

EC Safe & Sound

Channel Constriction Project Rear Removals

Certificate of Approval – Rear Removals Advisory Comments – Rear Facades & St. Paul

Howard County Department of Public Works

Appendix A - Presentation for October 7, 2021 Hearing

Outline

Application for **HPC Certificate of Approval – Partial Building Removal**

1. Channel Constriction Project
2. Advantages
3. EC Safe & Sound Overview & Update
4. Review of Structures
5. Removal Process / Section 106
6. Timeline

Removal of portion of 8085, 8095, and 8111-8113 Main Street

No Change to Main Street facades

Partial building / Structure Removal (Chapter 12)

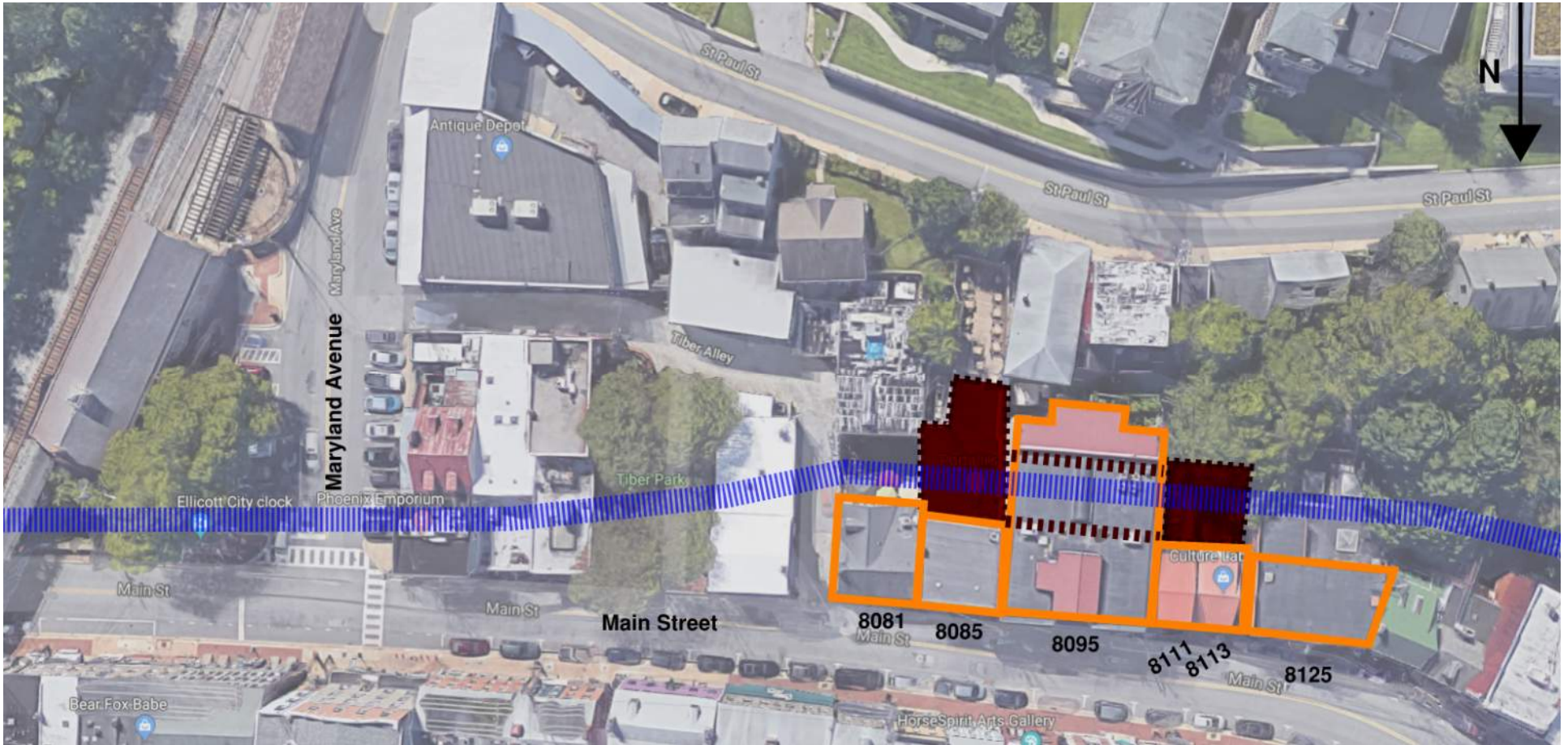
Request for Advisory Comments

1. Rear / Side Façade development process
2. Code & Use Study
3. Concept Designs
4. St. Paul Street Access / Placemaking

Visible and built features of new rear and side building facades (Chapters 7 & 9)

Site components / layout on the South side of the stream channel (Chapter 9)

Channel Constriction Project Overview



Stream Channel



Portion of building proposed for removal (below)



Portion of building proposed for removal

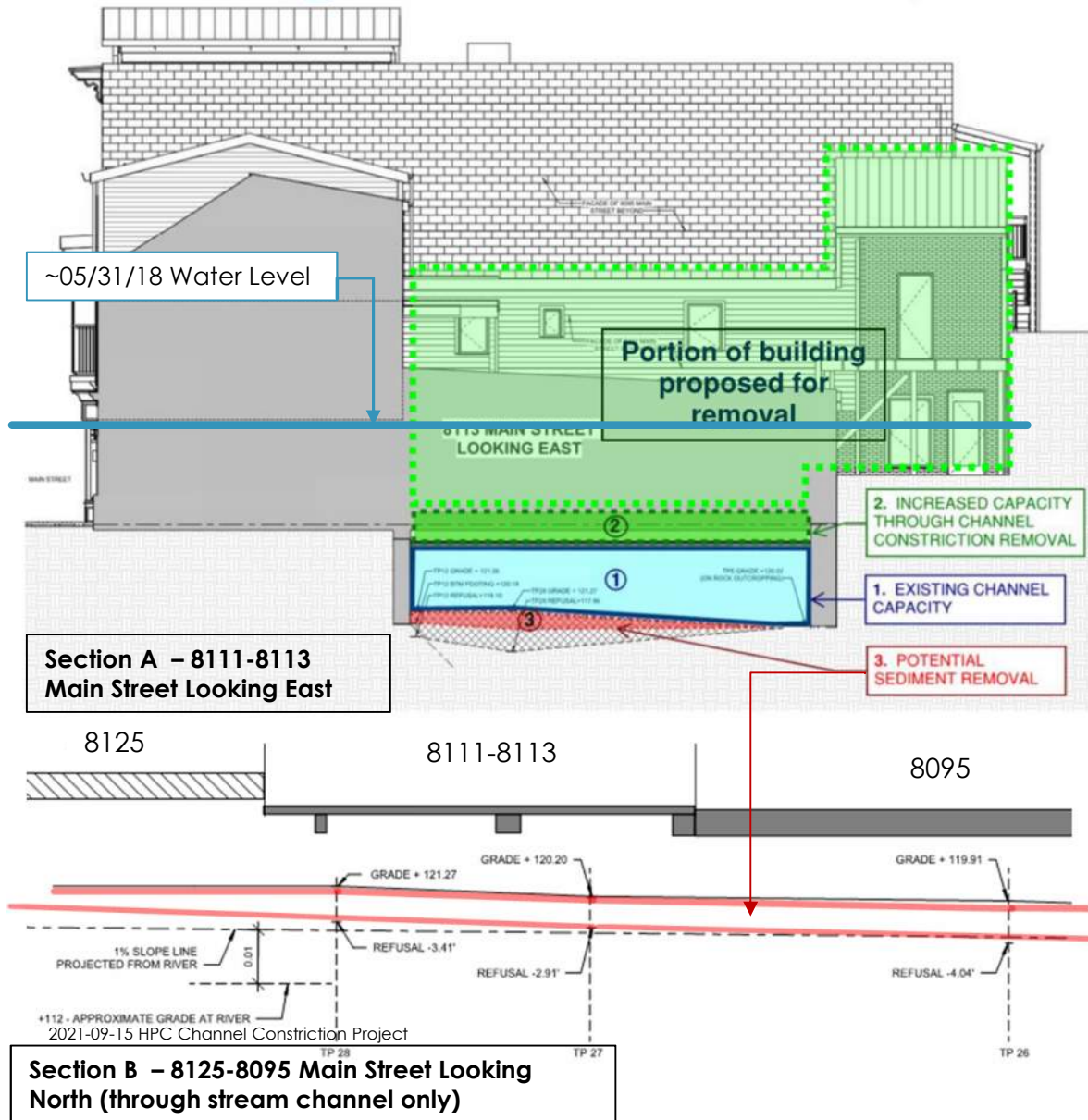
2021-09-15 HPC Channel Constriction Project



Portion of building to remain

10/1/2021

Channel Constriction Project - Necessity



Tiber-Hudson Stream Channel Sediment Study

Considerations:

- Depth of Sediment
- Proximity and bearing condition of stream channel walls
- Slope of the stream channel bottom
- Elevation of the Patapsco River (to ensure positive flow)

Findings:

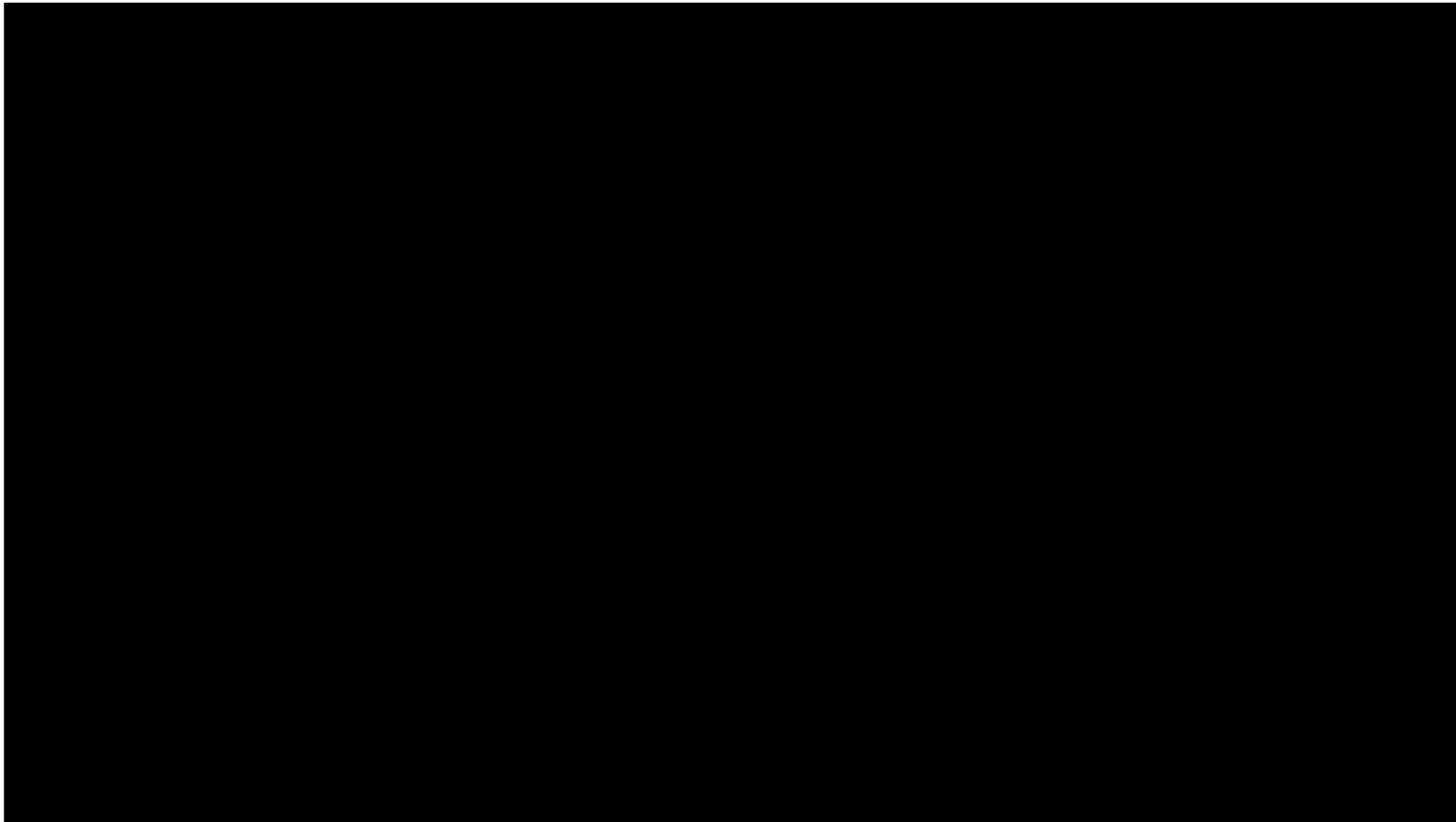
- Sediment was generally in excess of 12 inches and less than 36 inches
- Highly irregular channel bottom
- Avoid removal of material adjacent to stream channel walls

Howard County Department of Public Works with KCI Technologies, Inc & McCormick Taylor. 1 August 2021



Channel Constriction – 2018 Flood

Channel Constriction – 2018 Flood



*Buildings currently spanning the channel constrict the channel to approximately 6' – 8' clear vertically. **After the 2018 Flood, local resident Ron Peters documented evidence of water reaching 21 feet just upstream of 8125 Main Street.***

