

# I-91 VIADUCT STUDY

Springfield, Massachusetts



## Working Group Meeting #9

UMASS Springfield – Tower Square  
Springfield, Massachusetts

March 23, 2017



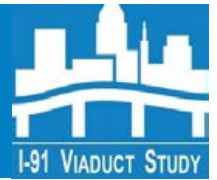
# Welcome & Introductions



- Ethan Britland – Project Manager (MassDOT)
- Michael Clark – Transportation Planner (MassDOT)
- Mark Arigoni, L.A. – Principal-in-Charge (MMI)
- Van Kacoyannakis, P.E. – Traffic (MMI)
- Nick Armata, AICP – (MMI)
- John Hoey - QA/QC (MMI)
- Sarah Paritsky – Public Involvement (Regina Villa)



# Agenda



- Welcome and Introductions
- Refresher of the Three Alternatives:
  - Alternative #1: Sunken & Covered - Following Current I-91 Alignment
  - Alternative #2: Sunken & Covered following Modified I-91 Alignment (section of combined rail and highway corridor)
  - Alternative #3: Reconstructed Elevated Structure (Modern Viaduct)
- Evolution of Study Evaluation Criteria
- Evaluation Criteria Break-out Station Discussions
  - Station 1: Mobility and Safety Criteria
  - Station 2: Land Use, Socioeconomic, and Community Effects
  - Station 3: Environmental Effects and Cost
- Report Back on Evaluation Criteria Station Discussions
- Next Steps

# Review of Public Meeting #2



Held on December 6<sup>th</sup>, 2016 @ UMass - Springfield

## ■ Part I: Presentation

- Overview of Working Group Meetings 4-8
- Getting to 3 Alternatives
- Next Steps

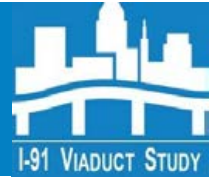
## ■ Part II: Open House

### ■ Break-Out Stations

- 1. Station 1: I-291 & 91 Area
- 2. Station 2: Memorial Bridge & Downtown
- 3. Station 3: South End Bridge & Long Meadow Curves
- 4. Economic Development and Bike/Ped Improvement



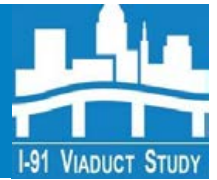
# Refresher of Three Alternatives



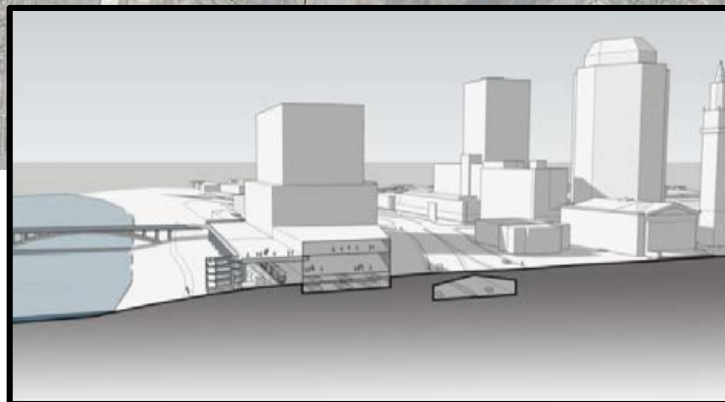
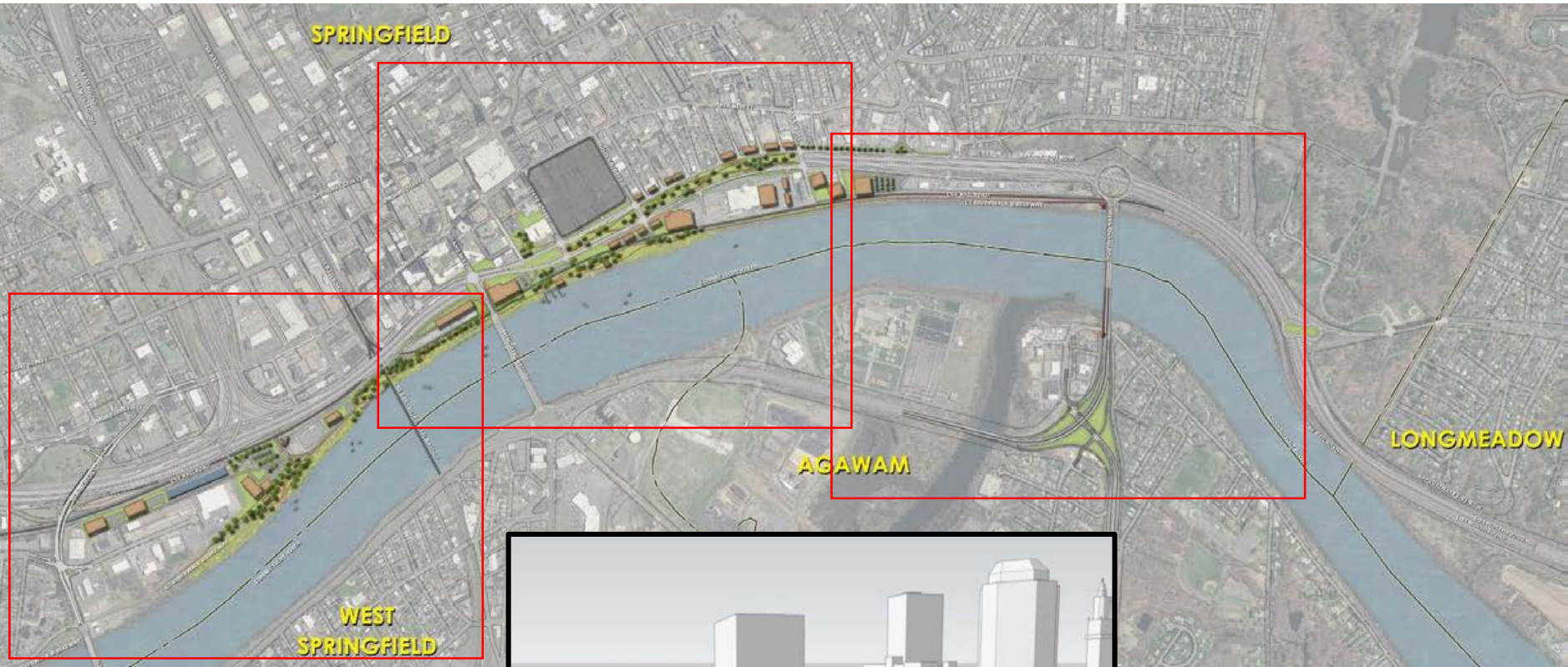
- Sunken, Tunnel, or Combination(s) following current I-91 Alignment
- Sunken, Tunnel, or Combination(s) following modified I-91 Alignment (section of combined rail and highway corridor)
- Reconstructed Elevated Structure (Modern Viaduct)



# Alternative No.1



## Sunken following current I-91 Alignment



**Conceptual Planning Study:** This graphic represents a hypothetical development scenario that could be representative of potential future development along the I-91 Viaduct Corridor and is shown for general informational purposes. Any actual future development that occurs along this corridor may vary from this conceptual representation.





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**A: Eco-Industrial Park, Sustainable Incentive Business, Green Industry**

Approximately 60,000 Square Feet (SF) Building Footprint & 100,000 SF Solar Shown

**B: Multi-story Riverfront Residential Development & Restaurant**

Approximately 80,000 SF Residential & 20,000 SF Restaurant/Retail, Parking & River Access

