I-90 ALLSTON INTERCHANGE PLACEMAKING STUDY

Boston Redevelopment Authority

Task Force Work Session – February 3, 2016

The Cecil Group Stantec Nelson/Nygaard



I-90 Allston Interchange Placemaking Study

Work Session Topics

- Mobility/Connectivity
 - Review of previous work session discussion



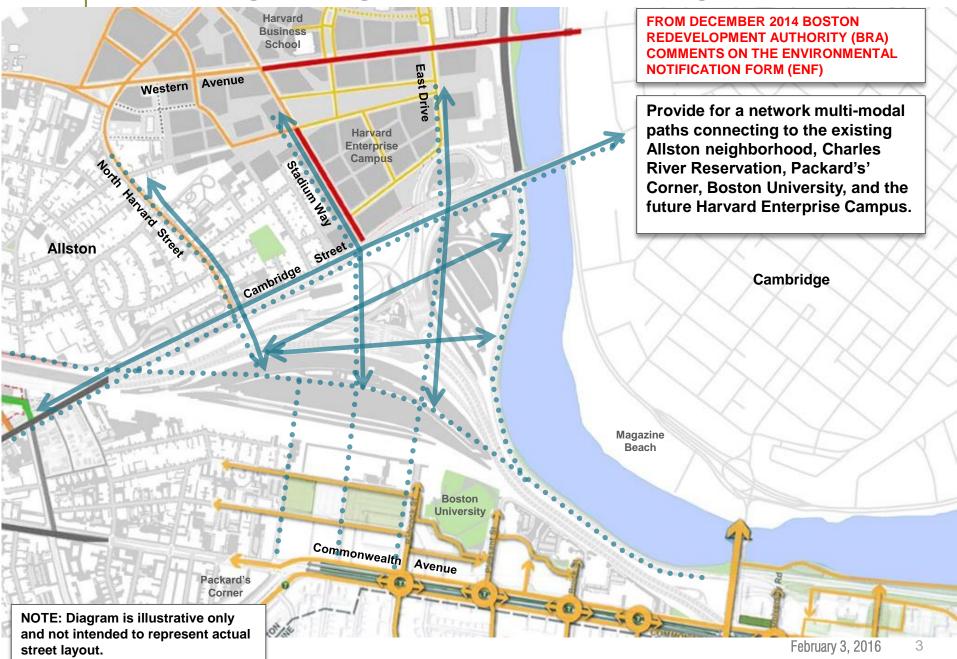
Discussion of key considerations

Development Flexibility / P Distinctive and Contextual

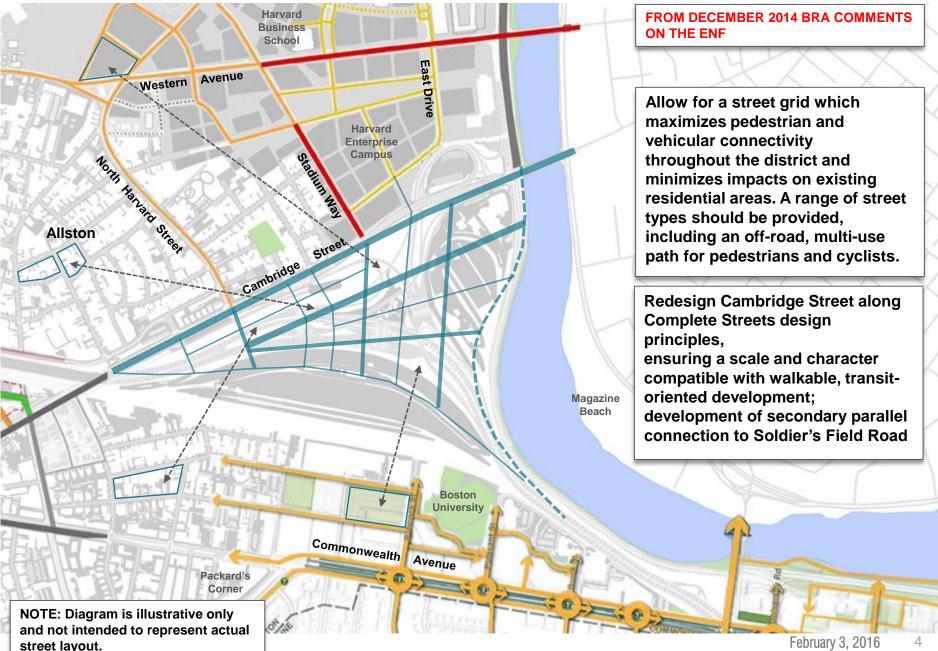
- Current design considerations
- Future district considerations



