I-90 ALLSTON INTERCHANGE
PLACEMAKING STUDY

Boston Redevelopment Authority

Task Force Work Session –
February 3, 2016

The Cecil Group
Stantec
Nelson/Nygaard

Work Session Topics

Mobility/Connectivity

- Review of previous work session discussion

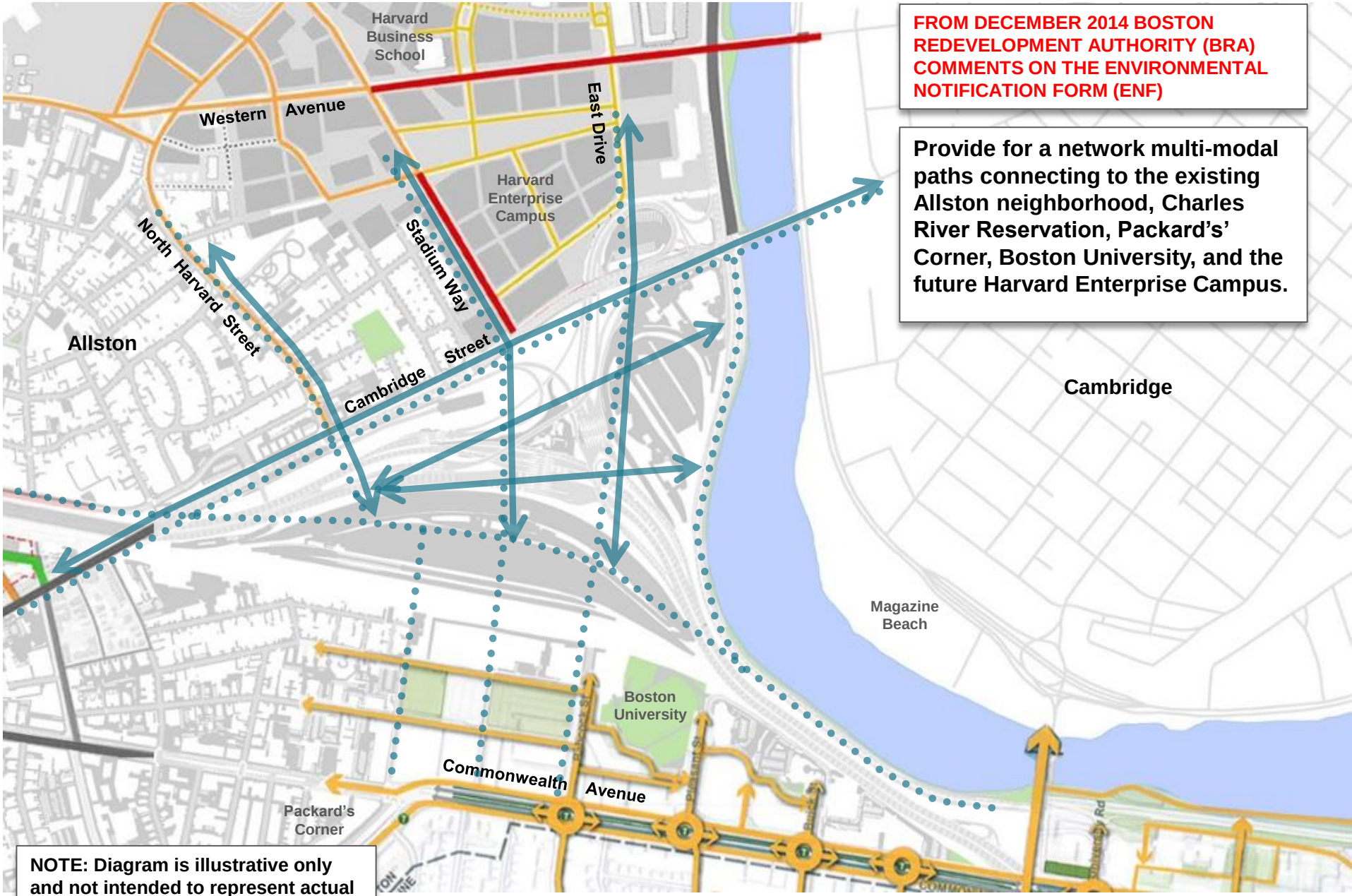
Energy Efficiency/Sustainability

- Discussion of key considerations

Development Flexibility / Distinctive and Contextual

- Current design considerations
- Future district considerations

Allston Interchange: Strong connections to surrounding areas

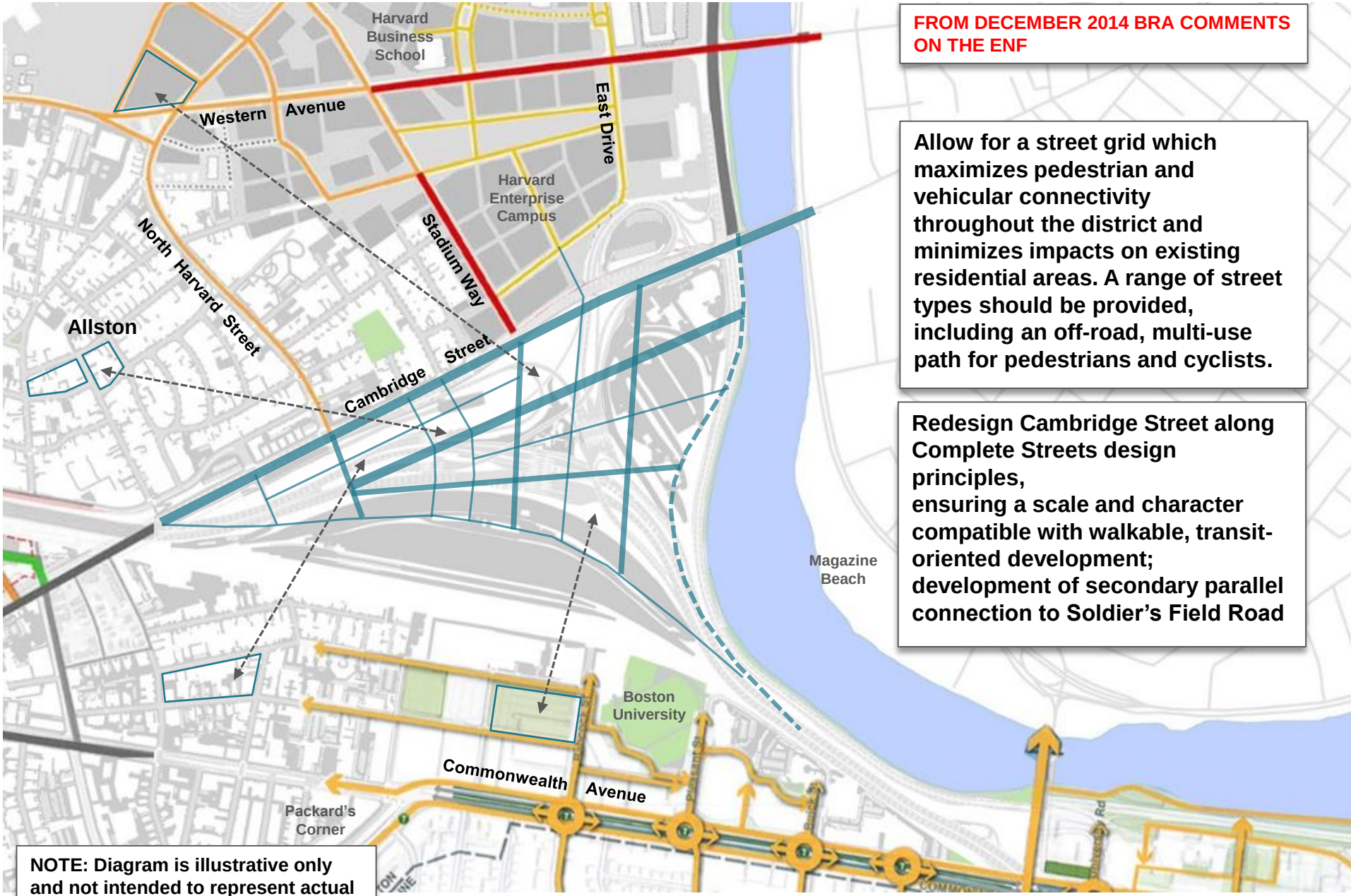


FROM DECEMBER 2014 BOSTON REDEVELOPMENT AUTHORITY (BRA) COMMENTS ON THE ENVIRONMENTAL NOTIFICATION FORM (ENF)

Provide for a network multi-modal paths connecting to the existing Allston neighborhood, Charles River Reservation, Packard's' Corner, Boston University, and the future Harvard Enterprise Campus.

NOTE: Diagram is illustrative only and not intended to represent actual street layout.

Allston Interchange: Traditional street grid/Revitalized Cambridge Street



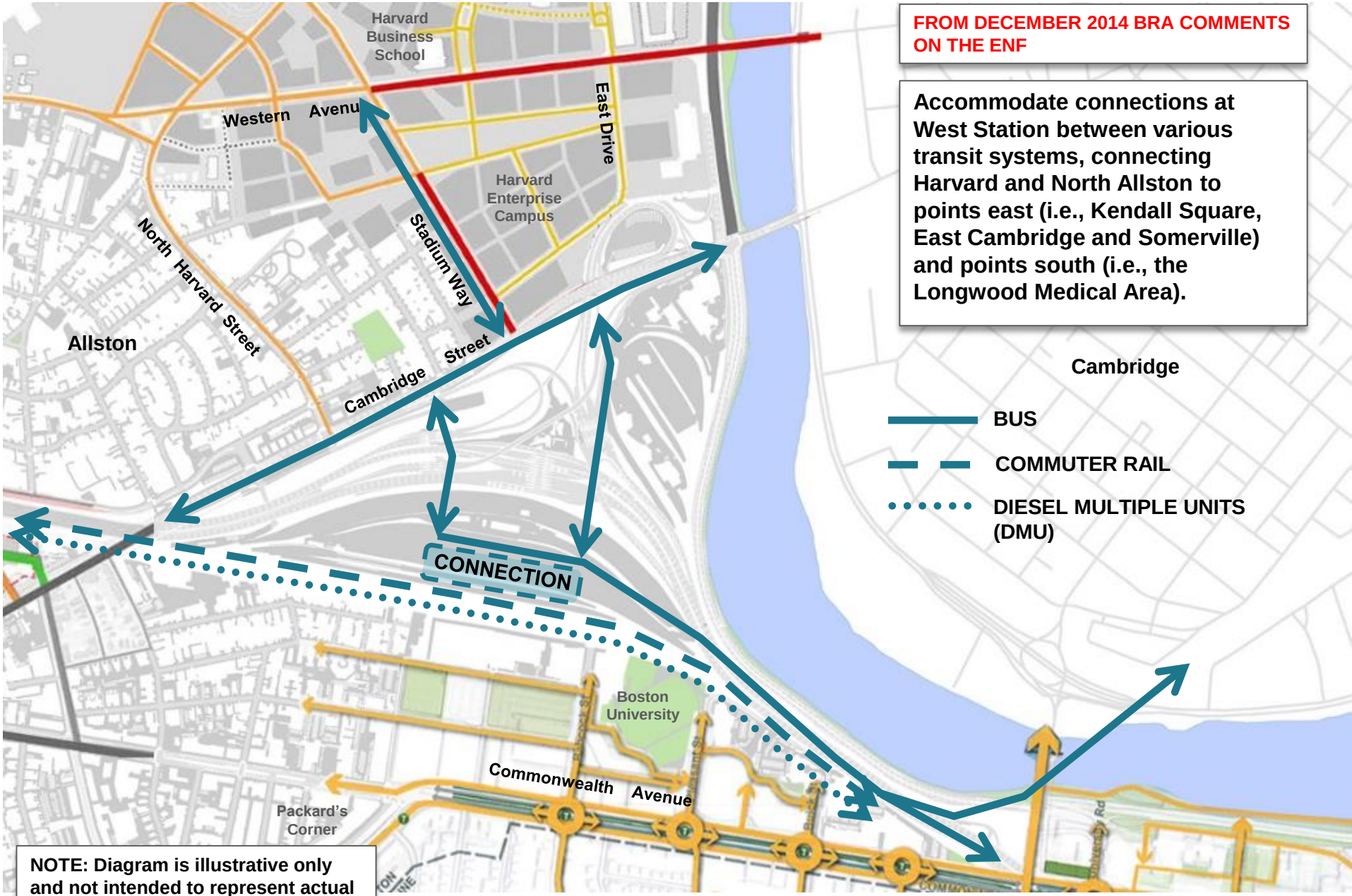
FROM DECEMBER 2014 BRA COMMENTS ON THE ENF

Allow for a street grid which maximizes pedestrian and vehicular connectivity throughout the district and minimizes impacts on existing residential areas. A range of street types should be provided, including an off-road, multi-use path for pedestrians and cyclists.

Redesign Cambridge Street along Complete Streets design principles, ensuring a scale and character compatible with walkable, transit-oriented development; development of secondary parallel connection to Soldier's Field Road

NOTE: Diagram is illustrative only and not intended to represent actual street layout.

Allston Interchange: Integration of bus and rail transit systems

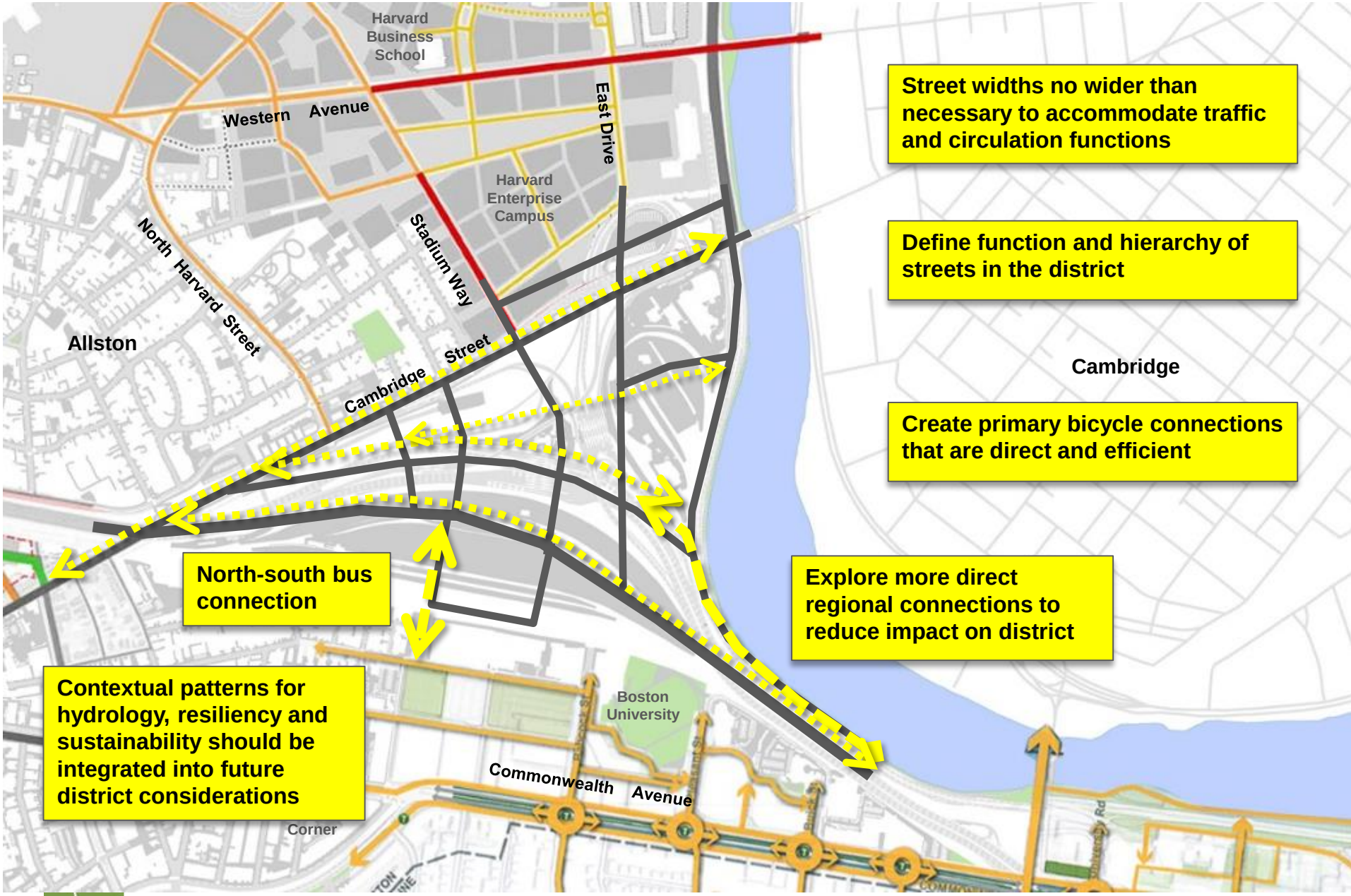


FROM DECEMBER 2014 BRA COMMENTS ON THE ENF

Accommodate connections at West Station between various transit systems, connecting Harvard and North Allston to points east (i.e., Kendall Square, East Cambridge and Somerville) and points south (i.e., the Longwood Medical Area).