Advantages of Channel Constriction Project

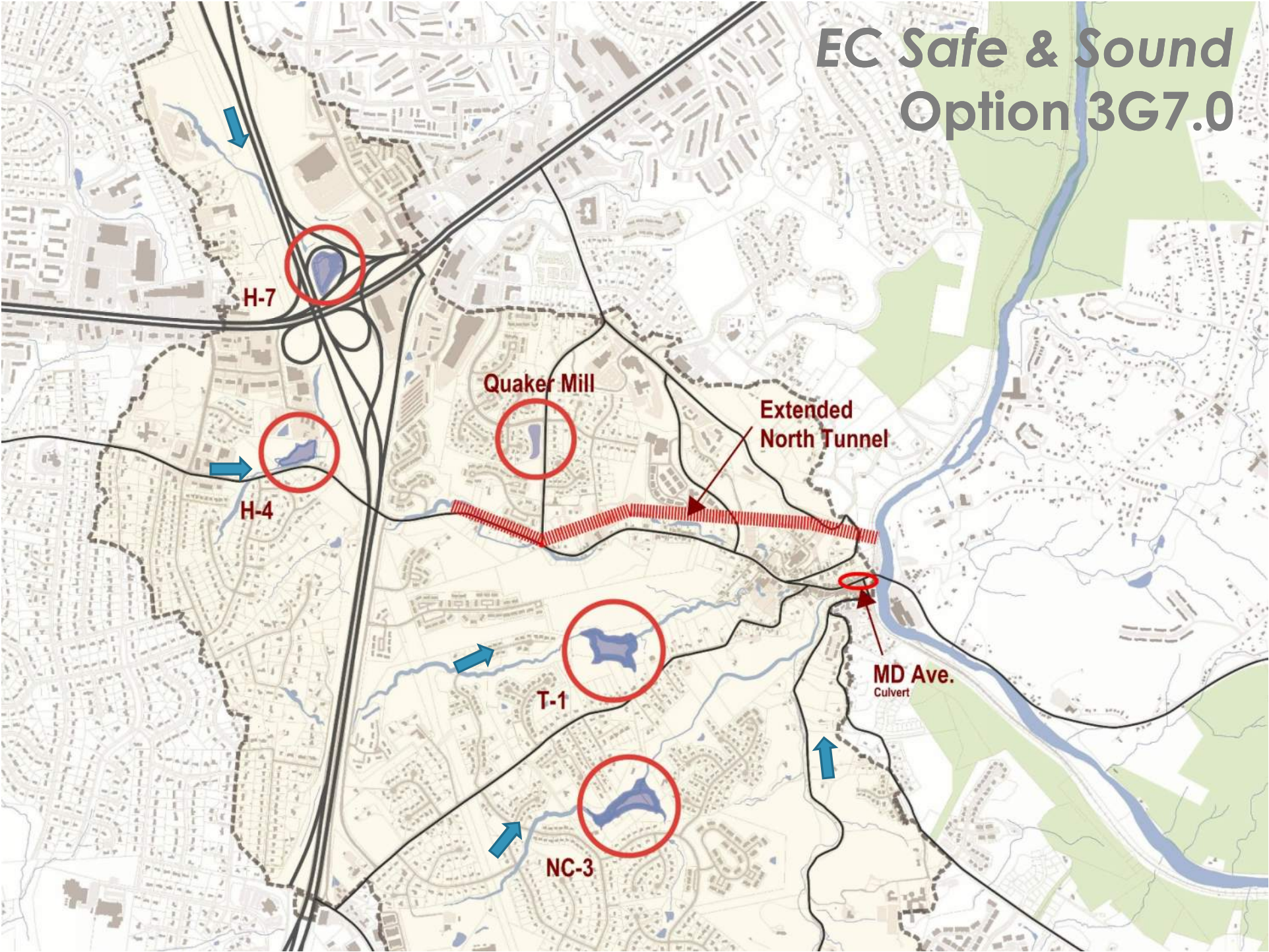
- Restores capacity in the conveyance network
- Improves efficiency of flow in the conveyance network
- **Reduces peak water surface elevation**
- Reduces hydrostatic forces on neighboring buildings
- **Does not impact Main Street facades**
- Maintains useable building area for each address
- Maintains the notion / unique typology of buildings spanning the channel, through preservation of upper floors of 8095.

*“...the water courses themselves are not highly visible in the center of the historic district. ... Tiber Creek flows parallel to Main Street, through Ellicott City’s central commercial area, but is confined to channels behind buildings or culverts beneath roads and buildings. Recent changes {c.1990} in downtown Ellicott City have helped to make Tiber Creek visible from public areas. **These and similar projects that open up views of the streams or rivers help to emphasize the relationship of Ellicott City to its natural setting.**”*

Chapter 9, *Ellicott City Historic District Design Guidelines*. 7 May 1998

Quotes reference: “*Evaluation of Ellicott City Flood Risk Management Alternatives, Howard County, Maryland*”. December 2019. Planning Division, US Army Corps of Engineers, Baltimore District.

EC Safe & Sound Option 3G7.0



Overview – EC Safe & Sound



- 7 Individual Projects
- **Major Improvement Program**
- **Substantial benefit to Ellicott City & Howard County**
- Supports County Seat of Howard County
- County's 2nd largest employment hub
- Historic Ellicott City is the center of the CDP
 - One of Howard County's most visible and recognizable historic communities
 - 955 jobs supported

Project	Status
<i>Quaker Mill Dry Flood Mitigation</i>	Pre-Construction
<i>H-7 Dry Flood Mitigation</i>	Construction
<i>Maryland Avenue Culvert / Terraced Floodplain</i>	Final Design
<i>North Tunnel</i>	Final Design
NC-3	Concept Design
H-4	Concept Design
T-1	Planning

EC Safe & Sound - Plan Development Process

- **Prior Administration's Plan**
 - Included removal of 10 buildings
- **Commenced review process upon taking office**
- **Goals included preservation of as many buildings as possible**
- **Considered >60 Scenarios**
 - Removal of no buildings
 - Removal of 4 buildings
 - Removal of 6 Buildings
- **Solicited Community Input**
 - 5 Plans advanced
 - Community Meeting
 - Online Comment Period
- **Selection of Option 3G7.0**

“Overall, the USACE review team found that the County is following a **sound process** and that the FRM measures being considered are typical of the measures considered for USACE FRM projects. **The current County-selected alternative (known as 3G.7.0) can significantly reduce flood risk to downtown Ellicott City.**”

reference: “*Evaluation of Ellicott City Flood Risk Management Alternatives, Howard County, Maryland*”. December 2019. Planning Division, US Army Corps of Engineers, Baltimore District.

Water Depth & Water Velocity

Water Depths Comparison

	Previous 5 year plan (16C) (Comparison Only)	Option 3G.7.0
Max Depth - Lower Main (100 year storm)*	4.5 feet	Less than 1 foot
Average Depth, Caplan's to Md Ave (100 year storm)	3.2 feet	Less than 1 foot
Max Depth - Lower Main (July 2016 storm)*	5.5 feet	3 feet
Average Depth, Caplan's to Md Ave (July 2016 storm)	4.1 feet	2 feet
Max Depth - Lower Main (May 2018 storm)*	Unknown	Less than 1 foot
Average Depth, Caplan's to Md Ave (May 2018 storm) <small>*Maximum depth reflects water depths on Lower Main Street above Maryland Avenue.</small>	Unknown	Less than 1 foot

- Goal of reducing depths and velocities as much as possible.
- **Reduction in street-level flooding to 3 feet or less a priority in support of non-structural flood proofing**
- **Reduction in flood velocities down to 5 feet/second (or below) are a priority in support of non-structural flood proofing**

Water Velocity Comparison

	Distance on Road Profile (feet)	Existing (feet/sec)	Previous Plan (feet/sec)	Option 3G.7.0 (feet/sec)
Columbia Pike to MD Avenue along Main Street	0-840	10.3	3.0	2.9
Abbreviated length - Approx. Caplans to MD Avenue	430-840	11.1	2.8	2.6
Abbreviated length - Approx. Tea on the Tiber to MD Avenue	600-840	13.9	3.5	2.5

Chart Graphic: "Ellicott City 'Safe and Sound' Plan: Flood Mitigation Options" 17 April 2019. Howard County Executive Calvin Ball.

Prior HPC Comments & Community Input

○ **Case HPC-18-46, September 2018:**

- *Plan included full demolition of all buildings included in this application.*

○ **Case HPC-19-48, October 2019:**

- *Commission noted that this was a 'straightforward' portion of the EC Safe & Sound Plan – in that it helps improve flow (conveyance) and maintains significant historical resources*

○ **Letter from Commission on the Section 106 Review:**

- *“Design the new Main Street Terraced Floodplain holistically with the surrounding area, not piecemeal”*
- *“Preserve existing foundations in place to reflect the industrial history of this section of the Tiber as the site of mills”*

○ **Case HPC-20-83, March 2021:**

- *Commission noted “years of study since the 2016 Flood, including a specially commissioned hydrology study and consultation with national experts.”*
- *Commission noted importance of final design decisions being carefully evaluated*

Community Input:

Ellicott City Watershed Master Plan

EC Safe and Sound Community Meetings

Joint Permit Application (JPA) Public Meeting

Section 106 Consulting Party Meetings

Ellicott City Project Advisory Group

Scope – Partial Building Removal



Stream Channel



Portion of building proposed for removal (below)