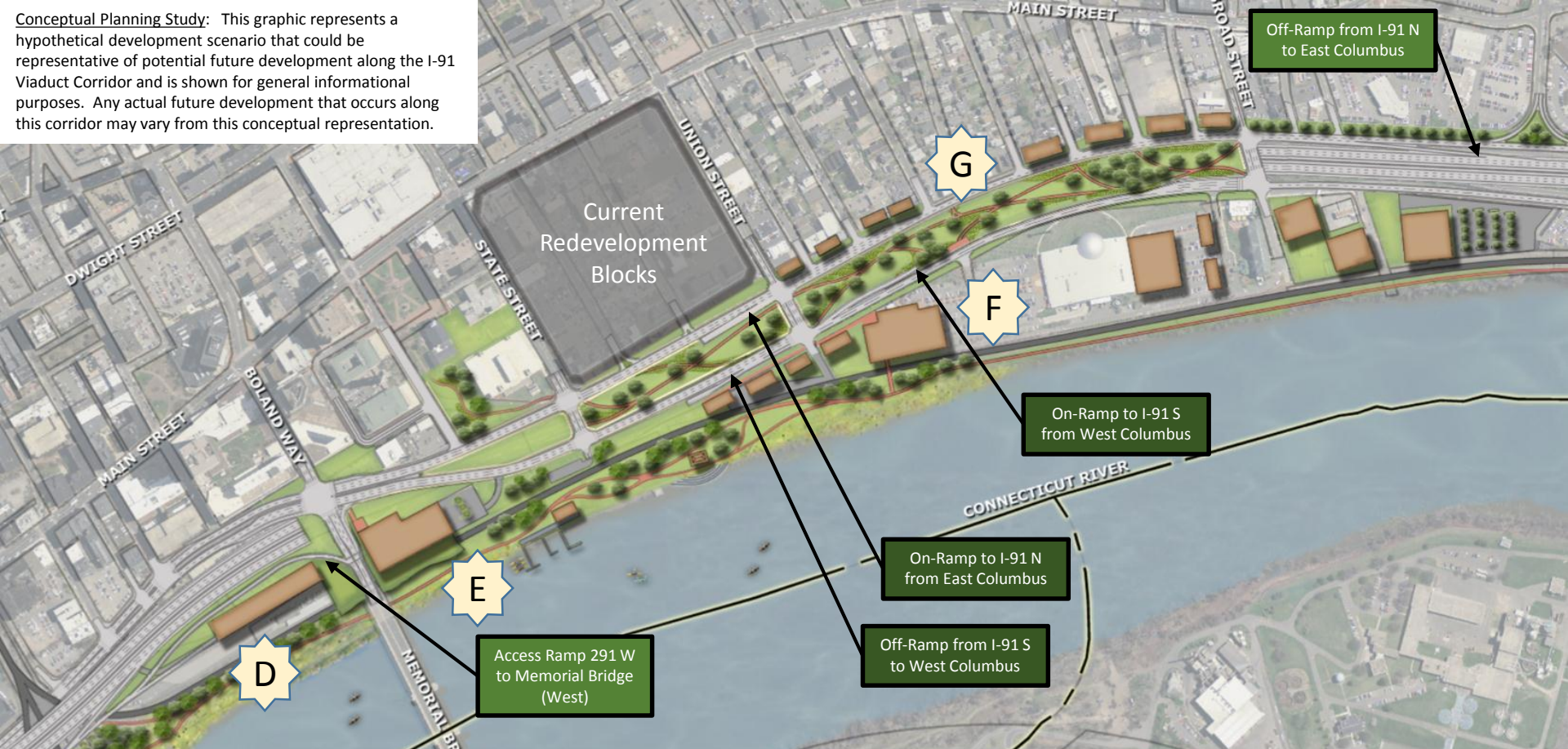
**C: Enhanced Riverfront Access and Park Space along Bikeway**

March 23, 2017





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**D: Reconstructed I-91 North Garage** (80,000 SF Footprint)

**E: Multi-story Riverfront Residential Development & Retail**

Approximately 120,000 SF Residential & 10,000 SF Restaurant/Retail, Parking Garage, Elevated Green Terrace over Rail, Park Connection to Downtown & Riverfront Park, Marina

**F: Parkview & Riverfront Development (West Columbus & Hall of Fame)**

New Development along sunken & covered I-91 Park Corridor West (140,000 SF Residential & 127,000 SF Commercial Office/Retail)

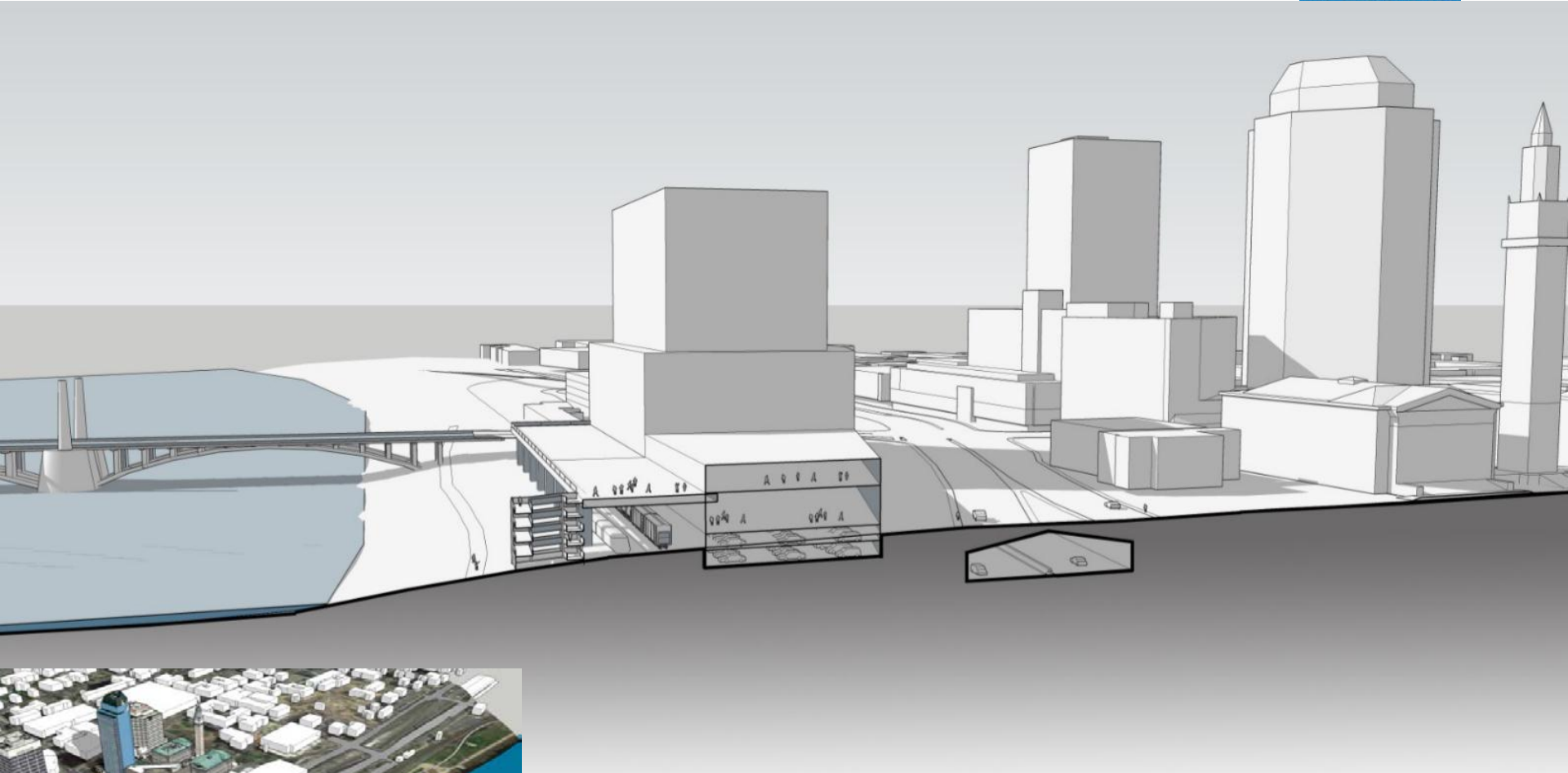
**G: Parkview Development (East Columbus)**

New Development along I-91 Parkview Corridor East Columbus from Union to Broad Street (70,000 SF Residential & 55,000 SF Commercial Retail/Office)