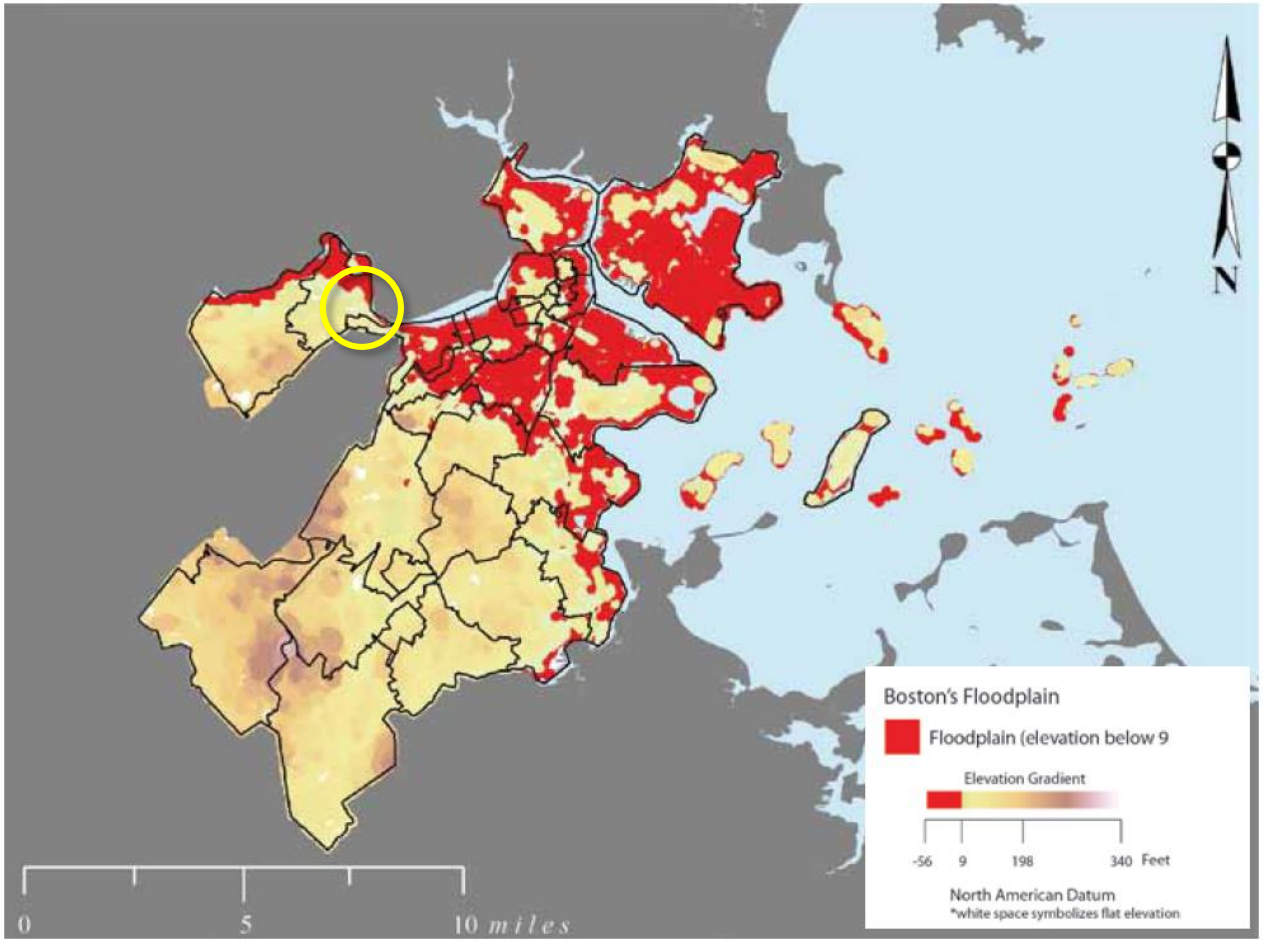
NOTE: Diagram is illustrative only and not intended to represent actual street layout.

KEY POINTS FROM THE 1/20 WORK SESSION



Summary Discussion: Energy Efficiency/Sustainability

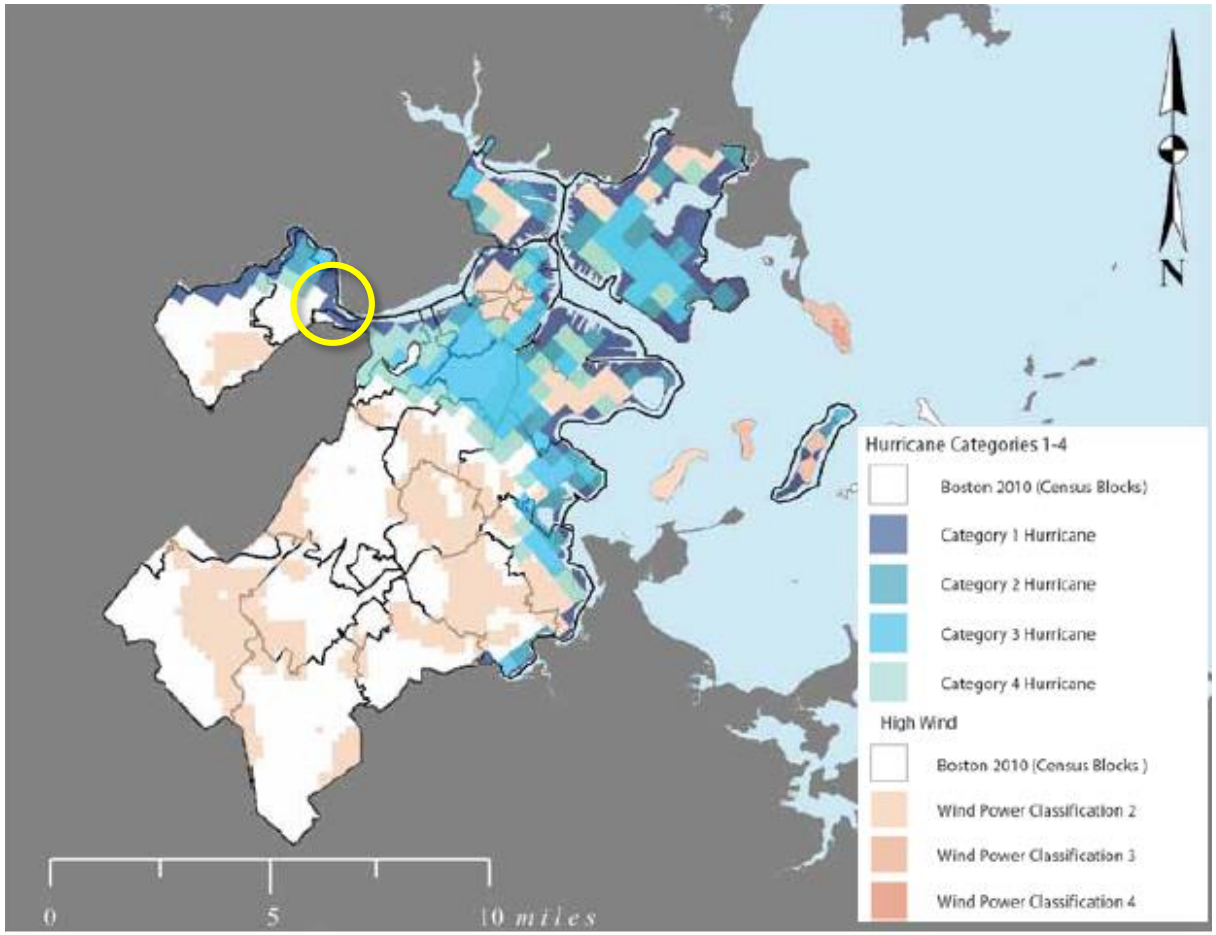
Flood levels in Boston (Projecting water level 9 feet above current levels):



This corresponds to highest Mean Higher High Water level in the Preparing for the Rising Tides (BHA, 2013) report. **Source: *Building Resilience in Boston*, July 2013**

Summary Discussion: Energy Efficiency/Sustainability

Hurricane Hazards in Boston (Storm surge and wind):



Mapping of wind and hurricane hazards for Boston reveals the highest wind speeds in East Boston, with high wind also in downtown Boston and in exposed elevations around the city.

Source: *Building Resilience in Boston,* July 2013

Summary Discussion: Energy Efficiency/Sustainability

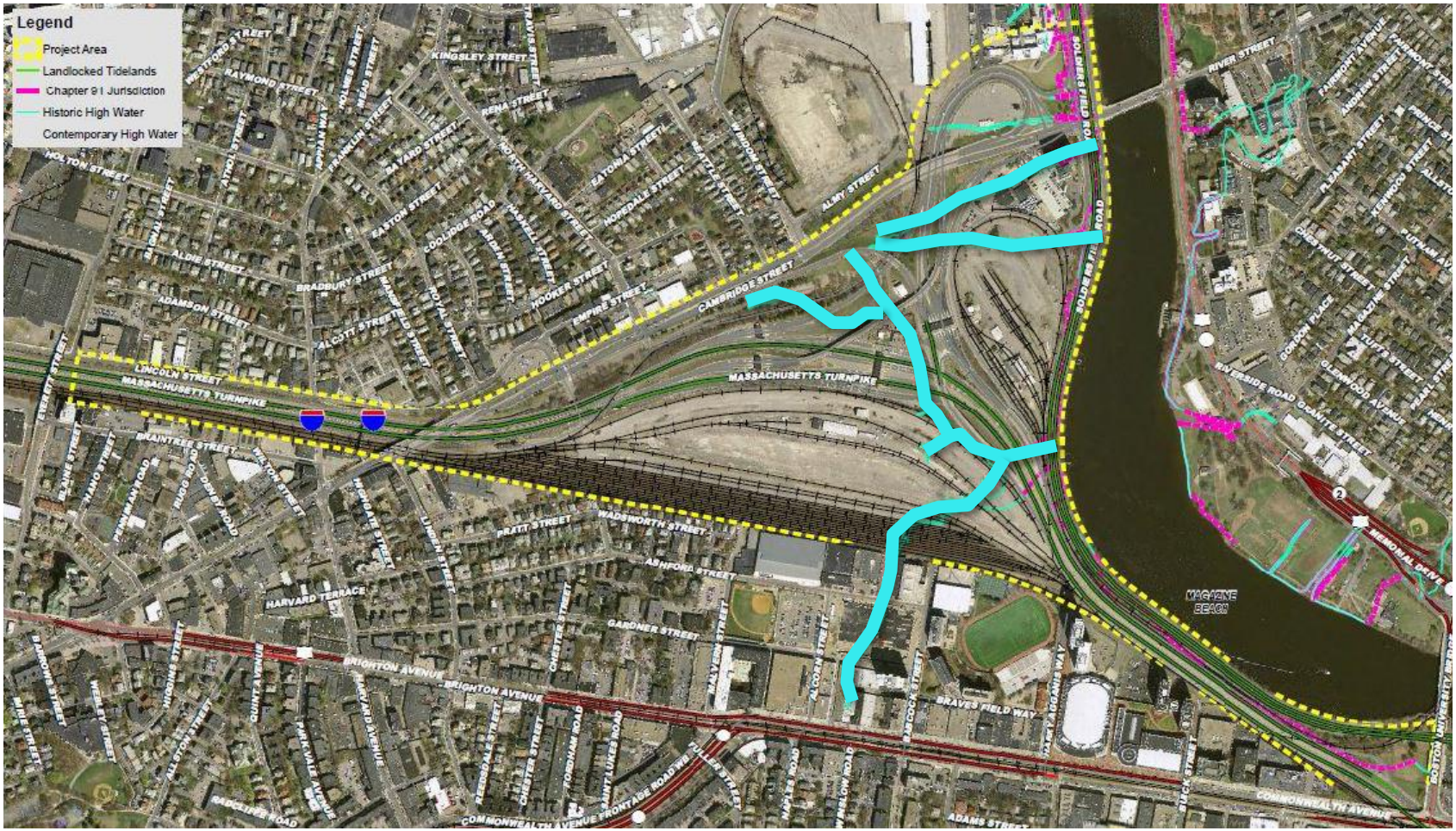
Category 4 Hurricane Flood Risk in Allston

Allston building types shown with the predicted extent of flooding from a category 4 hurricane as determined from a NOAA SLOSH model for Boston.

Source: ***Building Resilience in Boston,*** **July 2013**

Summary Discussion: Energy Efficiency/Sustainability

Historic High Water



Source: *Allston I-90 Interchange ENF,* October 2014

Summary Discussion: Energy Efficiency/Sustainability

Impervious Surfaces in Allston (Storm surge and wind):

This map of impervious surfaces in the Allston neighborhood shows the extent of paving and building density.

Source: *Building Resilience in Boston,* July 2013

Summary Discussion: Energy Efficiency/Sustainability

Current design considerations:

- *What are the underlying characteristics driving district decisions?*
  - Integrate flood resiliency into district design
  - Design hard infrastructure to mitigate flooding
  - Consider flood elevations when setting final roadway and intersection elevations
  - Integrate stormwater flows, collection and treatment into functional open space network
  - Other sustainability/resiliency drivers?

Works Session Focus: Development Flexibility

Current design considerations:

- *How are the blocks shaping development character?*
- *How does development shape the street environment?*
- *How can West Station be integrated into the district?*
- *How should the development be shaped within the district?*

Reminder of next steps:

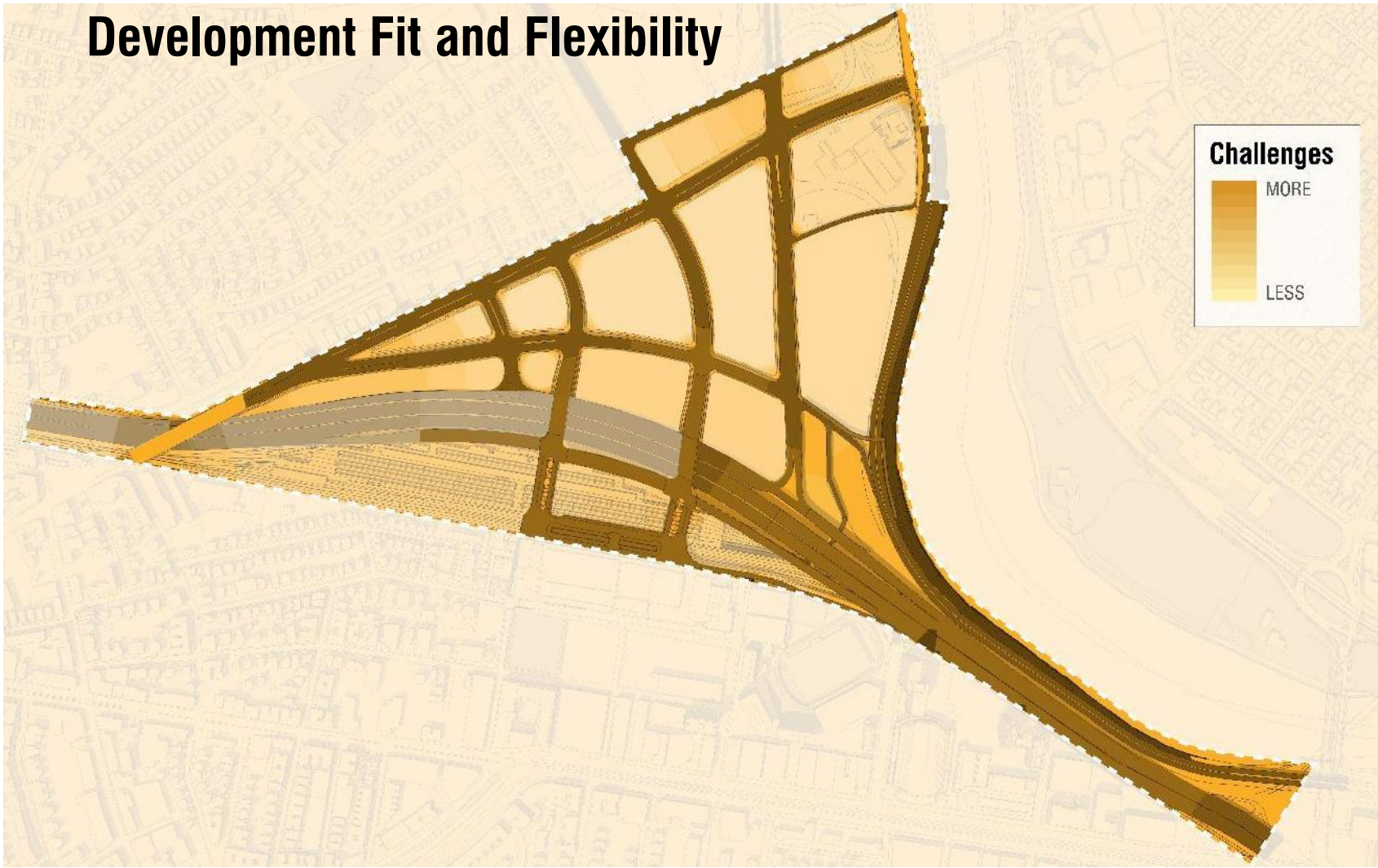
- *Integration of all conversations into district alternative scenarios and discussion of trade-offs*

Works Session Focus: Development Flexibility

Current design considerations:

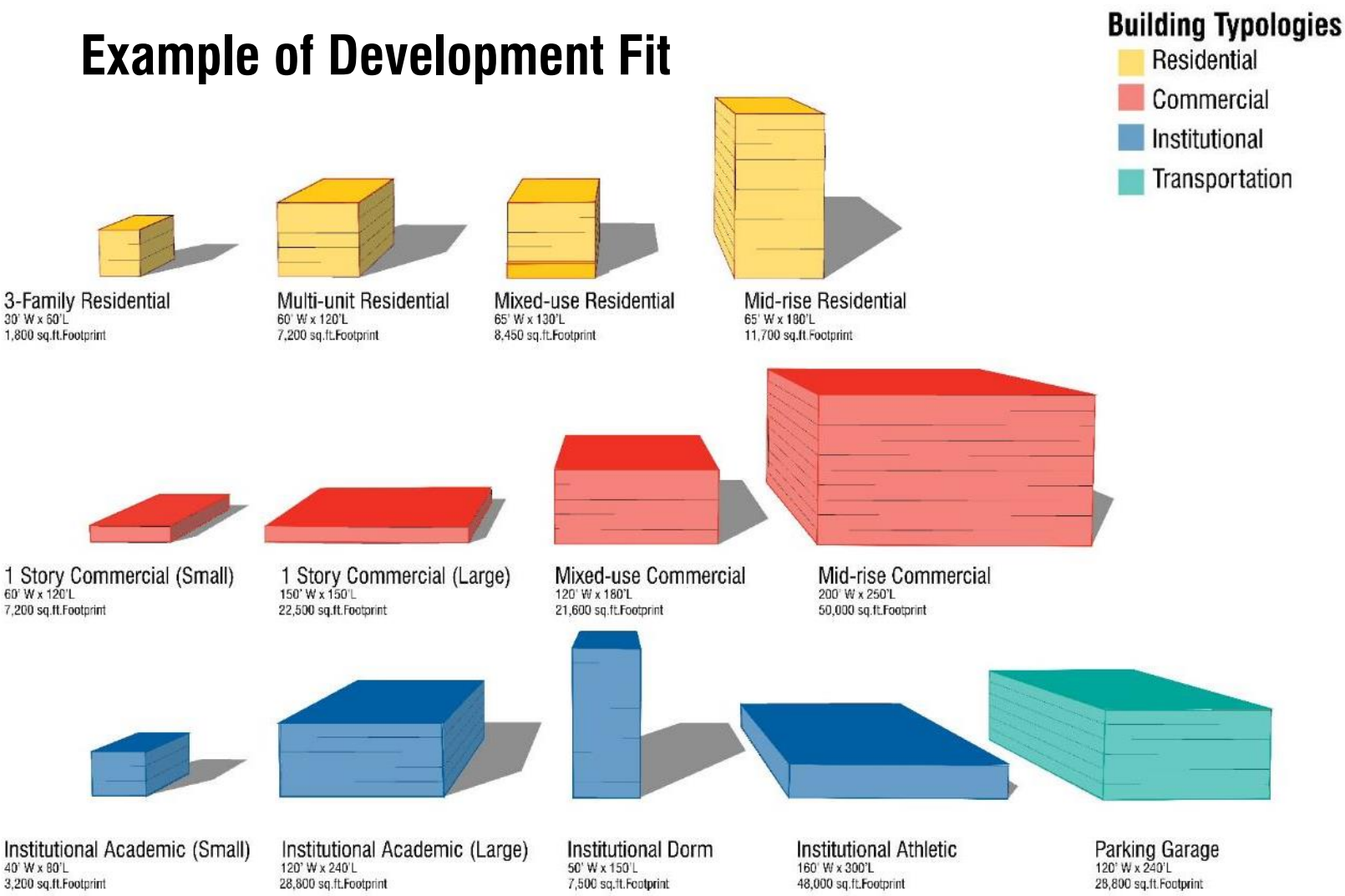
- *How are the blocks shaping development character?*
  - Block scale and geometry
  - Block elevation and slope of roadway
  - Access to blocks – highway ramps
  - Access to blocks – one way streets

Discussion Topic: Development Flexibility



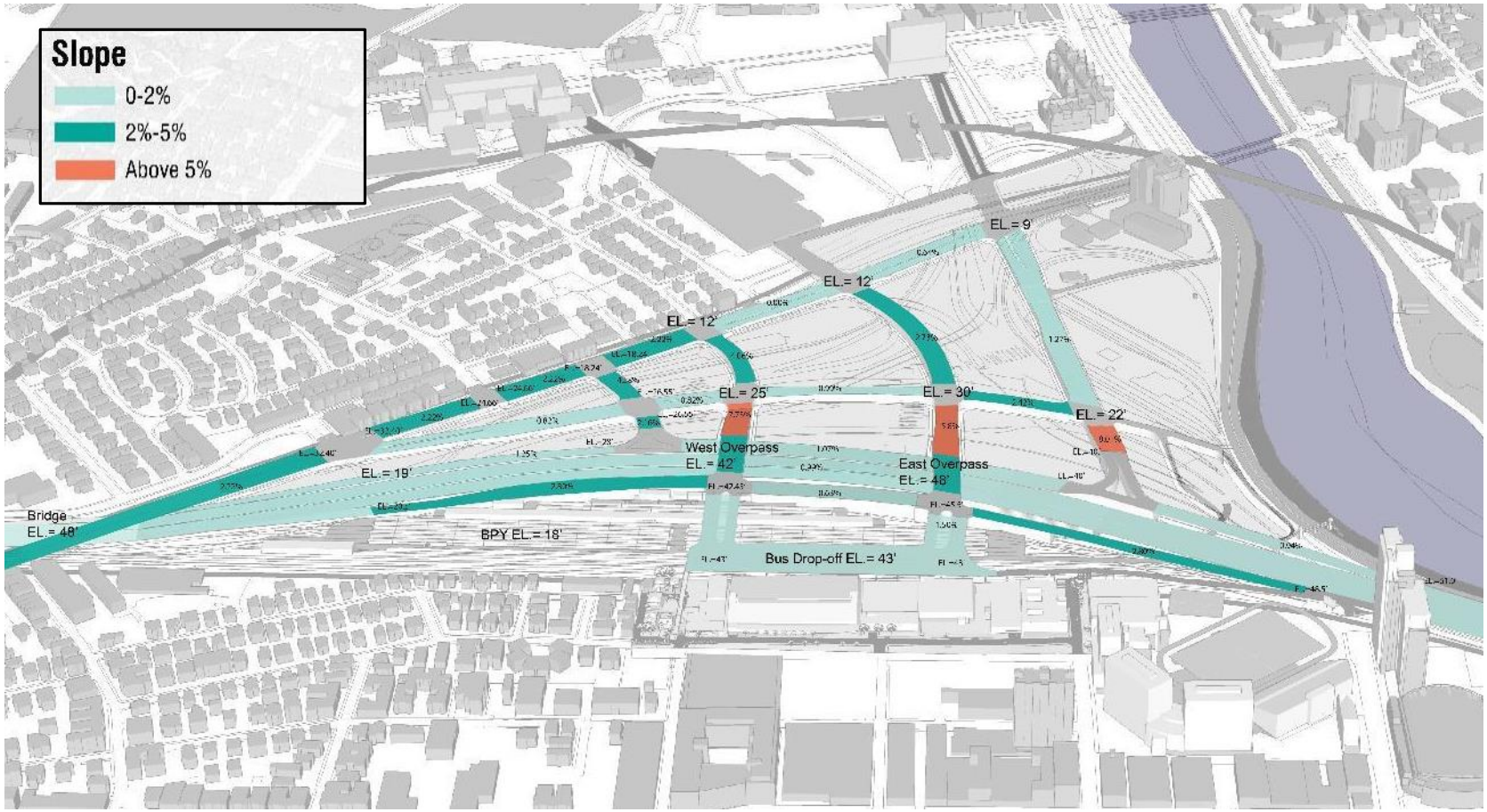
Discussion Topic: Development Flexibility

Example of Development Fit



Discussion Topic: Development Flexibility

Block Elevation and Slope of Roadway



Discussion Topic: Development Flexibility

Photos of Slope Examples – None as steep as –

Pinckney Street on Beacon Hill - 16%

Park Street on Beacon Hill - 9-10%

Discussion Topic: Development Flexibility

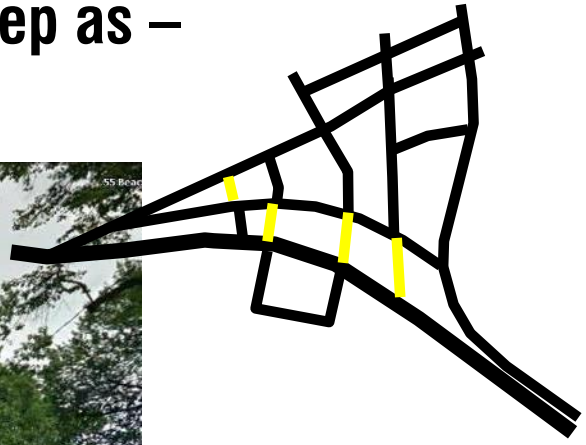
Photos of Slope Examples – None as steep as –

Market Street in Brighton – 2-4%

Discussion Topic: Development Flexibility

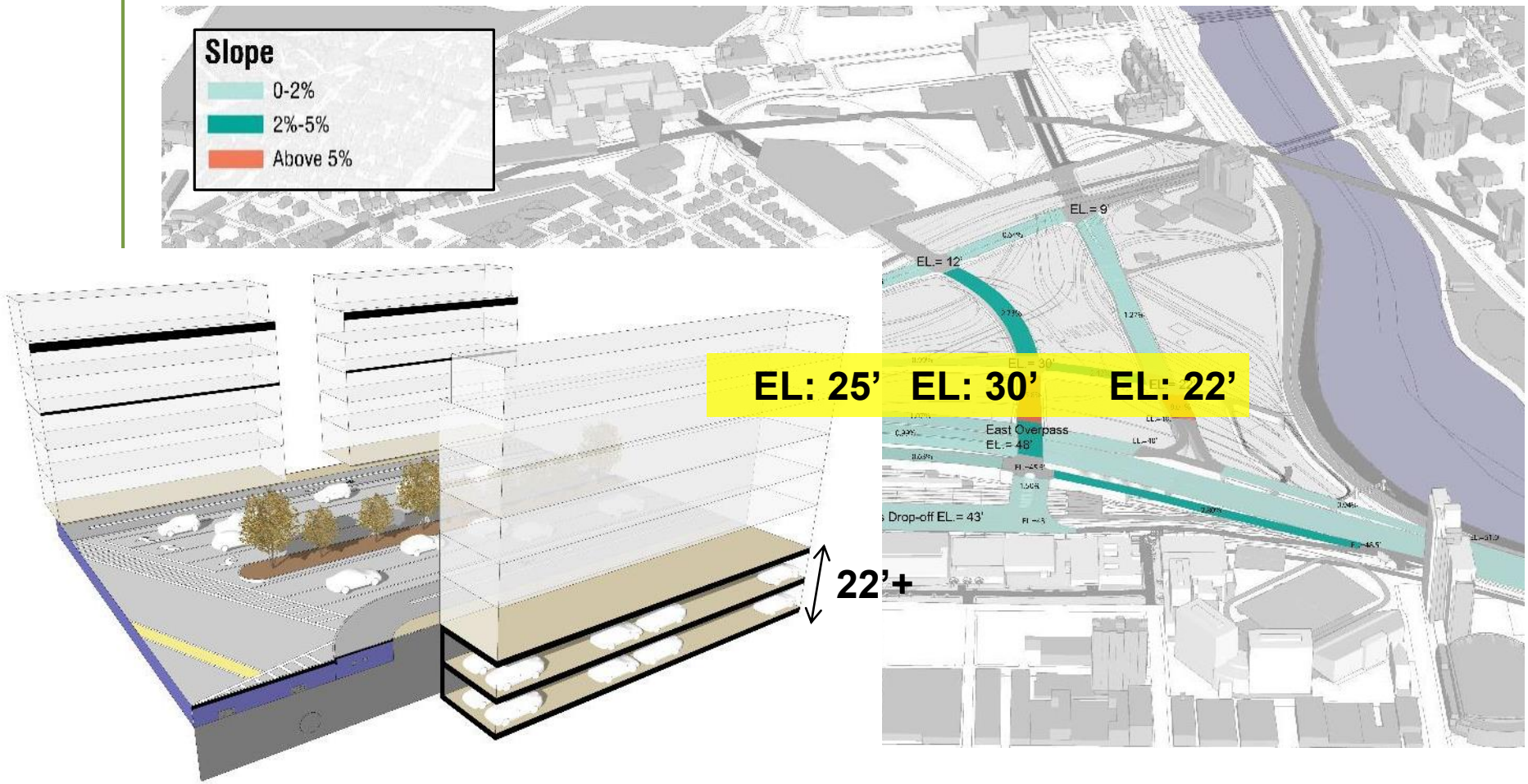
Photos of Slope Examples – None as steep as –

Beacon Street – 4-8%



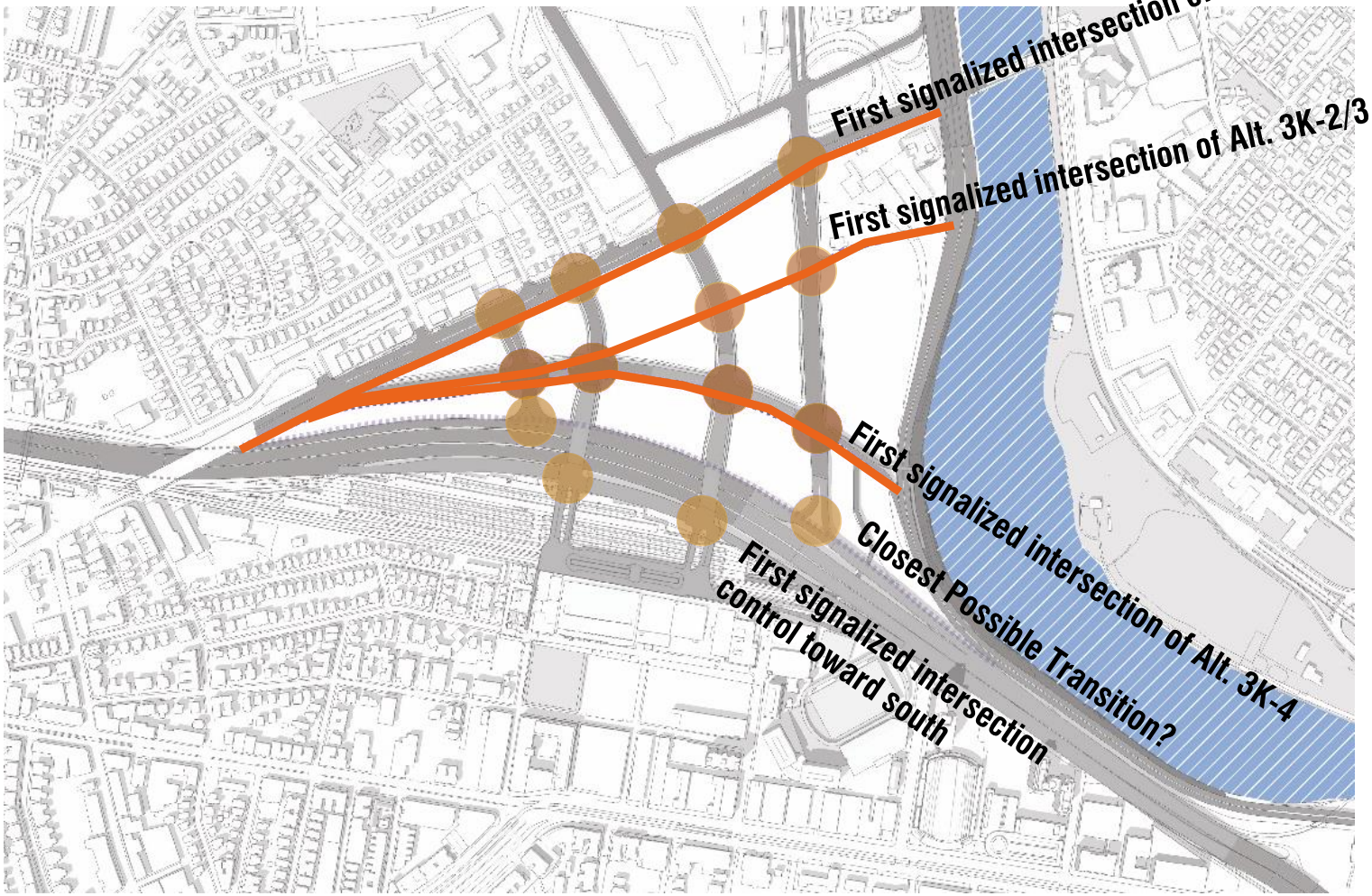
Discussion Topic: Development Flexibility

