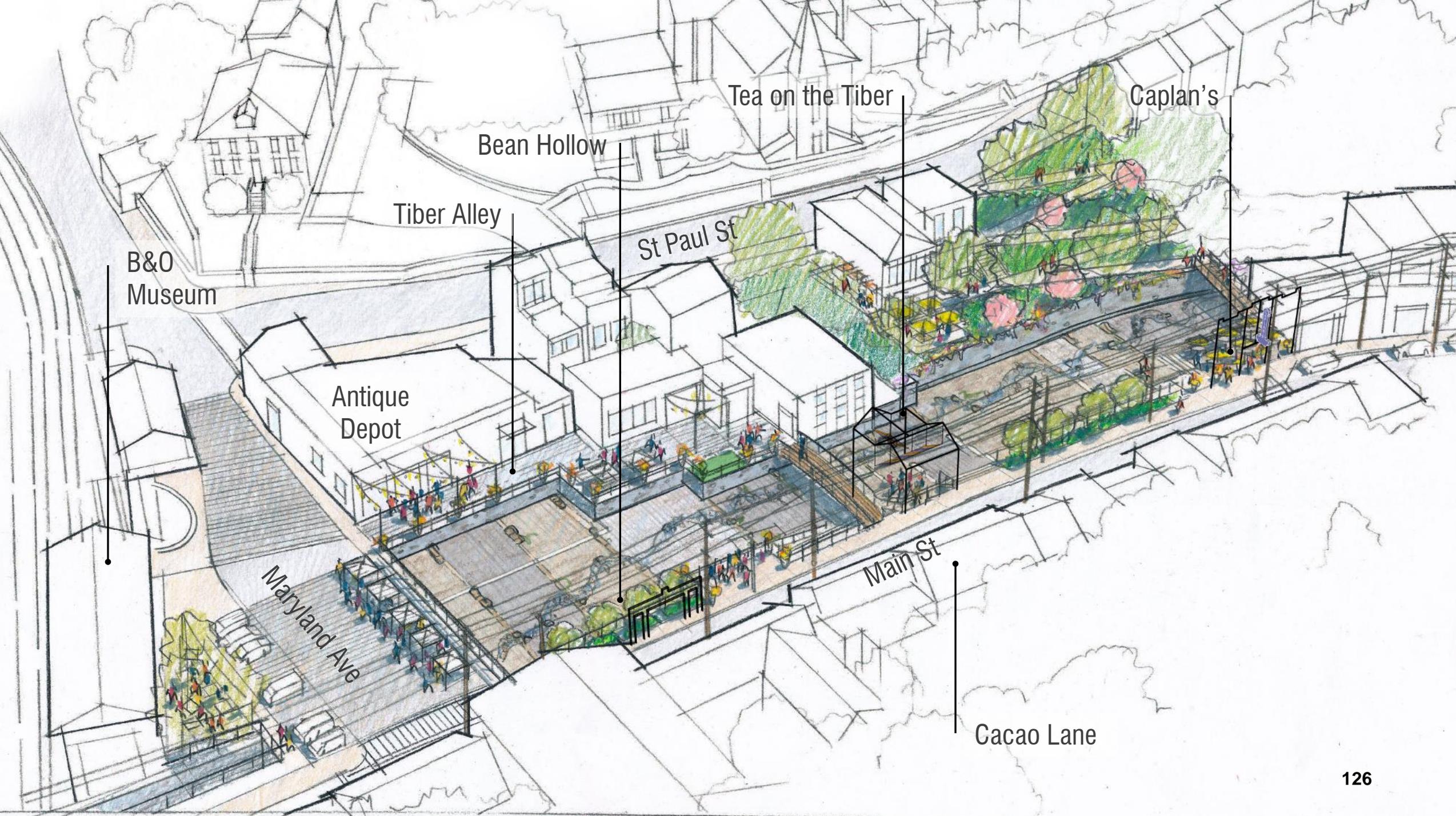
St Paul St

Antique
Depot

Maryland Ave

Main St

Cacao Lane



B&O
Museum

Antique
Depot

Bean Hollow

Tiber Alley

St Paul St

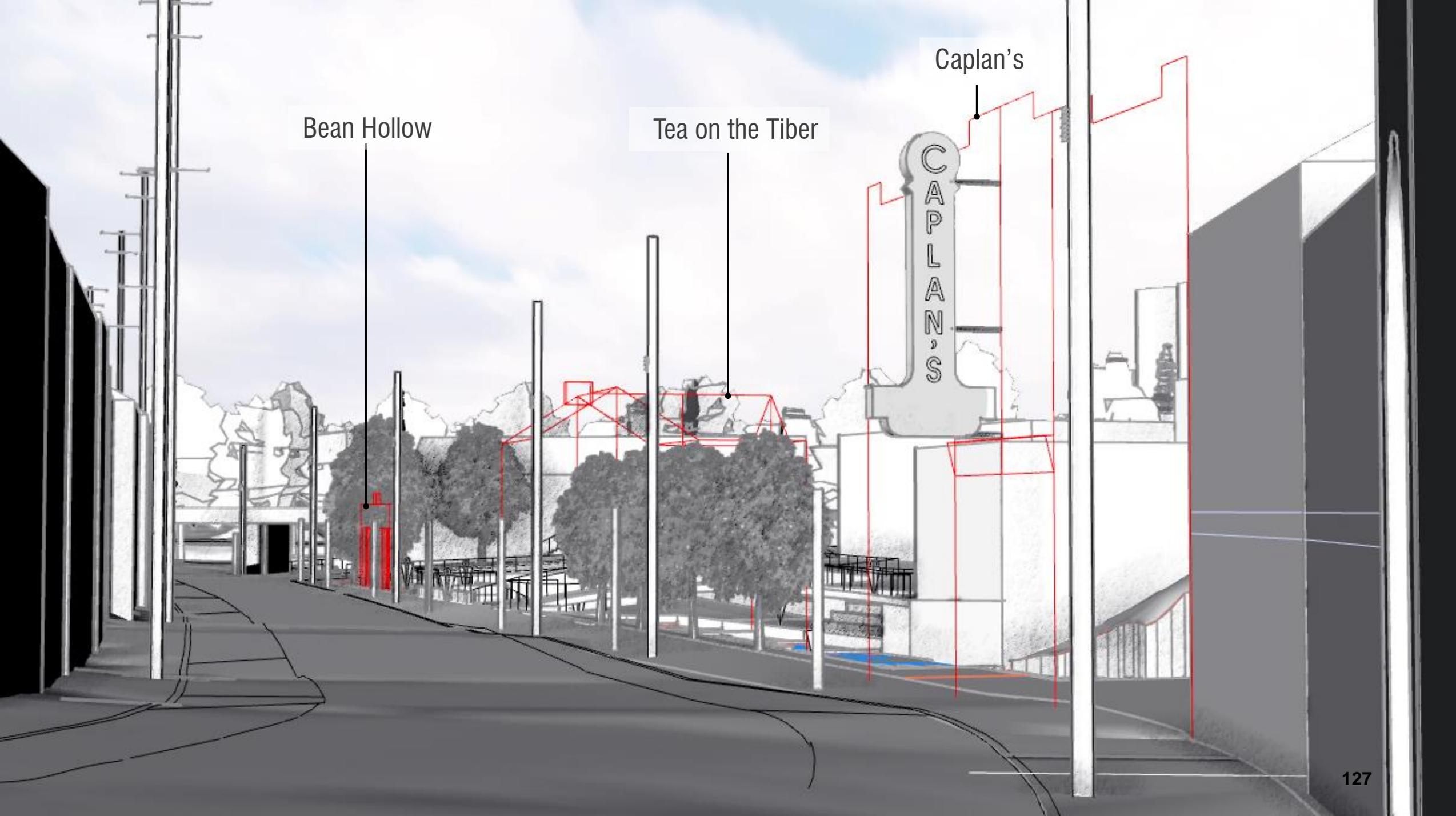
Tea on the Tiber

Caplan's

Maryland Ave

Main St

Cacao Lane



Bean Hollow

Tea on the Tiber

Caplan's





Tea on the Tiber





Lower Main | Riverfront

Scenario #2: Full Channel

- Maximum hydraulics
- Maximize sidewalk area on south side of Main St.
- Straight channel walls





Bean Hollow

Caplan's

Cacao Lane

Main St

B&O

Antique Depot

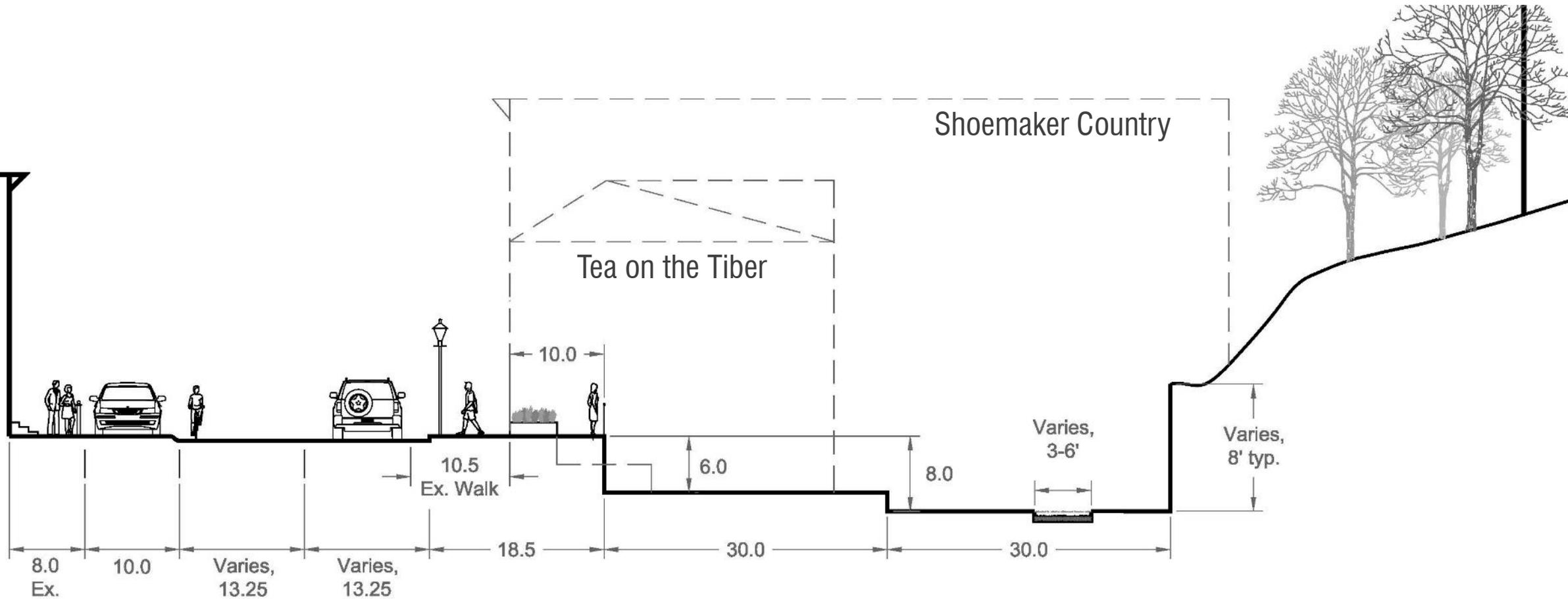
Maryland Ave

Tea on the Tiber

St Paul St

Tiber Alley

Lower Main | Riverfront



“Tiber Park” Cross Section F: Continuous Channel / Expanded Main Street Sidewalks