Portion of building proposed for removal



Portion of building to remain

10/1/2021

Current Photos



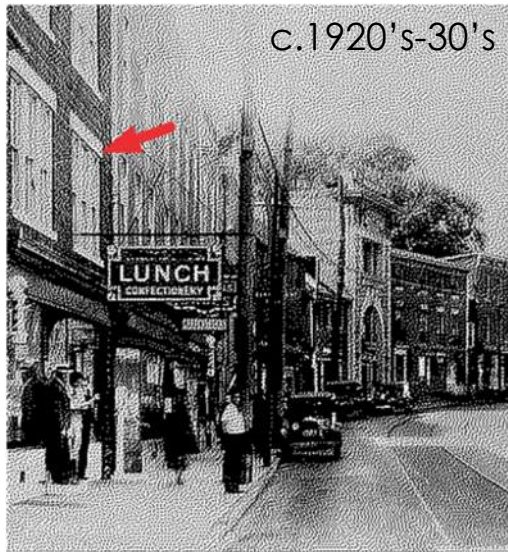
8085



8095



8111-8113



c.1920's-30's



c.1999



c.1950

Historical Photos



Channel Constriction – 2018 Flood

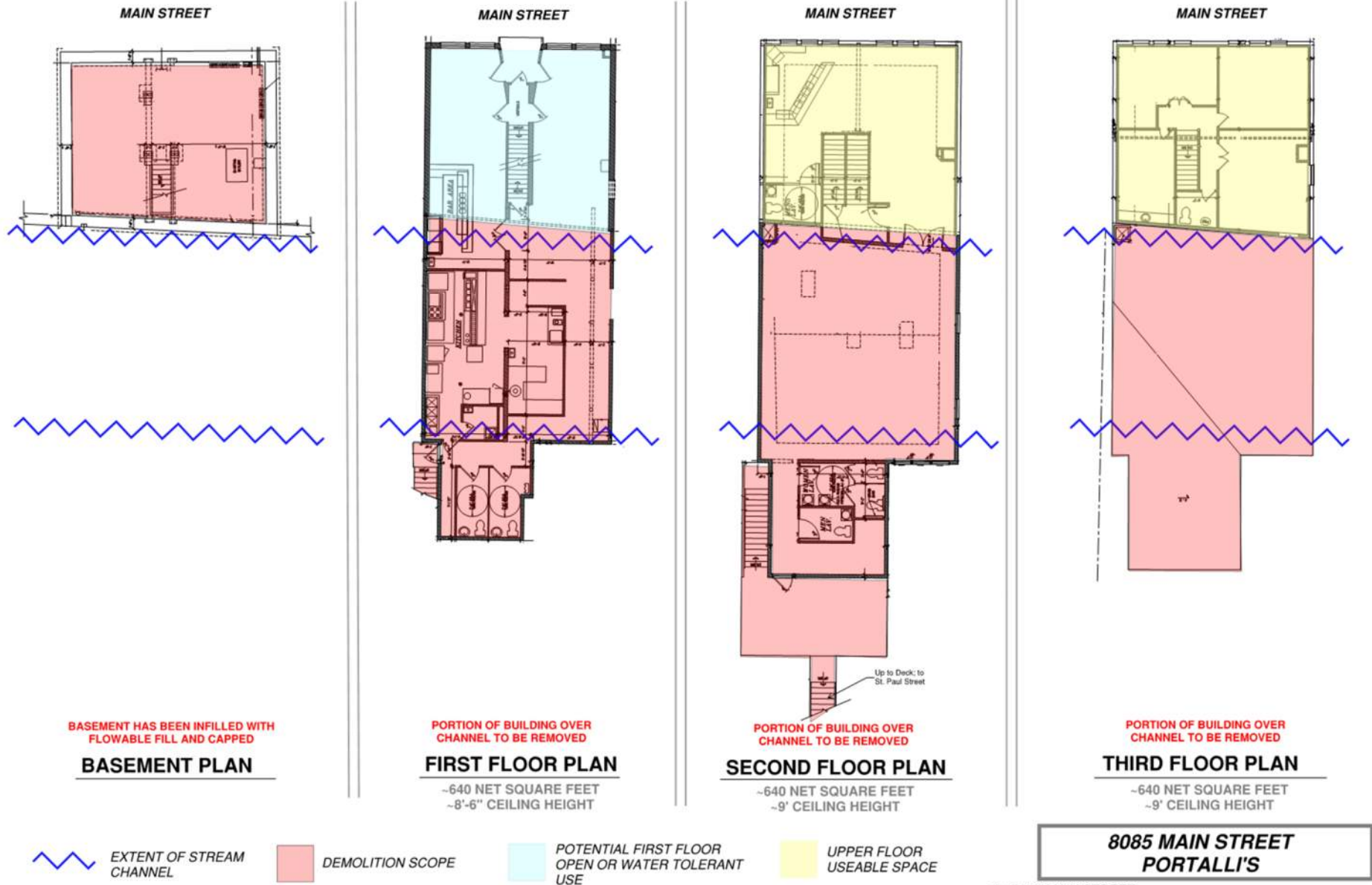
8125



8125 Upper Level



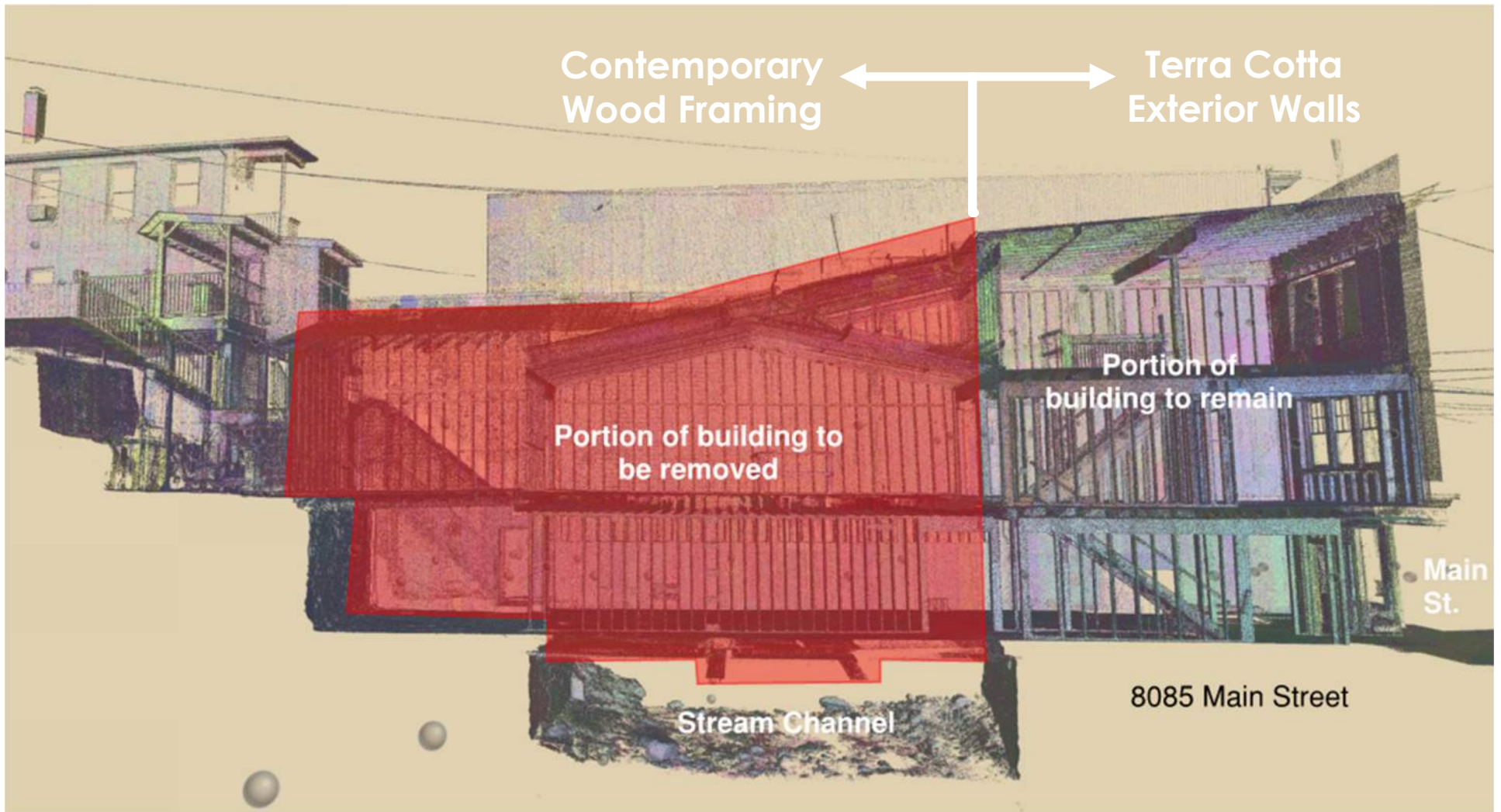
8085 Main Street (former Portalli's)



8085



8085 Main Street (former Portalli's)

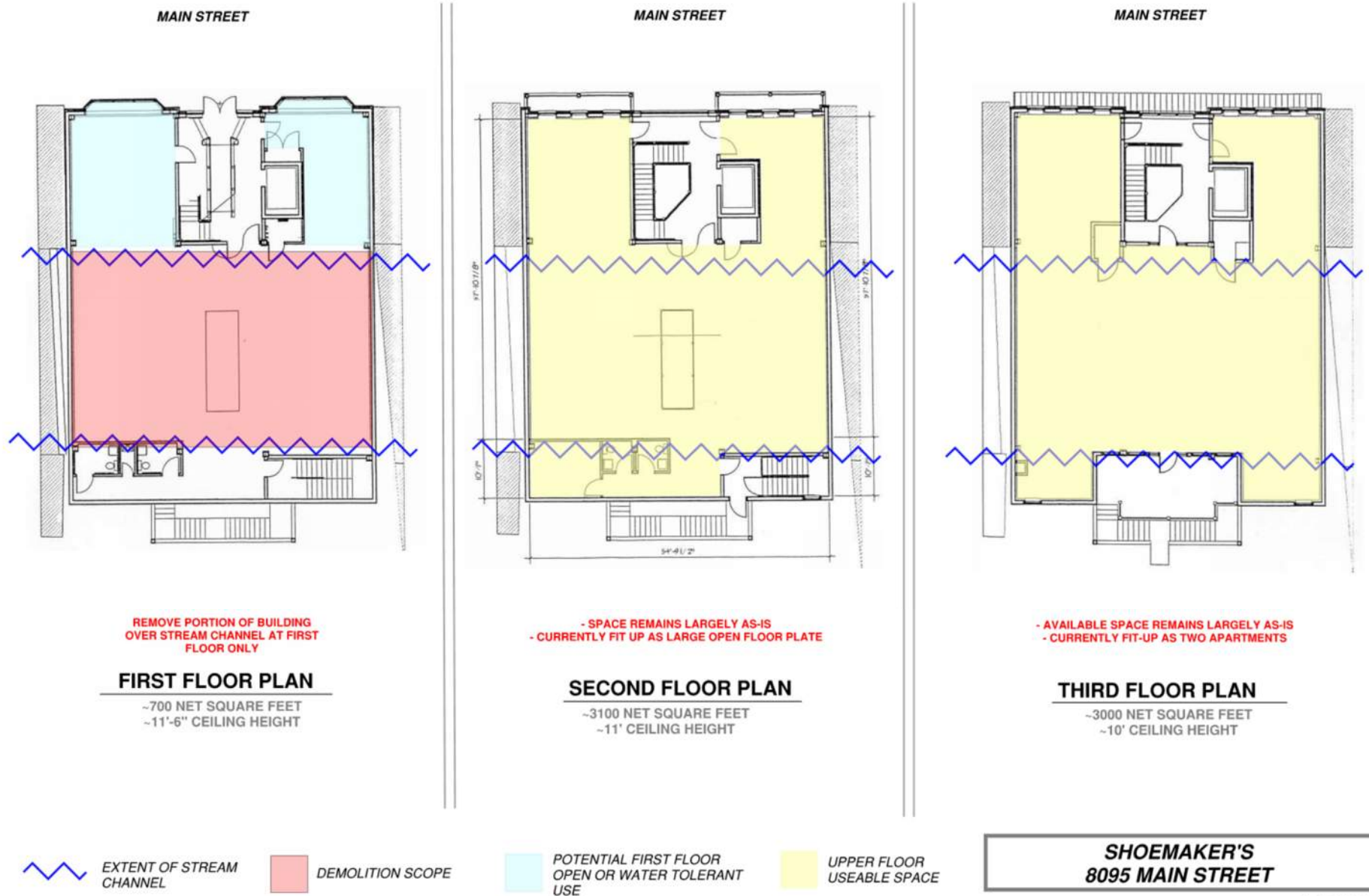


8085 Main Street (former Portalli's)

- **Rear section proposed for removal was heavily damaged in 2016 Flood**
- **Originally supported by three wood trusses.**
 - One destroyed in fire (late 1990's)
 - One destroyed in 2016 Flood
 - Third is no longer a structural element, but will be salvaged
- Portion of building proposed for removal is constructed from platform framing, restructuring and maintain upper floor is technically infeasible
- **Rear removal affords opportunity to open views to former mill race, adjacent to former grist mill**



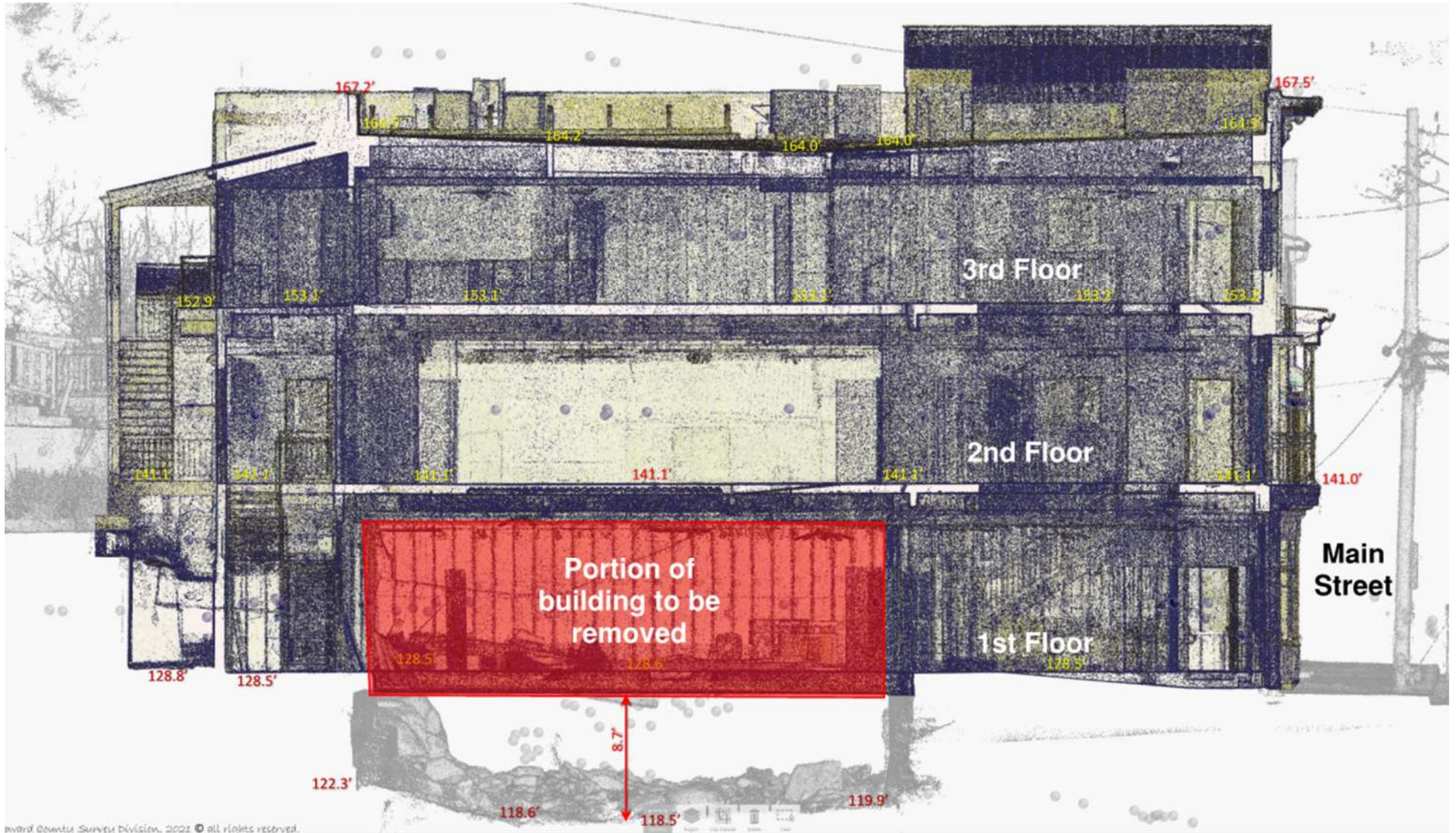
8095 Main Street (former Shoemaker Country)