Allston Interchange: Strong connections to surrounding areas

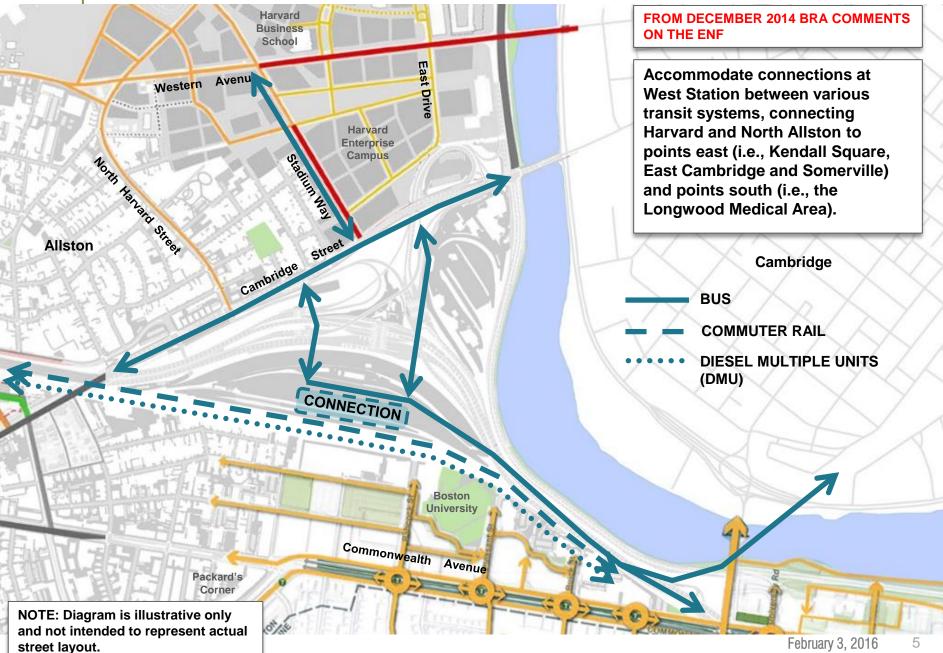


Allston Interchange: Traditional street grid/Revitalized Cambridge Street

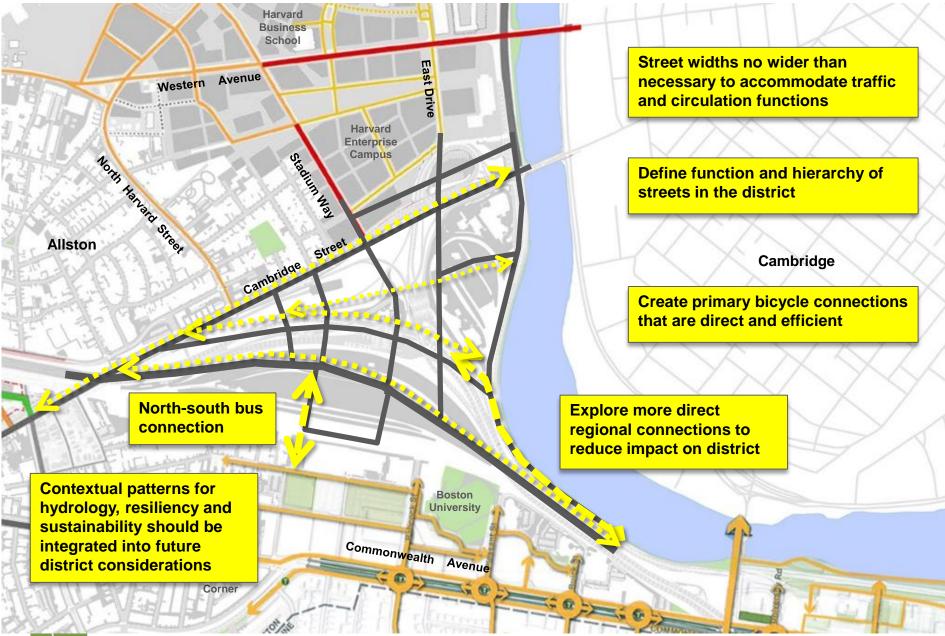


February 3, 2016

Allston Interchange: Integration of bus and rail transit systems



KEY POINTS FROM THE 1/20 WORK SESSION



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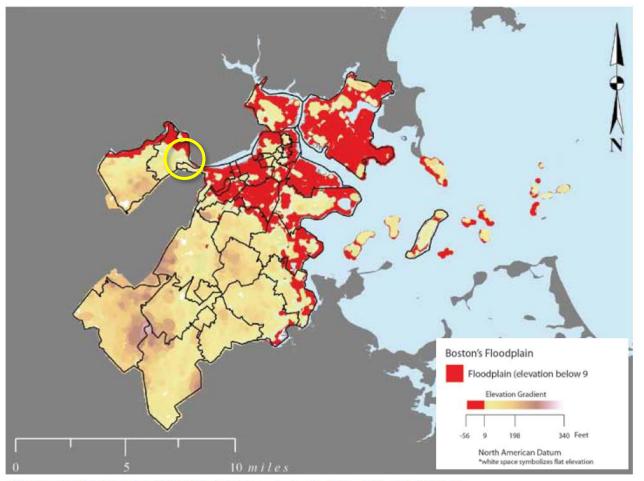