Tea on the Tiber

Bean Hollow

B&O
Museum

Cacao Lane

Caplan's

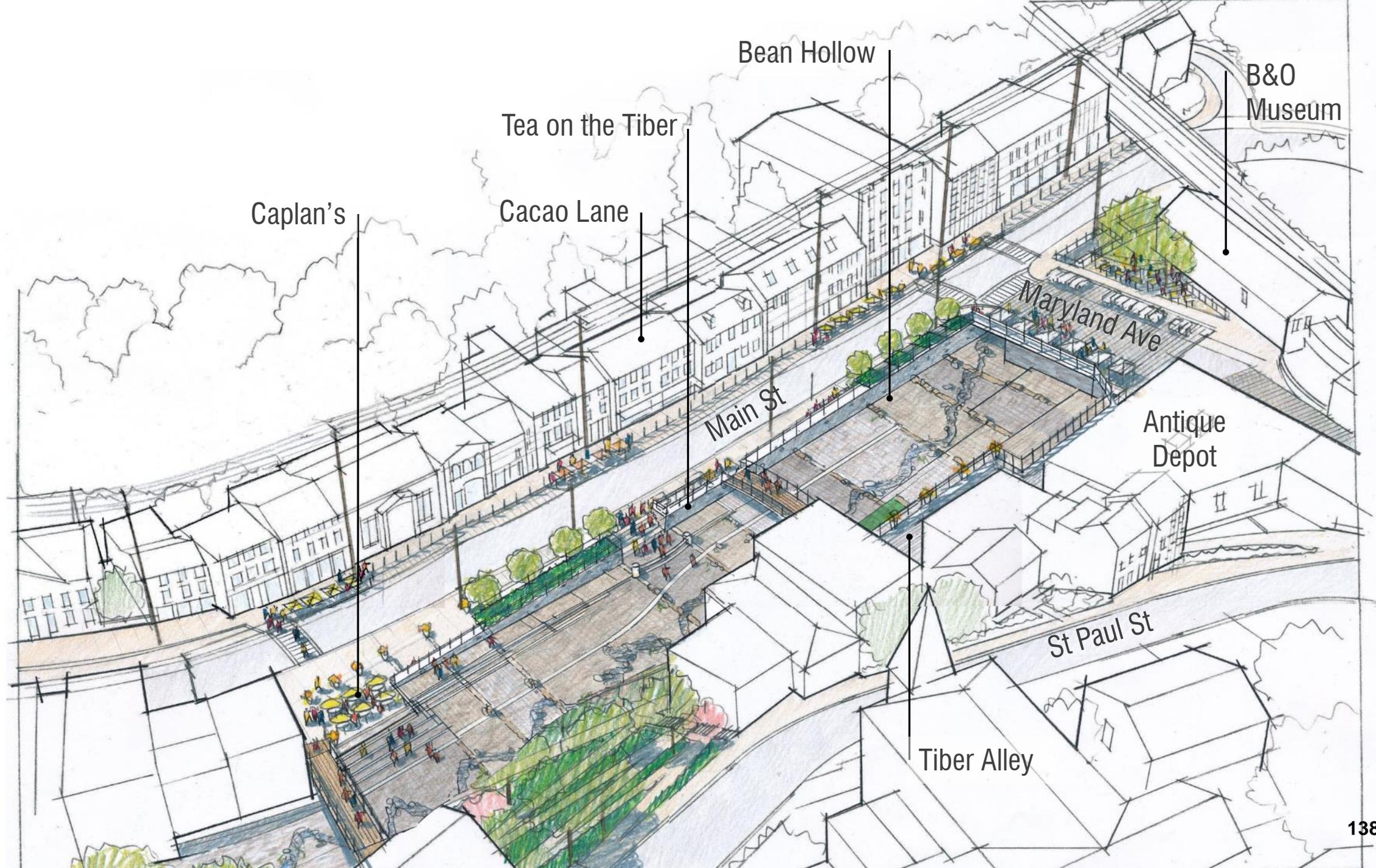
Main St

Maryland Ave

Antique
Depot

St Paul St

Tiber Alley



Caplan's

Tea on the Tiber

Cacao Lane

Bean Hollow

B&O
Museum

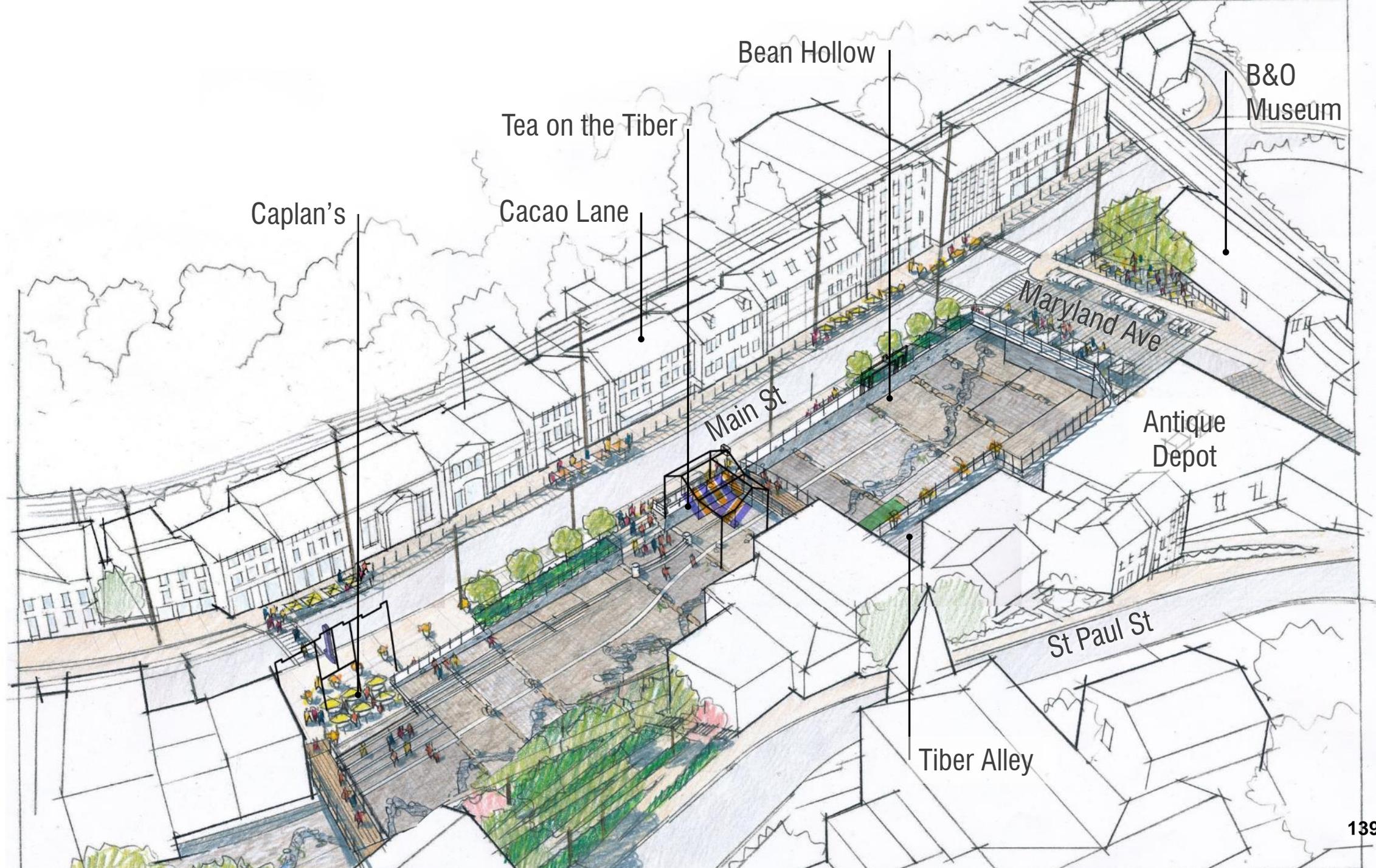
Main St

Maryland Ave

Antique
Depot

St Paul St

Tiber Alley



Caplan's

Tea on the Tiber

Cacao Lane

Bean Hollow

Main St

Maryland Ave

Antique Depot

St Paul St

Tiber Alley

B&O Museum



Bean Hollow

Caplan's

Cacao Lane

Main St

B&O

Maryland Ave

Antique Depot

Tea on the Tiber

St Paul St

Tiber Alley

Lower Main | Riverfront

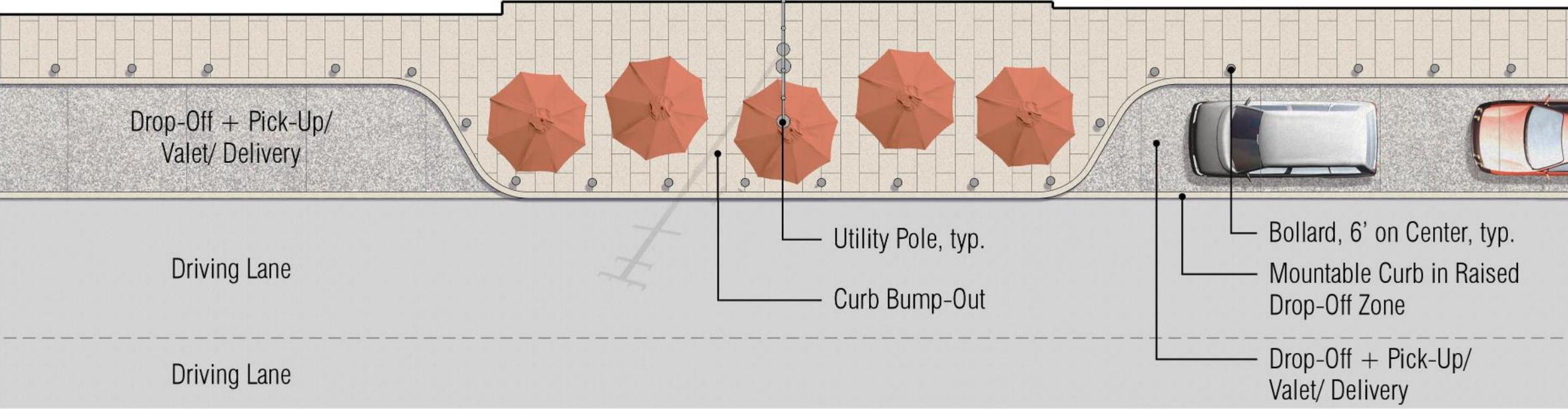
Main Street Streetscape

- Sidewalk expansion
- Parking / drop-off / delivery
- Resilient paving
- Raised crosswalks
- Integrated flood warning sensors and cameras
- Wayfinding
- Placemaking



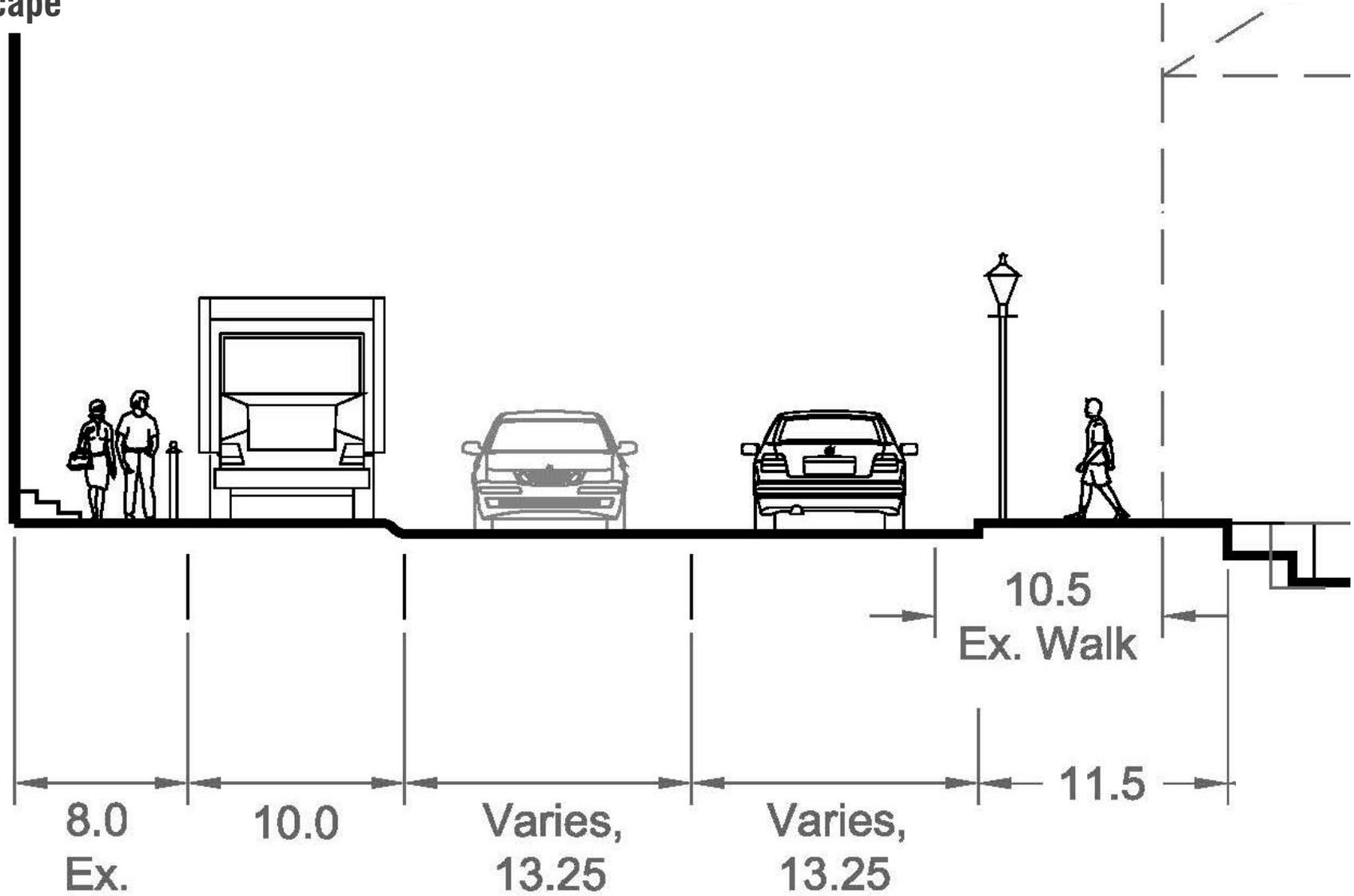
Lower Main | Riverfront

Main Street Streetscape (North Side)



Lower Main | Riverfront

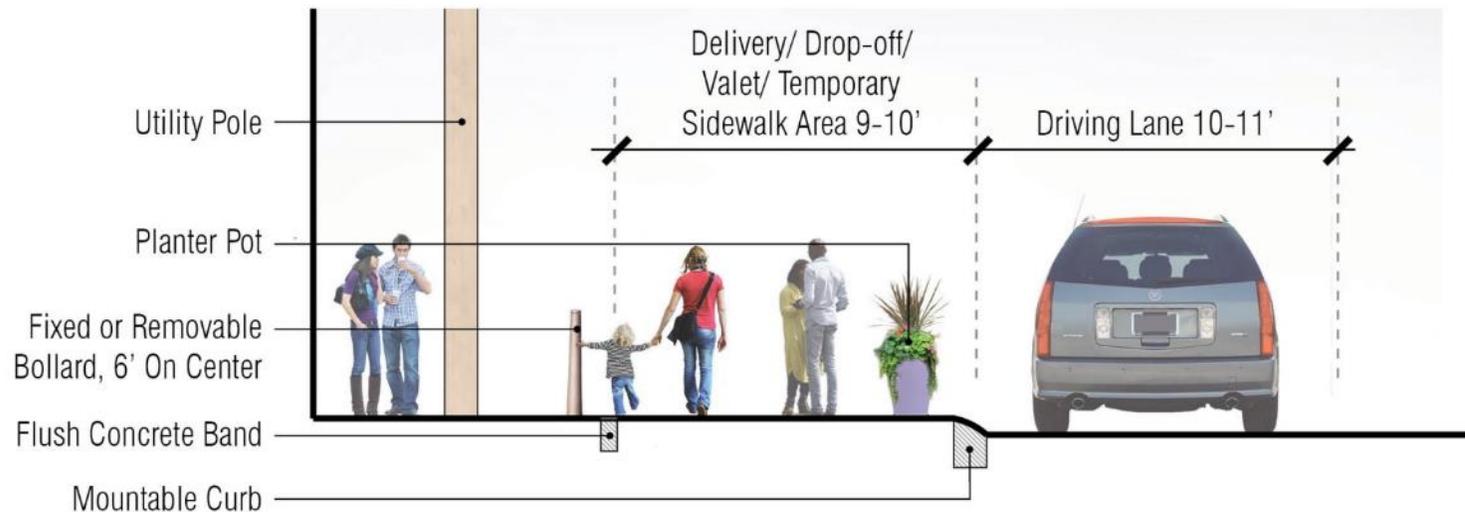
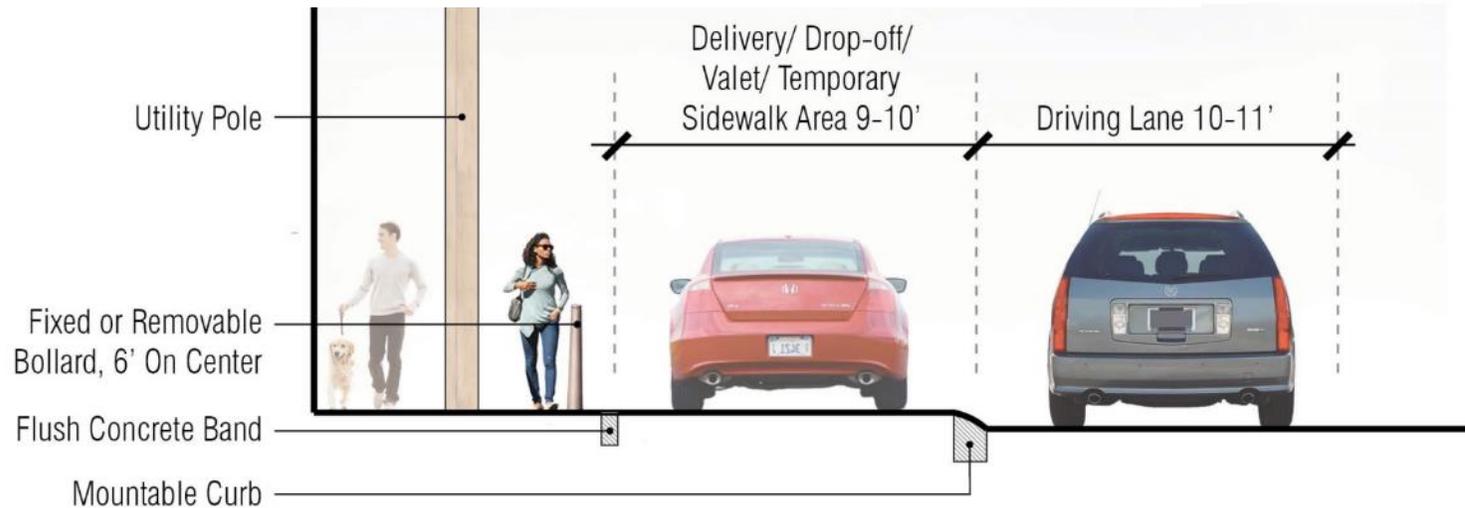
Main Street Streetscape