8095



8095 Main Street (former Shoemaker Country)

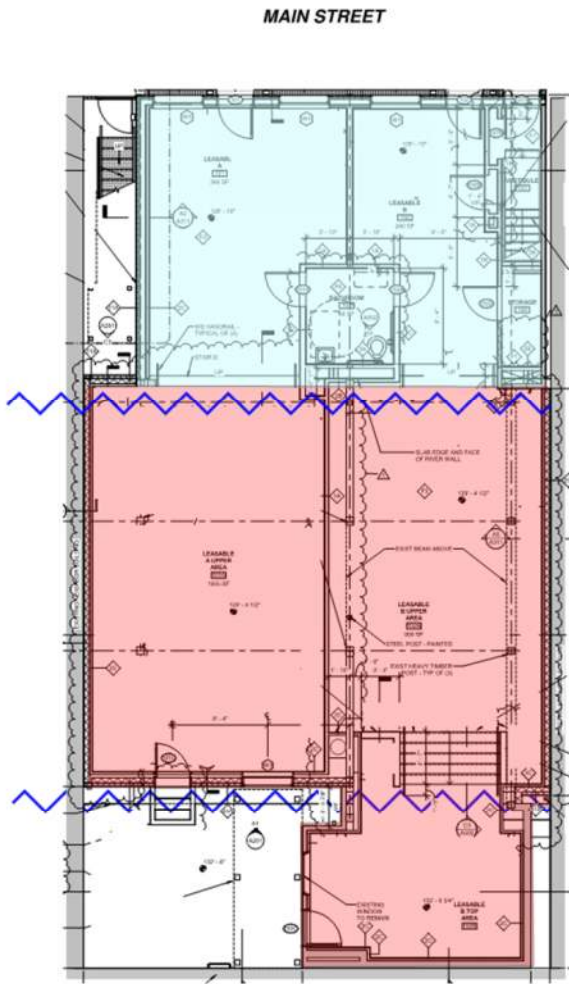


8095 Main Street (Shoemaker Country)

- Filled with approximately 6 feet of water during 2018 Flood. Force of flood waters buckled concrete floor structure.
- **Constructed c.2000**
 - Replaced 'Rosenstock's Building', destroyed by fire (late 1990's)
 - Contemporary construction
 - Lack of interior detailing
 - **Designed to withstand flood waters.**
- Portion of first floor proposed for removal.
- Second and Third Floor are supported by precast concrete planks spanning the channel.
- **Maintaining the Second and Third Floors preserves the notion or typology of buildings spanning the channel.**



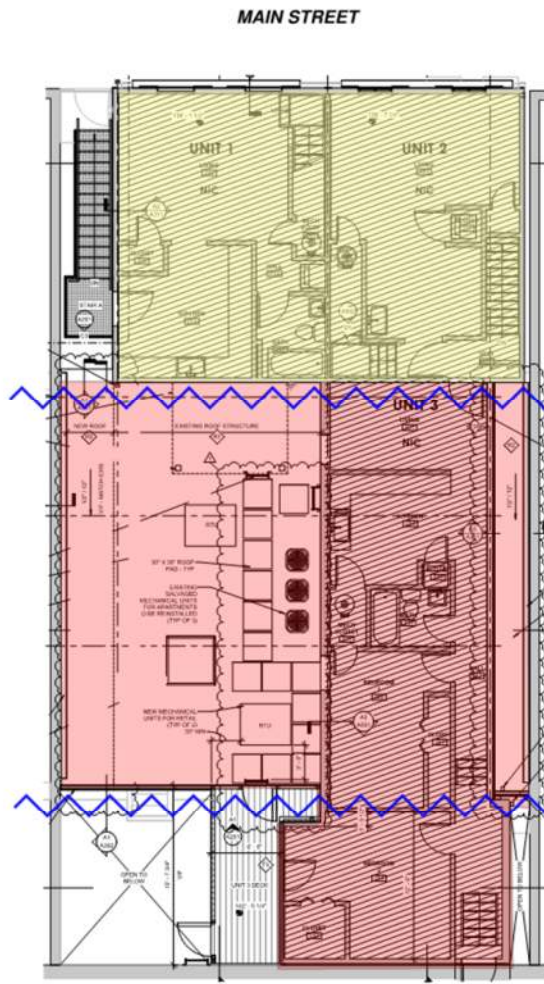
8111-8113 Main Street (former Johnson's Bldg)



PORTION OF BUILDING OVER CHANNEL TO BE REMOVED

FIRST FLOOR PLAN

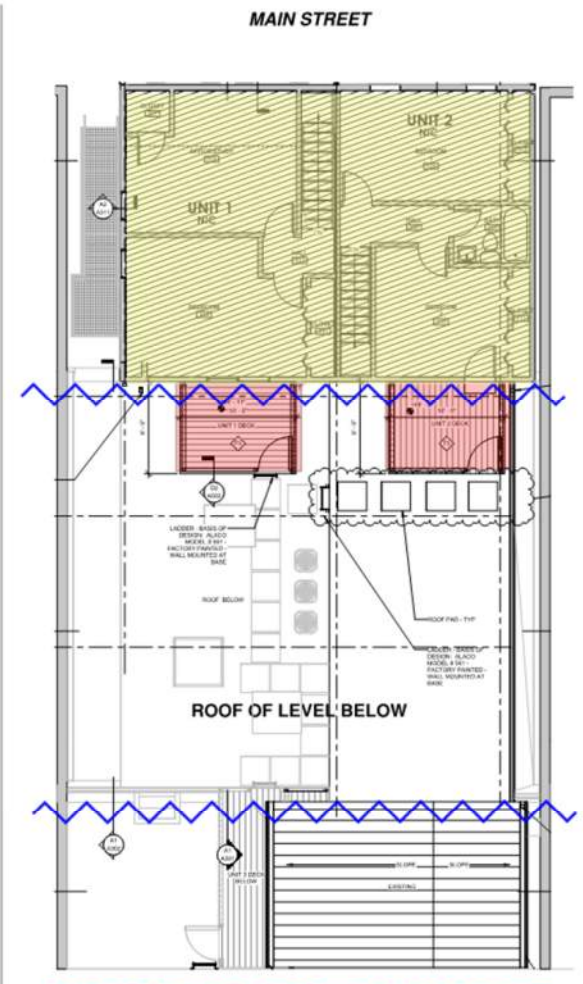
~665 NET SQUARE FEET
~8' CEILING HEIGHT



PORTION OF BUILDING OVER CHANNEL TO BE REMOVED

SECOND FLOOR PLAN

~665 NET SQUARE FEET
~8' CEILING HEIGHT



PORTION OF BUILDING OVER CHANNEL TO BE REMOVED

THIRD FLOOR PLAN

~665 NET SQUARE FEET
~8' CEILING HEIGHT



EXTENT OF STREAM CHANNEL



DEMOLITION SCOPE



POTENTIAL FIRST FLOOR
OPEN OR WATER TOLERANT
USE



UPPER FLOOR
USEABLE SPACE

JOHNSON'S BUILDINGS
8109-8113 MAIN STREET

AKA 8111 - 8113 MAIN STREET

Updated 09/02/2021

8113-8111-8095 from rear of 8125



8113-8111



8111-8113 Main Street (former Johnson's Bldg)



8111-8113 Main Street (former *Johnson's Bldg*)

- **Heavily damaged by 2016 Flood, emergency stabilization implemented.**
- History
 - Damaged by fire (late 1990's)
 - Contemporary construction
 - Lack of interior detailing
- Rear portion of structure proposed for removal.
- 8111: 2-Story portion proposed for removal.
- 8113: 1-Story portion proposed for removal.
- **Wood truss componentry will be salvaged for re-use in another location.**



Useable Space

- Each building will be useable and occupiable.
- First Floor spaces will be of similar scale to other Main Street structures (~20'-25' Deep floor plates)
- Planning for short term and long term uses through Code & Use Study

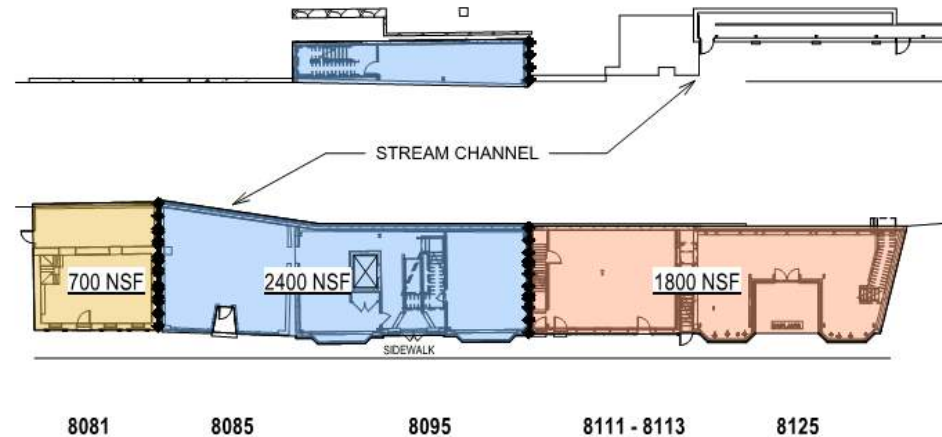


Diagram – Available Space (NSF)

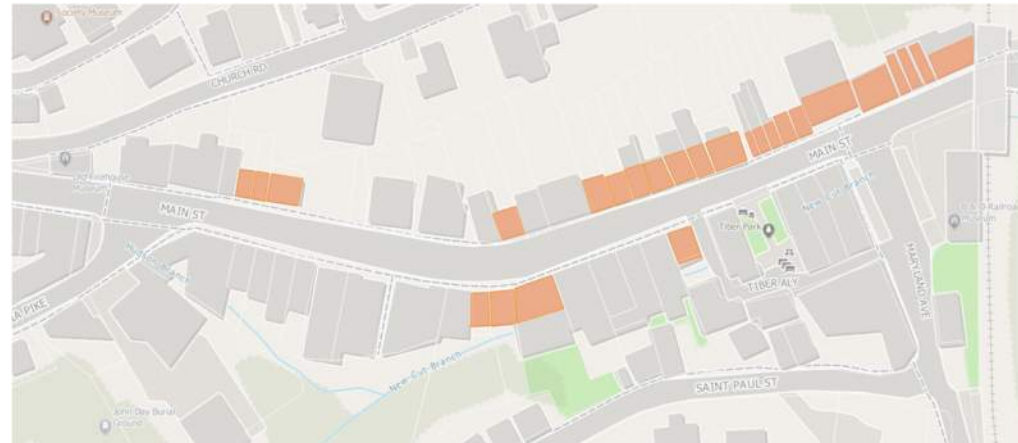


Diagram – Similar Floor Plates on Lower Main Street

Process – Partial Building Removal

- **Recordation** *(complete)*
 - Laser scan (LIDAR) of entire structure. *(included in Application)*
 - Development of architectural drawings *(included in Application)*
 - Survey by County's Architectural Historian
 - Detailed photography per MHT standards; HABS Documentation *(in progress)*
- **Salvage of Components**
 - Identification and designation of character-defining elements *(included in Application)*
 - Engaged qualified preservation Architect and Contractor, technical specifications for salvage operations *(in progress)*
 - Documentation / inventory / design considerations for future re-use

Section 106 Programmatic Agreement

- Executed in September, 2021
- I. Responsibilities of the Signatories
- II. Measures to avoid, minimize, and mitigate adverse effects.
- III. Performance Standards

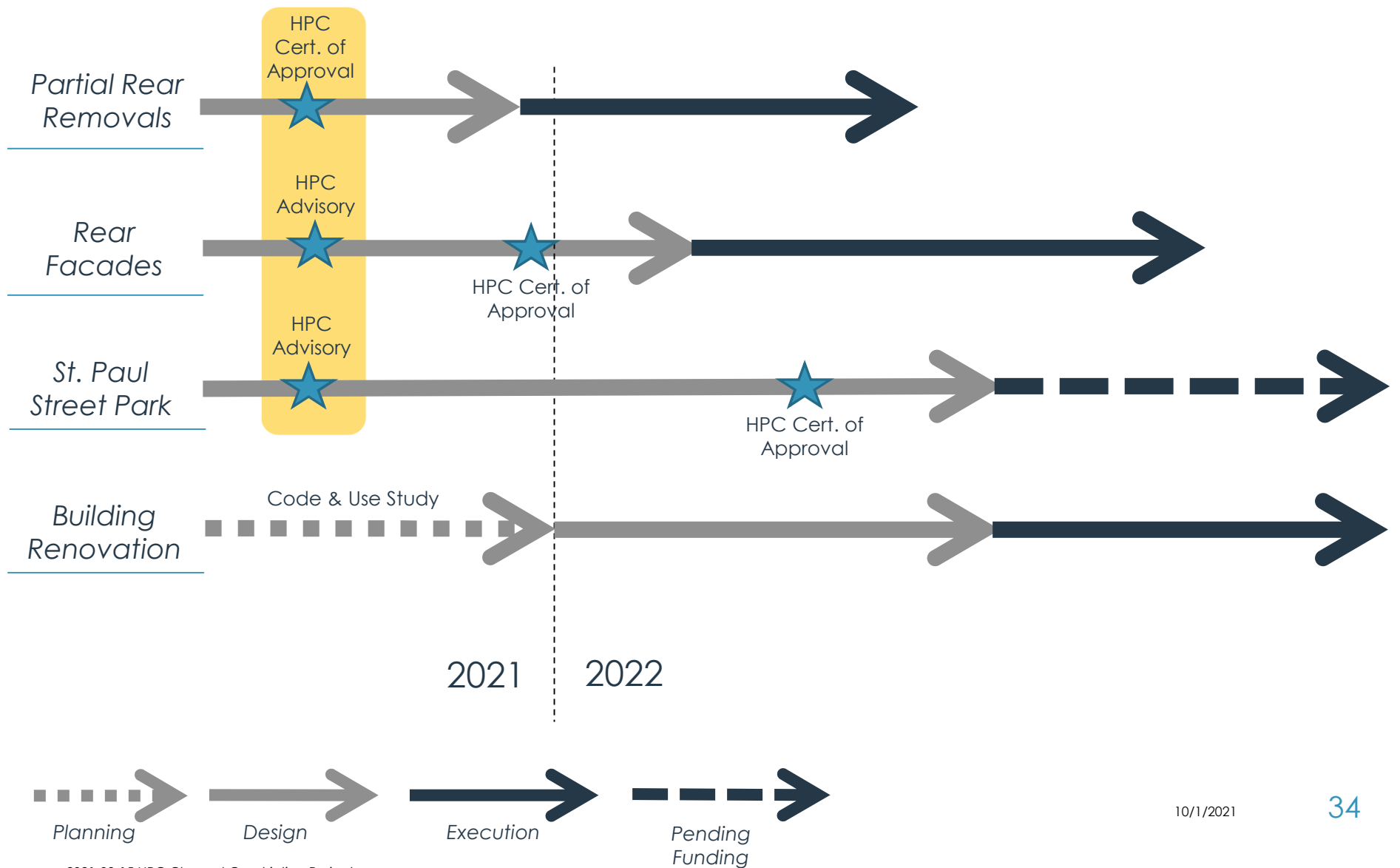
Section 106 Programmatic Agreement, Part 2 *(Measures to avoid, minimize, and mitigate adverse effects)*