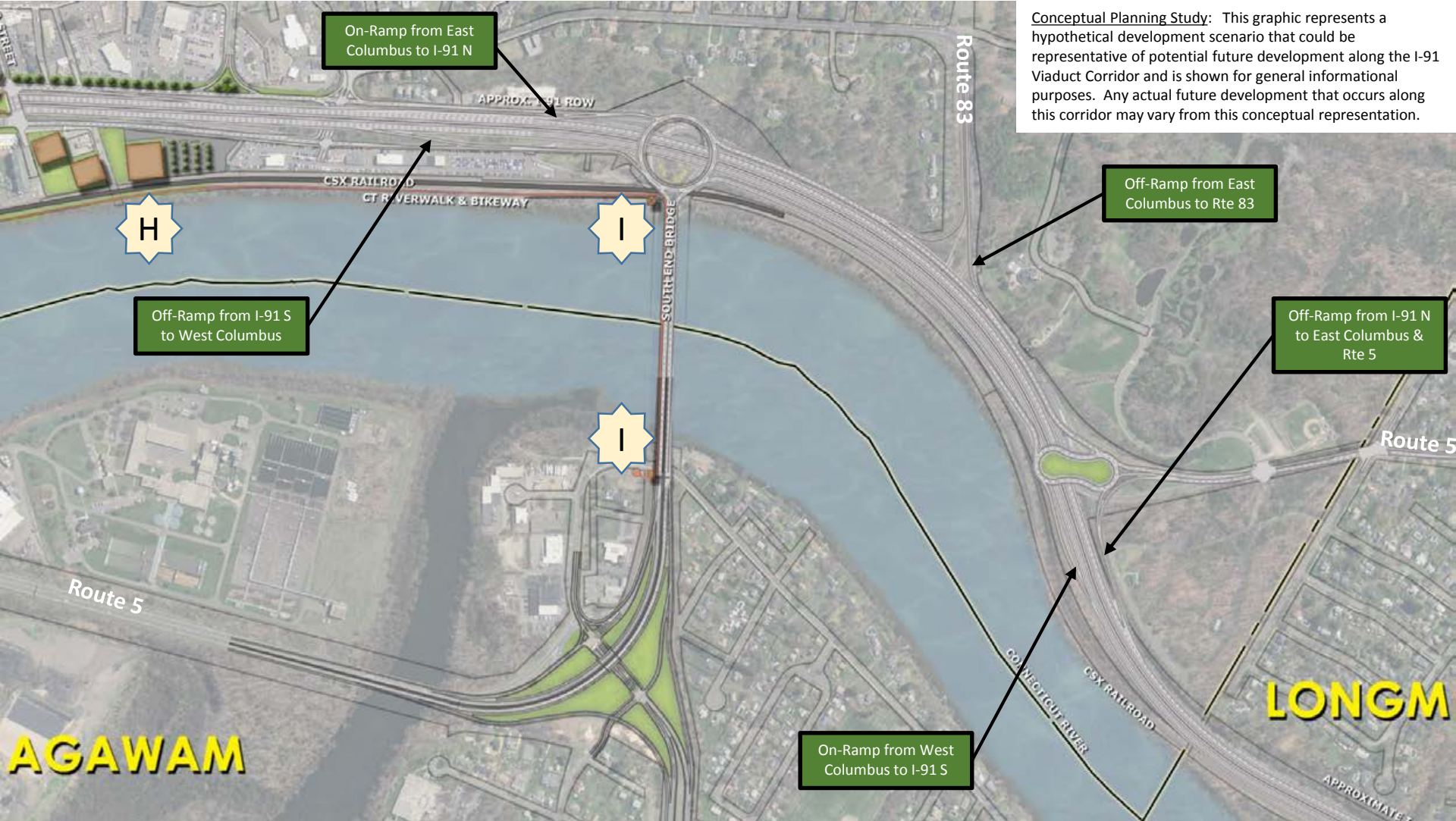


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Alternative #1





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## H: Gateway Development

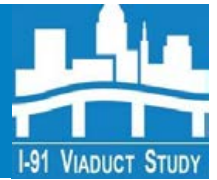
Approximately 100,000 Square Feet (SF) & 40,000 SF Car Dealership Expansion

## I: Connecticut River Bikeway Extension

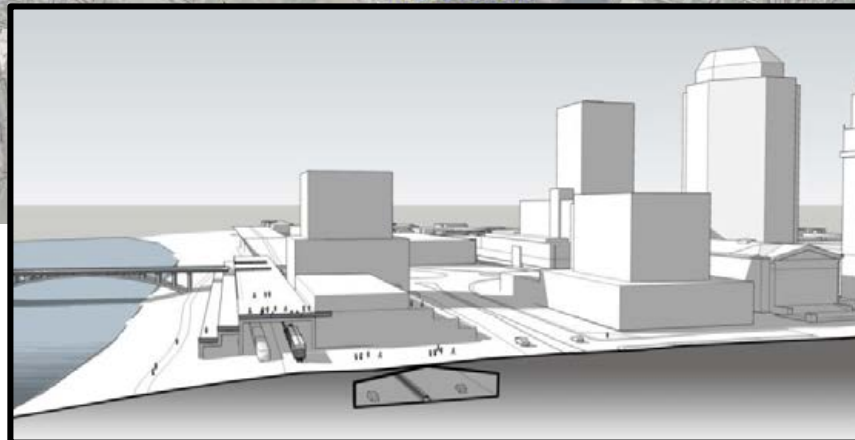
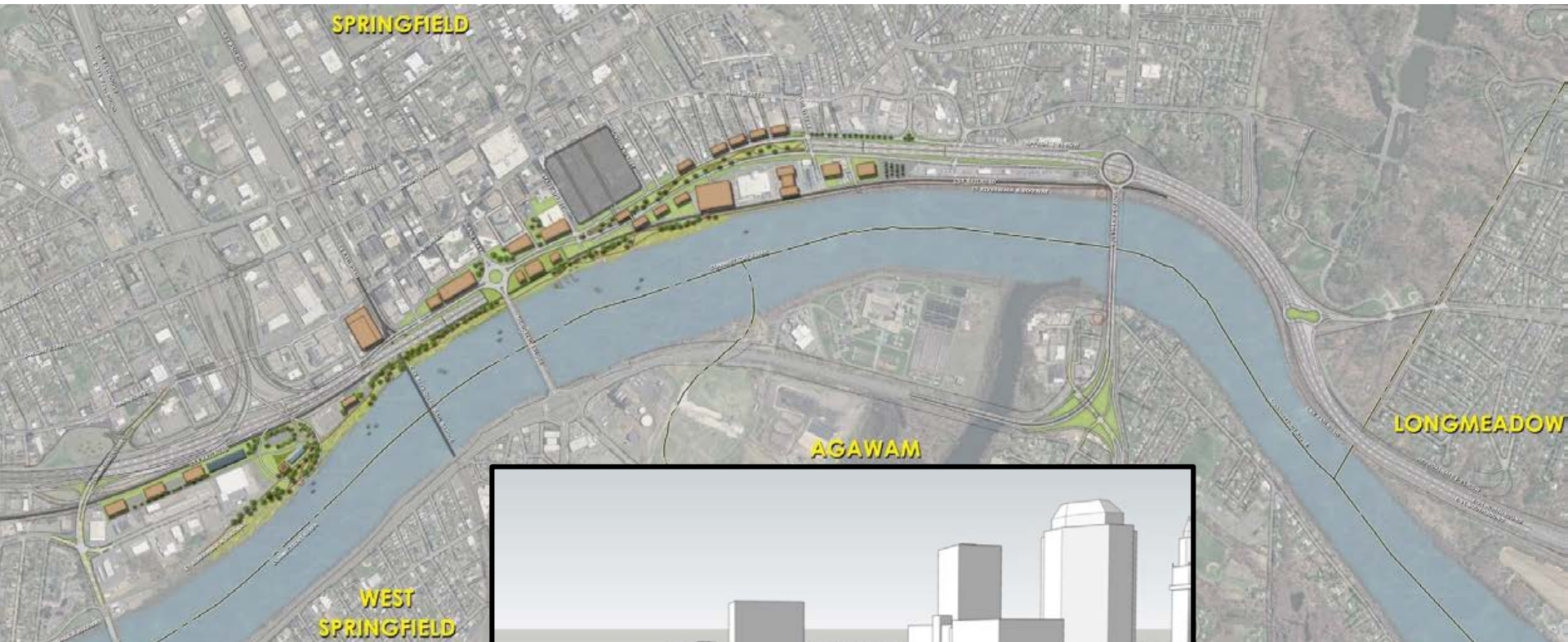
Accessible Ramps up to Bridge Elevation, New Bridge or Modification of existing to allow Bike Accommodation to Agawam Side, Construct Accessible Ramps to River Road (remove stair case)