Lower Main | Riverfront

Main Street Streetscape

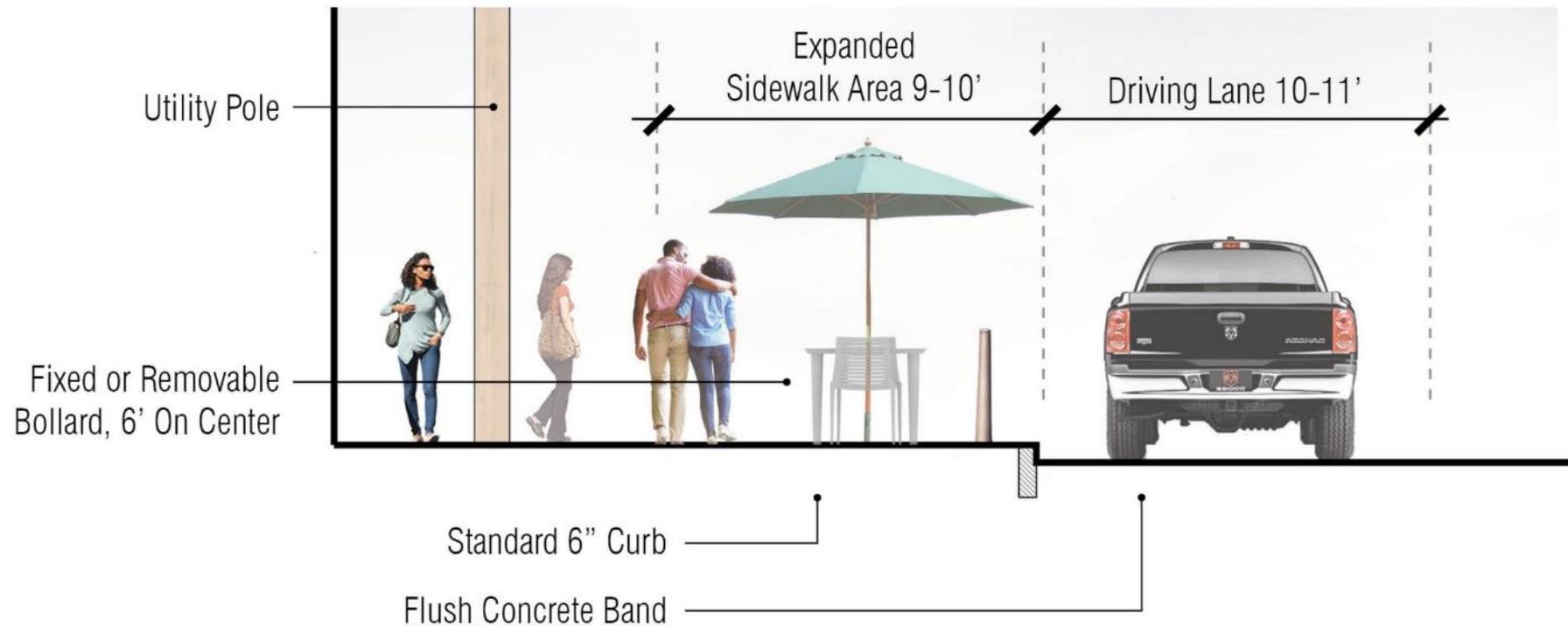
Mountable Curb



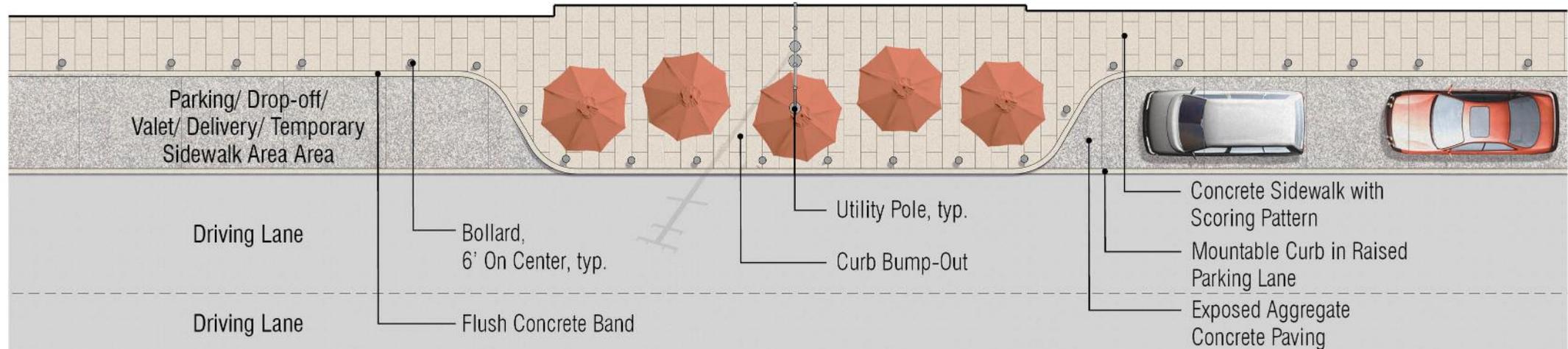
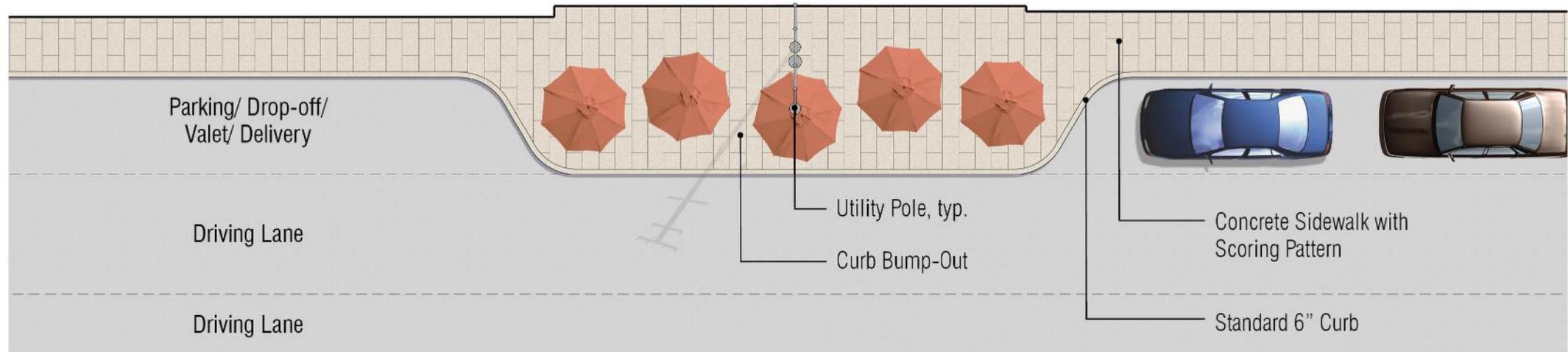
Lower Main | Riverfront