- Recordation / Documentation
- Architectural Salvage (Character-Defining Elements)
- Treatment of Archeological Resources
- Public Interpretation Measures
- Design Review
- Retention & Adaptive Reuse

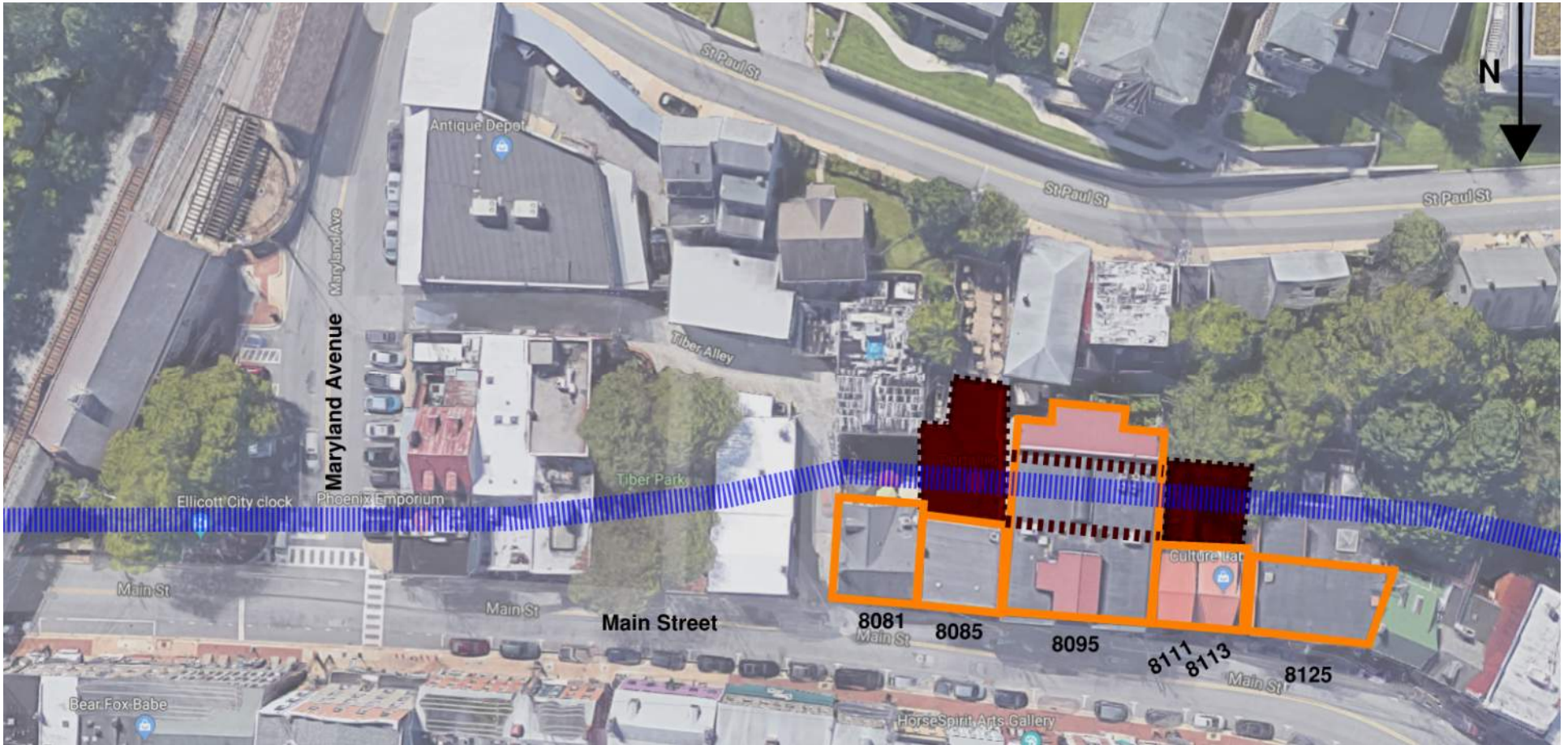
Structures of Unusual Importance

- **Chapter 12: Demolition (Ellicott City Historic District Design Guidelines)**
- **Section 300: Rules of Procedure, Howard County Historic Preservation Commission**
 - *Requires the Commission to determine if the structures proposed for removal are of unusual importance*
- **Howard County Code 16.608 – Structures of unusual importance**
 - (d) *Special Circumstances.* The Commission may approve the proposed alteration, moving or demolition of a structure of unusual importance despite the fact that the changes come within the provisions of subsections (a) through (c) of this section, if:
 - (1) The structure is a deterrent to a major improvement program which will be of substantial benefit to the County;
 - (2) Retention of the structure would be a threat to public safety;
 - (3) Retention of the structure would cause undue financial hardship to the owner; or
 - (4) Retention of the structure would not be in the interest of a majority of the persons in the community.

Channel Constriction Project- Timeline



Channel Constriction Project Overview



Stream Channel



Portion of building proposed for removal (below)



Portion of building proposed for removal



Portion of building to remain

10/1/2021

Request for Advisory Comments

1. Buildings: Rear & Side Facades

- **Code and Use Study**
 - Egress considerations
 - Fire / Life Safety
 - Flood
 - Use of Buildings
- **Design Considerations**
 - Context
 - Provenance
 - Scale
 - Re-use of salvaged materials

2. St. Paul Street Connector / Pocket Park / South Side of Stream Channel

- Egress from buildings
- Potential access from St. Paul Street
- Overlook / respite / passive space

HPC Guidelines

Chapter 7: New Construction, Additions, Porches & Outbuildings

Chapter 9: Landscape & Site Elements

Chapter 12: Demolition and Relocation

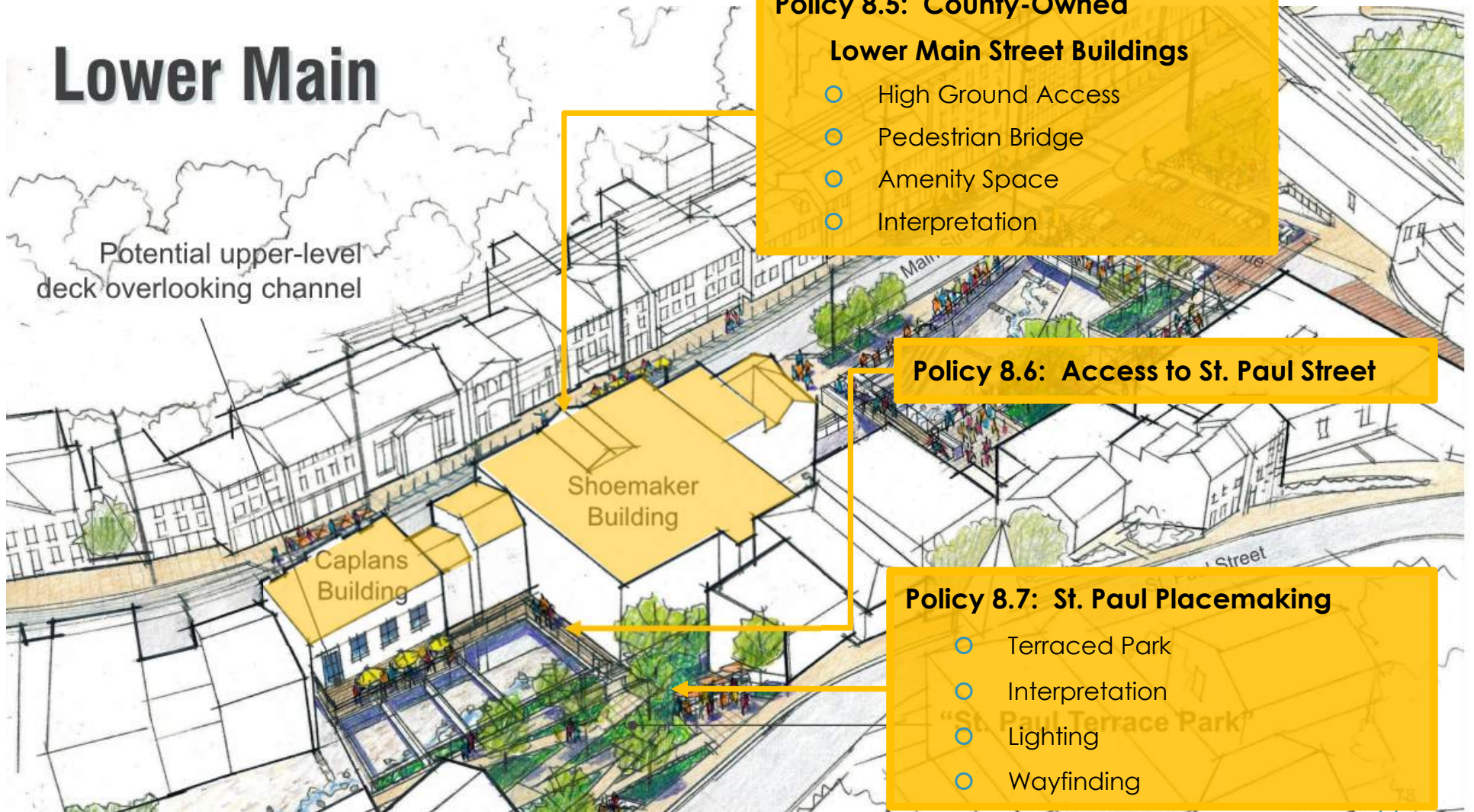
Ellicott City Watershed Master Plan

- Policy 8.5: County-Owned Lower Main Street Buildings
- Policy 8.6: Access to St. Paul Street
- Policy 8.7: St. Paul Placemaking

Ellicott City Watershed Master Plan

Lower Main

Potential upper-level deck overlooking channel



Policy 8.5: County-Owned

Lower Main Street Buildings

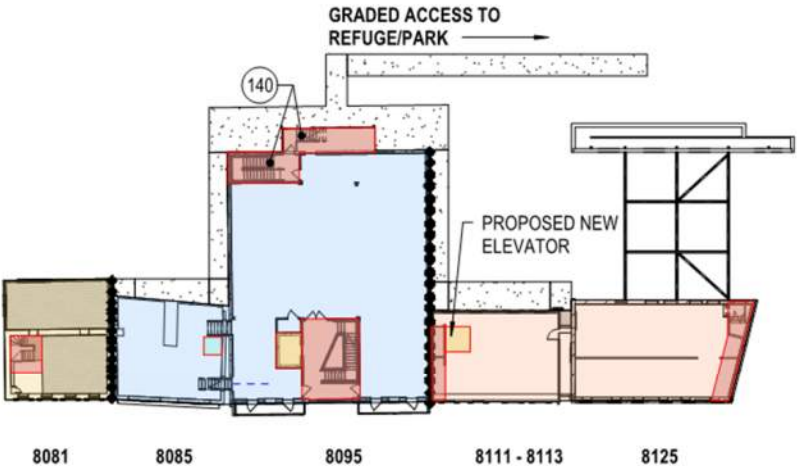
- High Ground Access
- Pedestrian Bridge
- Amenity Space
- Interpretation

Policy 8.6: Access to St. Paul Street

Policy 8.7: St. Paul Placemaking

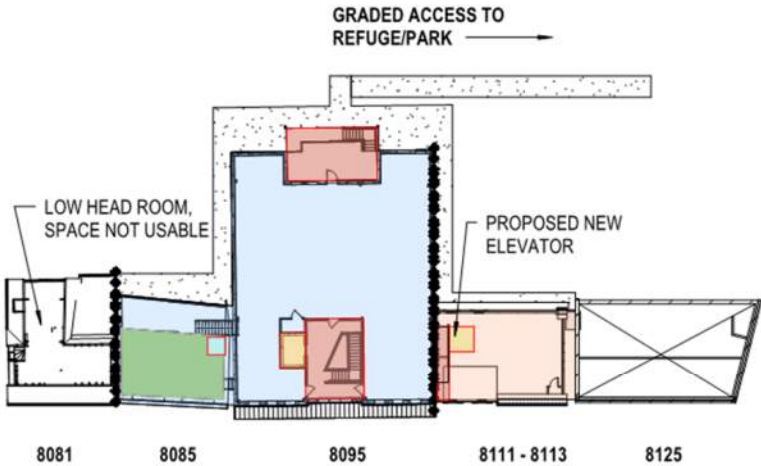
- Terraced Park
- Interpretation
- Lighting
- Wayfinding