February 3, 2016

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



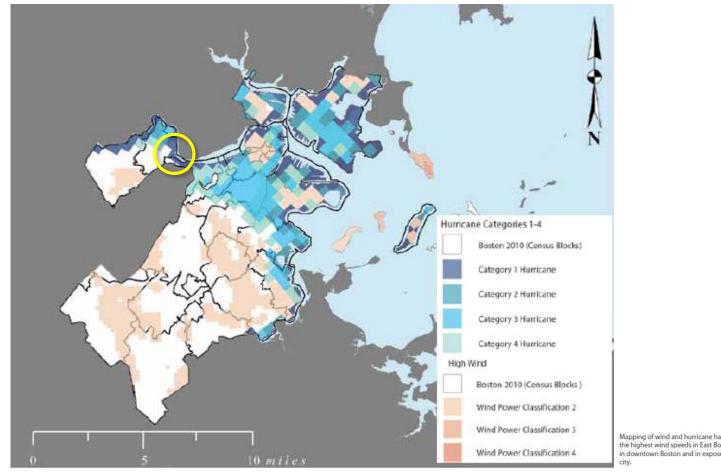
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Summary Discussion:



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

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

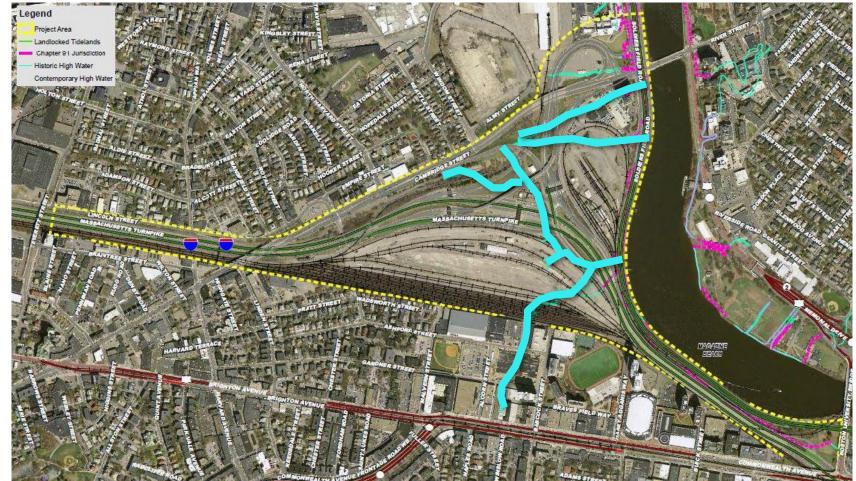


Summary Discussion:



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

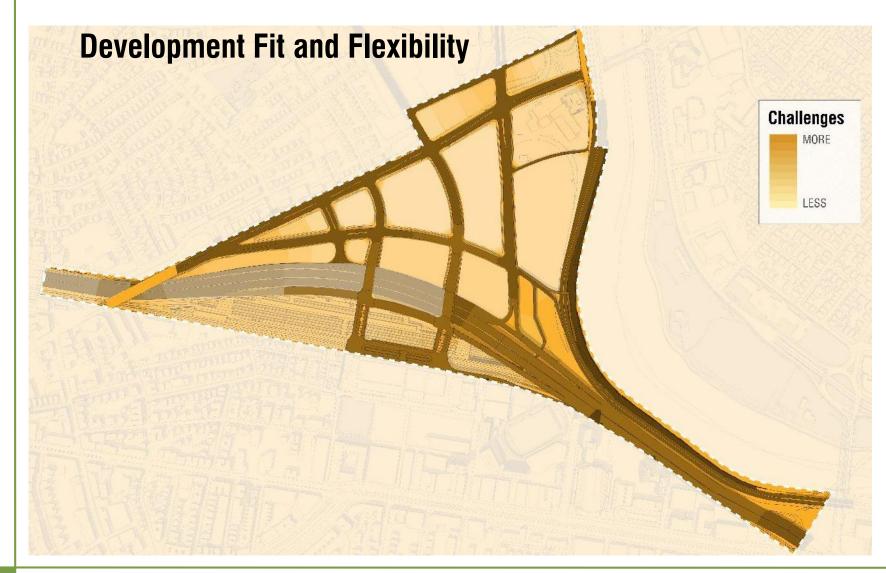


Works Session Focus: 📃 Development Flexibility

Current design considerations:

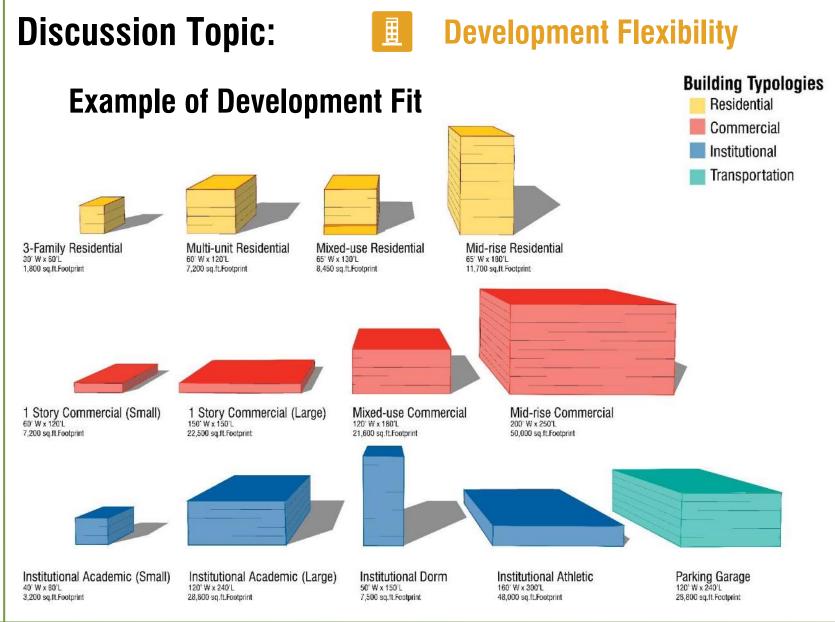
- How are the blocks shaping development character?
 - Block scale and geometry
 - Block elevation and slope of roadway
 - Access to blocks highway ramps
 - Access to blocks one way streets

Discussion Topic: **I** Development Flexibility





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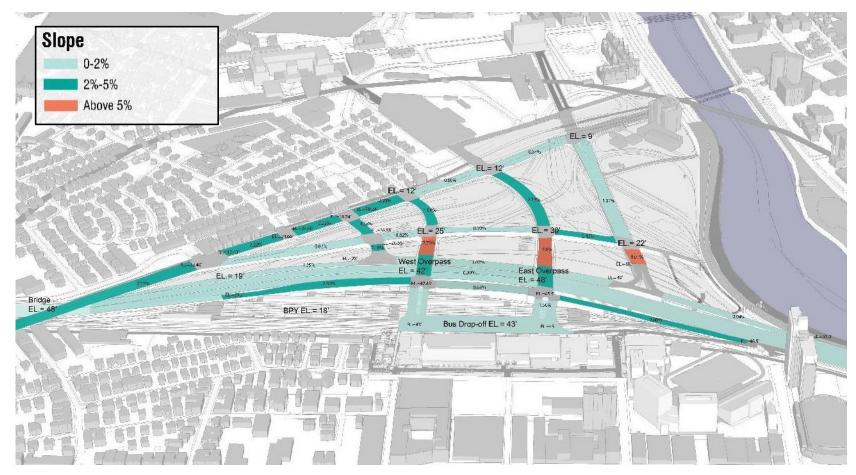


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Discussion Topic: **I** Development Flexibility

Block Elevation and Slope of Roadway





Discussion Topic: **I** 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: **I** Development Flexibility