Main Street Streetscape

Expanded North Side Sidewalk



Streetscape Paving





Lot F

Wine Bin

Lot E

Ellicott Mill
Brewing Co

Upper Main Street Streetscape

Courthouse

Court Ave

Visitor Center

Church Rd

Su Casa

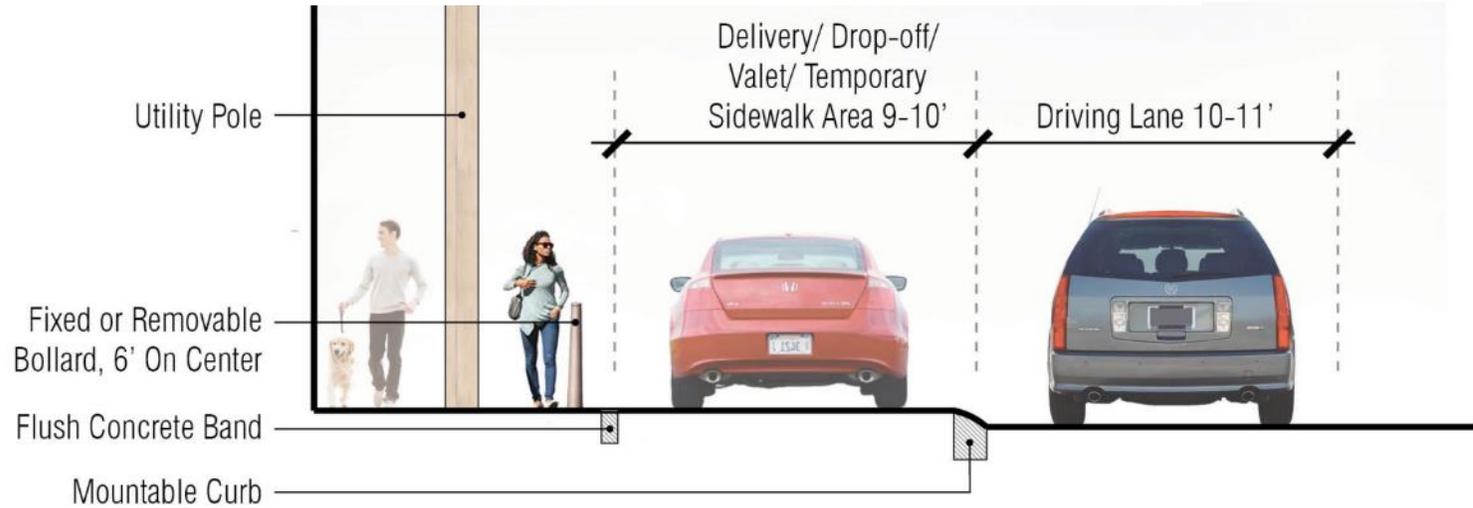
Merryman St

Old Columbia Pike

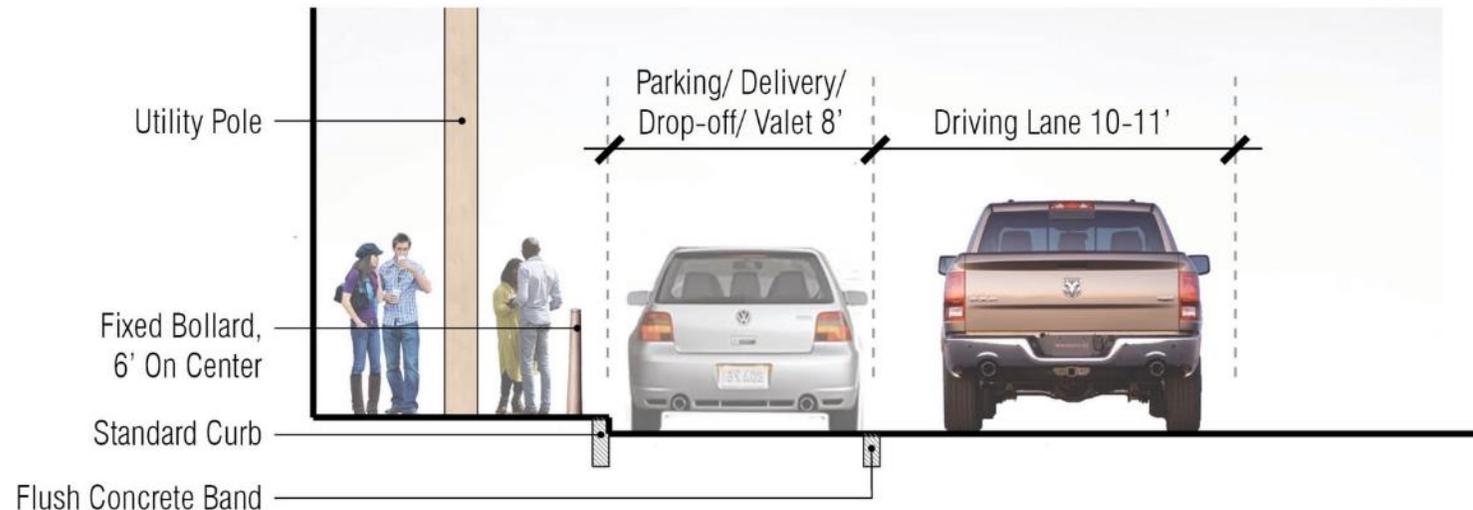
Main St Streetscape

Upper Main Street Streetscape

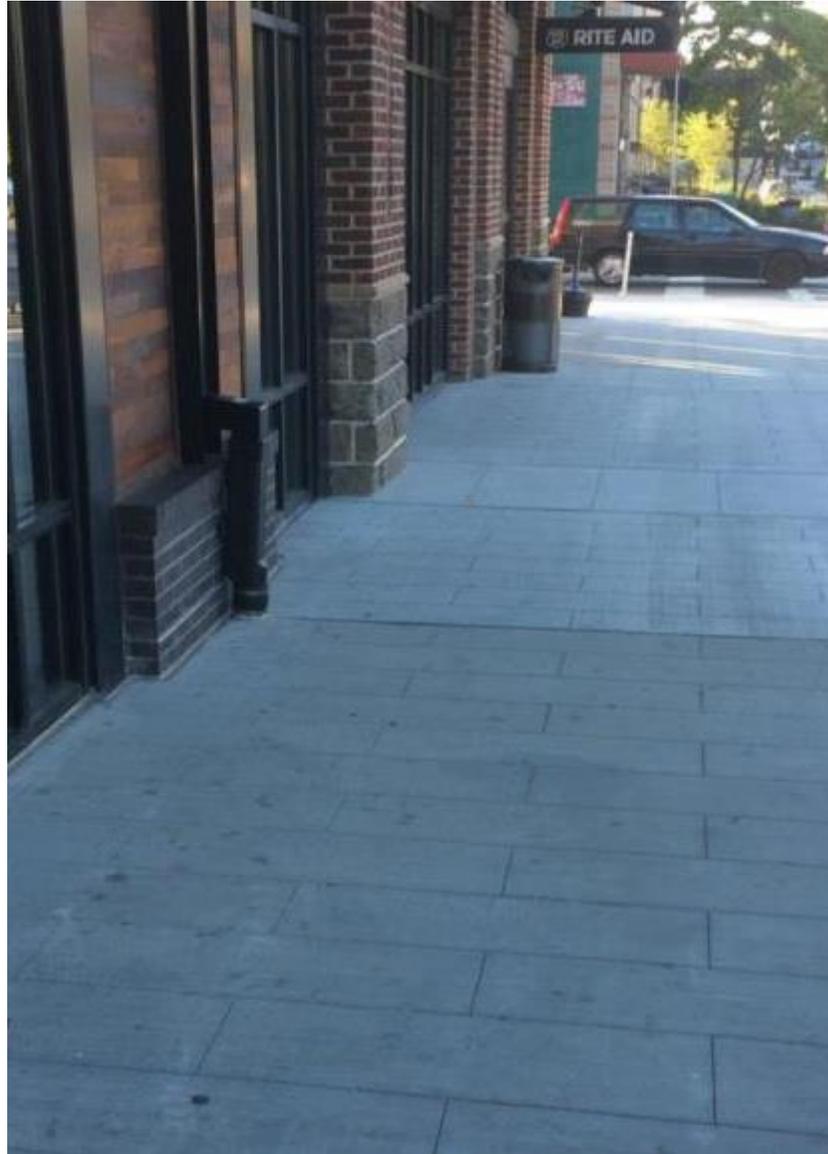
Condition 1 Mountable Curb



Condition 2 Standard Curb



Streetscape Paving



Lower Main | Riverfront

Maryland Avenue

Bean Hollow

Main St

Maryland Ave

B&O
Museum

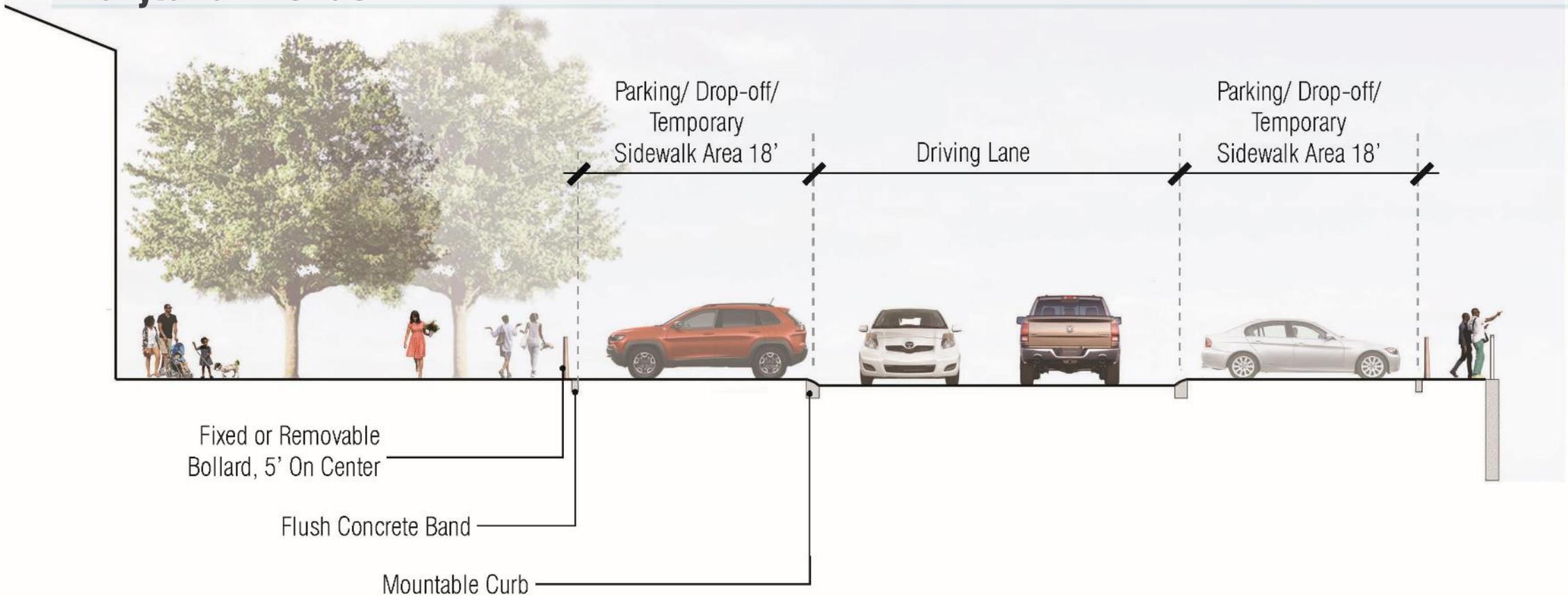
Tiber
Alley

Antique
Depot

Patapsco
River

Lower Main | Riverfront

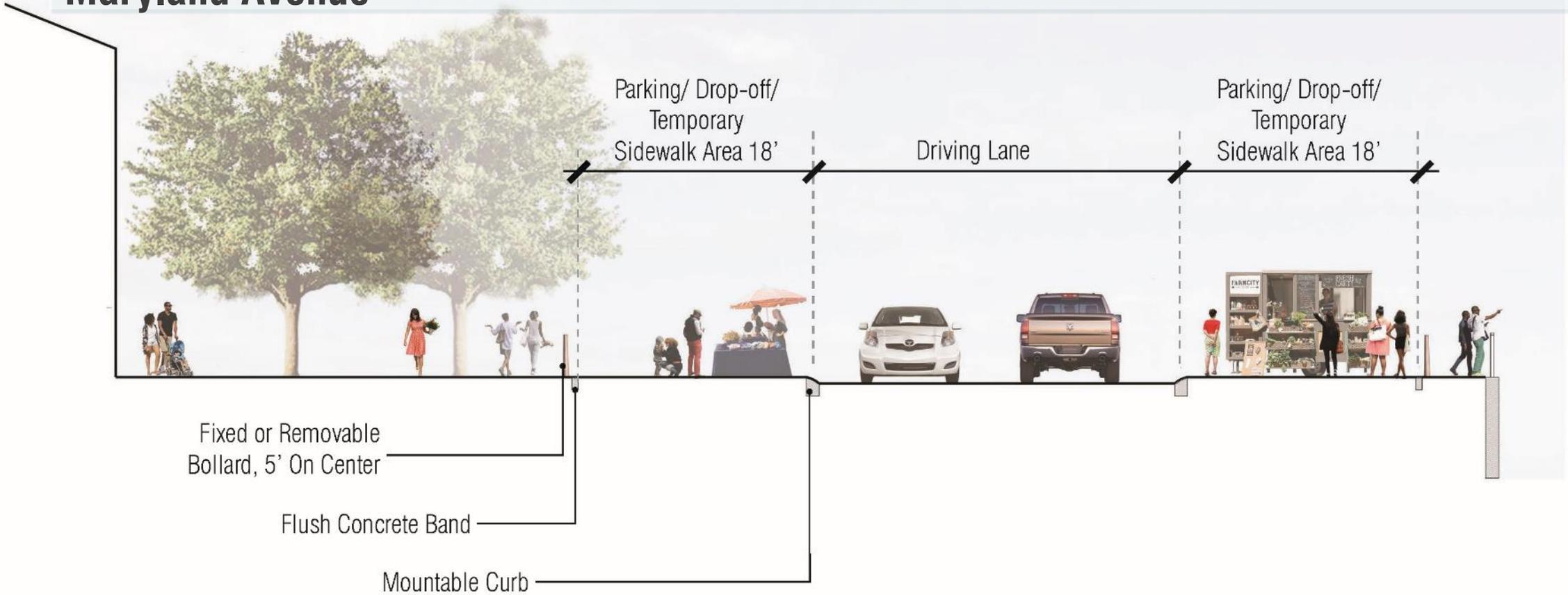
Maryland Avenue



Mountable Curb Streetscape (Typical Day)
Maryland Avenue

Lower Main | Riverfront

Maryland Avenue



Mountable Curb Streetscape (Event)
Maryland Avenue

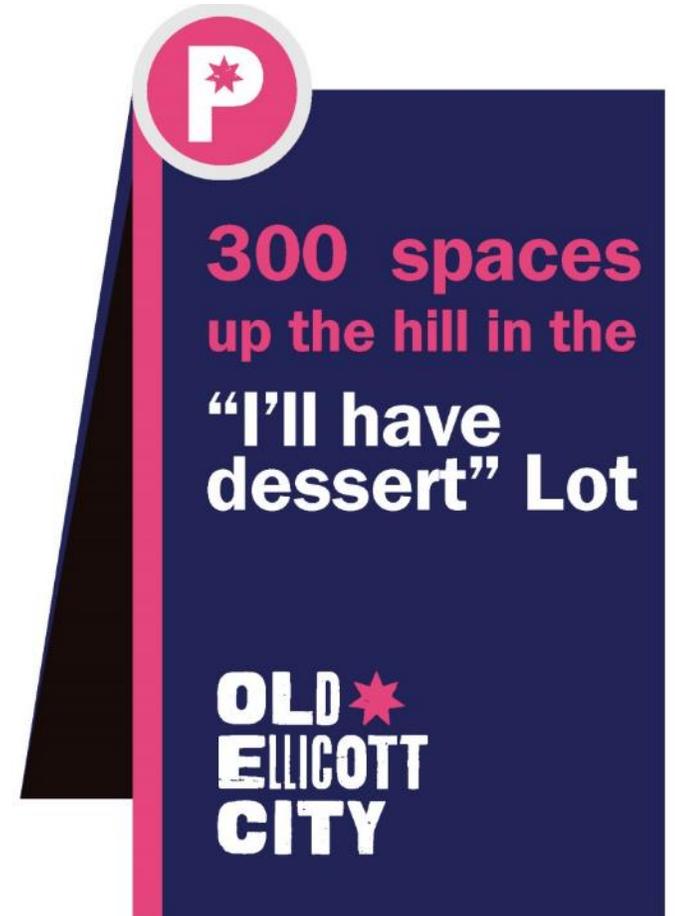
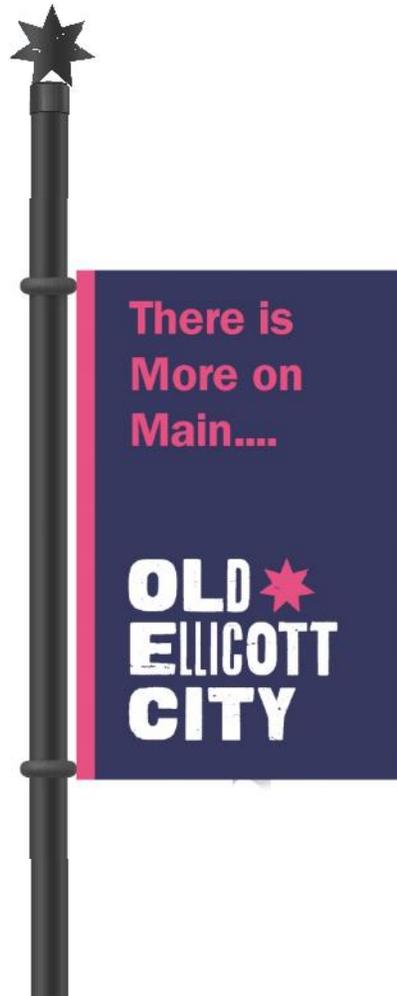
Lower Main | Riverfront