Code & Use Study – 3 Buildings



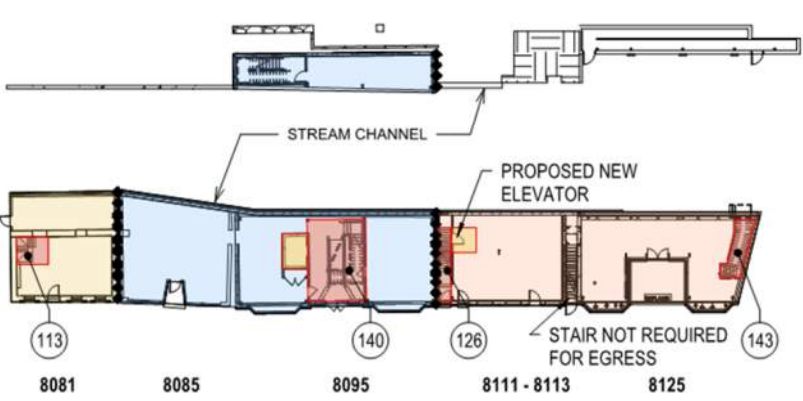
SECOND FLOOR PLANS

SCALE: 1/32" = 1'-0"



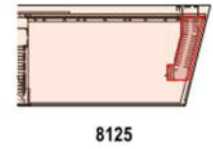
THIRD FLOOR PLANS

SCALE: 1/32" = 1'-0"



FIRST FLOOR PLANS

SCALE: 1/32" = 1'-0"



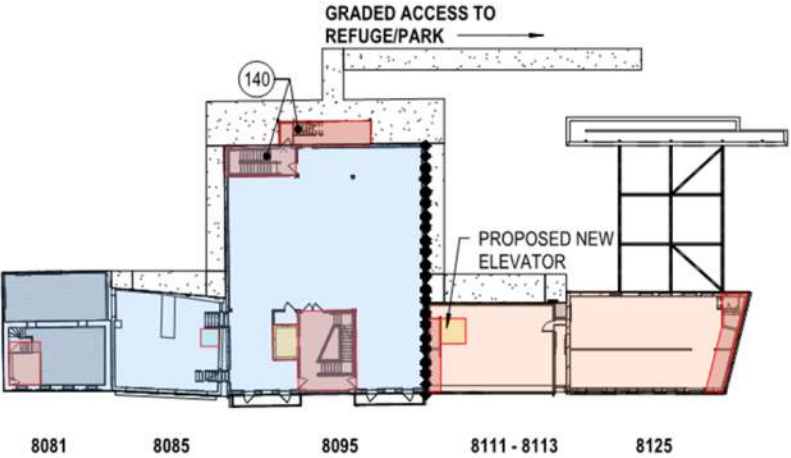
ALT FIRST FLOOR PLAN

SCALE: 1/32" = 1'-0"

PLAN LEGEND

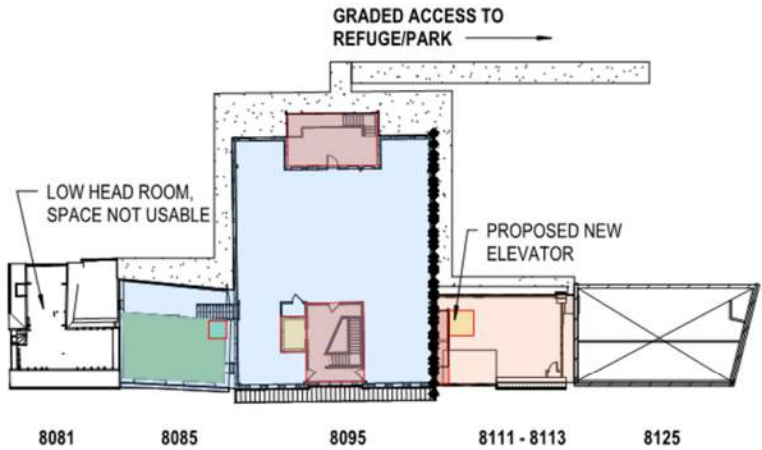
- FIRE BARRIER
- EGRESS STAIRS
- ELEVATOR
- LIFT
- MEZZANINE
- EXISTING STAIR EGRESS CAPACITY

Code & Use Study – 2 Buildings



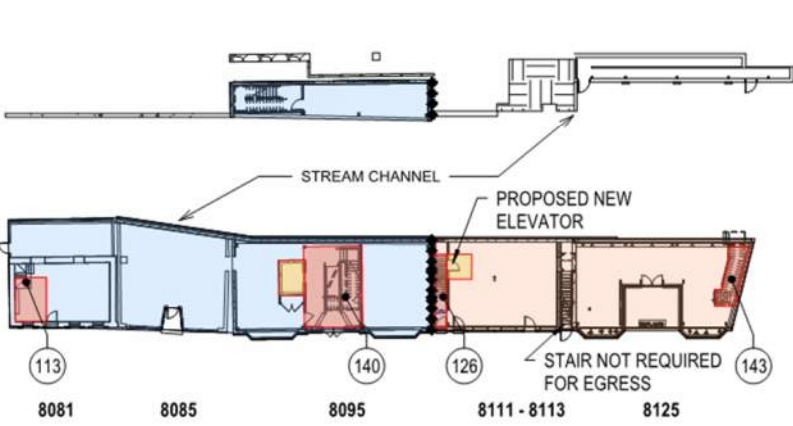
SECOND FLOOR PLANS

SCALE: 1/32" = 1'-0"



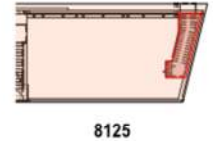
THIRD FLOOR PLANS

SCALE: 1/32" = 1'-0"



FIRST FLOOR PLANS

SCALE: 1/32" = 1'-0"



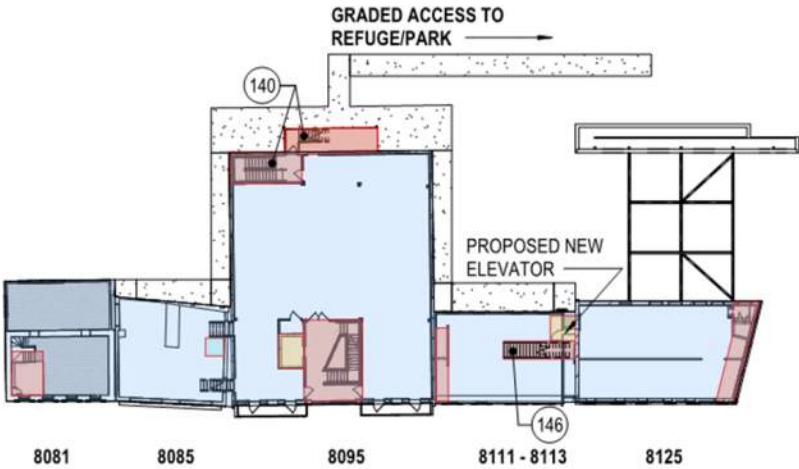
ALT FIRST FLOOR PLAN

SCALE: 1/32" = 1'-0"

PLAN LEGEND

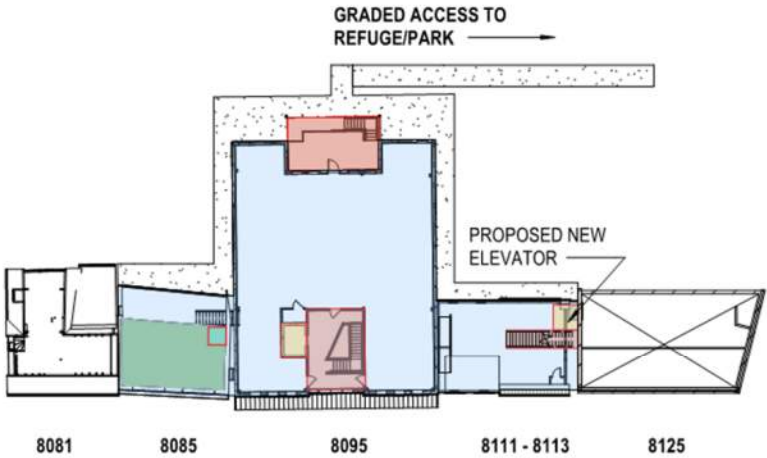
- FIRE BARRIER
- EGRESS STAIRS
- ELEVATOR
- LIFT
- MEZZANINE
- EXISTING STAIR EGRESS CAPACITY

Code & Use Study – 1 Building



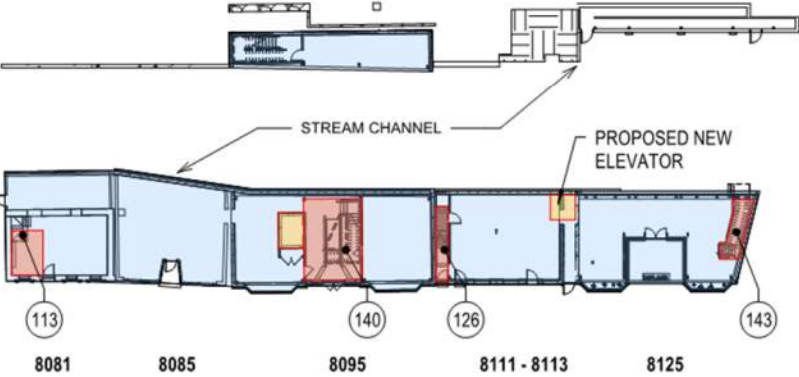
SECOND FLOOR PLANS

SCALE: 1/32" = 1'-0"



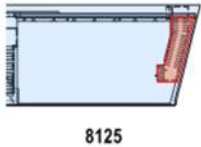
THIRD FLOOR PLANS

SCALE: 1/32" = 1'-0"



FIRST FLOOR PLANS

SCALE: 1/32" = 1'-0"



ALT FIRST FLOOR PLAN

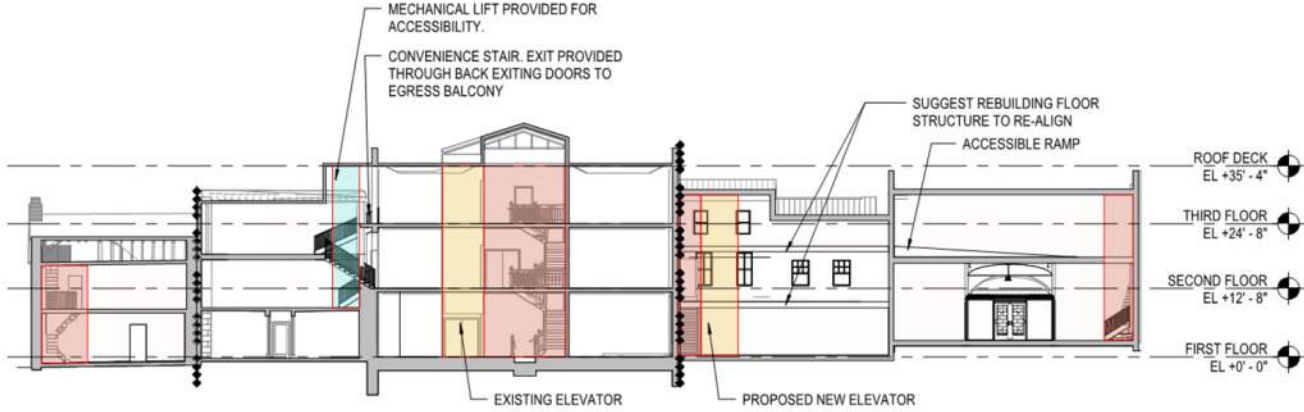
SCALE: 1/32" = 1'-0"

PLAN LEGEND

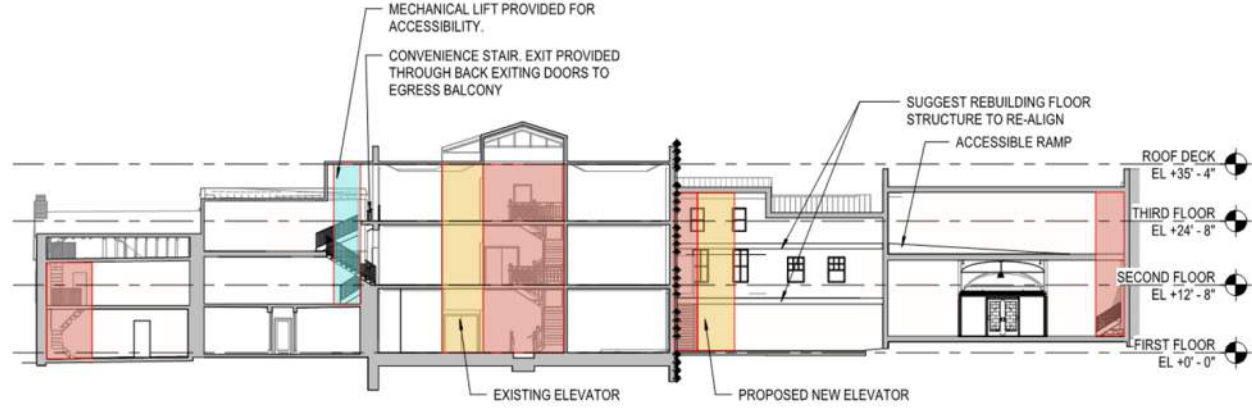
- FIRE BARRIER
- 100— EXISTING STAIR EGRESS CAPACITY
- EGRESS STAIRS
- ELEVATOR
- LIFT
- MEZZANINE