# Alternative No. 2



## Sunken following modified I-91 Alignment

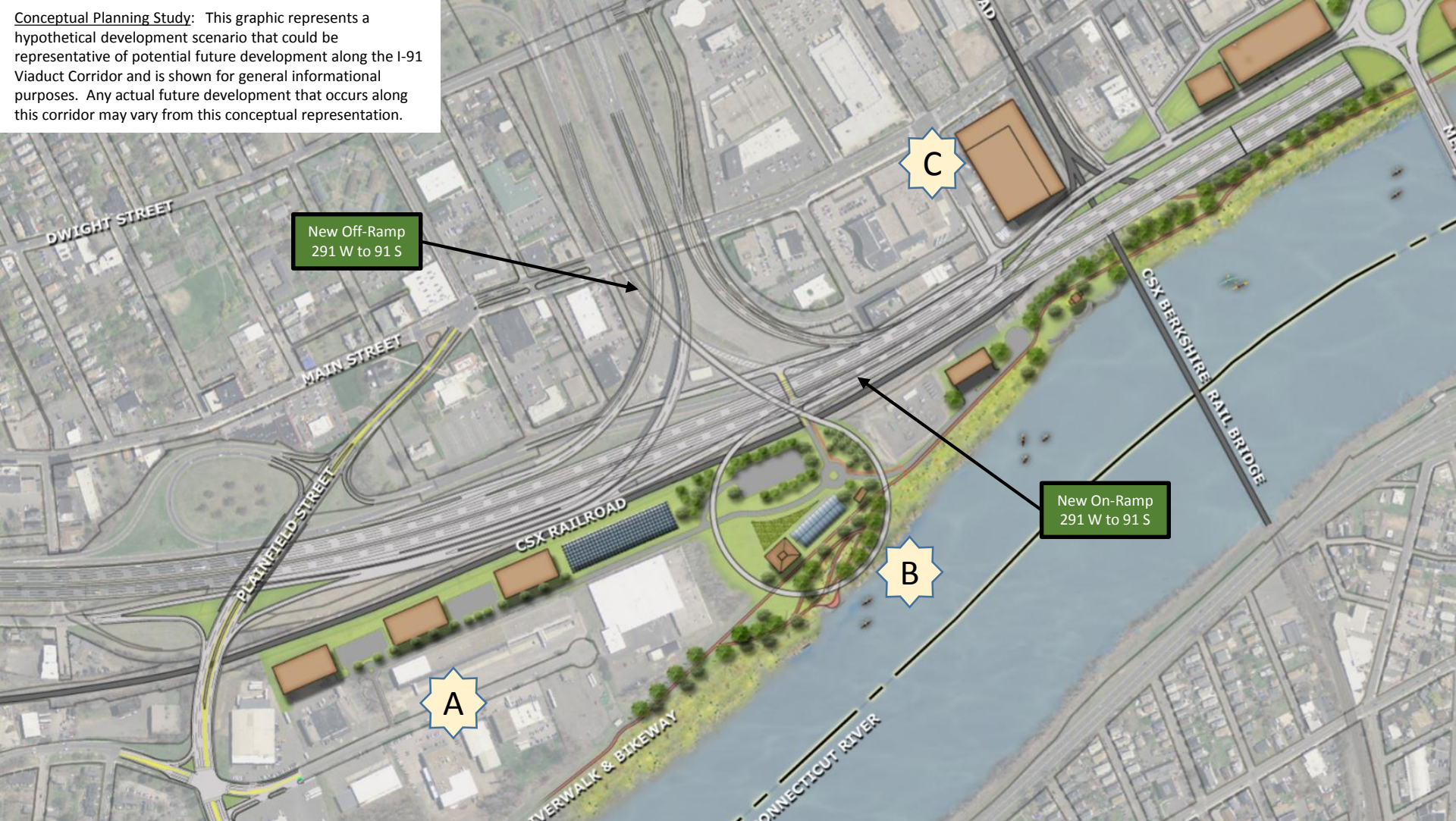


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**A: Eco-Industrial Park, Sustainable Incentive Business, Green Industry**  
Approximately 90,000 Square Feet (SF) Building Footprint & 70,000 SF Solar Shown

**B: Public/Private Community Greenhouse & Gardens**  
Approximately 10,000 Restaurant/Retail, Parking & River Access

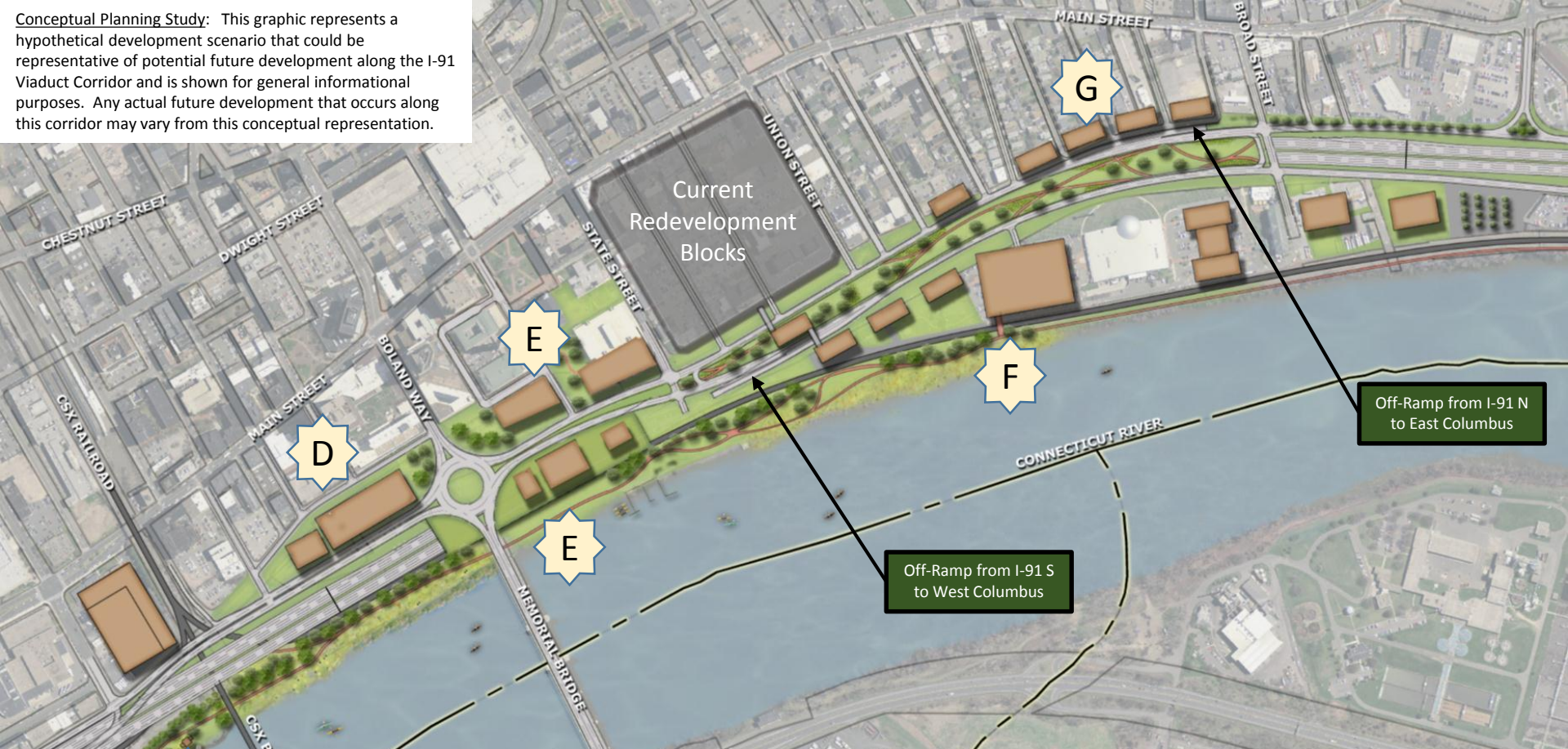
**C: Parking Garage** (Approximately 110,000)

October 26





Conceptual Planning Study: This graphic represents a hypothetical development scenario that could be representative of potential future development along the I-91 Viaduct Corridor and is shown for general informational purposes. Any actual future development that occurs along this corridor may vary from this conceptual representation.