Grading and Parking



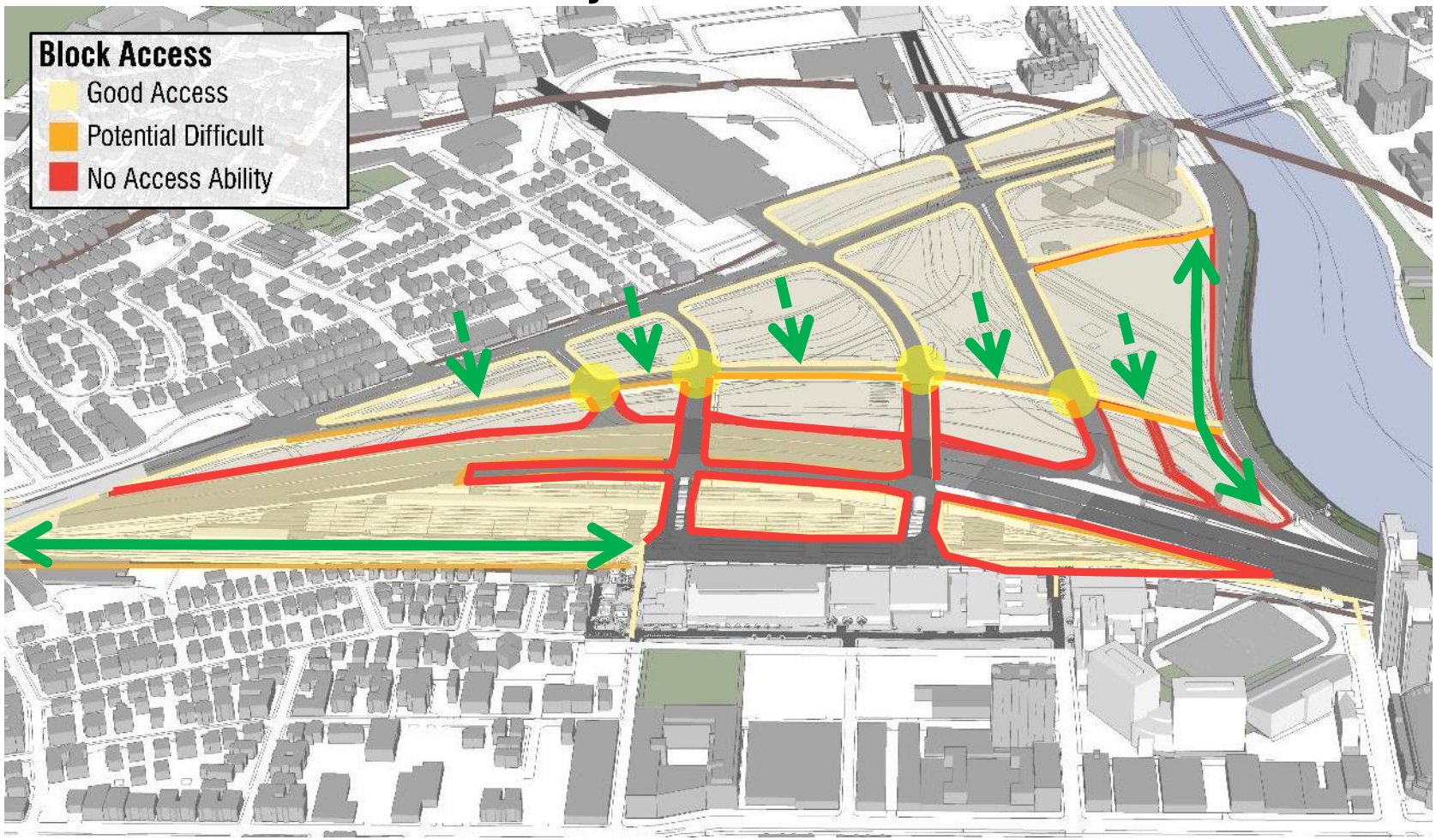
Discussion Topic: Development Flexibility

Transition from Highway to City Street Network



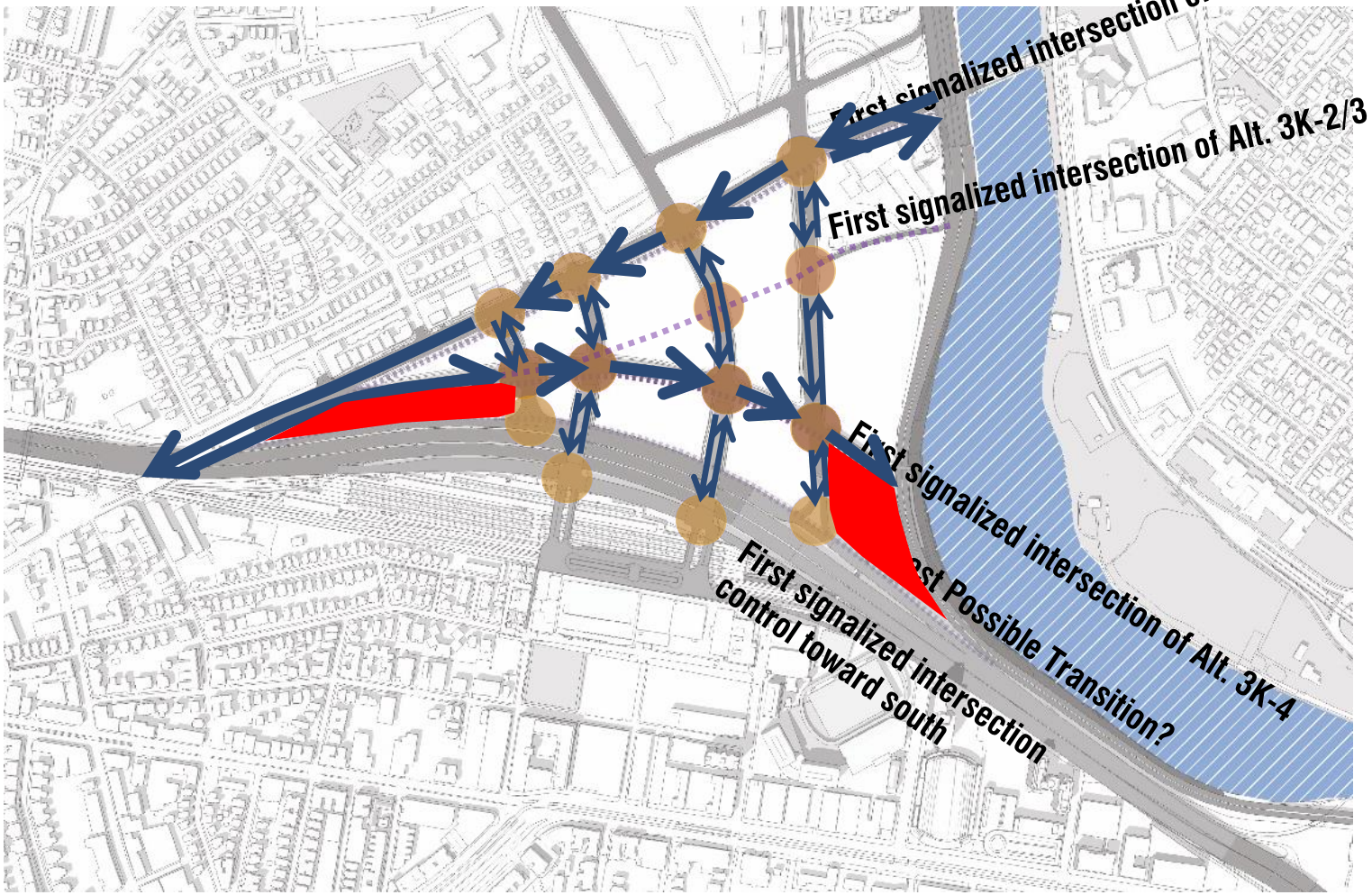
Discussion Topic: Development Flexibility

Block Access and Flexibility



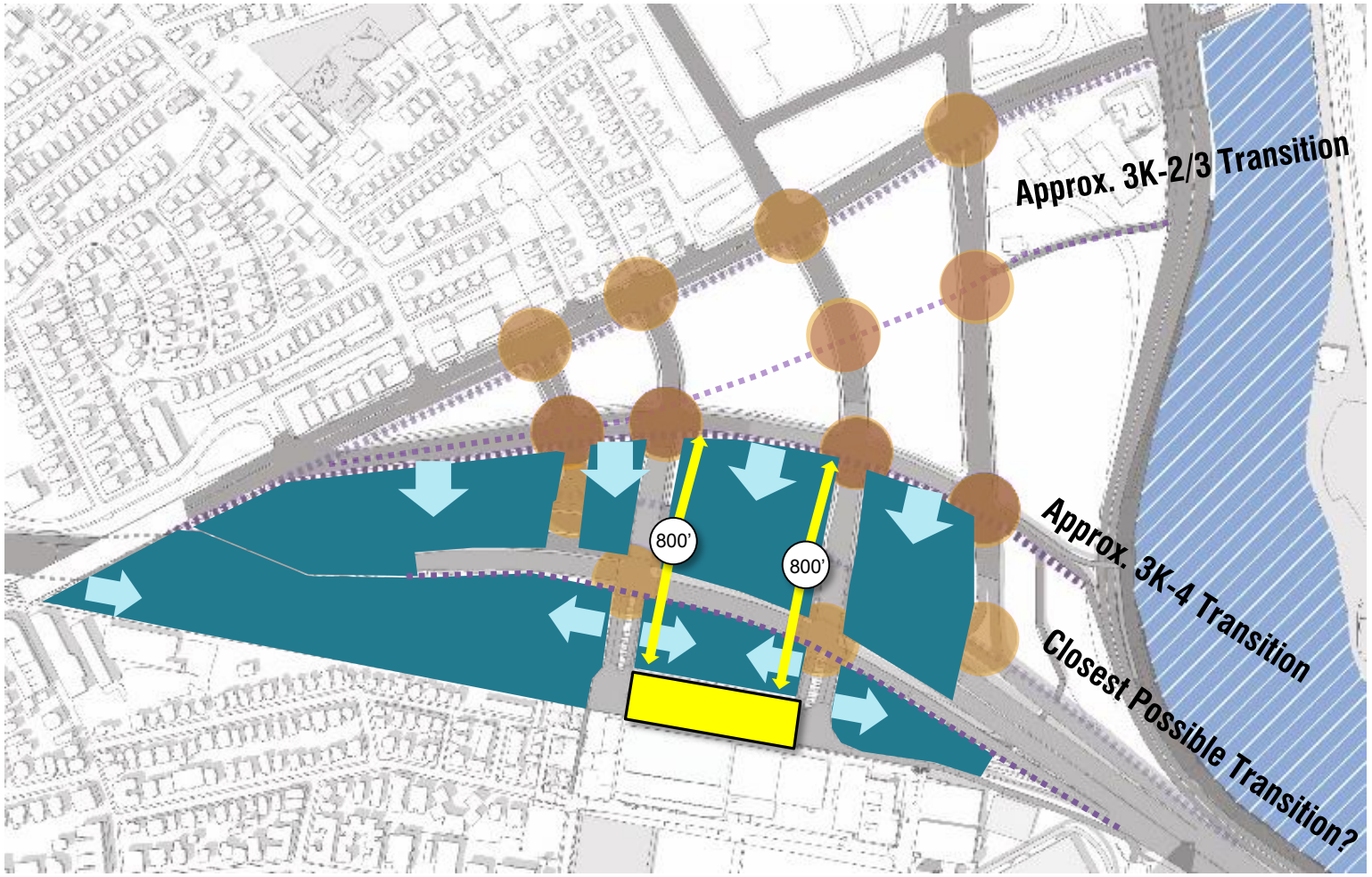
Discussion Topic: Development Flexibility

Block Access – One-way Streets



Discussion Topic: Development Flexibility

Integration of West Station



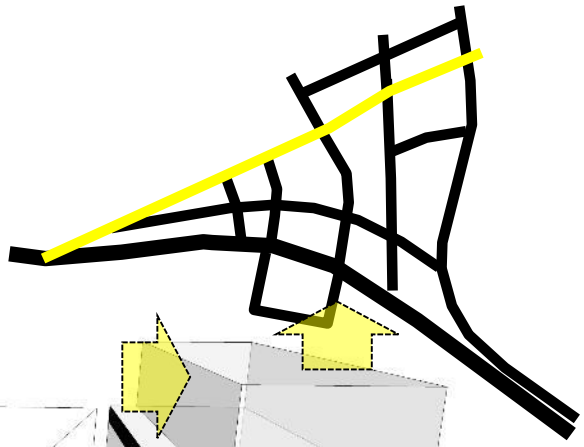
Works Session Focus: Development Flexibility

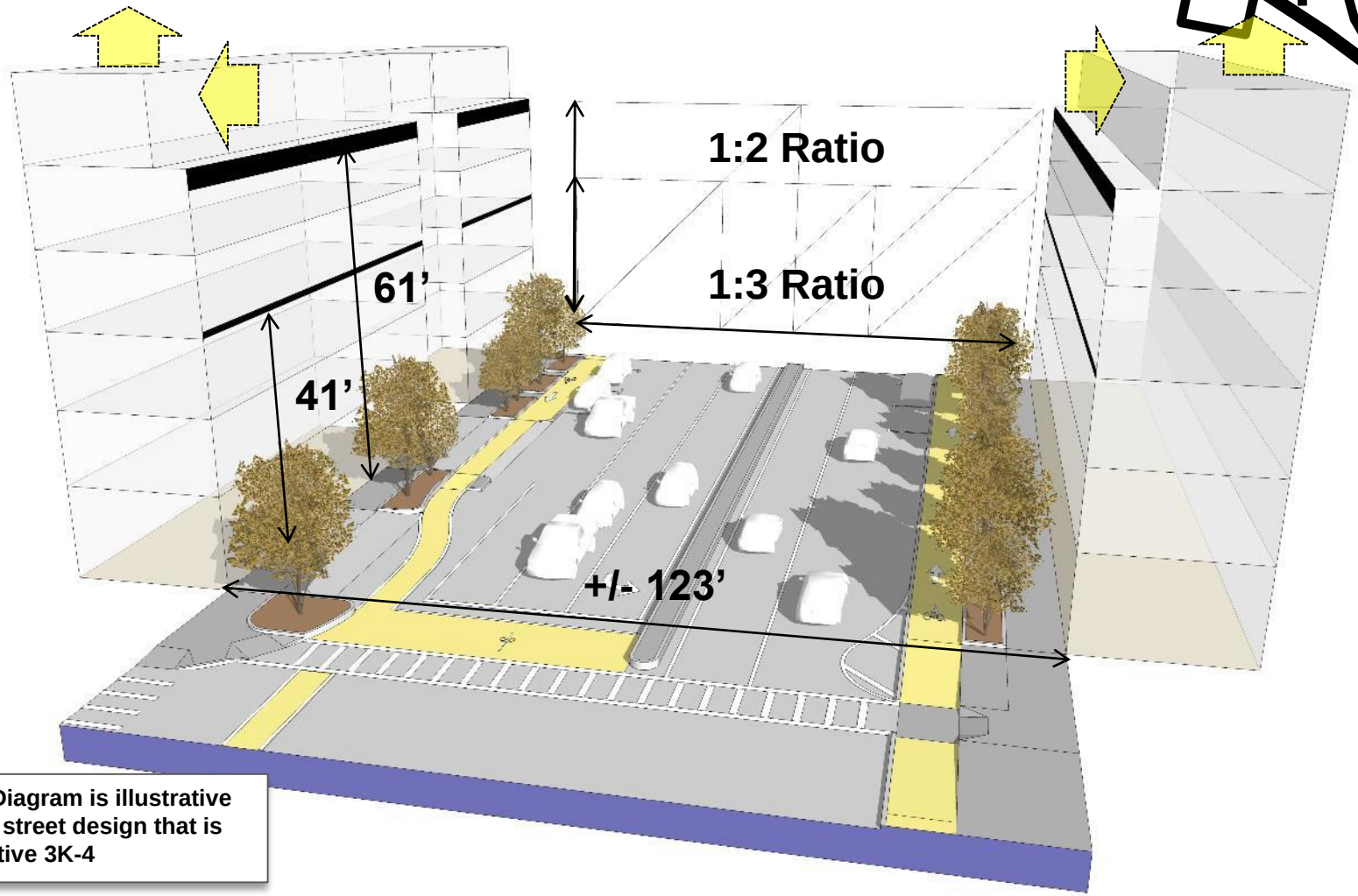
Current design considerations:

- *How does development shape the street environment?*
  - Continuity of street frontage
  - Potential for active building frontage
  - Sense of character and enclosure at the street