Code & Use Study – Building Sections

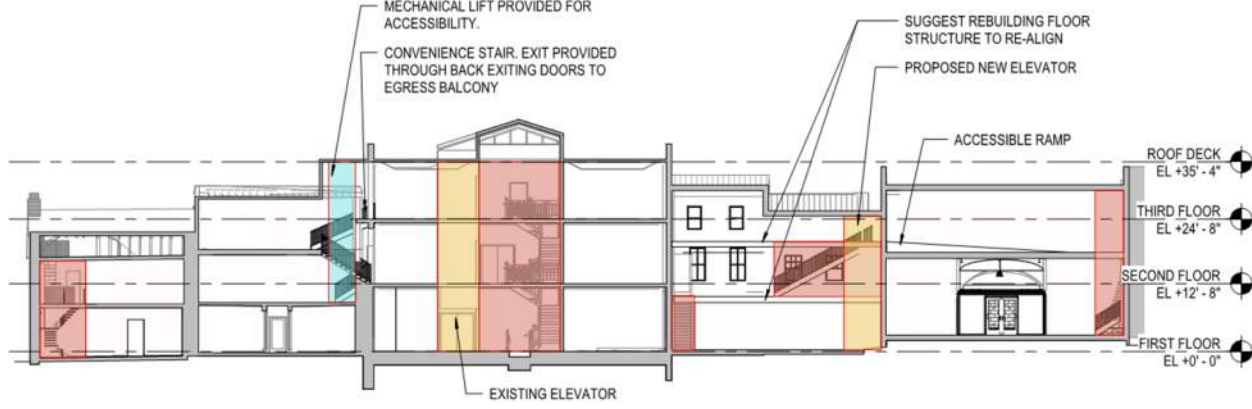
A
3 Buildings



B
2 Buildings



C
1 Building



Design Considerations: Rear Facades

- **HPC Guidelines + EC Watershed Master Plan**
- Preserve Main Street Facades.
- Where buildings must be removed, salvage character-defining elements and plan to re-use, where feasible.
- Buildings will remain in the County portfolio until completion of EC Safe & Sound.
- **Incorporate flood egress** in addition to life safety requirements of code.
- Incorporate accessibility where technically feasible.
- Plan for a short-term County use while ensuring the potential for a long-term highest and best use.

Approach A: Traditional

- Considers materials and approaches common in the district.
- Utilizes materials in traditional manners.
- Preserves existing height of stream channel walls
- Responds directly to Master Plan concepts

Approach B: Contemporary

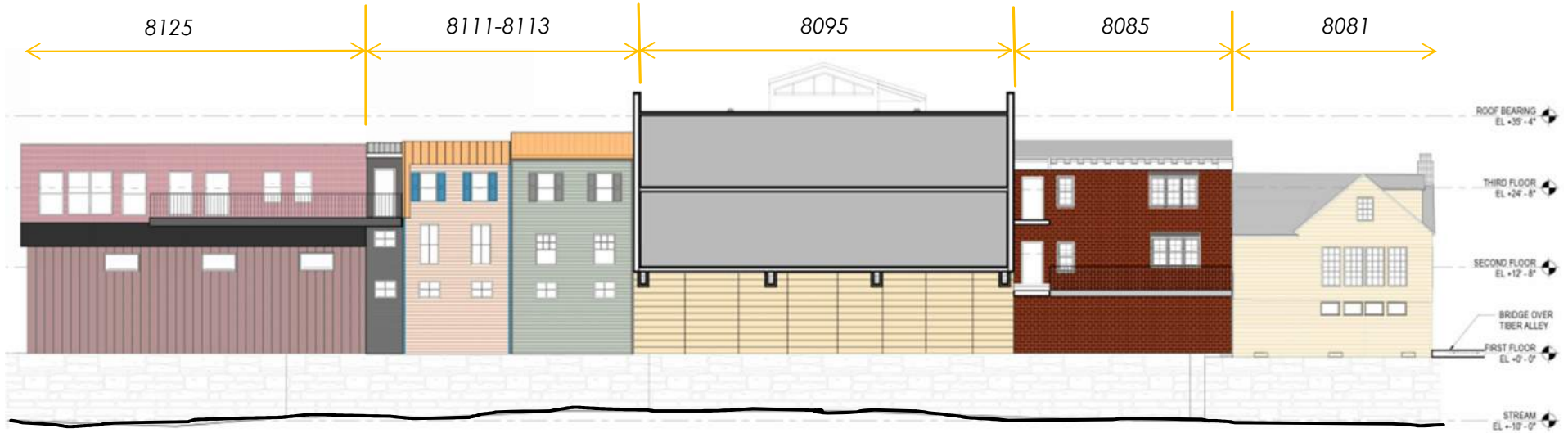
- Considers alternative materials and approaches not found in the district.
- Develops facades of 8095, previously concealed, in a contemporary manner.



Rear Facades – Traditional Storyboard



Rear Facades – Traditional Approach



North Elevation



Approach A
East Façade - 8095



Rear Facades – Contemporary Storyboard



Rear Facades – Contemporary Storyboard



Fiber Cement Image A



Fiber Cement Textures

Brick veneer



Brick Image A



Brick Image B

Fiber cement veneer



Terra Cotta Image A



Terra Cotta Image B

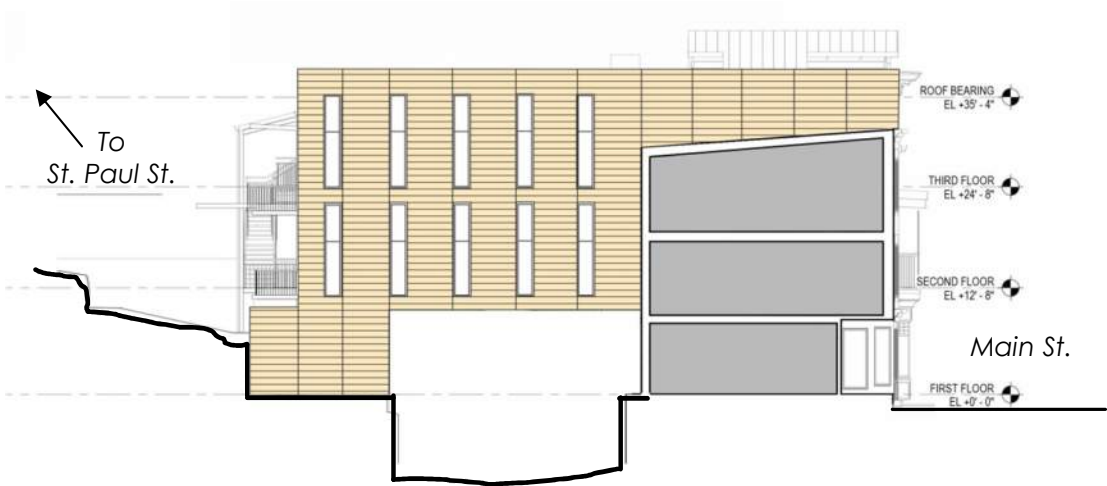
Terra cotta veneer



Stone Image A

Stone veneer

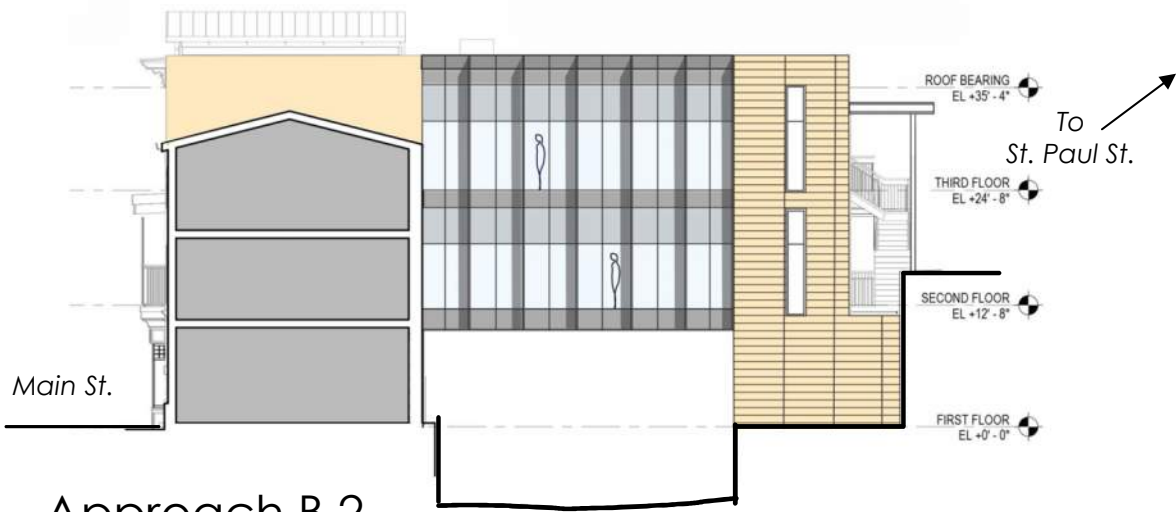
Rear Facades – Contemporary Approach



Approach B.1
East Façade - 8095



Approach B
North Façade - 8095



Approach B.2
West Façade - 8095



Design Considerations: St. Paul Street

- **HPC Guidelines + EC Watershed Master Plan**
- Passive park space.
- Include small amenity spaces for potential use by adjacent residents.
- **Incorporate flood egress from Main Street buildings.**
- Relate to carriage house structures once present along St. Paul Street.
- Consider new or interesting vistas.
- 19' – 21' Grade Change

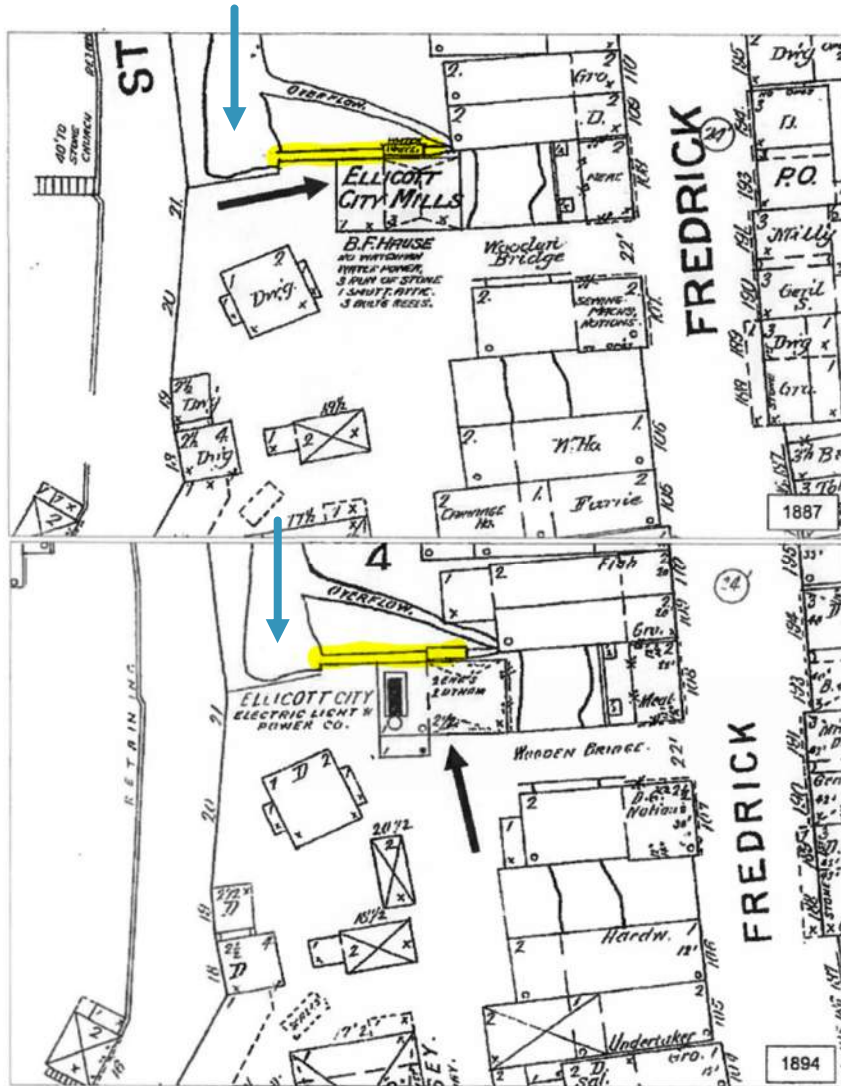
Approach A:

- *Responds directly to need for egress.*
- *Incorporates potential seating area parallel to stream channel.*

Approach B:

- *Enlarges St. Paul Street presence, capturing footprint of former carriage house.*
- *Plans for passive lawn space at mid point of ramping system.*
- *Includes larger potential seating area parallel to stream channel behind 8125, potential for activation by users of 8125.*