Maryland Avenue



Lower Main | Riverfront

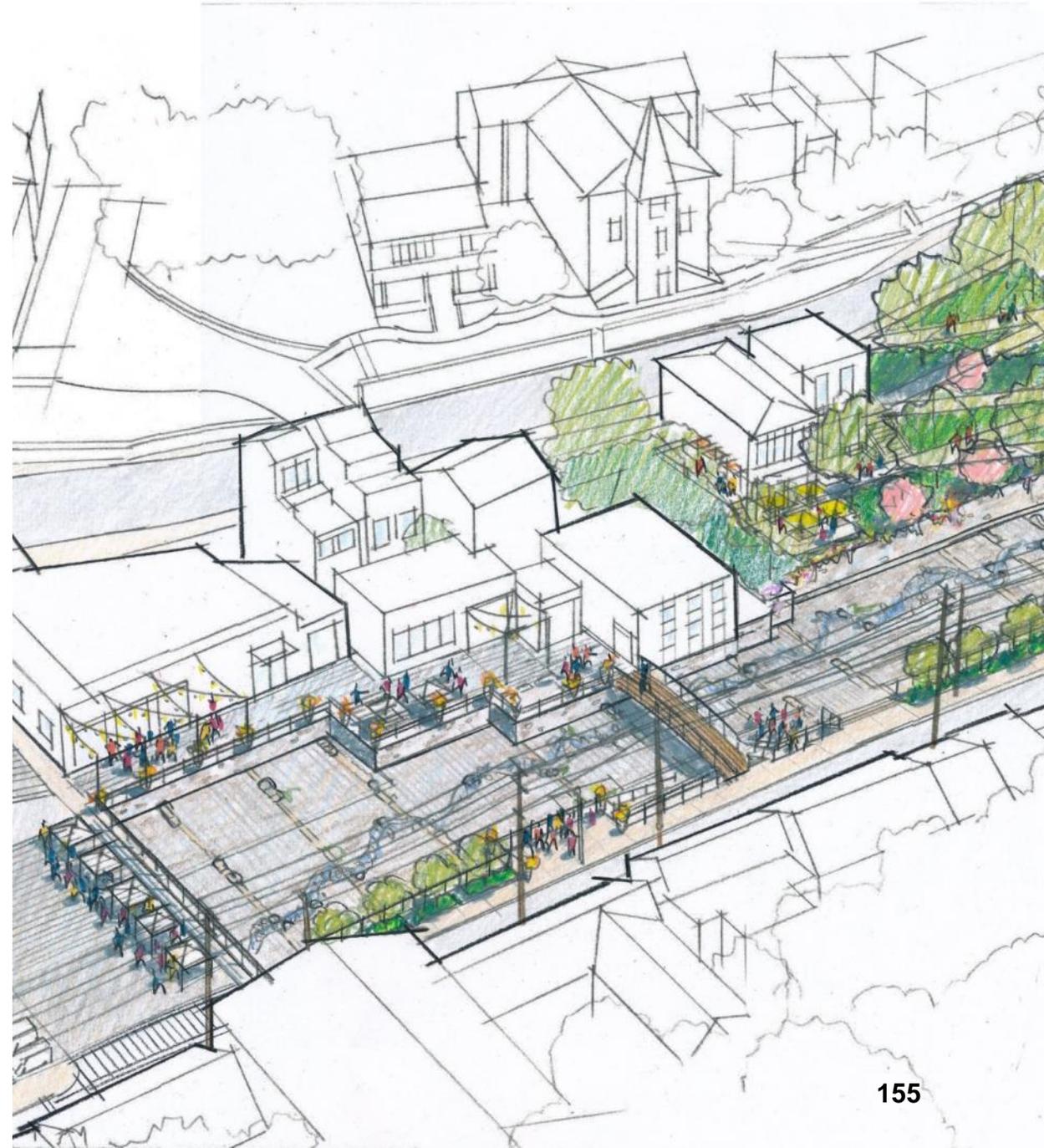
Wayfinding



Lower Main | Riverfront

Rear Façade Grant

- Improve now visible rear facades
- Activate “Tiber Park”



Lower Main | Riverfront

Overlooks



Lower Main | Riverfront

Riverfront

- Patapsco Riverfront Park
- Pedestrian Bridge



Lower Main | Riverfront

Patapsco Riverfront Park

- Long-Term Opportunity
- Access to Patapsco
- In Conjunction with Lot A Deck



Lower Main | Riverfront

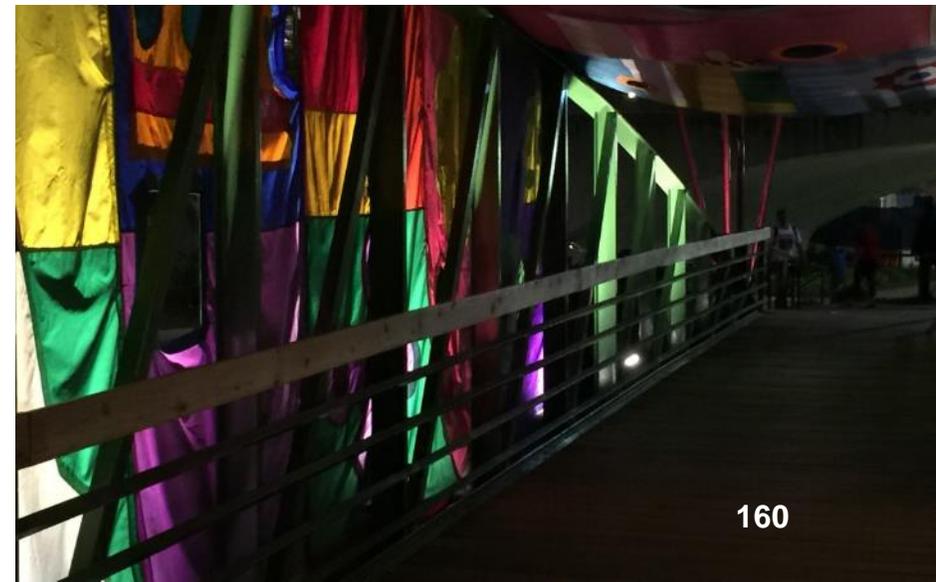
Pedestrian Bridge

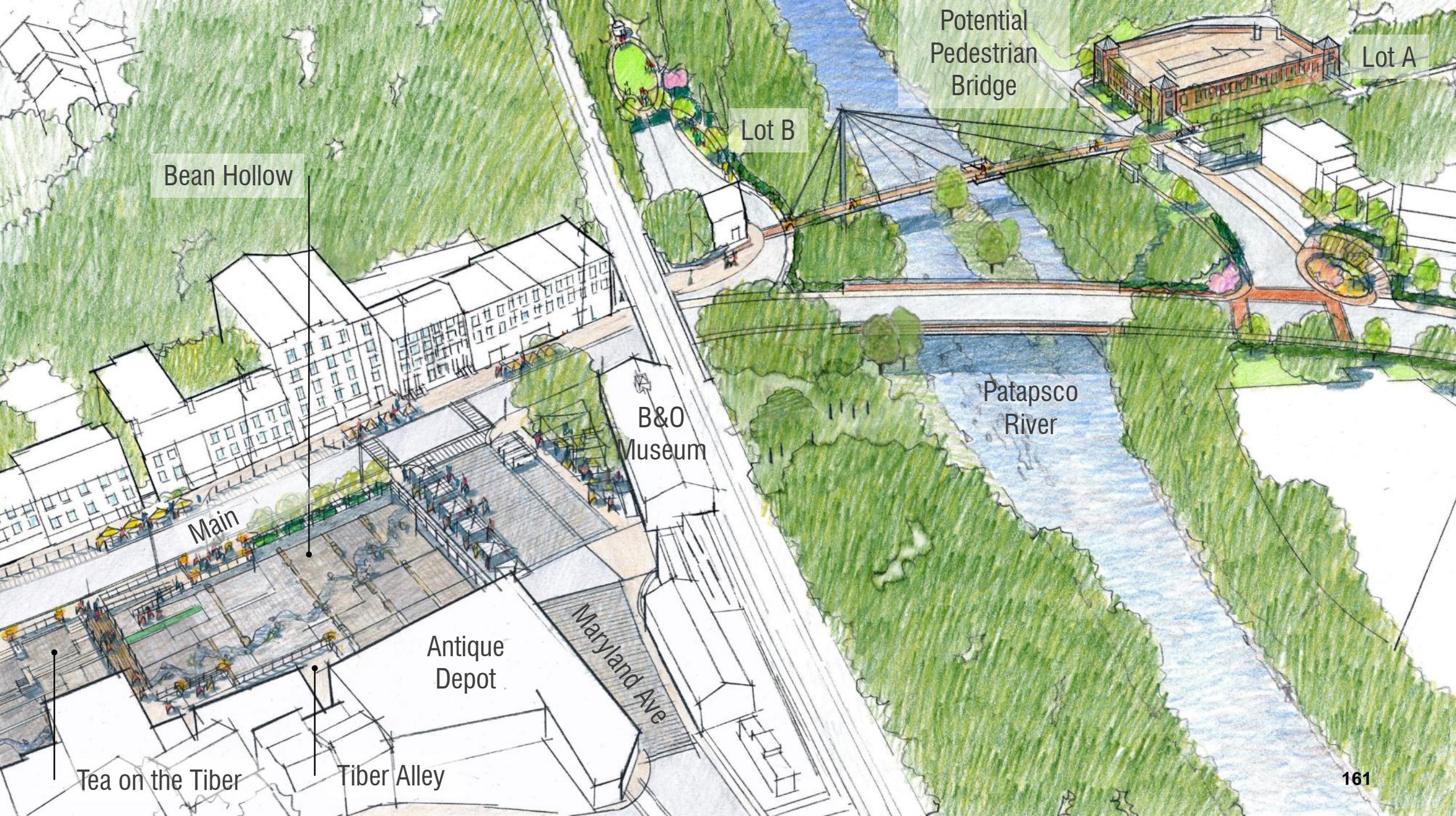
- Alignment of former trolley line bridge
- Signature design
- Attraction



Lower Main | Riverfront

Pedestrian Bridge





Bean Hollow

Potential
Pedestrian
Bridge

Lot A

Lot B

Patapsco
River

B&O
Museum

Main

Maryland Ave

Antique
Depot

Tea on the Tiber

Tiber Alley

Focus Areas



NOTE: Progress Plan. *Illustrative Plan to be updated to represent refinements to West End Main conveyance improvements, Lot F/Ellicott Mills Drive conveyance improvements, Barnard Fort House property planning and additional refinements to Lower Main*

Upper Main | Hudson Bend

Mixed-Use

- Business relocation
- New businesses
- Public restrooms
- Upper floor uses
- Structured parking / trash management
- Stormwater capture
- Innovative design, sensitive to "place"



“Hudson Bend”



Lot D

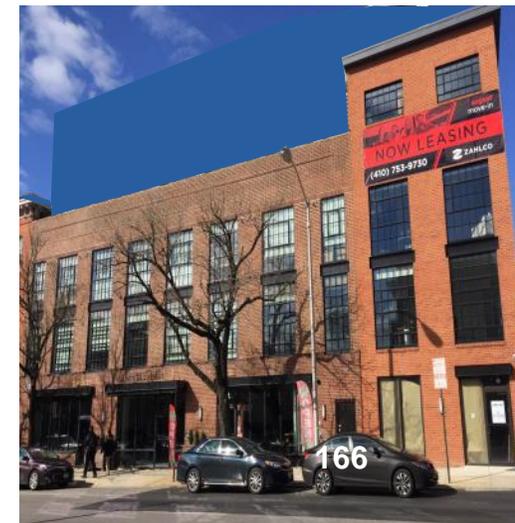
“Hudson Bend”

Tonge
Row

Su Casa



“Hudson Bend”

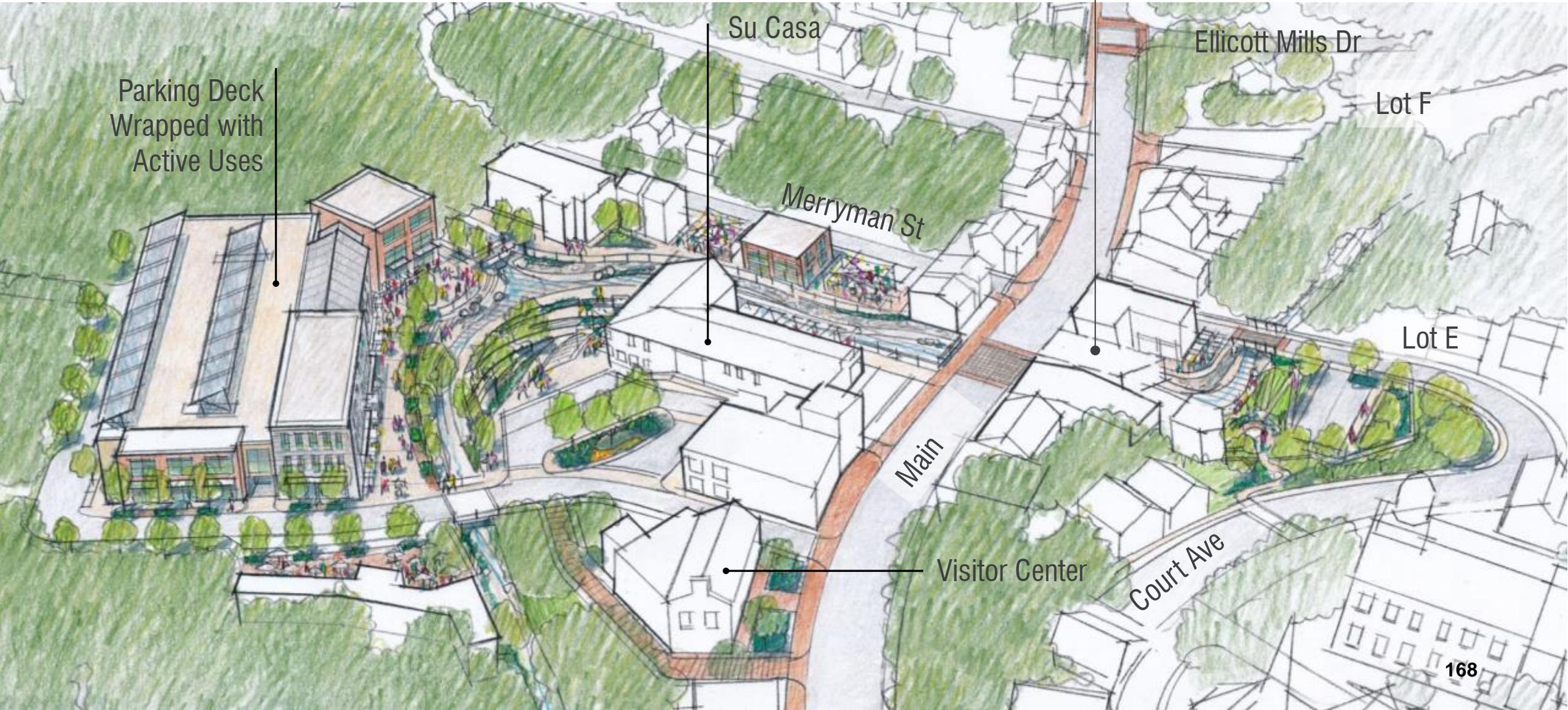


Upper Main | Hudson Bend



Upper Main | Hudson Bend

*Brewery Annex to be relocated



Parking Deck
Wrapped with
Active Uses

Su Casa

Merryman St

Ellicott Mills Dr

Lot F

Lot E

Main

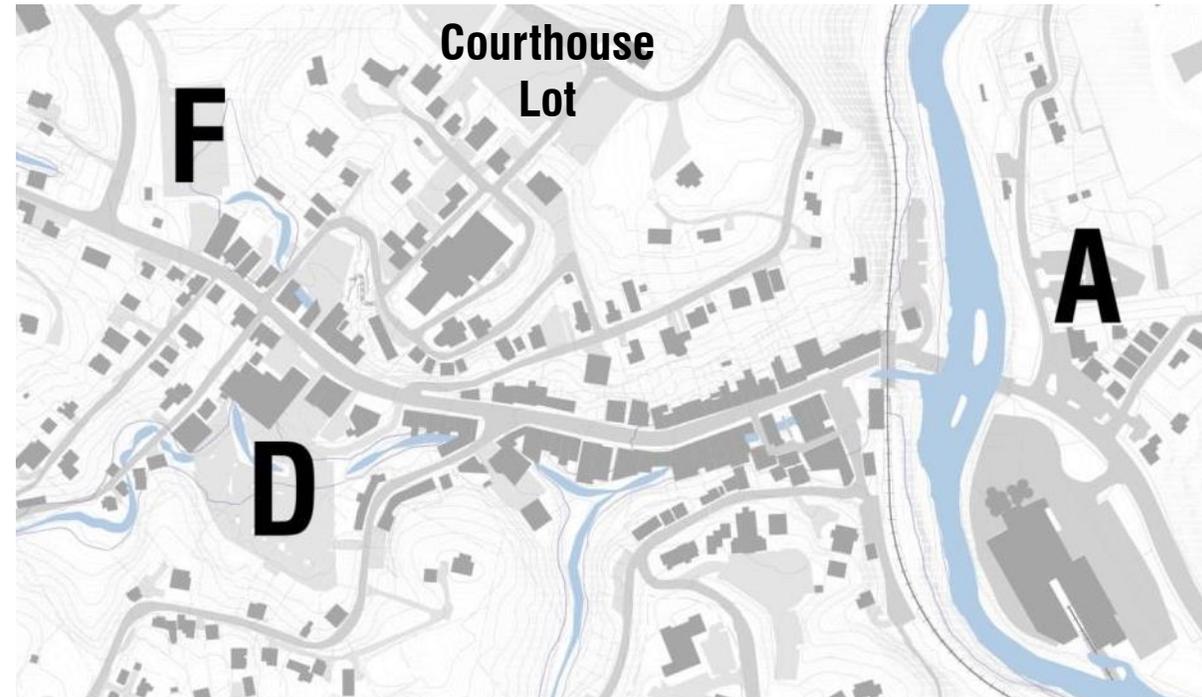
Visitor Center

Court Ave

Upper Main | Hudson Bend

Parking Phasing Strategy

- Still will be high demand in Lower Main
- Lots A, F and D appropriate for deck
- Temporary Shuttle and Courthouse Lot
- Careful construction phasing