Distinctive and Contextual

Character of Cambridge Street

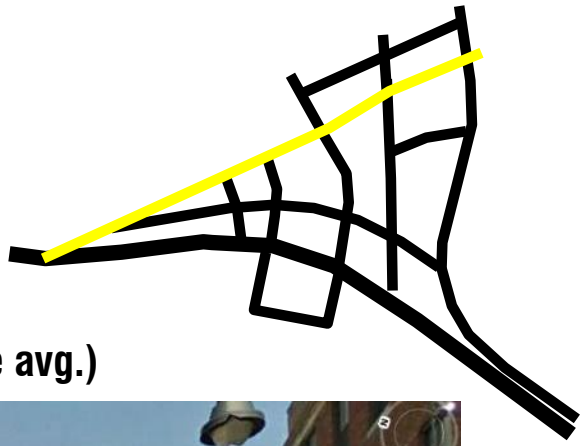




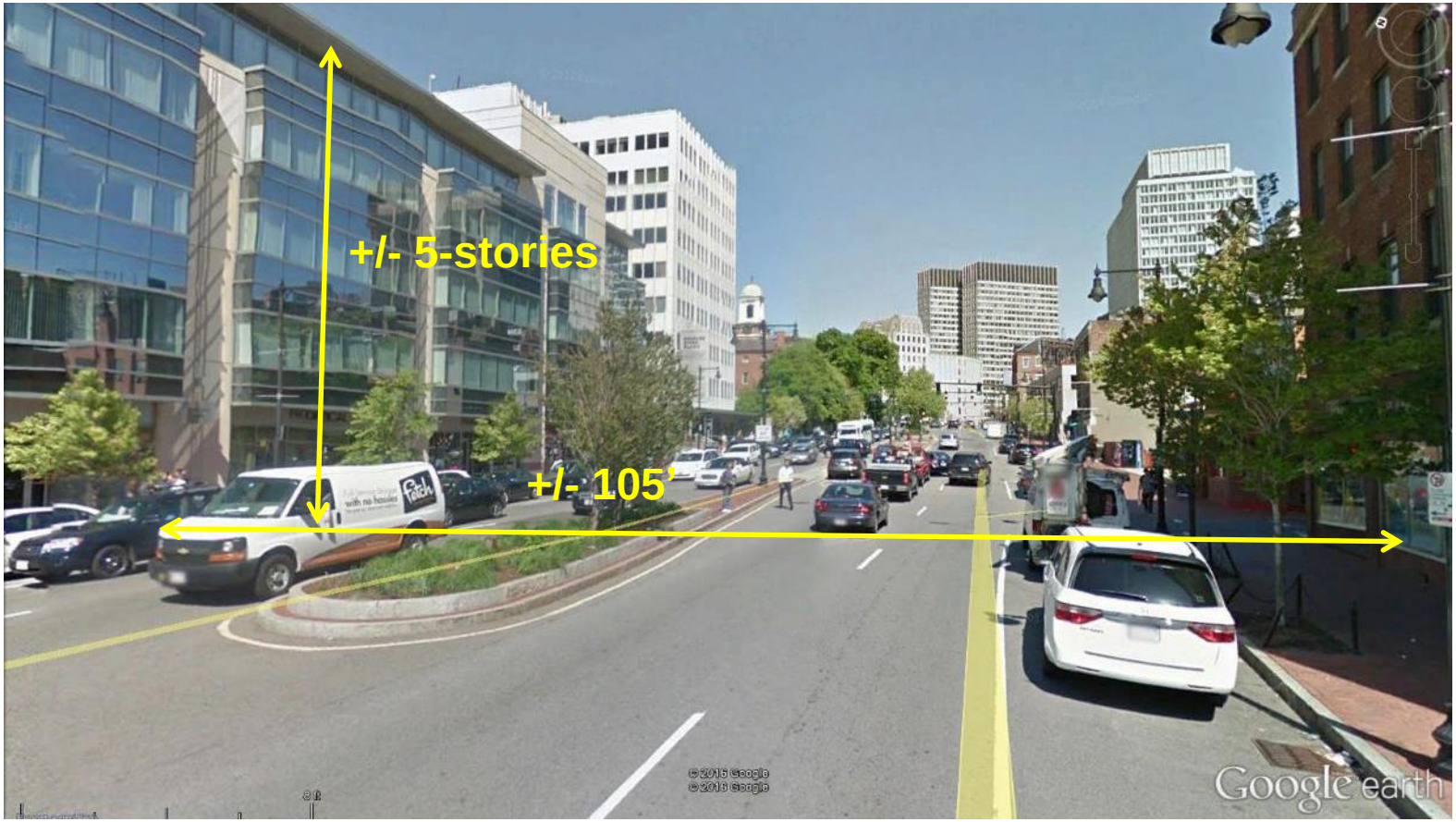
NOTE: Street Diagram is illustrative of a section of street design that is part of Alternative 3K-4

Distinctive and Contextual

Photo Example

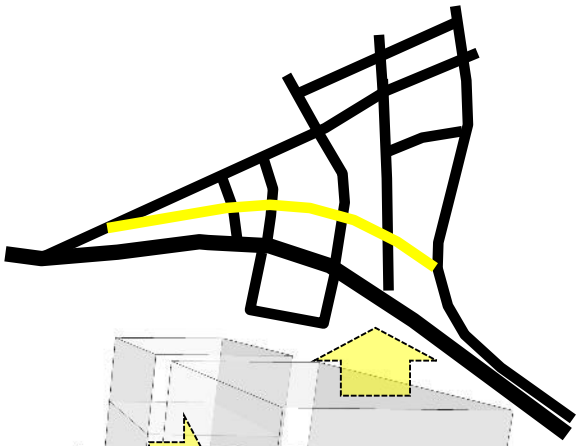


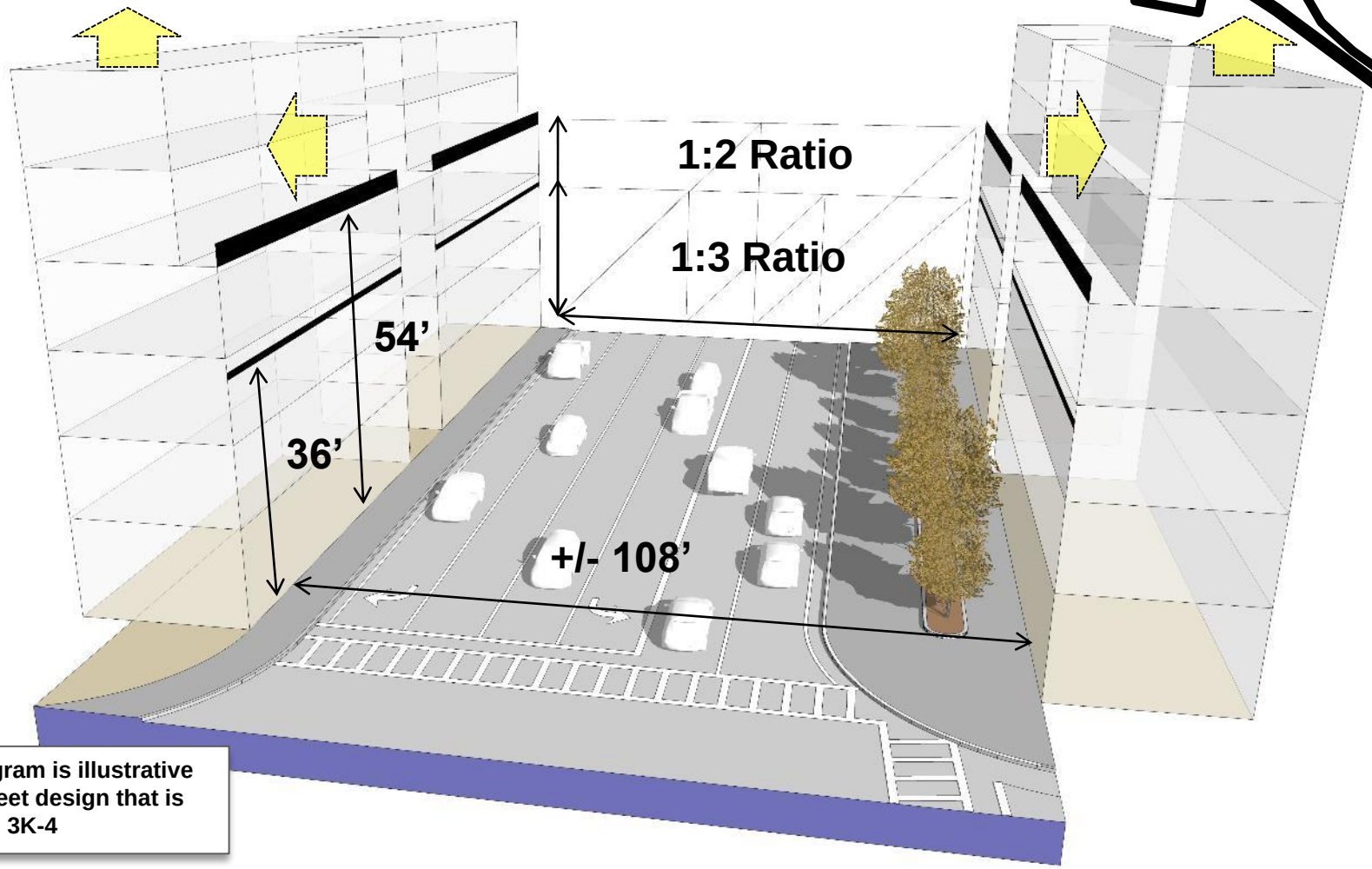
Cambridge Street near Beacon Hill (3.5% slope avg.)



Distinctive and Contextual

Character of Cambridge Street South





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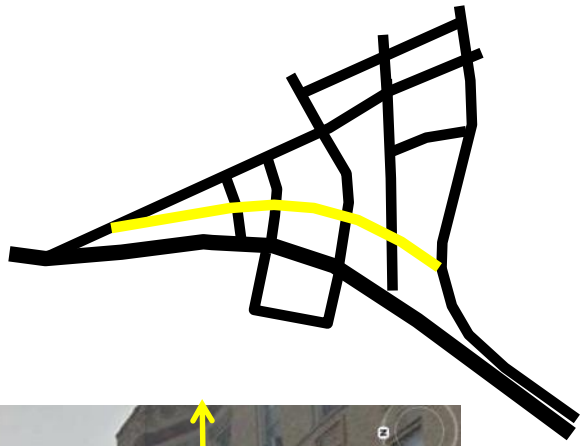
Distinctive and Contextual

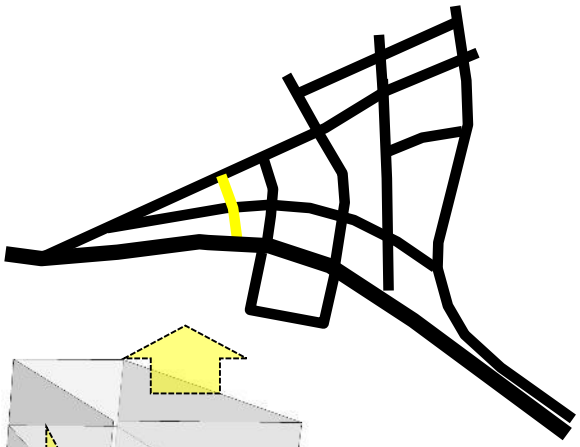
Photo Example

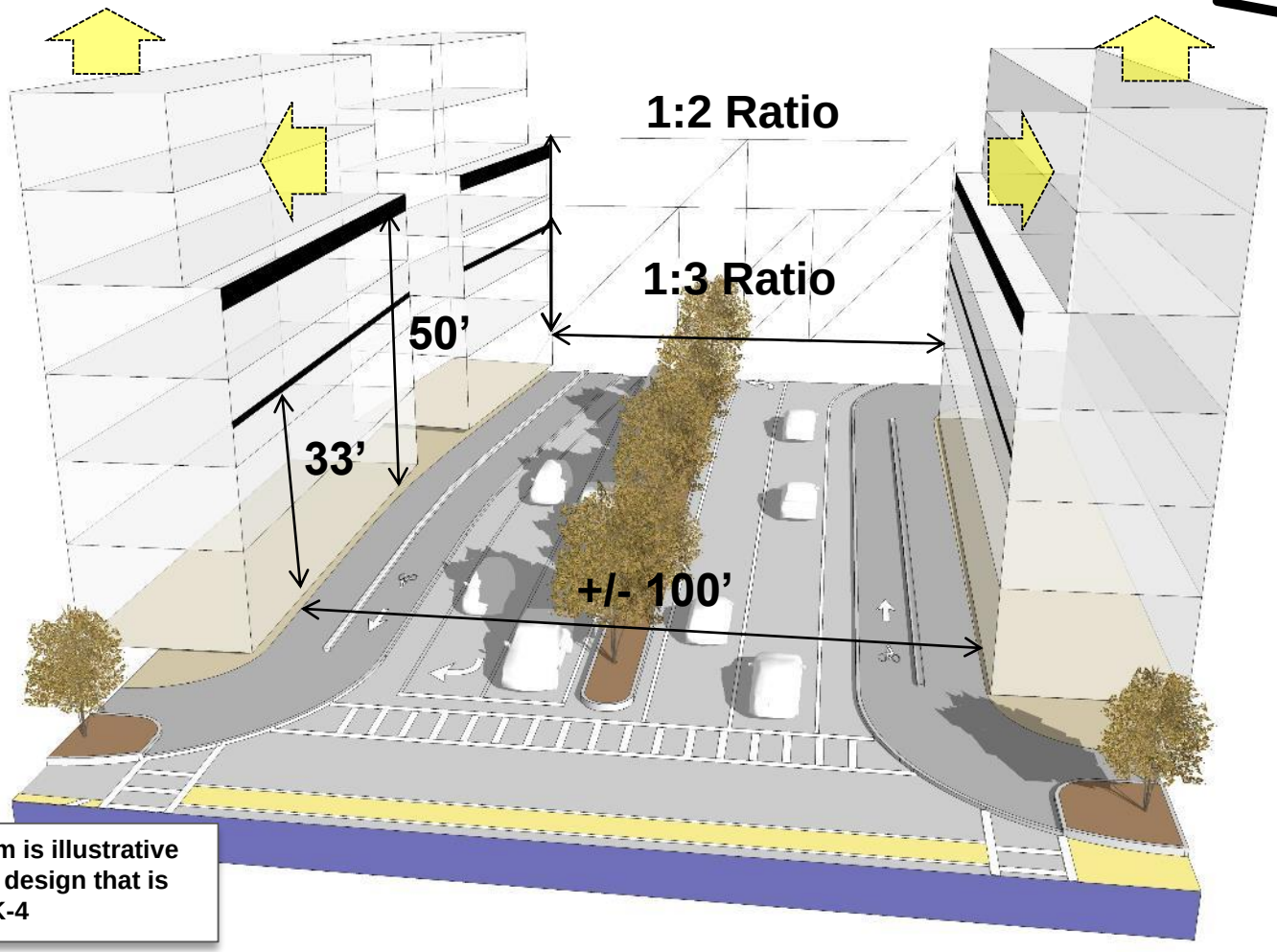


Brighton Avenue in Allston

Distinctive and Contextual

Character of West Street Connector





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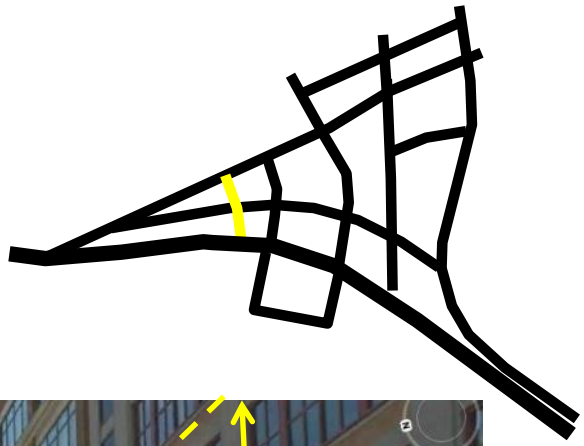
Distinctive and Contextual

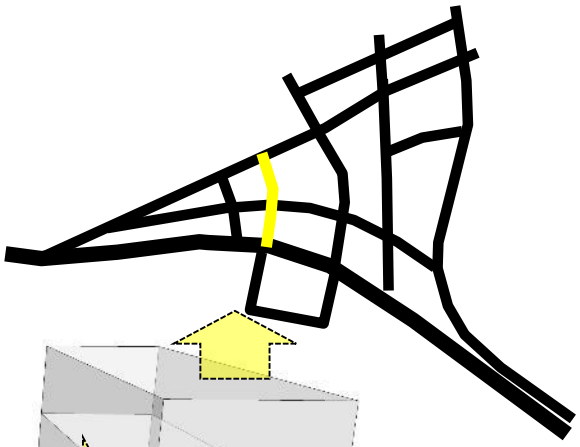
Photo Example

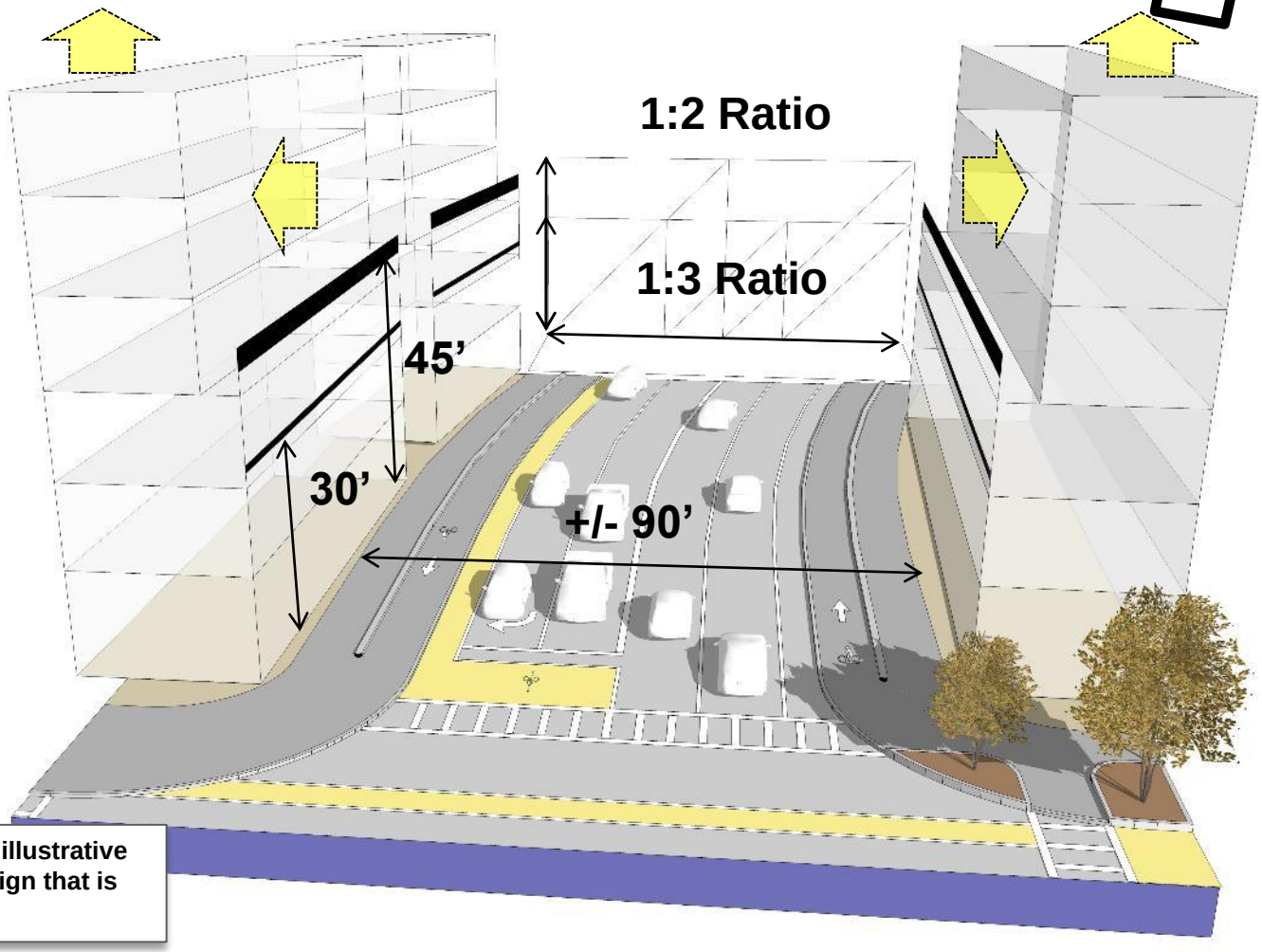


Kneeland Street in Chinatown

Distinctive and Contextual

Character of Seattle Street Connector





NOTE: Street Diagram is illustrative of a section of street design that is part of Alternative 3K-4