## D: Multi-story City Center North Development

Approximately 150,000 SF Office 10,000 SF Restaurant/Retail, Parking

## E: Bridgeview & Riverfront Development (Memorial Bridge/Riverfront Park)

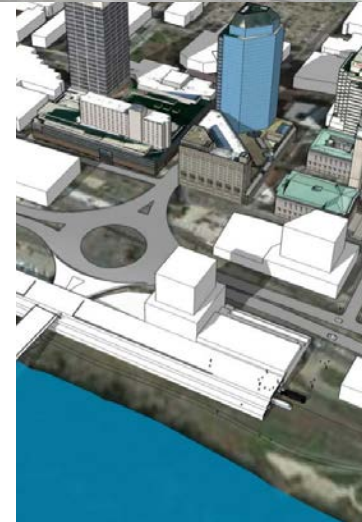
New Development along and above I-91 Park Corridor with 180,000 SF Office/Retail, and 120,000 SF Residential, Parking Garage under Elevated Green Terrace over Rail, Connection to Downtown & Riverfront

## F: Parkview & Hall of Fame Development West

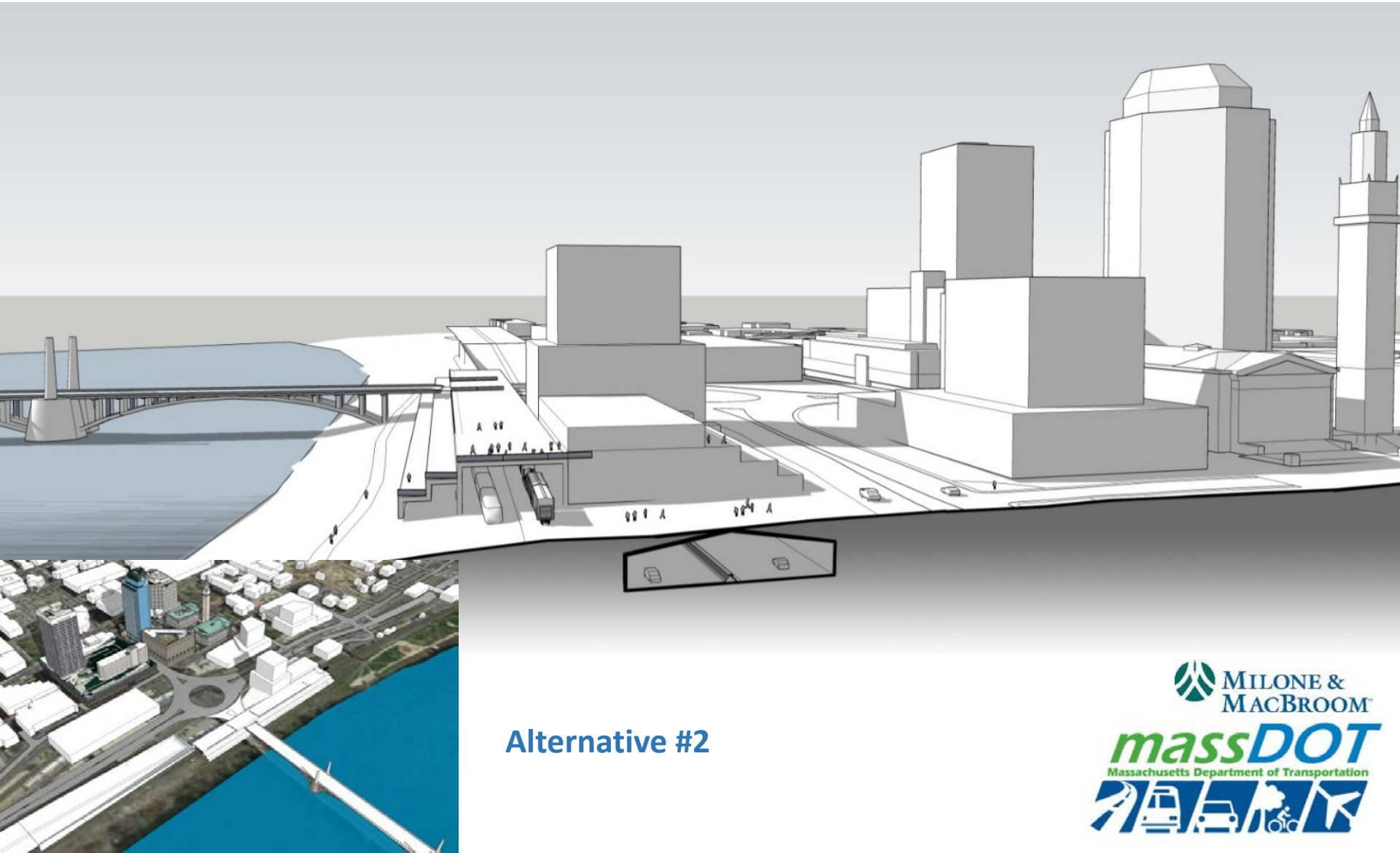
New Development along and above I-91 Park Corridor with 135,000 SF Office, 185,000 Retail, and 85,000 SF Residential, with new Parking Garage at HOF, and Skywalk Connections to Casino from West Columbus

## G: Parkview Development (East Columbus)

Development along I-91 Parkview Corridor East Columbus from Union to Broad Street (75,000 SF Retail & 225,000 SF Residential



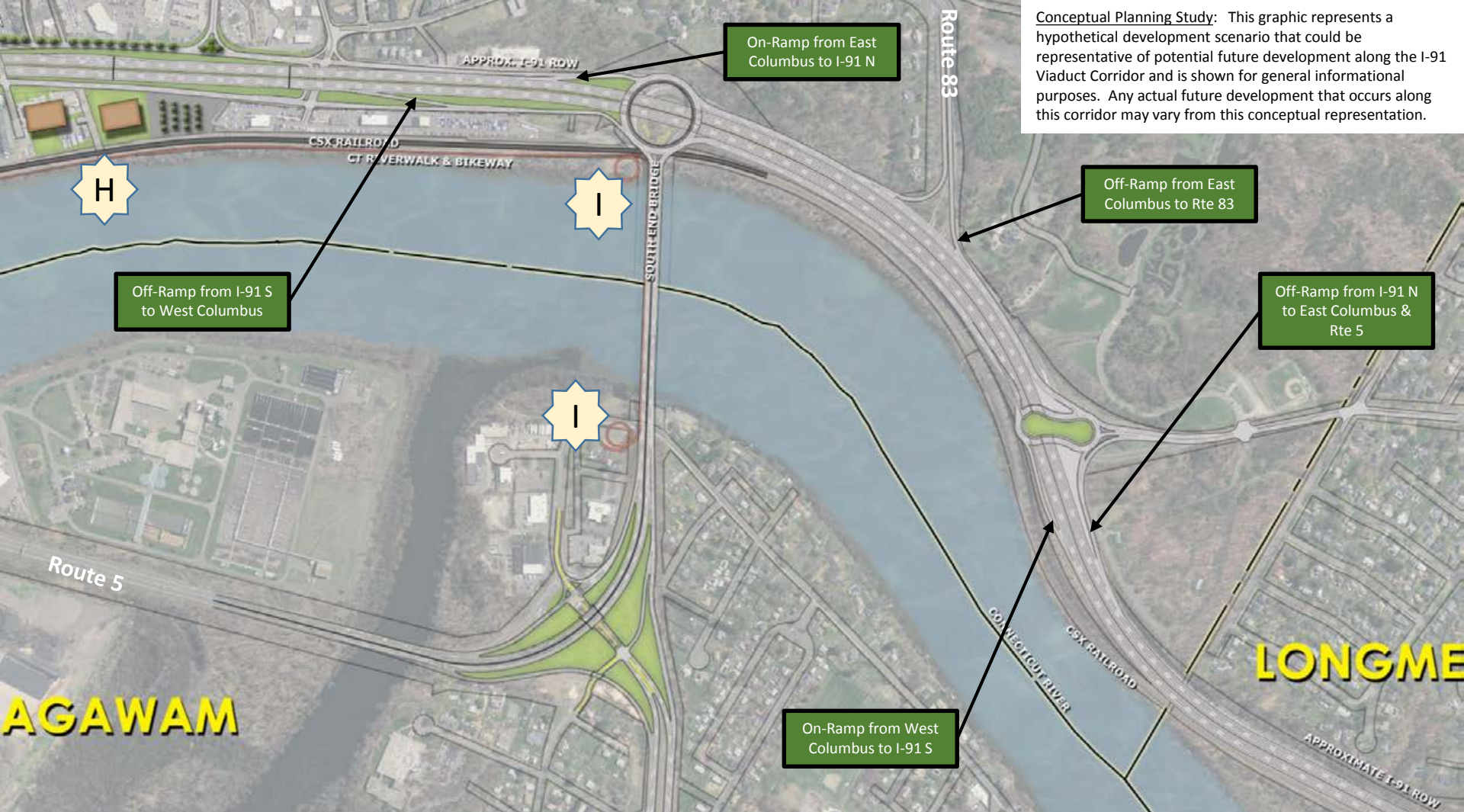
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Alternative #2