Upper Main | Hudson Bend

Temporary Shuttle

- Low-speed
- 10 person vehicles
- Electric or Low Speed Autonomous Vehicles
- Privately operated or
- Public/private partnership



Upper Main | Hudson Bend

Heritage Program Center

- Manage EC as a Heritage District
- Public interpretive space, lab, classroom, kitchen, public restrooms
- R&P Heritage Program Offices, PHG Offices
- Outdoor Gathering Spaces
- Parking
- Pathway Connections to Hudson Bend, Fels Lane Park, Lot F, Courthouse Hill, PFI
- Log Cabin

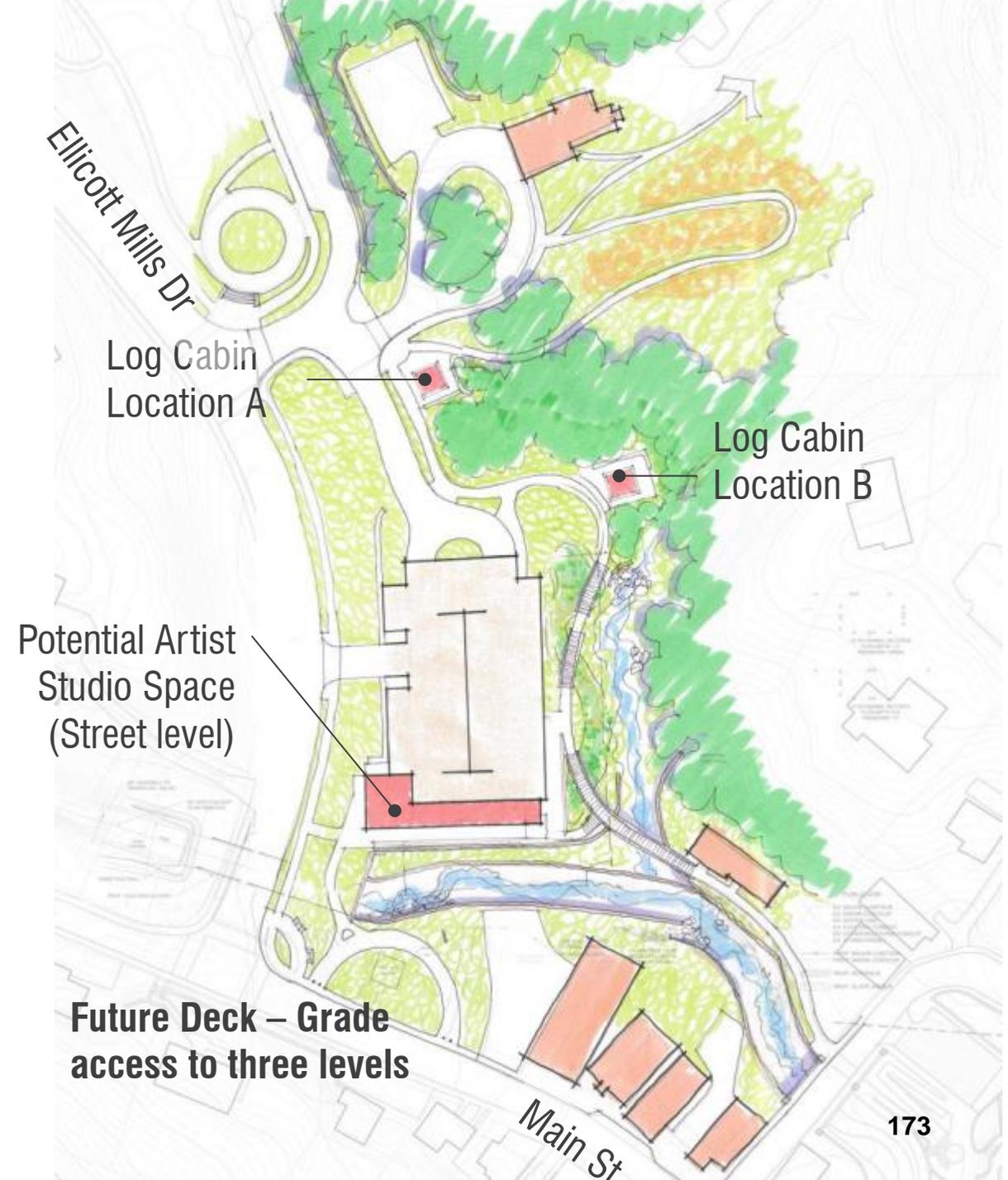


Upper Main | Hudson Bend

Lot F Reconfiguration

- Flood mitigation
- Hudson Bend pedestrian network along north side
- Shifted / reduced pavement
- Low retaining wall
- Pedestrian access to Main Street
- Barnard Fort House Campus
- Access for debris management
- Future deck? / Studio space?





Upper Main | Hudson Bend

Parking (Green Wall)



Upper Main | Hudson Bend

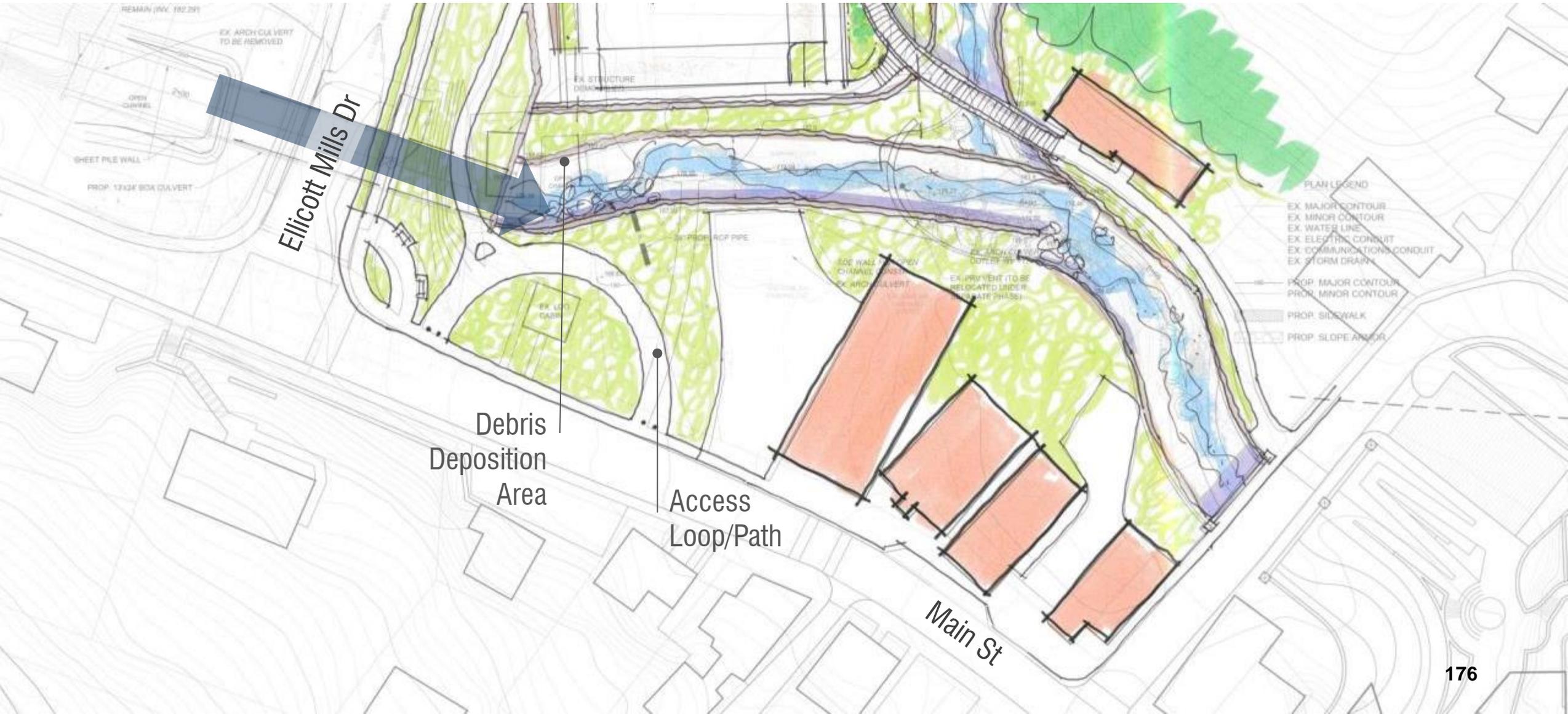


Potential Studio Space (Ellicott Mills Level)



Upper Main | Hudson Bend

Open Channel



Focus Areas



NOTE: Progress Plan. *Illustrative Plan to be updated to represent refinements to West End Main conveyance improvements, Lot F/Ellicott Mills Drive conveyance improvements, Barnard Fort House property planning and additional refinements to Lower Main*

West End Main

Main Street Flood Mitigation Projects

- Open channel
- Water conveyance from street to channel
- Pocket park opportunities



West End Main

Main Street Flood Mitigation Projects

- Open channel
- Water conveyance from street to channel
- Pocket park opportunities



West End Main

Main Street Improvements

- Crosswalks
- Traffic circle at Rogers Avenue
- Bridge clearance warning signs / signals
- Permanent curb extensions and crosswalks



West End Main Street Streetscape



West End Main Street Streetscape



West End Main Street Streetscape



West End Main

“Central West End”

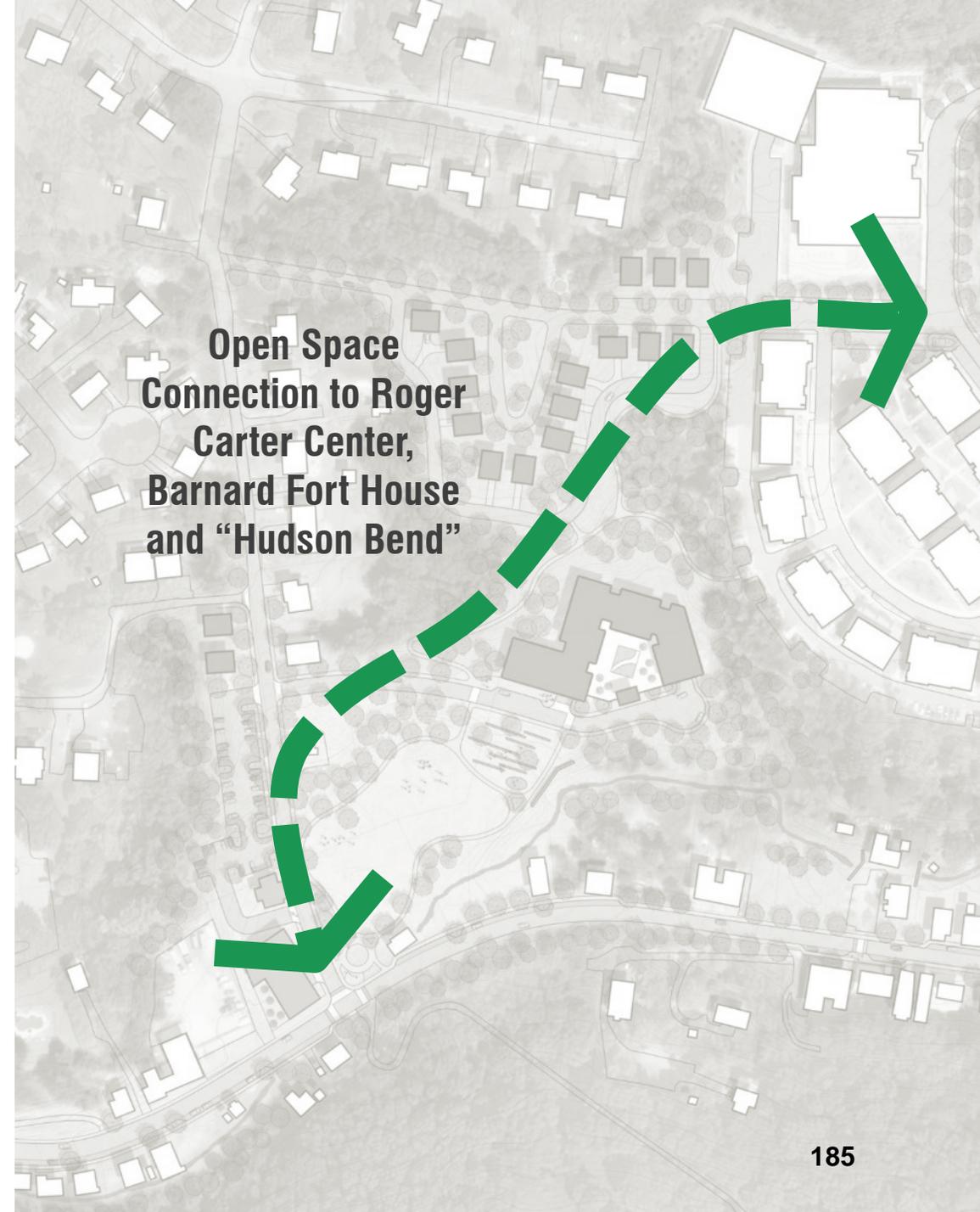
- Long-term opportunity
- Should private property owner desire to redevelop
- Additional flood mitigation enhancements
- Open space
- Residential opportunities
- Makers space opportunities