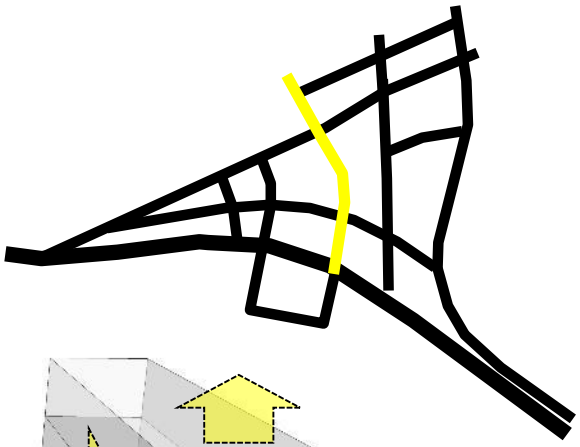
Distinctive and Contextual

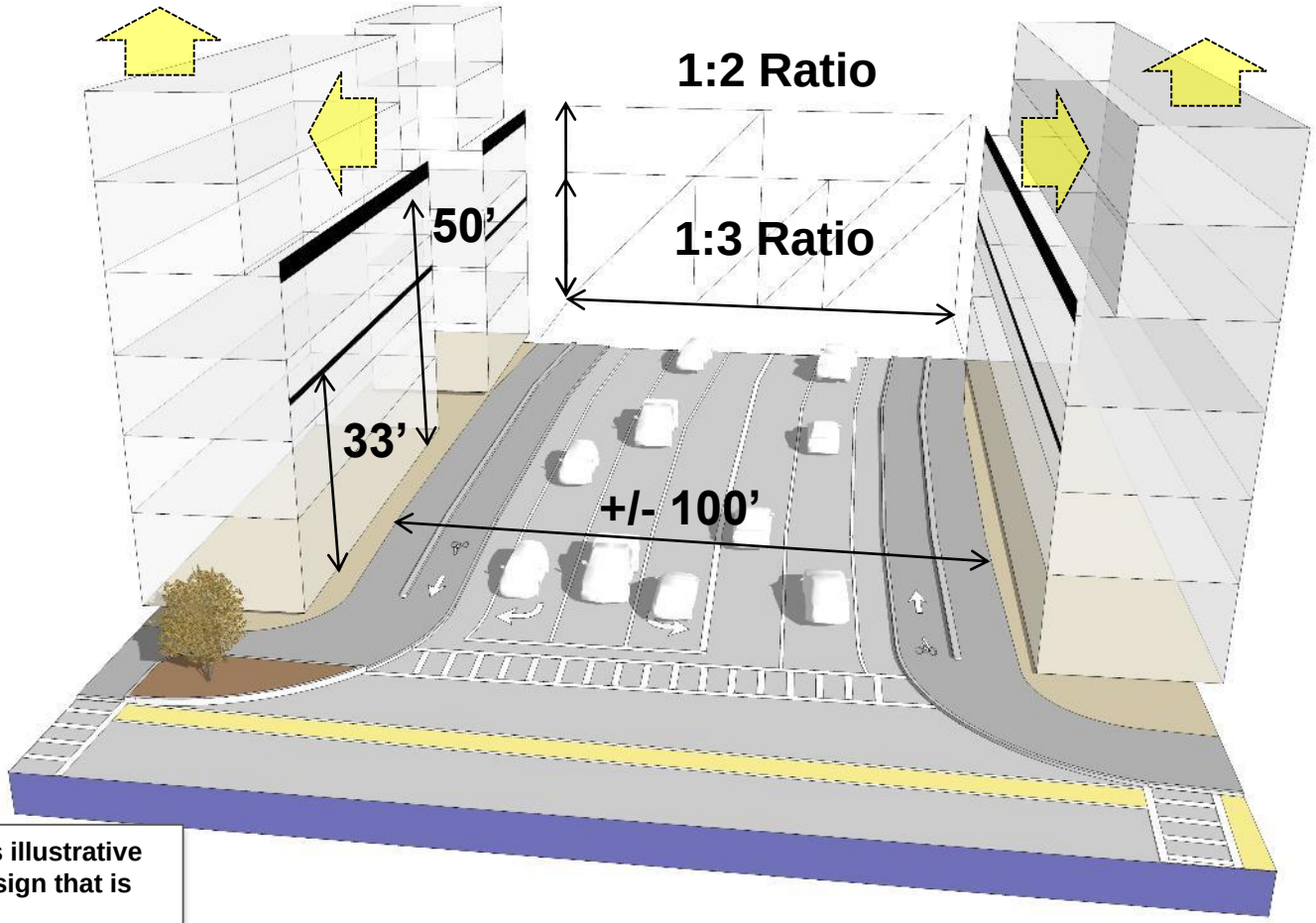
Photo Example

Mass. Ave. in Cambridge

Distinctive and Contextual

Character of Stadium Way Connector





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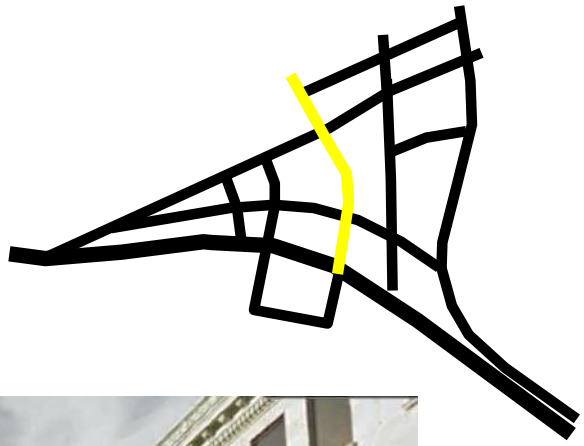
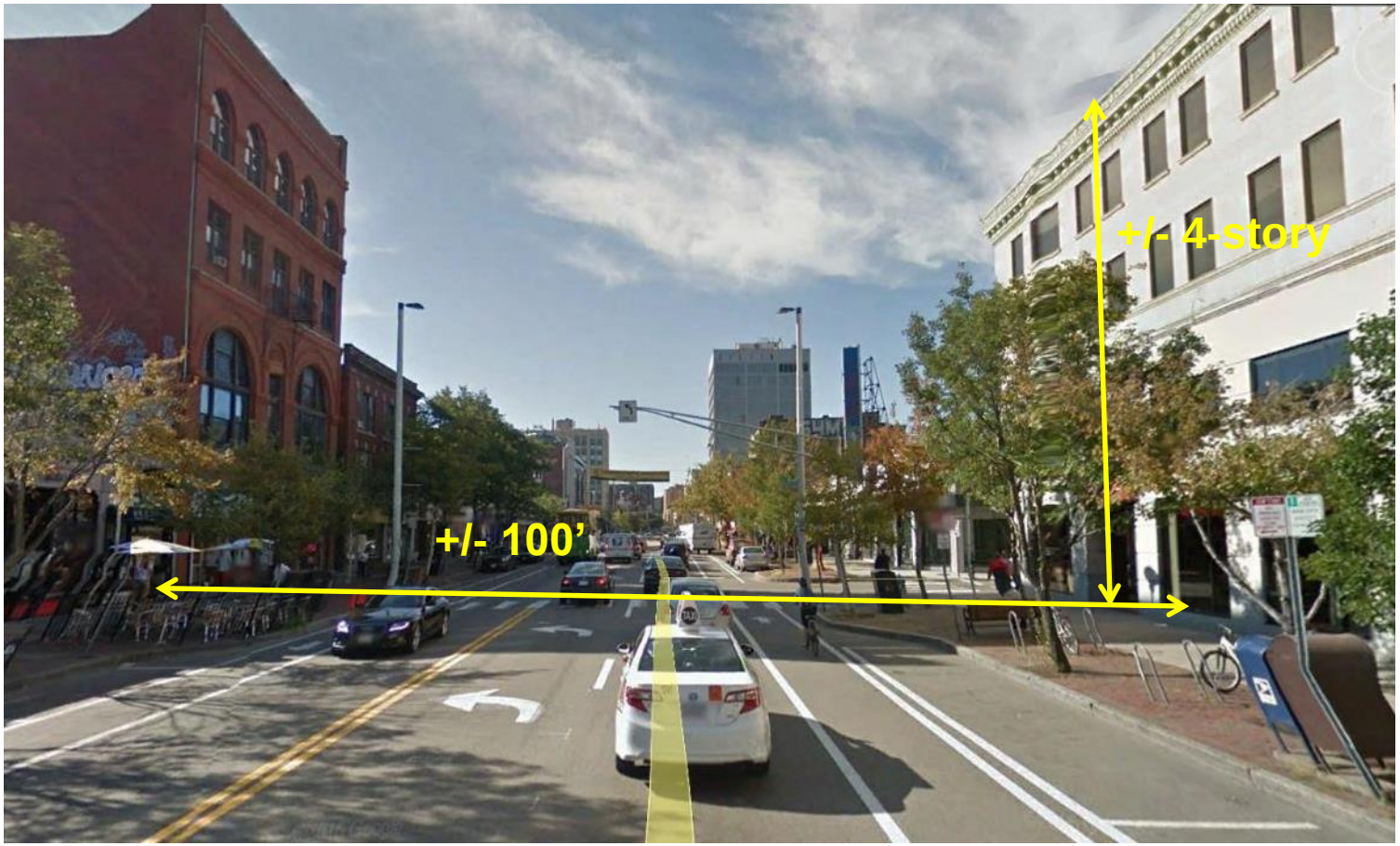
Distinctive and Contextual

Photo Example

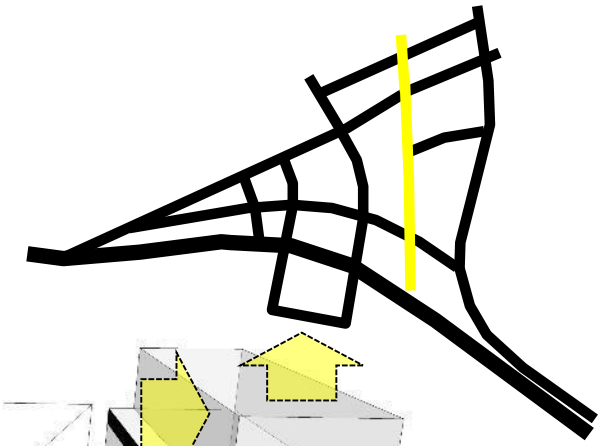


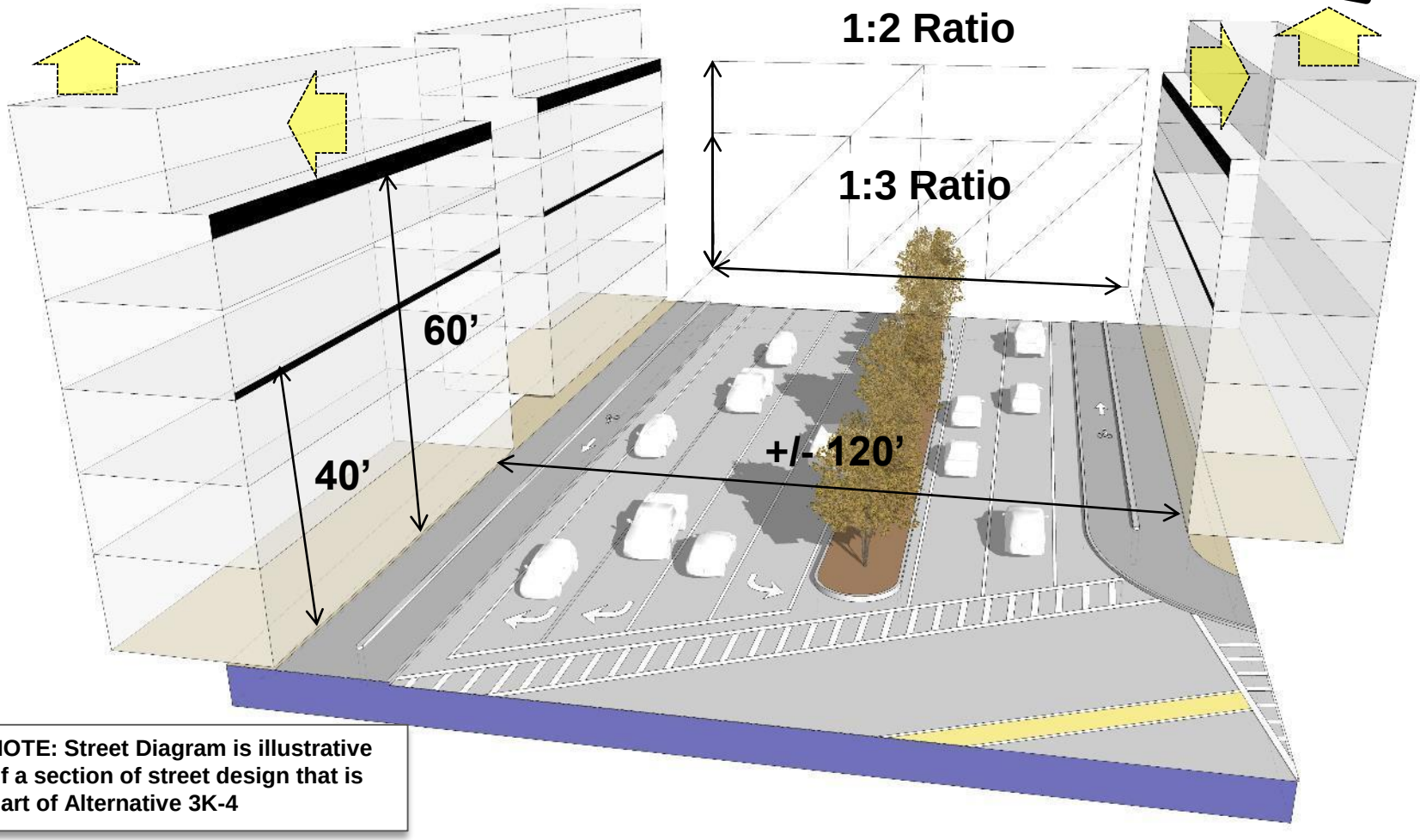
Mass. Ave. in Cambridge at Central Square