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## H: Gateway Development

Approximately 120,000 Square Feet (SF) Commercial Office/Retail

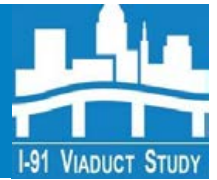
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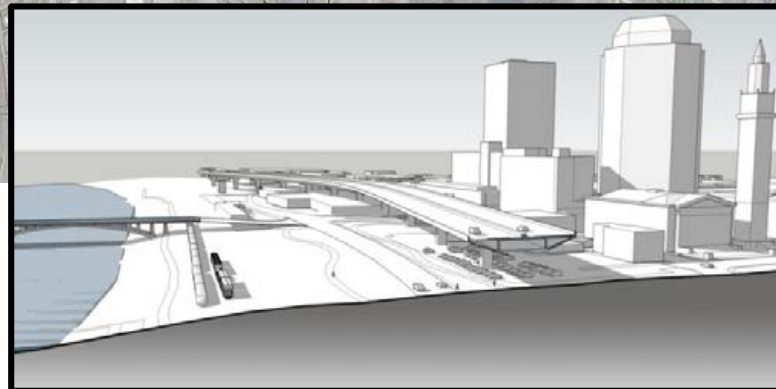
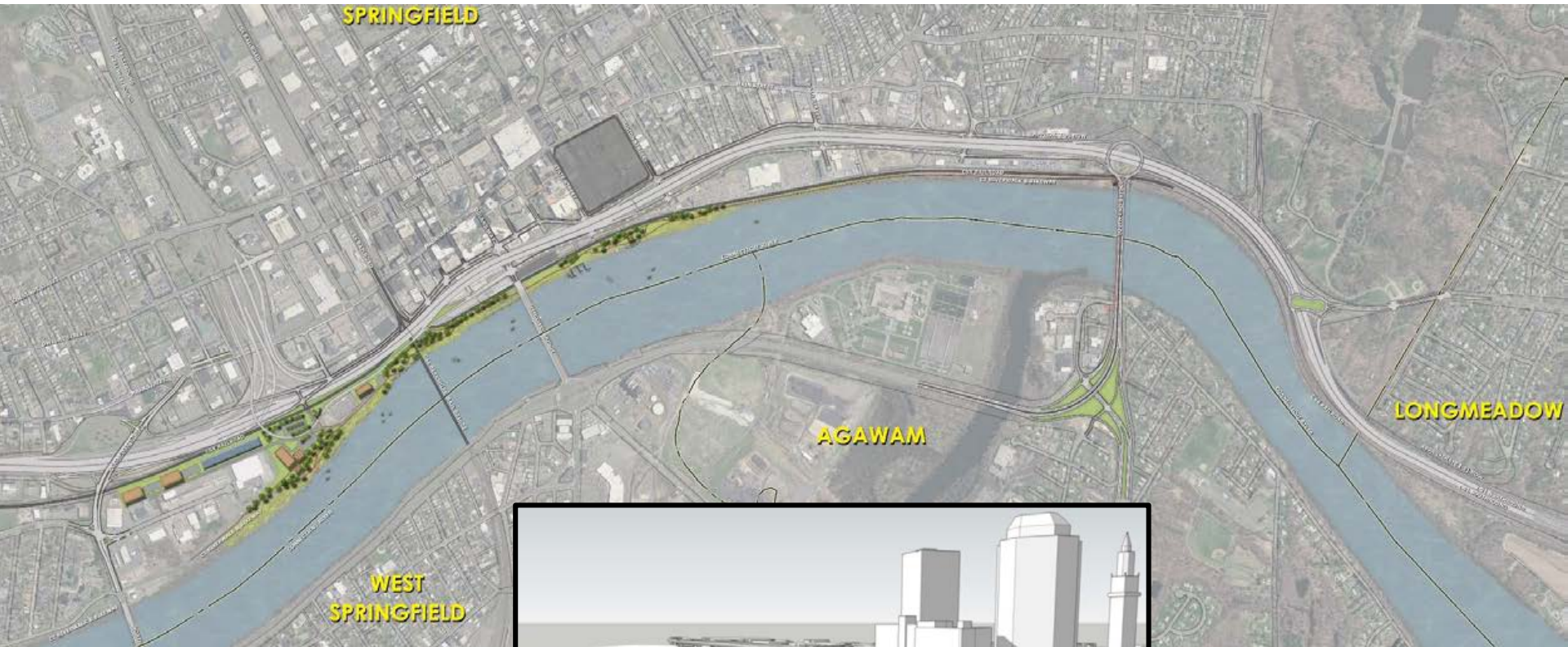




# Alternative No. 3



## Reconstructed Elevated Structure (Modern Viaduct)

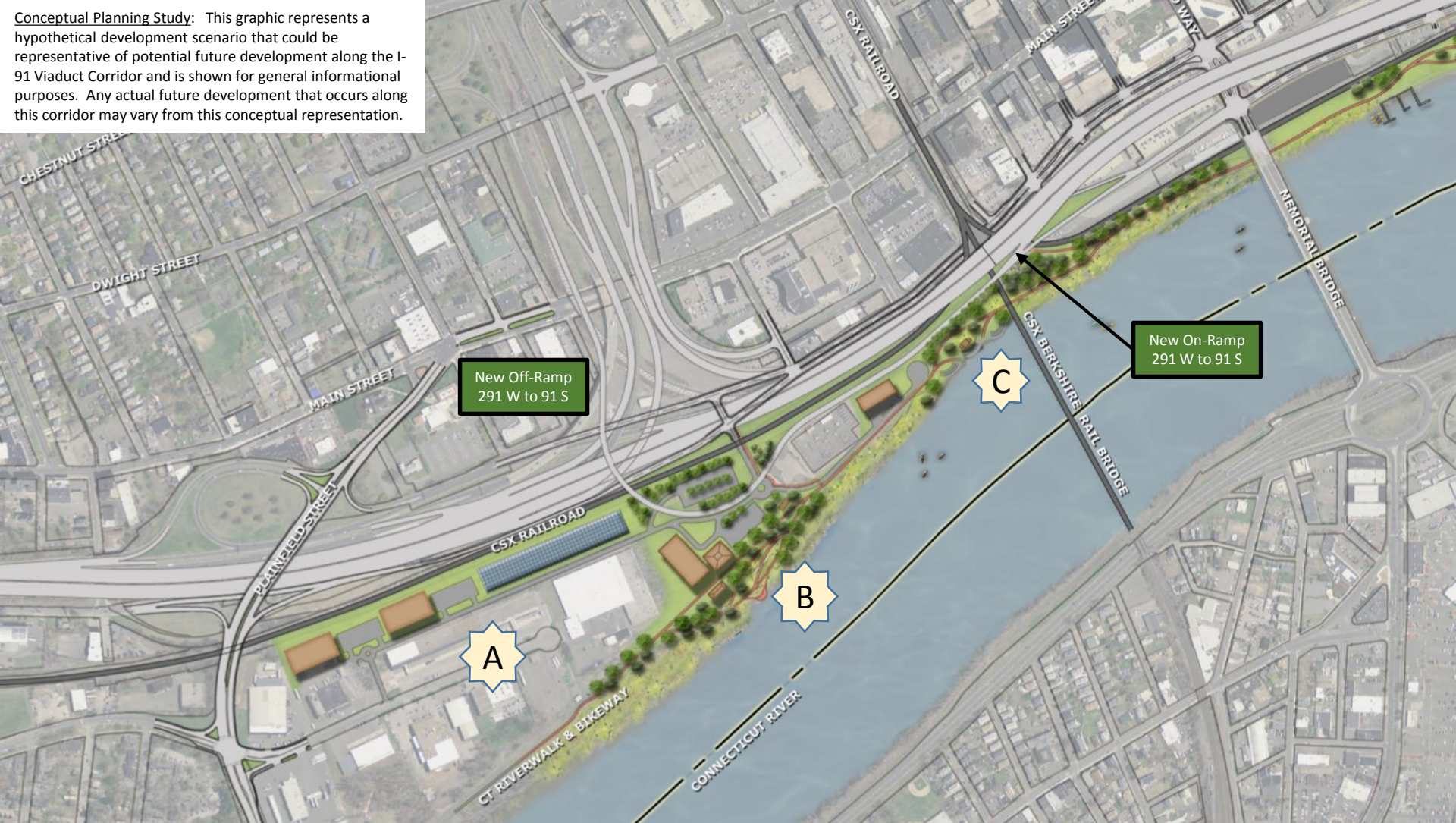


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**B: Multi-story Riverfront Residential Development & Restaurant**