West End Main

“Central West End”

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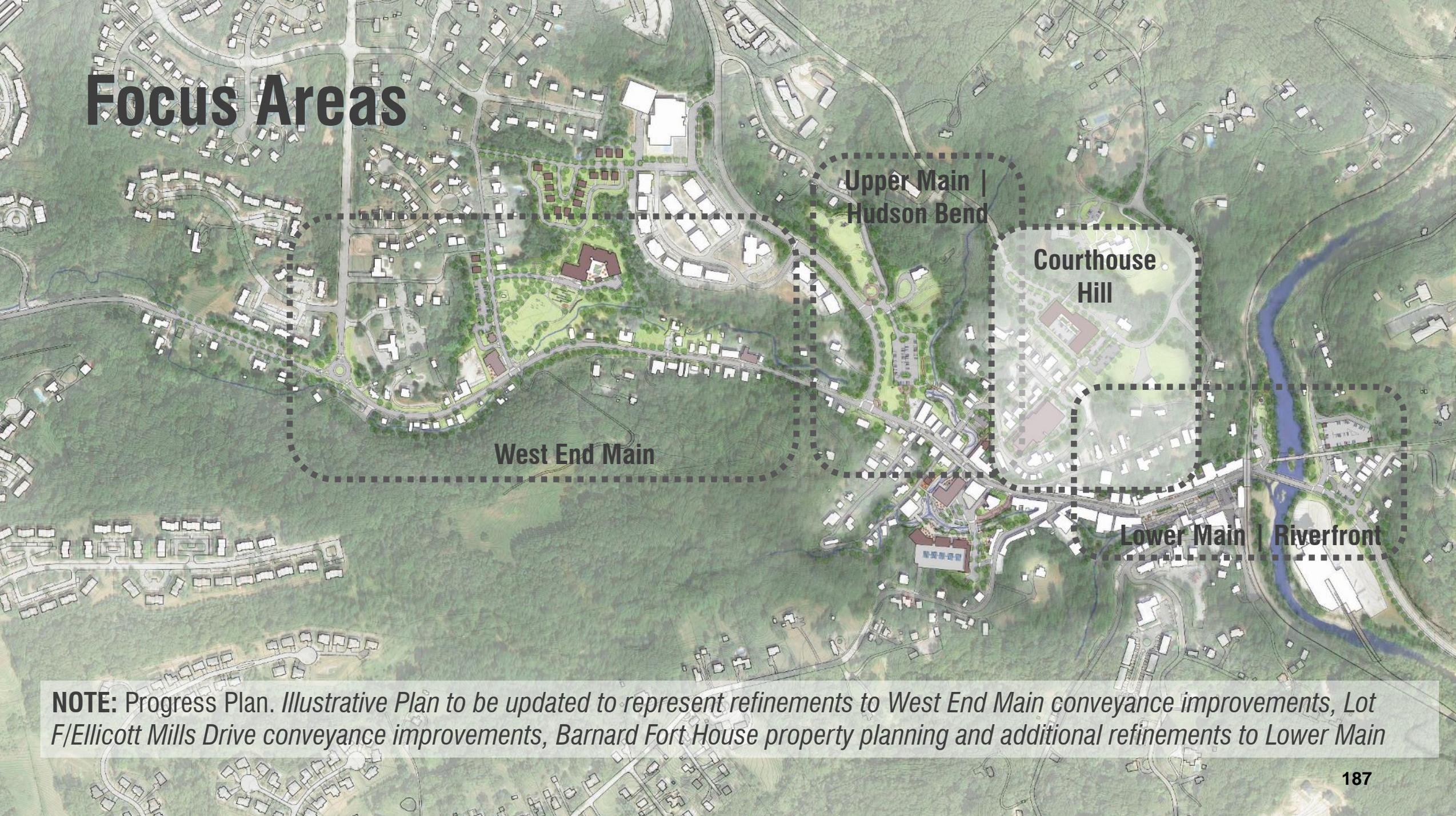


**Open Space
Connection to Roger
Carter Center,
Barnard Fort House
and “Hudson Bend”**

“Central West End” (Maker’s Spaces)



Focus Areas



Upper Main |
Hudson Bend

Courthouse
Hill

West End Main

Lower Main | Riverfront

NOTE: Progress Plan. *Illustrative Plan to be updated to represent refinements to West End Main conveyance improvements, Lot F/Ellicott Mills Drive conveyance improvements, Barnard Fort House property planning and additional refinements to Lower Main*

Courthouse Hill

Program

- Determined as part of RFP process
- Adaptive reuse of courthouse building
- Active uses wrapping parking deck
- Public and private parking
- On-site SWM



Courthouse Hill

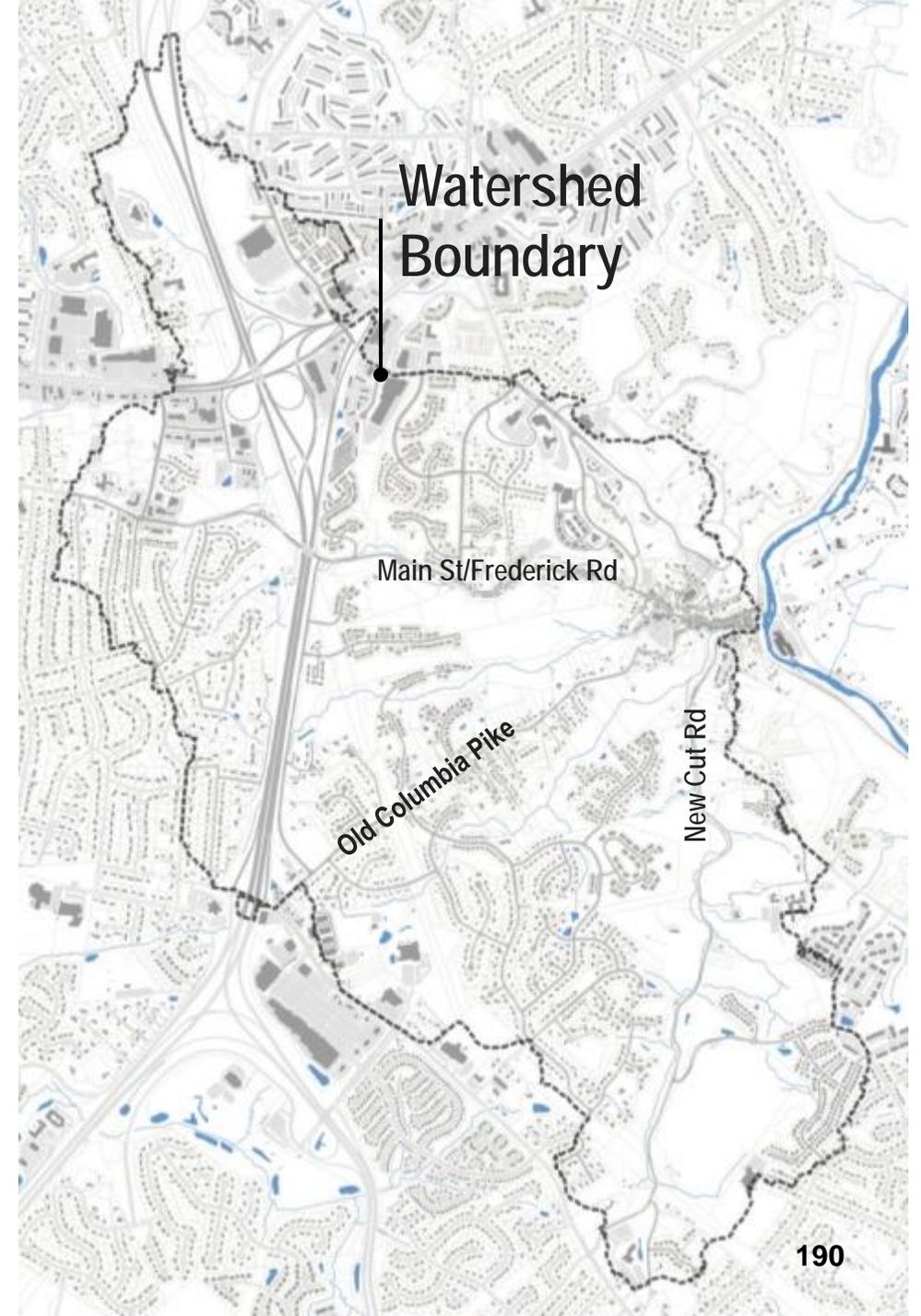
Considerations:

- Innovative design
- Interface/connectivity with PFI, Mt. Ida
- Connectivity to Main Street
- Site organization around streets
- Views / vistas



Watershed

- Pedestrian Connectivity
- Green Infrastructure / Green Neighborhood Incentives Program
- Patapsco River Flood Mitigation Sensitivity Analysis
- Tiber-Hudson Special Protection District
- Debris Management and Channel Maintenance Plans