Distinctive and Contextual

Character of East Drive Connector





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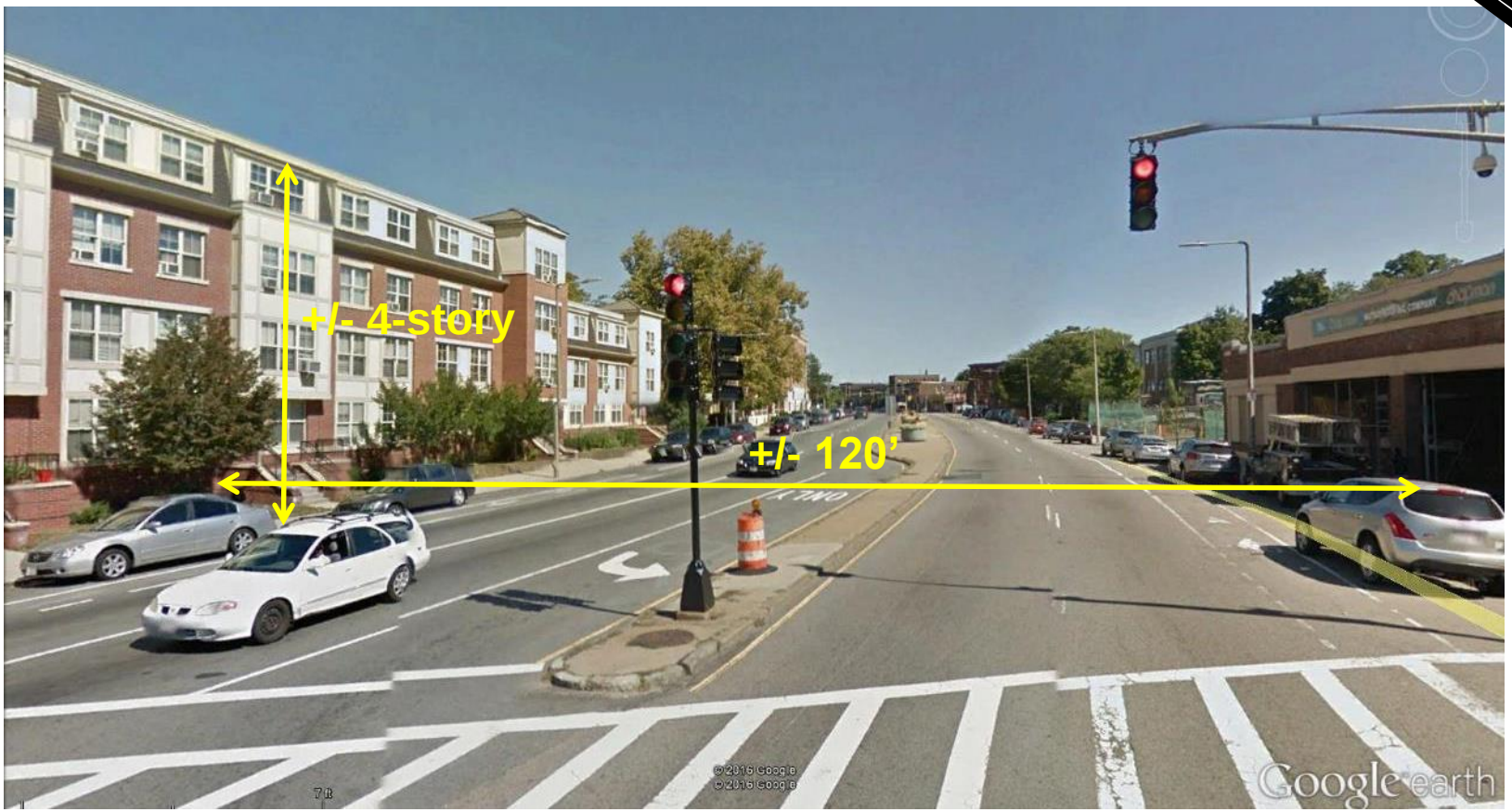
Distinctive and Contextual

Photo Example

Columbia Road in Dorchester



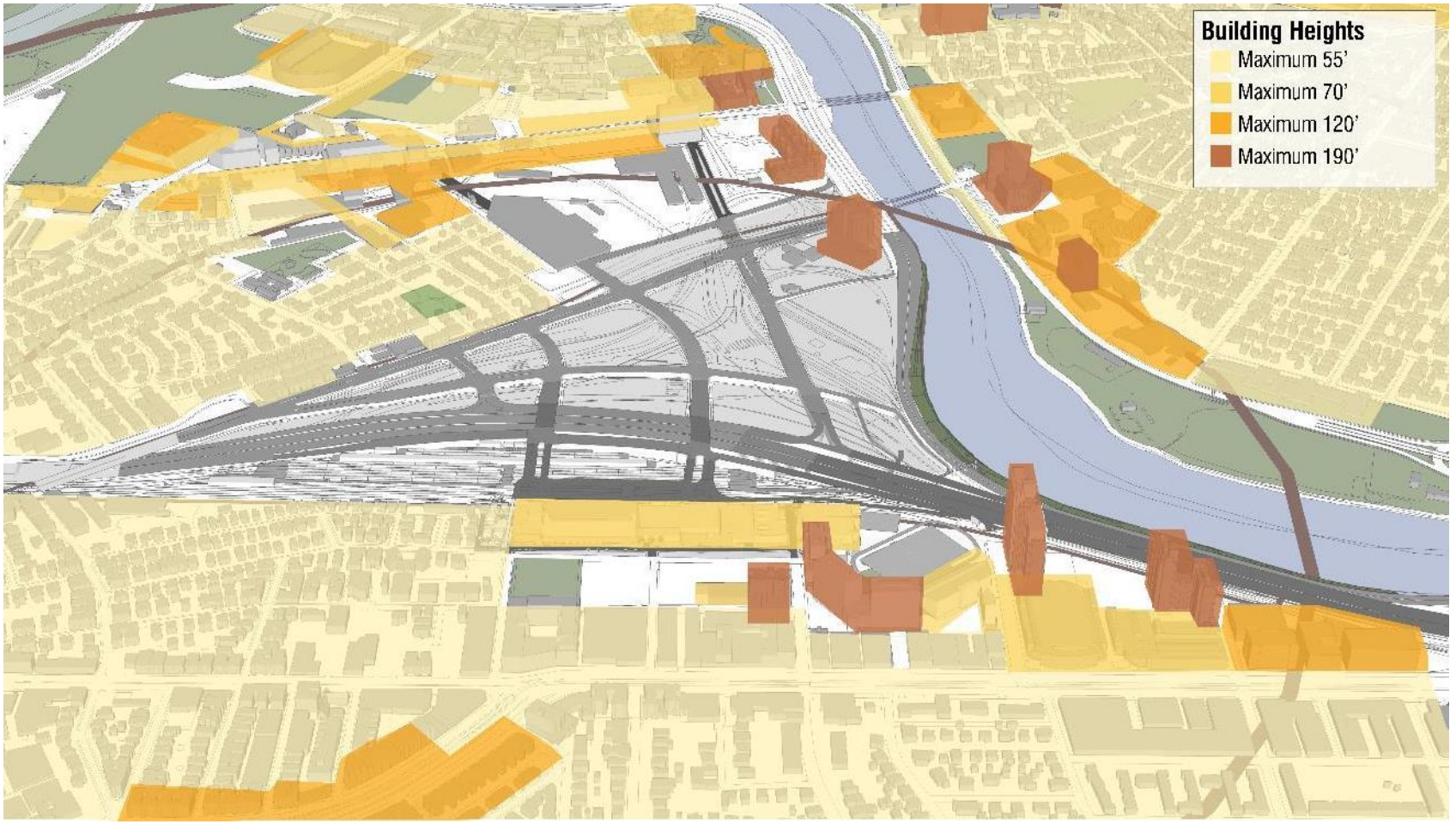
Works Session Focus: Distinctive and Contextual

Future district considerations:

- *How should the development be shaped within the district?*
  - Exploration of district built form typologies
  - Complementary to street/open space types

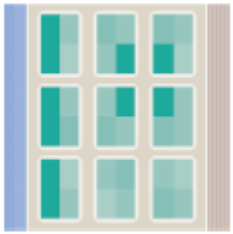
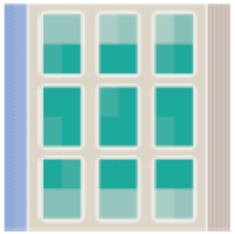
Works Session Focus: Distinctive and Contextual

Context Building Height:



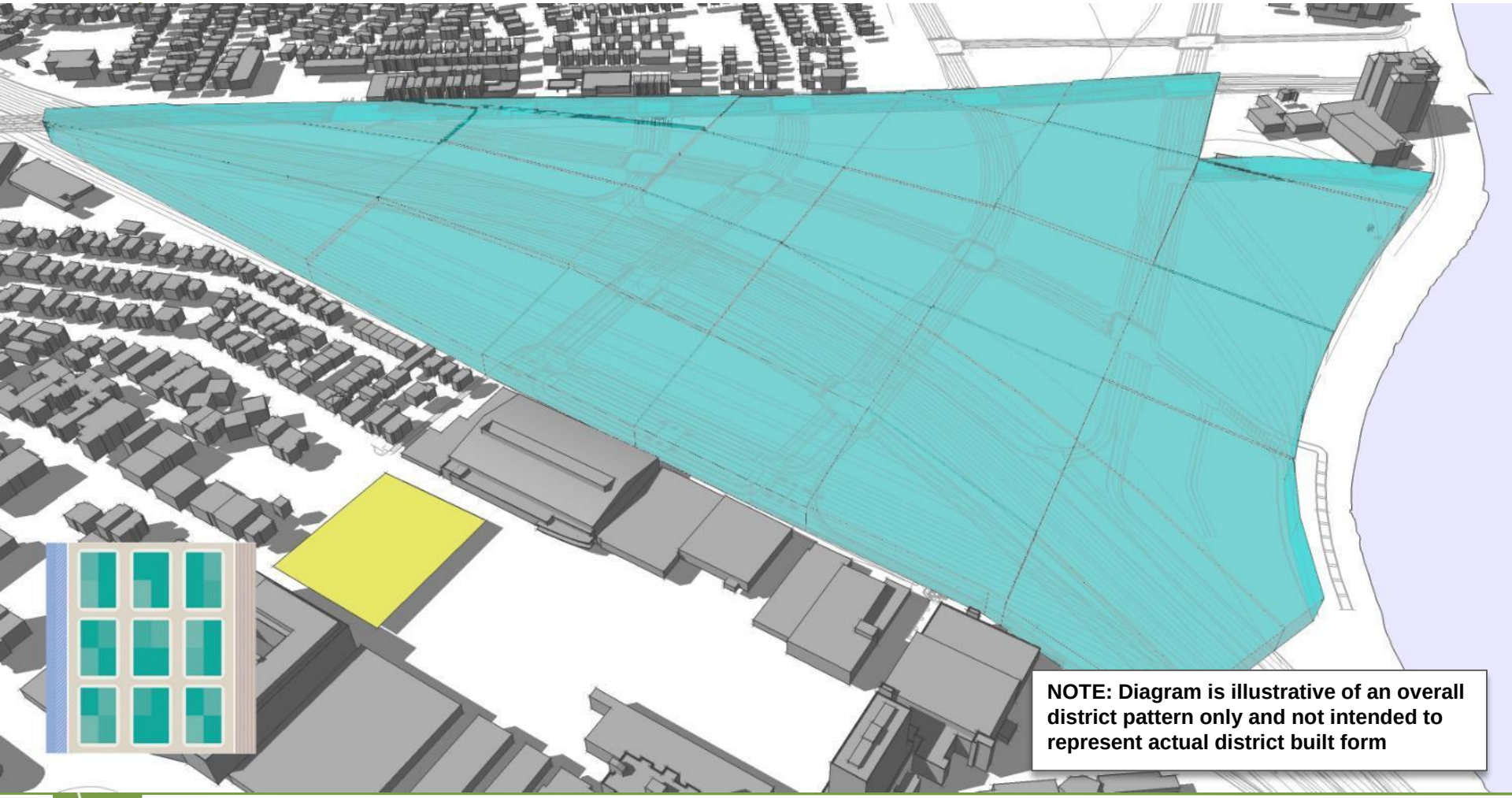
Discussion Topic: Distinctive and Contextual

District Wide Built Form Typologies Matrix

Built Form Type	Consistent	Concentrated	Tiered (A)	Tiered (B)	Contextual	Transit-Oriented	Others?
Built Form Type Diagram							
Characteristics	• Consistent buildable envelope • Relatively consistent building heights • May respect context or significant buildings	• Increases buildable envelope in focused areas • Centers increase at feature, focal street, or open space • Reinforces prominence of other district components	• Buildable envelope increases as it gets closer to natural feature • Tiering can be calibrated to surrounding context or real estate value	• Buildable envelope decreases as it gets closer to natural feature • Reduces impact of building height on feature • May preserve views	• Buildable envelope at district edges matches surrounding context • Reinforces existing patterns of built form	• Buildable envelope increases with proximity to transit access • May be responsive to multiple transit network simultaneously (rail, bus)	• ?
Examples	 • South Boston	 • Back Bay at Commons	 • Charles River	 • Boston's Greenway	 • South End Washington St.	 • Back Bay Station area	• ?

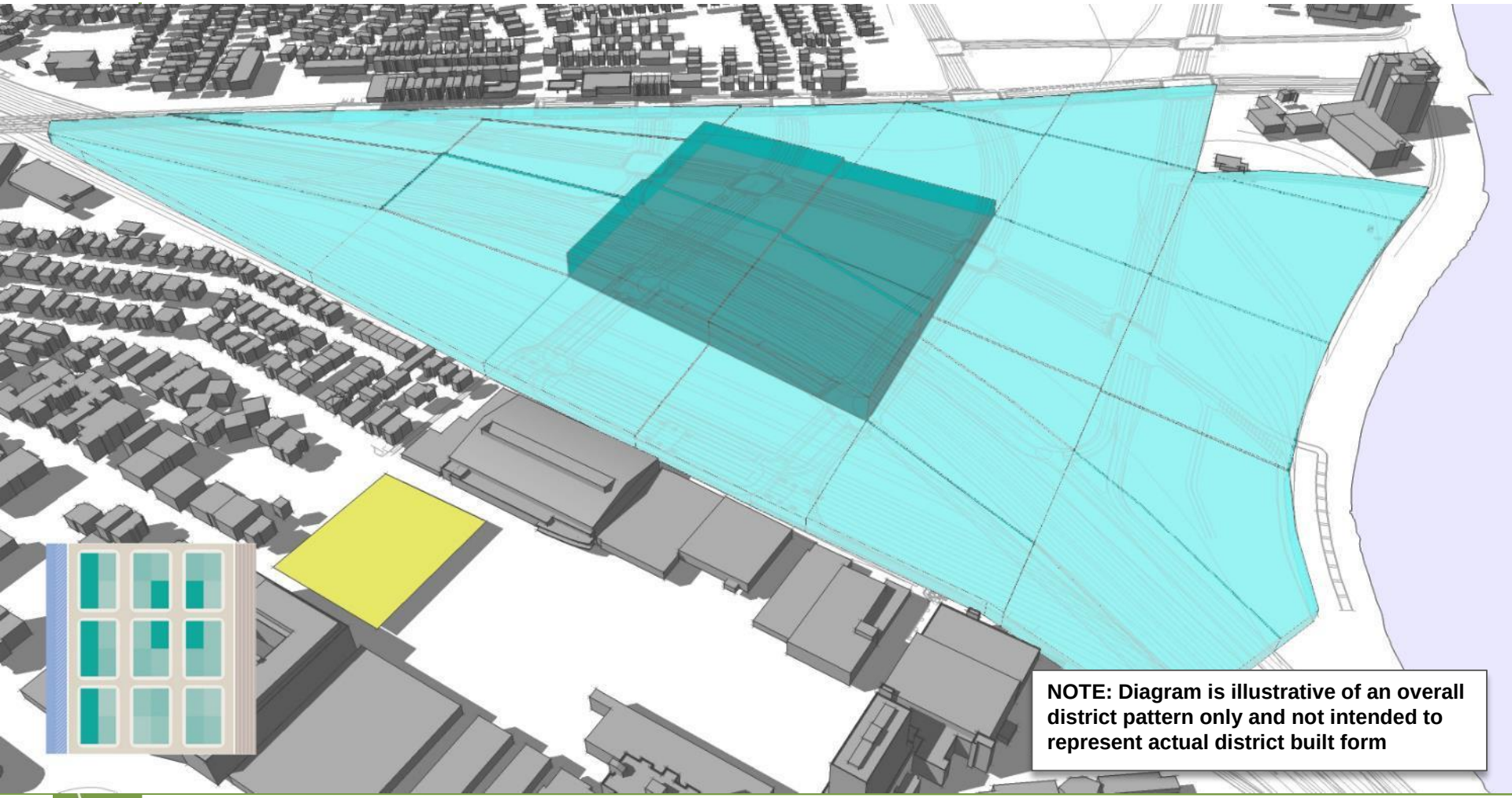
Works Session Focus: Distinctive and Contextual