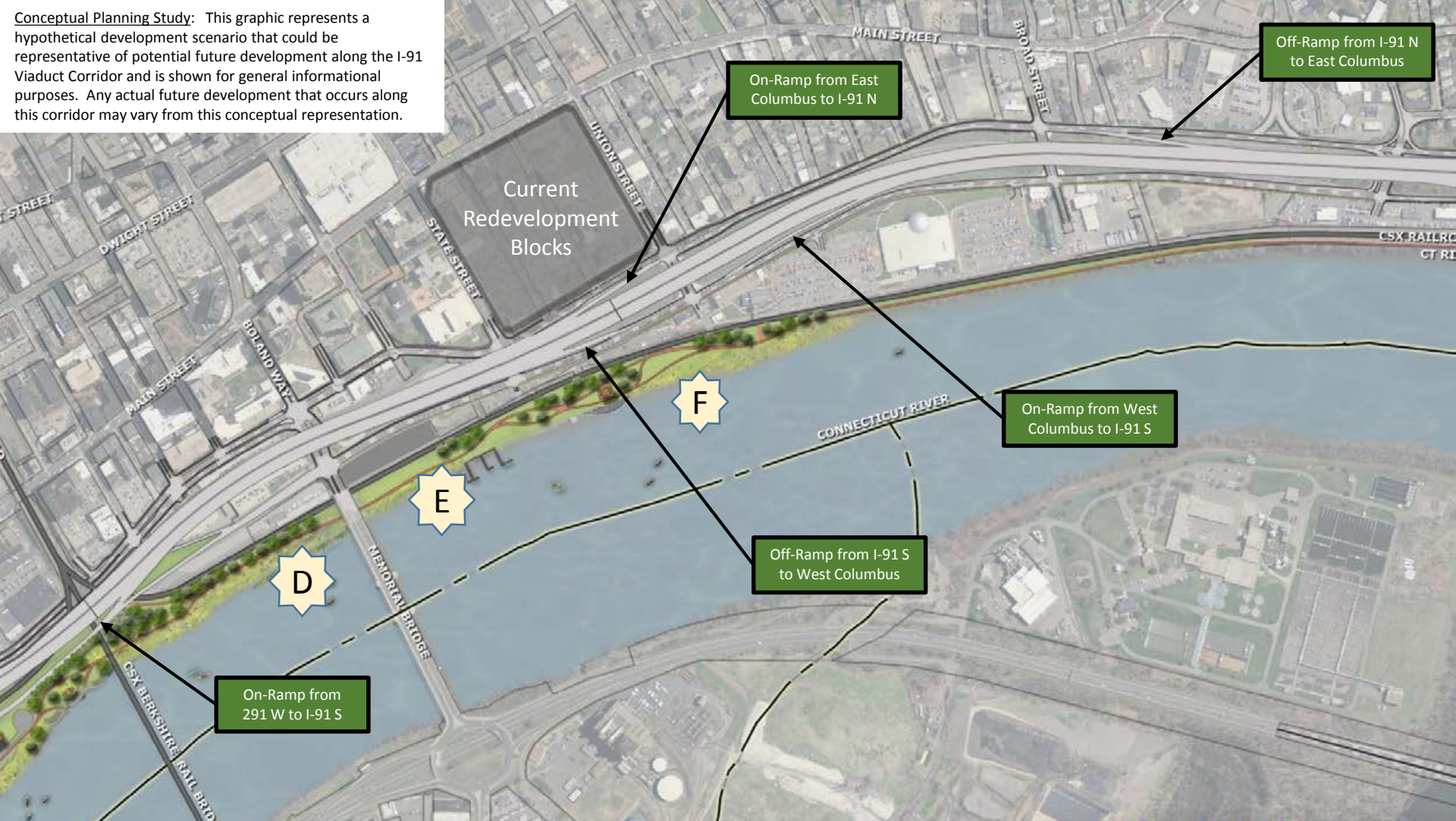
Approximately 80,000 SF Residential & 20,000 SF Restaurant/Retail, Parking & River Access

**C: Enhanced Riverfront Access and Park Space along Bikeway**





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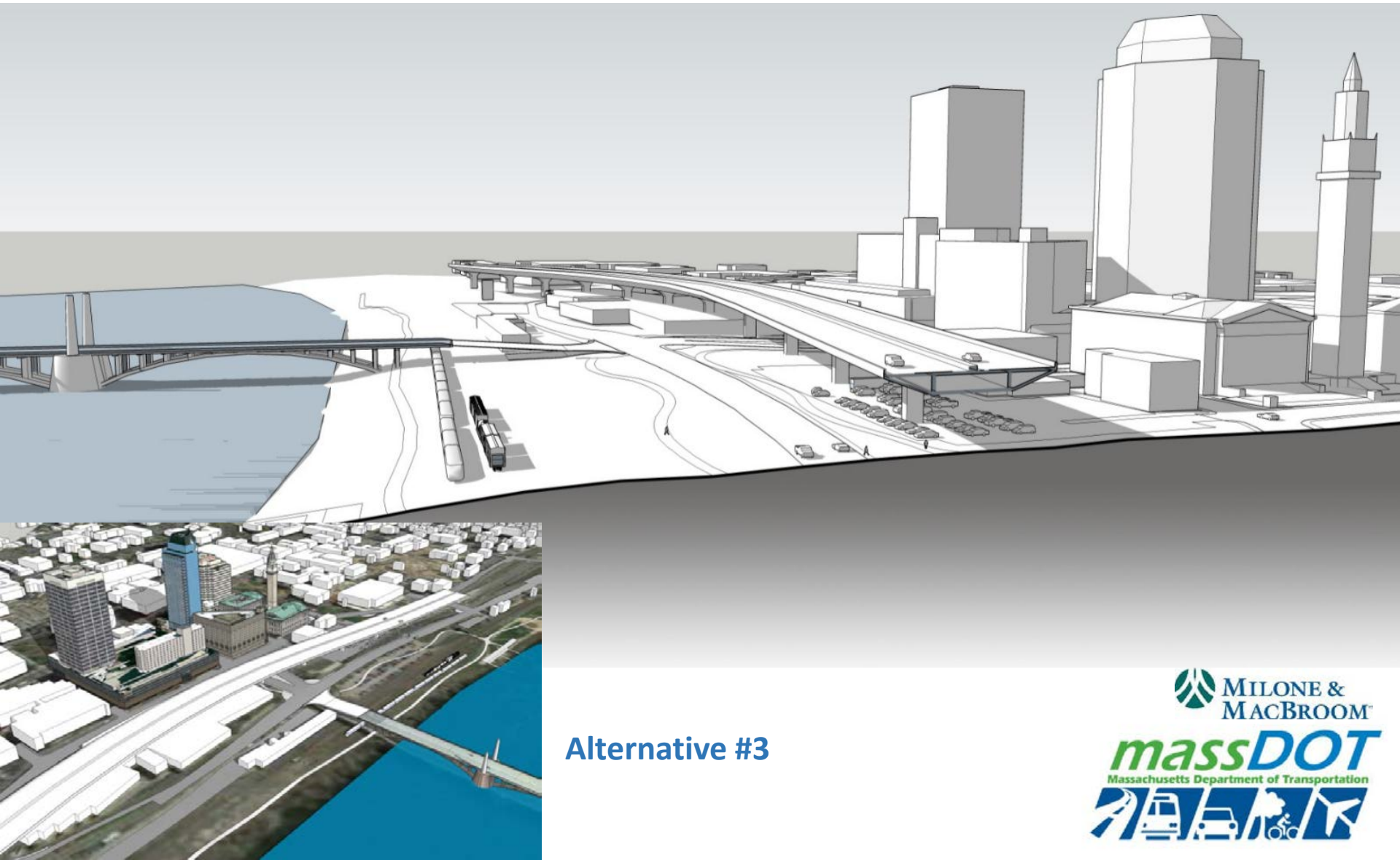
**D: I-91 North Garage Remains. Enhance Riverfront and River Access**