Debris Management



Debris Management

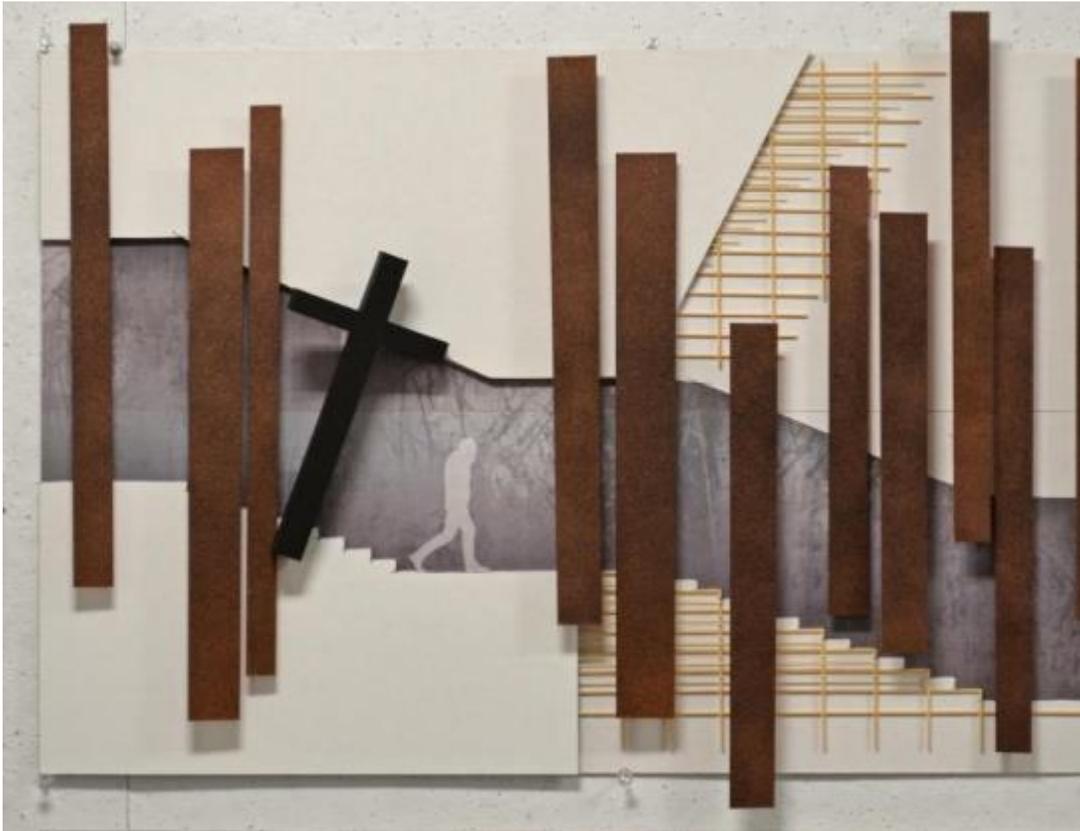
Debris Management – Log Snares



RES Robinson Fork Mitigation Bank

Debris Management

Debris Management – Structural Vertical Snares

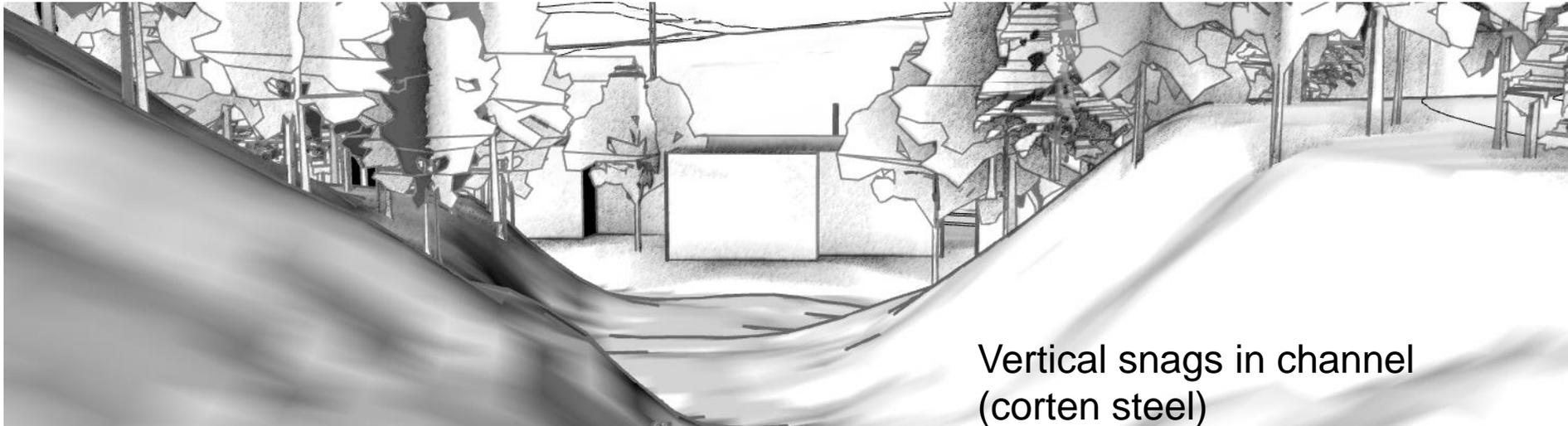


Layered Gallery by Gianni Botsford Architects

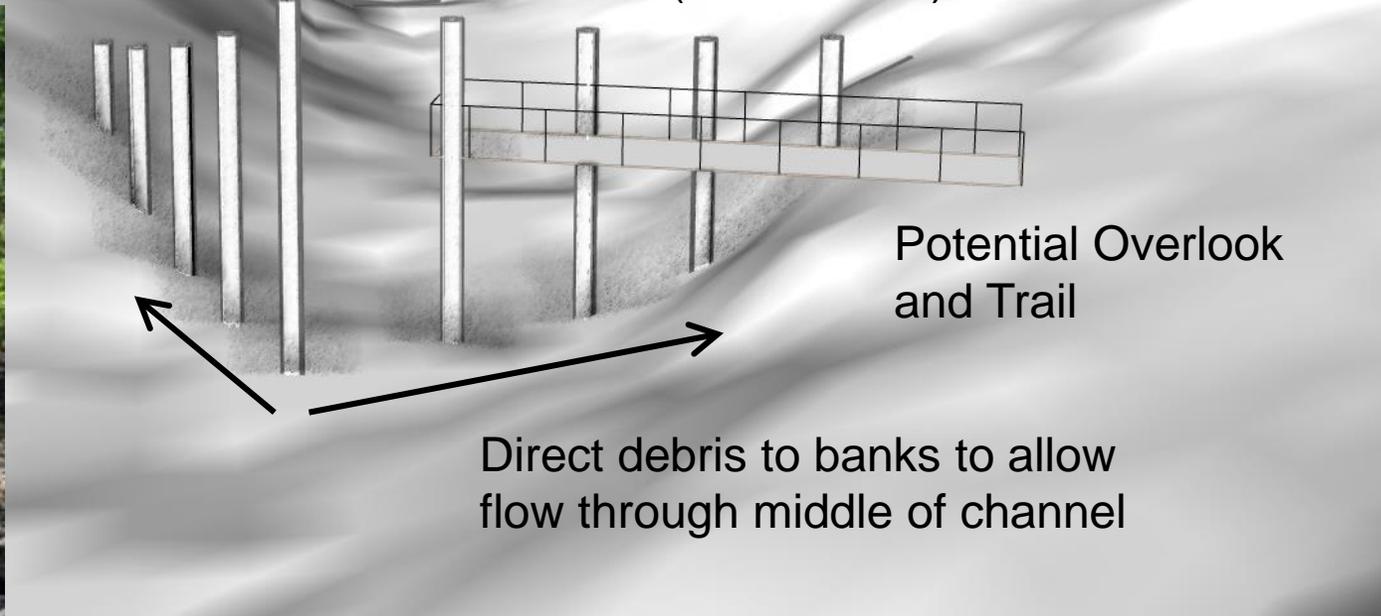
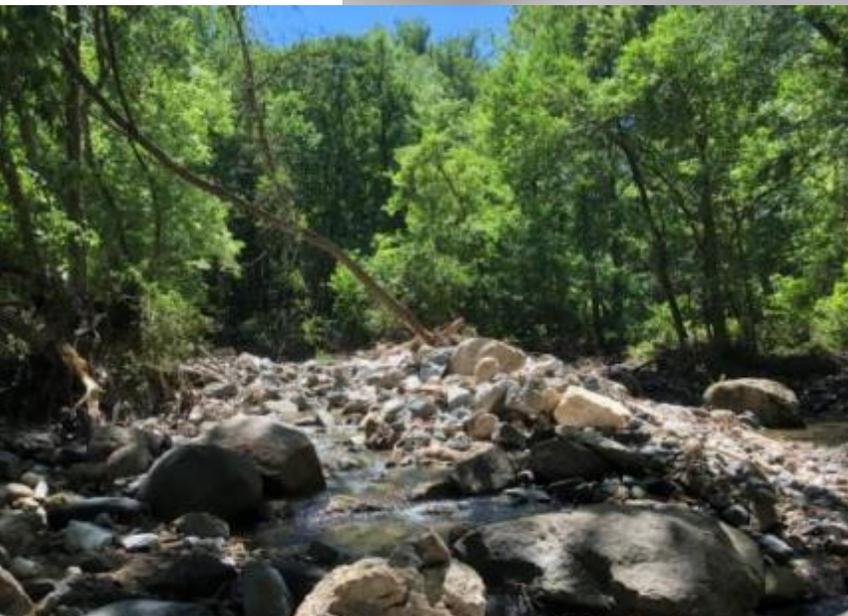


Debris Management

Debris Management – Structural Vertical Snares and Potential Overlook



Vertical snares in channel
(corten steel)



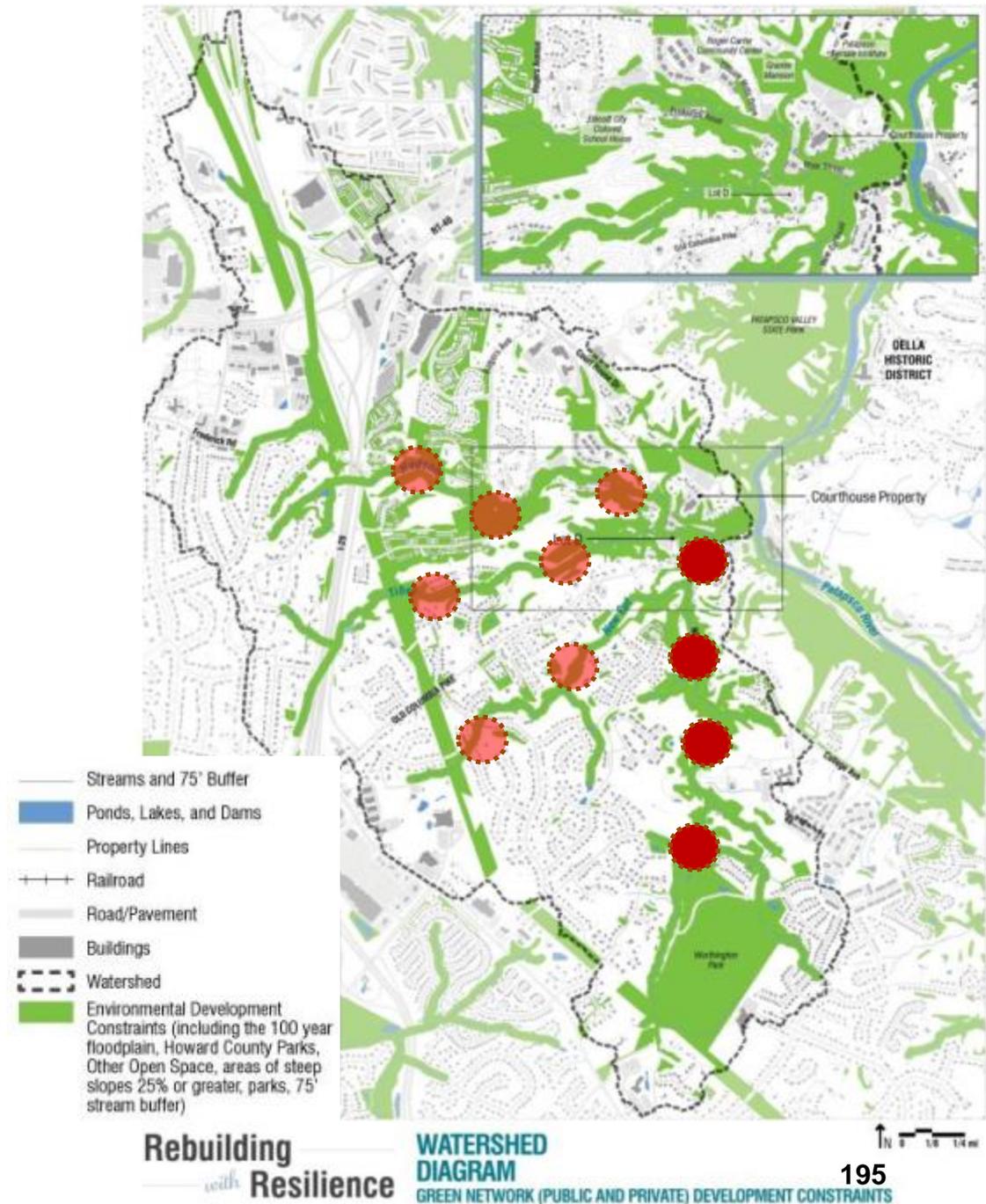
Potential Overlook
and Trail

Direct debris to banks to allow
flow through middle of channel

Debris Management

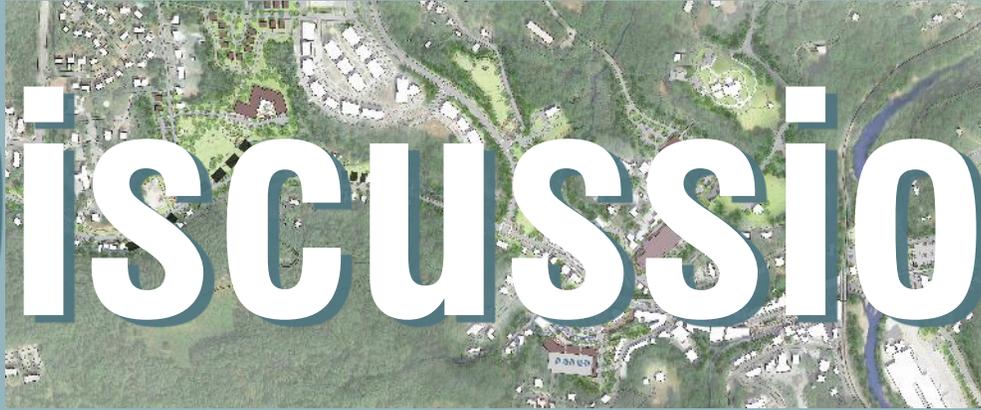
Considerations:

- Upright wood snags (small debris/habitat)
- Upright steel snags (large debris) - public art / flood lighting / viewing platforms
- Tree management
- Vehicular access / access easements
- Debris jam master plan (beginning with New Cut Branch)





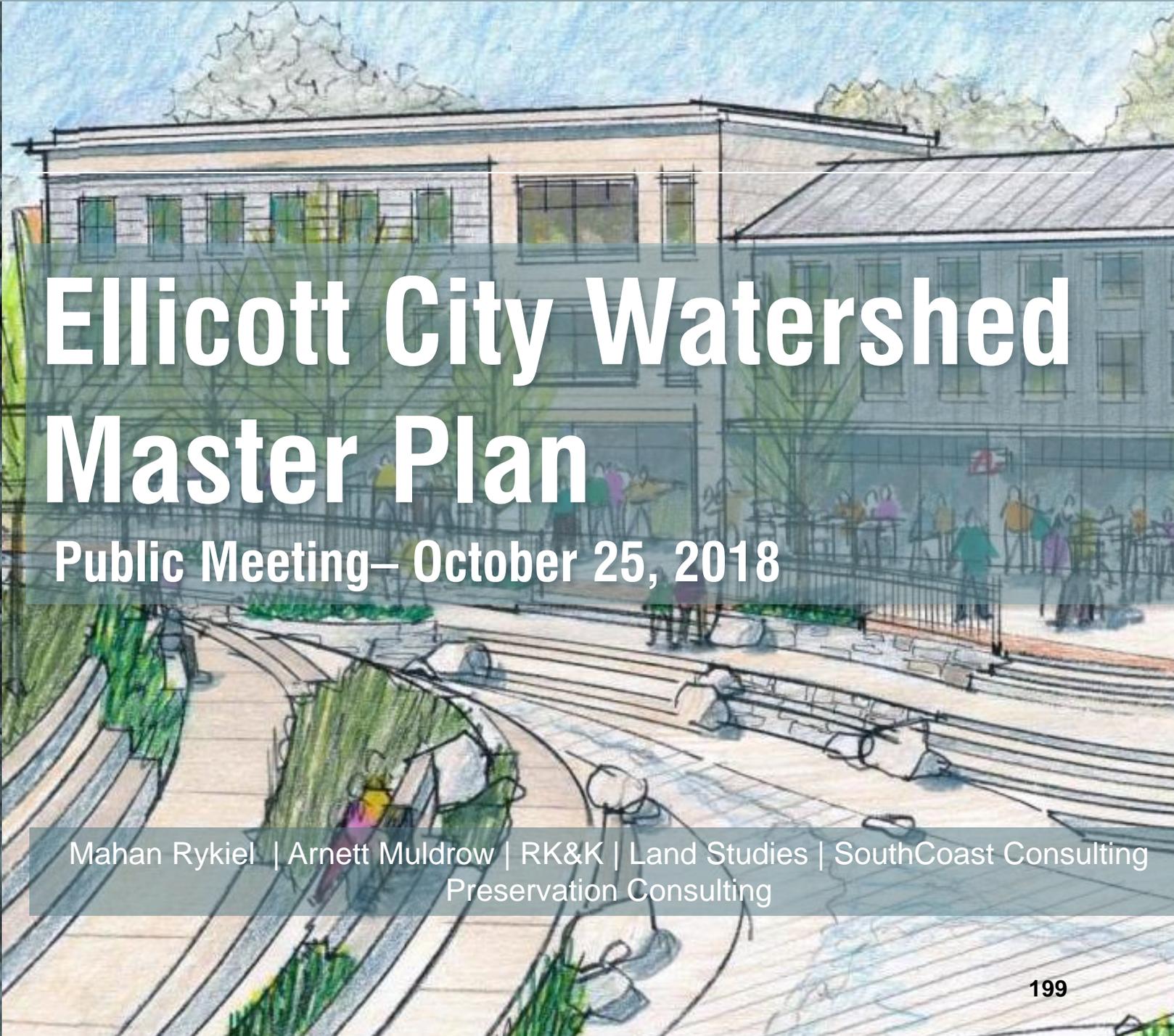
Discussion



Next Steps

Next Steps

- 1. Presentation posted on DPZ website: *Look for an email blast when available.***
- 2. Provide additional comments via survey to be released (DPZ to email).**
- 3. Stay tuned for future email notifications on the draft plan release and future meetings (Draft Plan for Public Review – Late January, 2019 Anticipated)**



Ellicott City Watershed Master Plan

Public Meeting— October 25, 2018

Mahan Rykiel | Arnett Muldrow | RK&K | Land Studies | SouthCoast Consulting
Preservation Consulting