Future district considerations: Consistent District Built Form Type



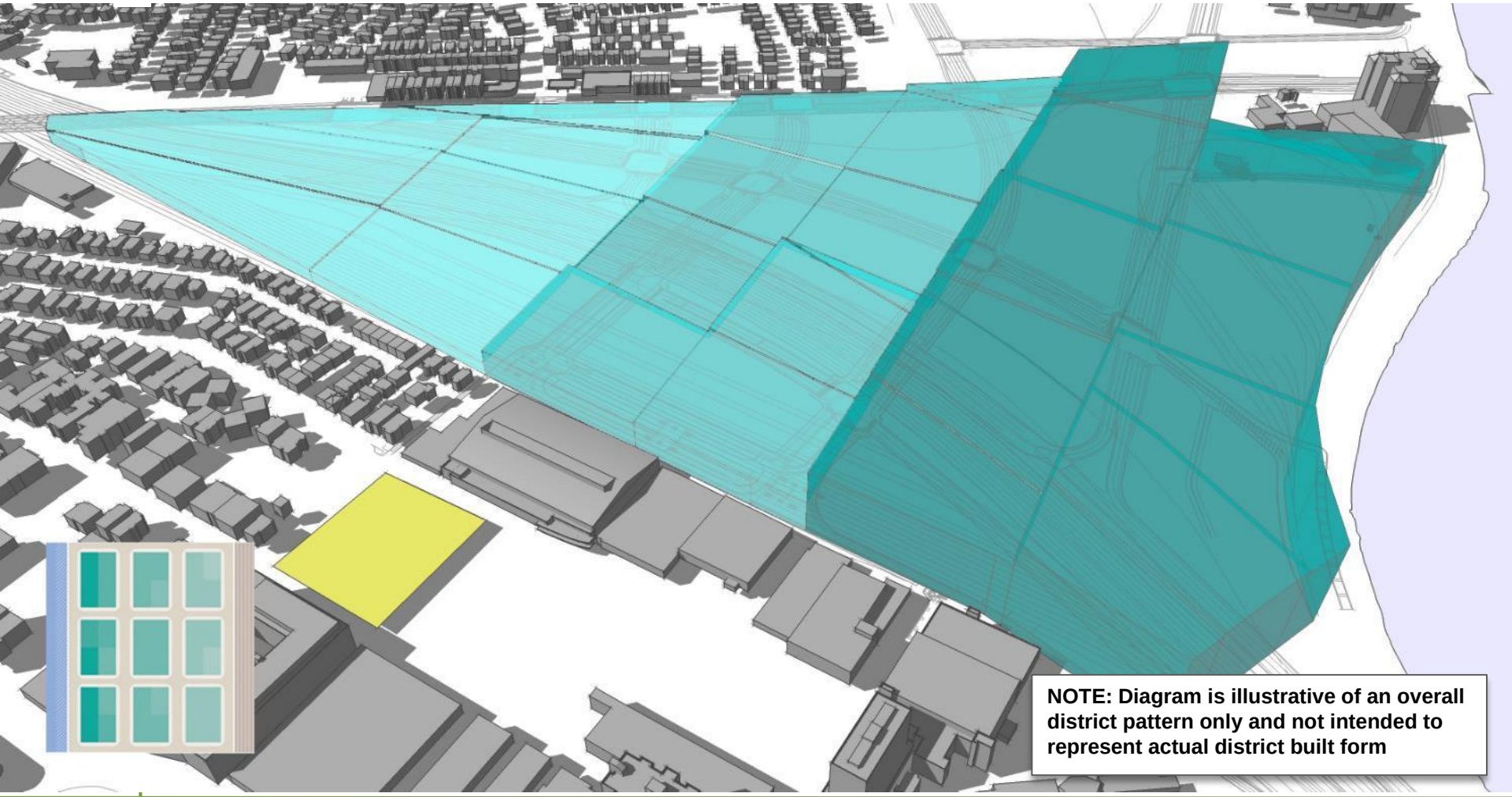
Works Session Focus: Distinctive and Contextual

Future district considerations: Concentrated District Built Form Type



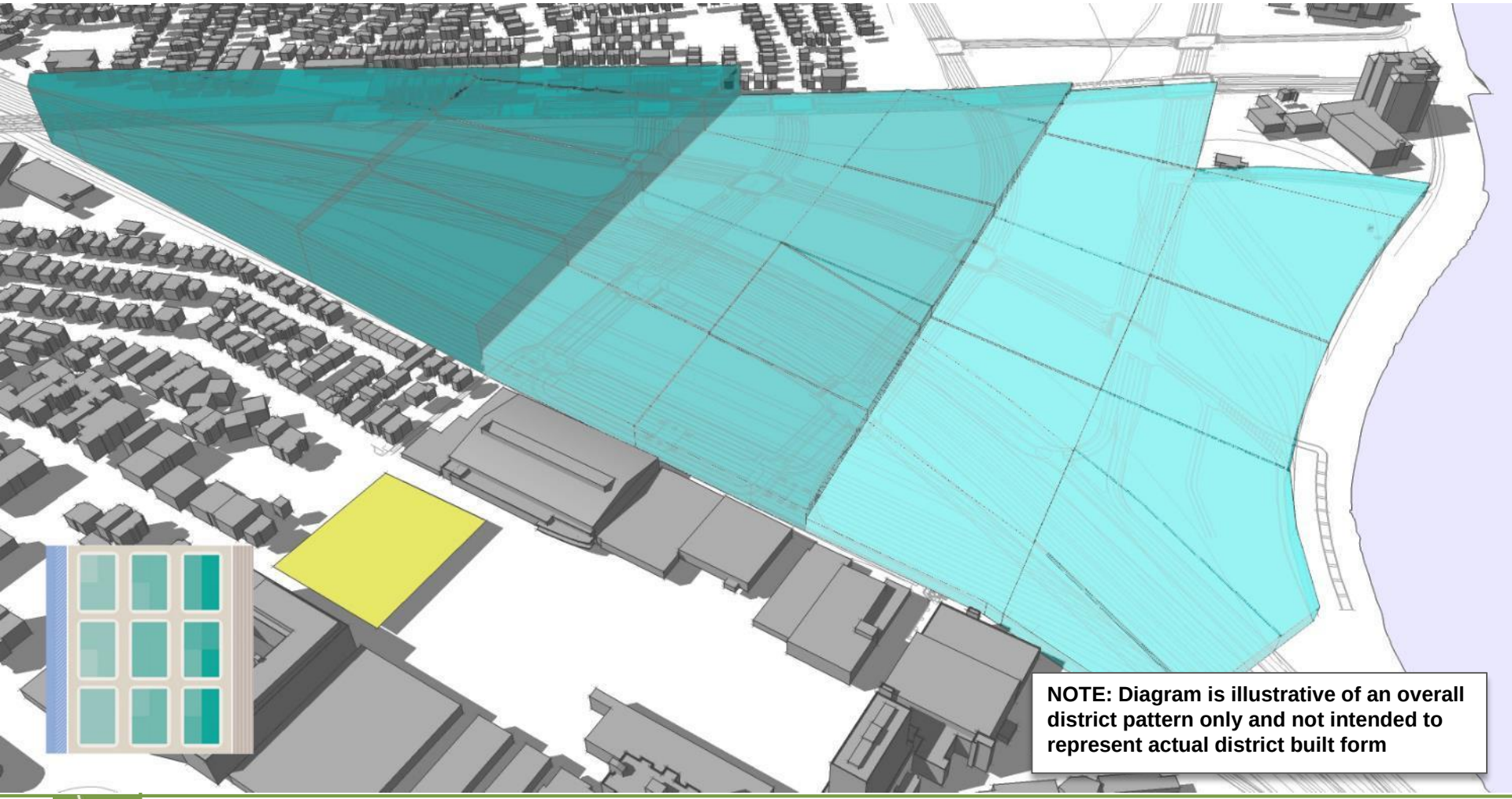
Works Session Focus: Distinctive and Contextual

Future district considerations: Tiered "A" District Built Form Type



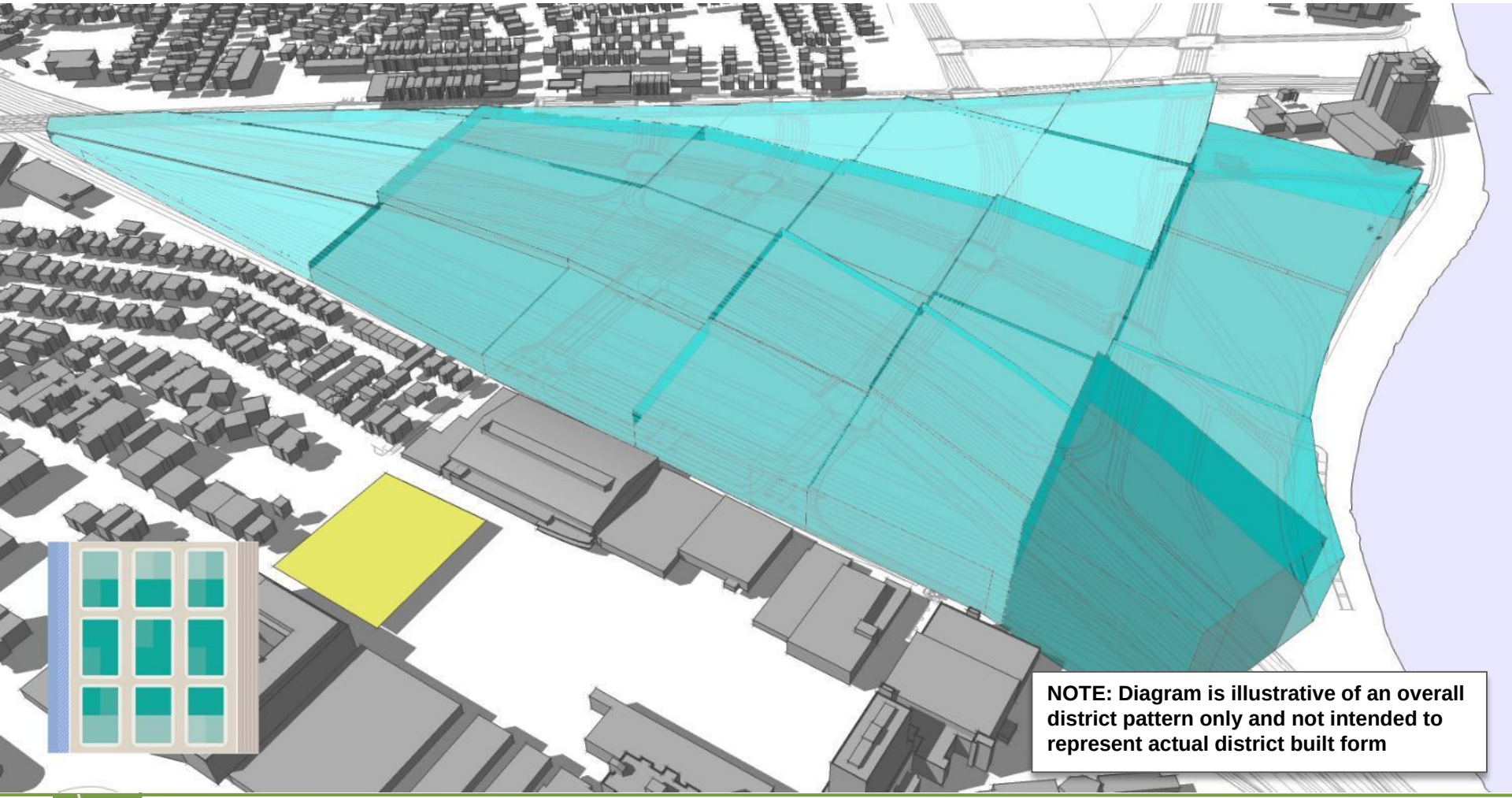
Works Session Focus: Distinctive and Contextual

Future district considerations: Tiered "B" District Built Form Type



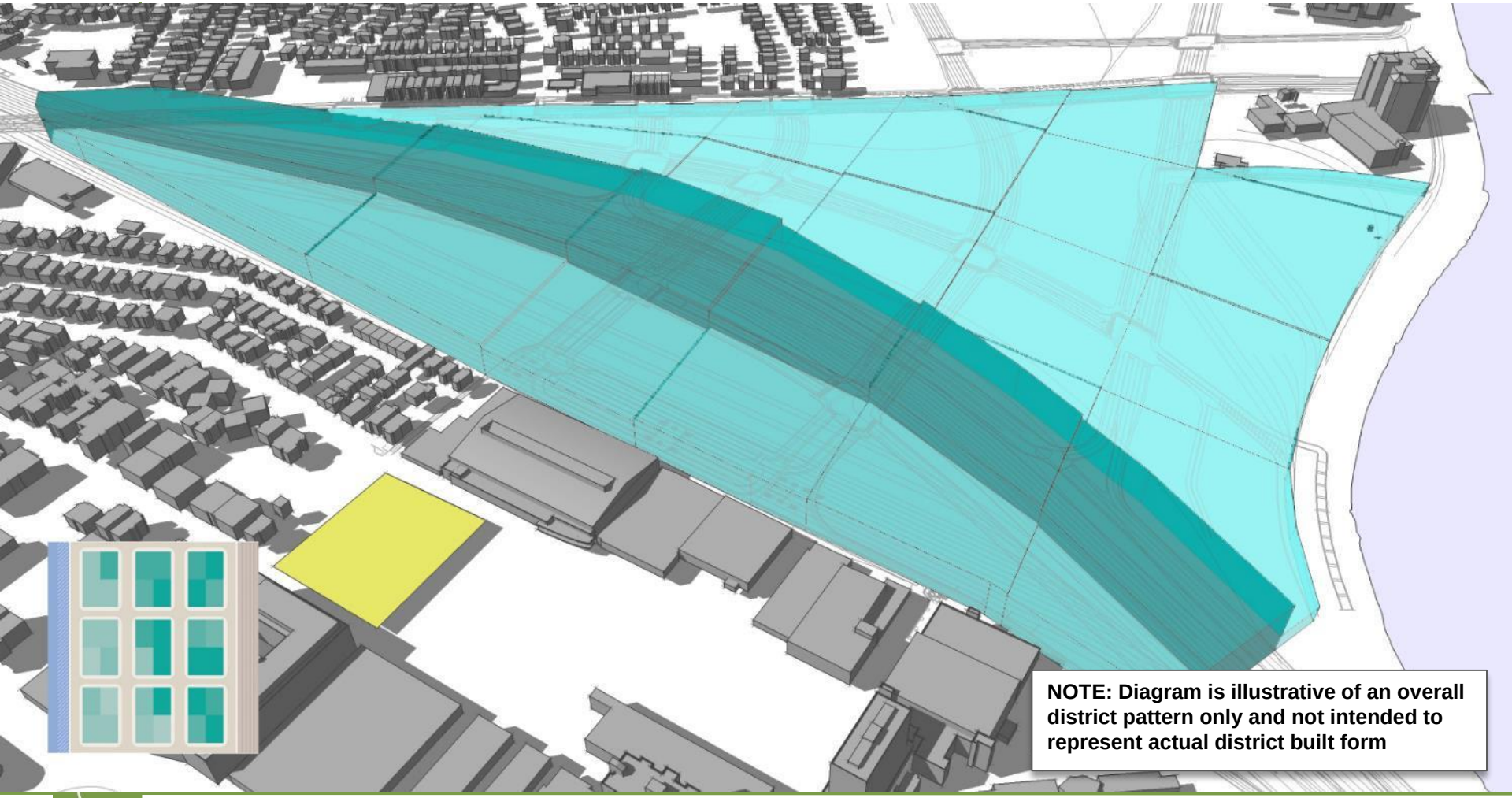
Works Session Focus: Distinctive and Contextual

Future district considerations: Contextual District Built Form Type



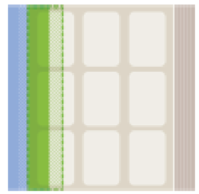
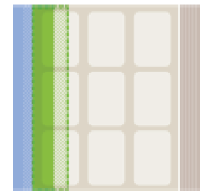
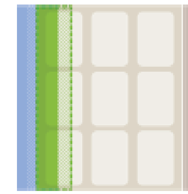
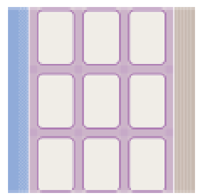
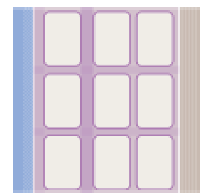
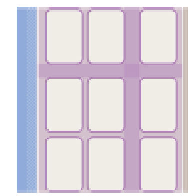
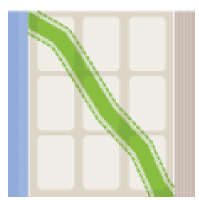
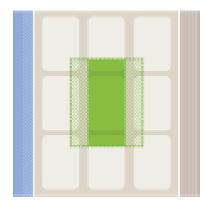
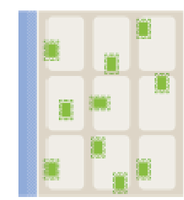
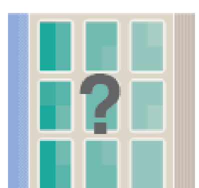
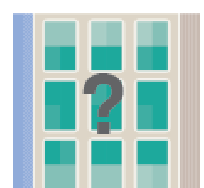
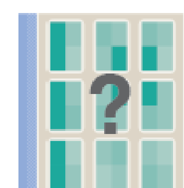
Works Session Focus: Distinctive and Contextual

Future district considerations: Transit-oriented District Built Form Type



Next Steps

District Wide Built Form Types

	SCENARIO A	SCENARIO B	SCENARIO C
BASELINE	• IMPROVED RIVERFRONT PARK • REALIGNMENT OF SOLDIER'S FIELD ROAD • DIRECT BICYCLE CONNECTION TO CHARRLES RIVER • NORTH-SOUTH BUS CONNECTION • REDUCTION OF STREET WIDTHS • RESILIENCY AND SUSTAINABILITY	• IMPROVED RIVERFRONT PARK • REALIGNMENT OF SOLDIER'S FIELD ROAD • DIRECT BICYCLE CONNECTION TO CHARRLES RIVER • NORTH-SOUTH BUS CONNECTION • REDUCTION OF STREET WIDTHS • RESILIENCY AND SUSTAINABILITY	• IMPROVED RIVERFRONT PARK • REALIGNMENT OF SOLDIER'S FIELD ROAD • DIRECT BICYCLE CONNECTION TO CHARRLES RIVER • NORTH-SOUTH BUS CONNECTION • REDUCTION OF STREET WIDTHS • RESILIENCY AND SUSTAINABILITY
			
VARIABLES			
Block/Grid Space Type	**Consistent**	**Hierarchical**	**Focal Street(s)**
Block/Grid Type Diagram			
Open Space Type	**Linear**	**Focal**	**Distributed**
Open Space Type Diagram			
Built Form Type	**Tiered (A)**	**Contextual**	**Concentrated**
Built Form Type Diagram			

Next Steps

- Next Full Task Force Meeting
  - Near end of February
  - District Build-out Alternative Scenarios
  - Presentation, evaluation and discussion

I-90 ALLSTON INTERCHANGE
PLACEMAKING STUDY

Boston Redevelopment Authority

Task Force Work Session –
February 3, 2016

The Cecil Group
Stantec
Nelson/Nygaard