**E: Remove I-91 South Garage. Enhance Connection under New Viaduct**

**F: Enhanced Riverfront Access and Park Space along Bikeway**



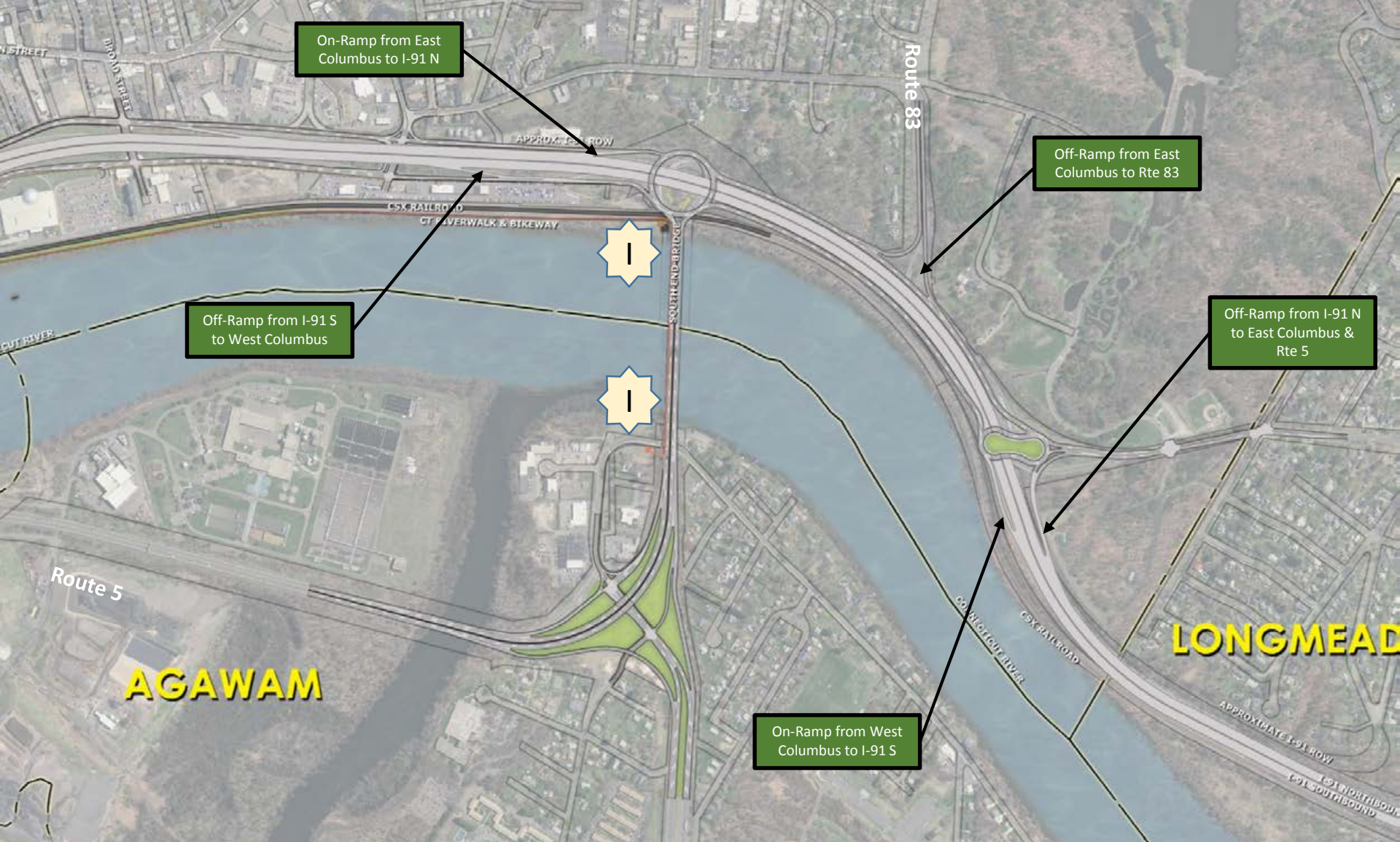
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Alternative #3







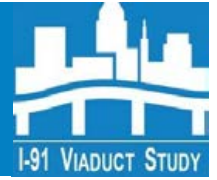
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# Refinement of Evaluation Criteria



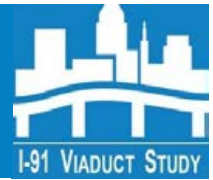
## ■ Significant MASSDOT & MASSDPH Coordination

Massachusetts Department of Public Health  
Bureau of Environmental Health

## ■ Comprehensive Evaluation Criteria that include Health Pathways.....

- Mobility & Accessibility, Safety, Environmental Effects
- Land Use & Economic Development
- Community Effects, and Cost

# Refinement of Evaluation Criteria



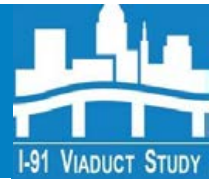
- Mobility & Accessibility
- Safety
- Environmental Effects
- Land Use & Economic Development
- Community Effects
- Cost

Category	Criterion	Impact	Significance	Weight	Score	Notes
Mobility & Accessibility	1.1.1.1	...	...	...	...	...
	1.1.1.2	...	...	...	...	...
	1.1.1.3	...	...	...	...	...
	1.1.1.4	...	...	...	...	...
	1.1.1.5	...	...	...	...	...
	1.1.1.6	...	...	...	...	...
	1.1.1.7	...	...	...	...	...
	1.1.1.8	...	...	...	...	...
	1.1.1.9	...	...	...	...	...
	1.1.1.10	...	...	...	...	...
Safety	1.2.1.1	...	...	...	...	...
	1.2.1.2	...	...	...	...	...
	1.2.1.3	...	...	...	...	...
	1.2.1.4	...	...	...	...	...
	1.2.1.5	...	...	...	...	...
	1.2.1.6	...	...	...	...	...
	1.2.1.7	...	...	...	...	...
	1.2.1.8	...	...	...	...	...
	1.2.1.9	...	...	...	...	...
	1.2.1.10	...	...	...	...	...
Environmental Effects	1.3.1.1	...	...	...	...	...
	1.3.1.2	...	...	...	...	...
	1.3.1.3	...	...	...	...	...
	1.3.1.4	...	...	...	...	...
	1.3.1.5	...	...	...	...	...
	1.3.1.6	...	...	...	...	...
	1.3.1.7	...	...	...	...	...
	1.3.1.8	...	...	...	...	...
	1.3.1.9	...	...	...	...	...
	1.3.1.10	...	...	...	...	...
Land Use & Economic Development	1.4.1.1	...	...	...	...	...
	1.4.1.2	...	...	...	...	...
	1.4.1.3	...	...	...	...	...
	1.4.1.4	...	...	...	...	...
	1.4.1.5	...	...	...	...	...
	1.4.1.6	...	...	...	...	...
	1.4.1.7	...	...	...	...	...
	1.4.1.8	...	...	...	...	...
	1.4.1.9	...	...	...	...	...
	1.4.1.10	...	...	...	...	...
Community Effects	1.5.1.1	...	...	...	...	...
	1.5.1.2	...	...	...	...	...
	1.5.1.3	...	...	...	...	...
	1.5.1.4	...	...	...	...	...
	1.5.1.5	...	...	...	...	...
	1.5.1.6	...	...	...	...	...
	1.5.1.7	...	...	...	...	...
	1.5.1.8	...	...	...	...	...
	1.5.1.9	...	...	...	...	...
	1.5.1.10	...	...	...	...	...
Cost	1.6.1.1	...	...	...	...	...
	1.6.1.2	...	...	...	...	...
	1.6.1.3	...	...	...	...	...
	1.6.1.4	...	...	...	...	...
	1.6.1.5	...	...	...	...	...
	1.6.1.6	...	...	...	...	...
	1.6.1.7	...	...	...	...	...
	1.6.1.8	...	...	...	...	...
	1.6.1.9	...	...	...	...	...
	1.6.1.10	...	...	...	...	...

Too Much Detail  
to Present!



# Detailed Evaluation Criteria



Break into equal sized groups and spend some time reviewing the detailed approach to the evaluation criteria and assessment progress, ask questions & provide feedback. We have allotted approximately 30 minutes or 10 minutes per station.

(Van) Station 1: Mobility & Safety Criteria

(Nick) Station 2: Land Use, Socioeconomic,  
& Community Effects

(Mark) Station 3: Environmental Effects & Cost

# Project Schedule



		2014				2015												2016												2017					
		SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Task 1	Study Area, Goals & Objectives, Evaluation Criteria, and Public Involvement Plan																																		
Task 2	Existing Conditions, Future No Build Conditions and Issues Evaluation																																		
Task 3	Alternatives Development																																		
Task 4	Alternatives Analysis																																		
Task 5	Recommendations																																		
Task 6	Final Report																																		

Working Group Meeting

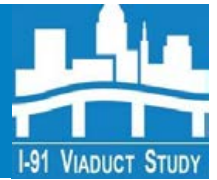


Public Meeting



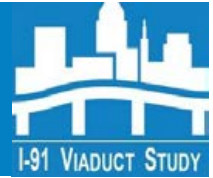


# Next Steps



- Complete Evaluation Criteria Rating Process
- Determine Preferred Alternative
- Additional Working Group Meeting
- Final Public Informational Meeting

# Questions & Comments



## Contacts:

Ethan Britland, Project Manager

Phone: 857-368-8840

Email: [ethan.britland@state.ma.us](mailto:ethan.britland@state.ma.us)

Michael Clark, Transportation Planner

Phone: 857-368-9800

Email: [michael.clark@state.ma.us](mailto:michael.clark@state.ma.us)

## Study Website Link:

[www.massdot.state.ma.us/i91viaductstudy](http://www.massdot.state.ma.us/i91viaductstudy)



# THANK YOU FOR YOUR PARTICIPATION