St. Paul Street – Access & Placemaking



Sanborn Fire Maps, 1887 / 1894



Google Earth, c.2011

St. Paul Street – View southeast from 8125



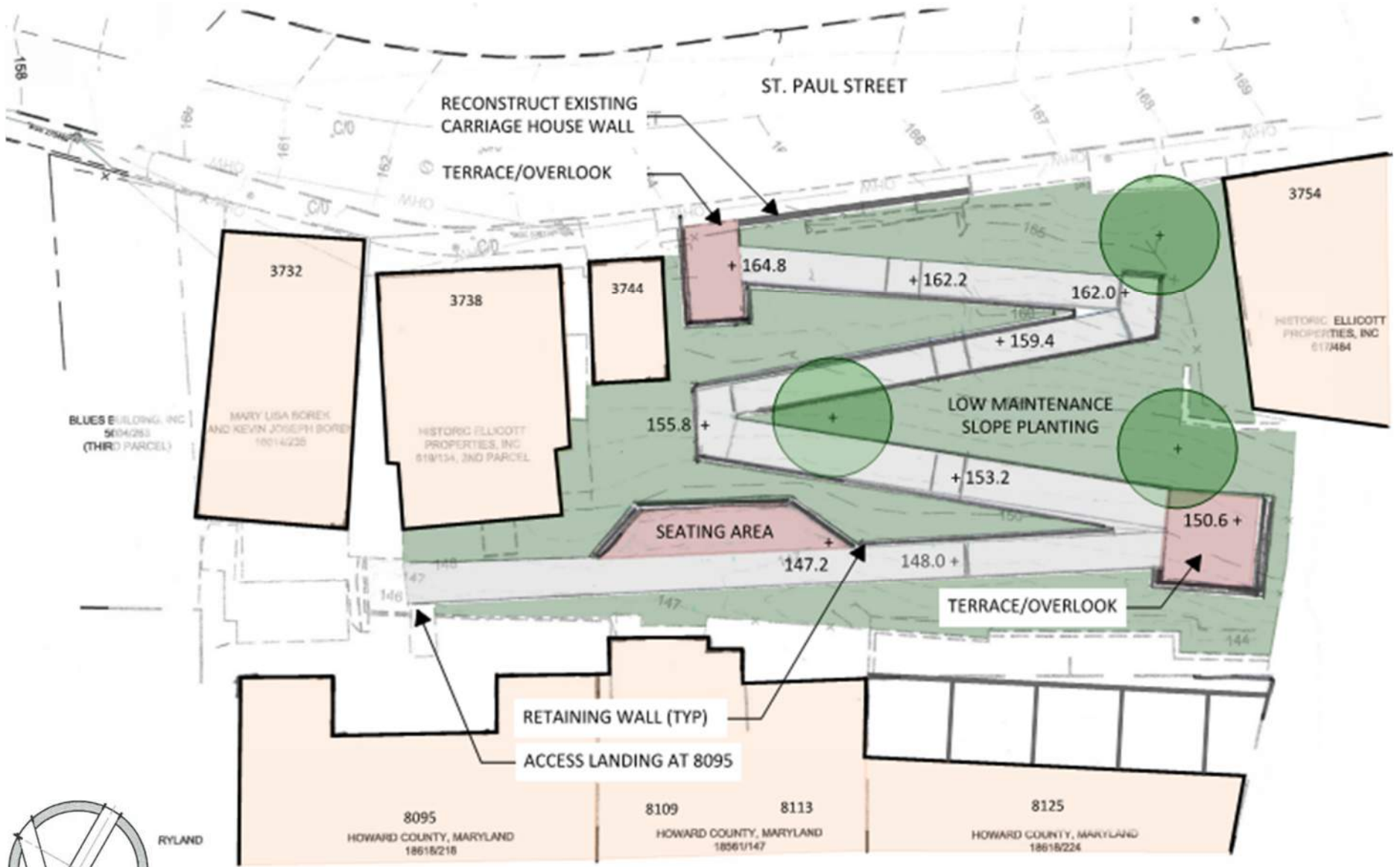
St. Paul Street – View southwest from 8113



St. Paul Street – View towards MD Ave.

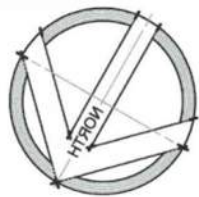
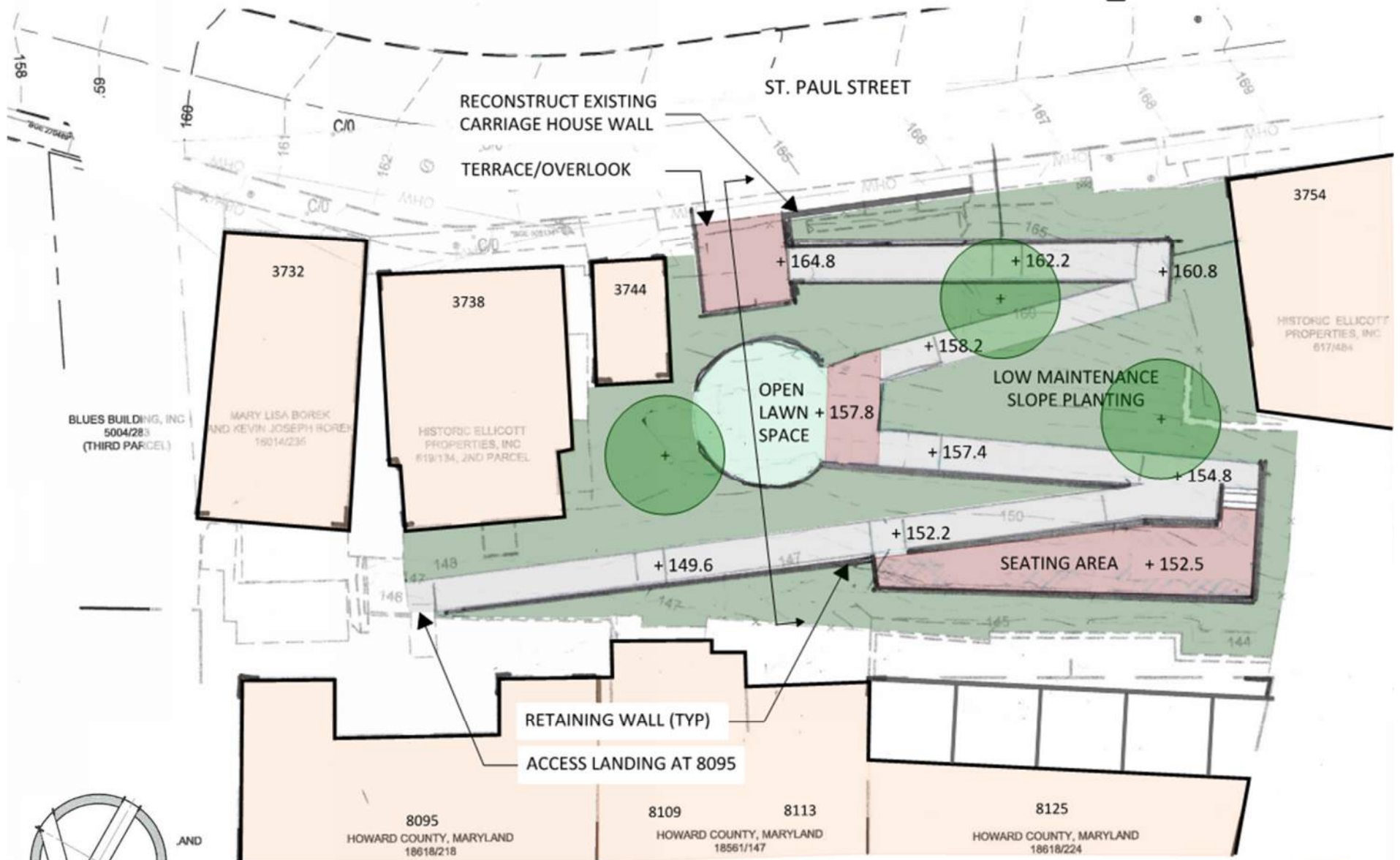


St. Paul Street – Access & Placemaking



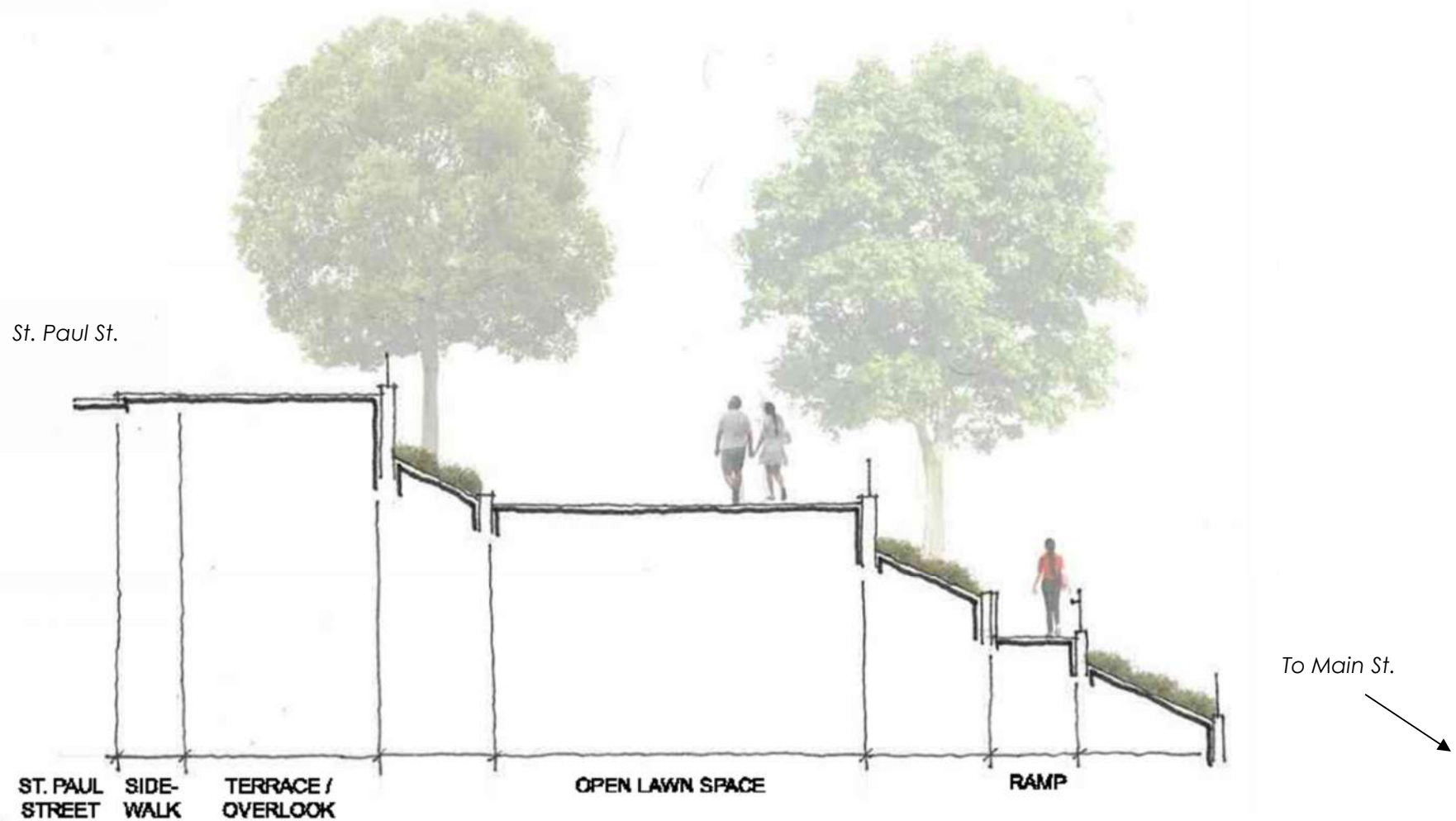
Approach A

St. Paul Street – Access & Placemaking



Approach B

St. Paul Street – Site Section

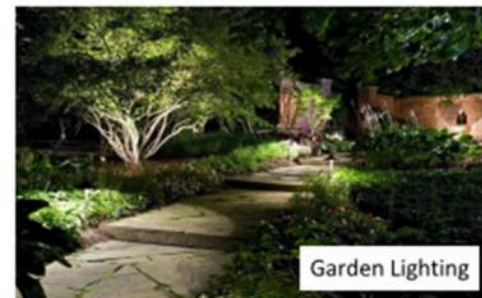
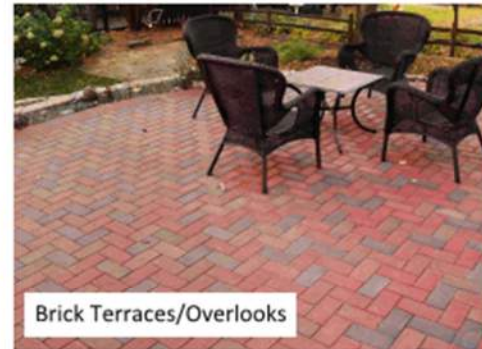


2021-09-15 HPC Channel Constriction Project

Approach B – Site Section

53A

St. Paul Street – Precedent Images



Path Forward

- **HPC Certificate of Approval – Rear Removals**
- **HPC Advisory Comments**