Photos of Slope Examples – None as steep as –

Beacon Street – 4-8%



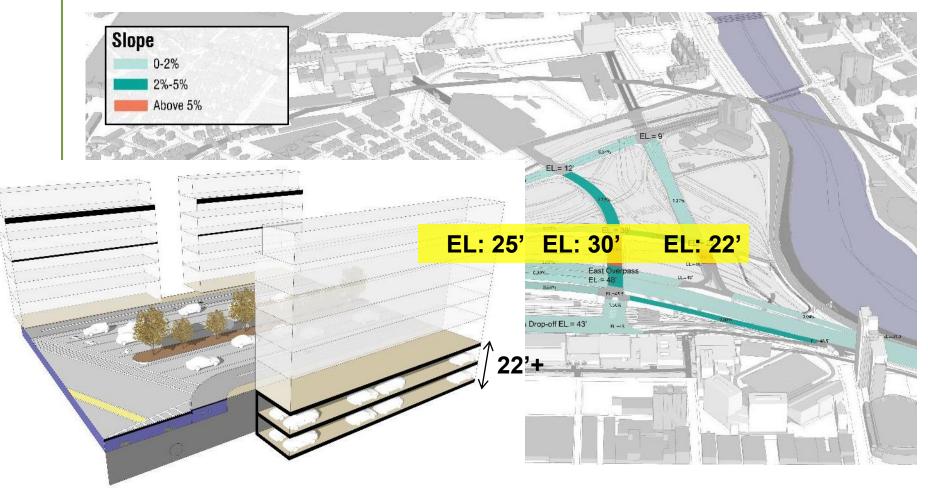


Discussion Topic:



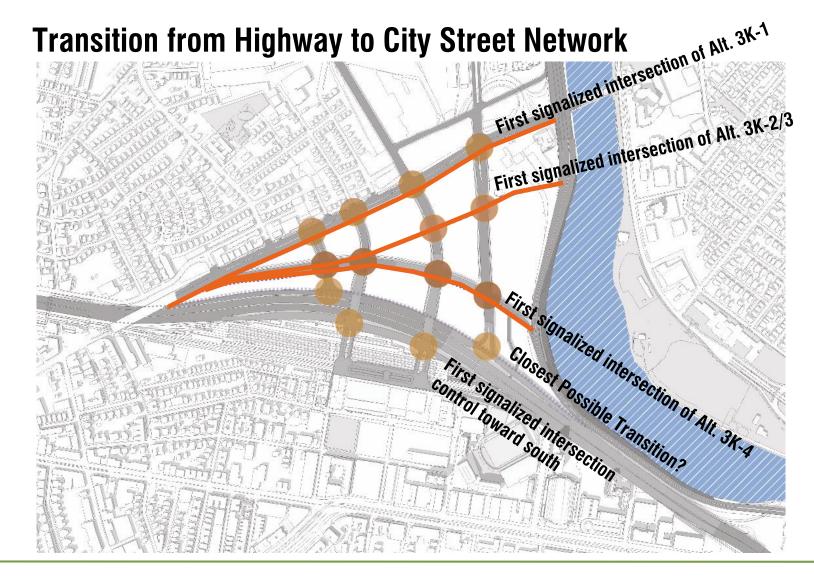
Development Flexibility

Grading and Parking





Discussion Topic: 📃 Development Flexibility



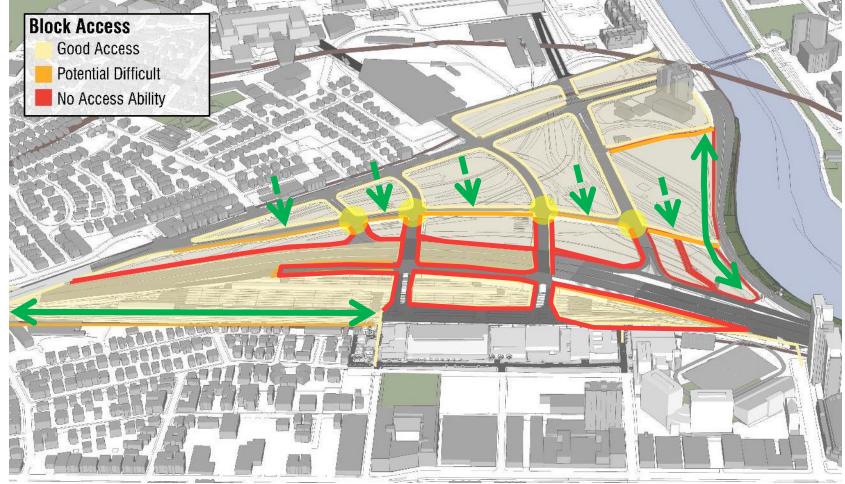


Discussion Topic:



Development Flexibility

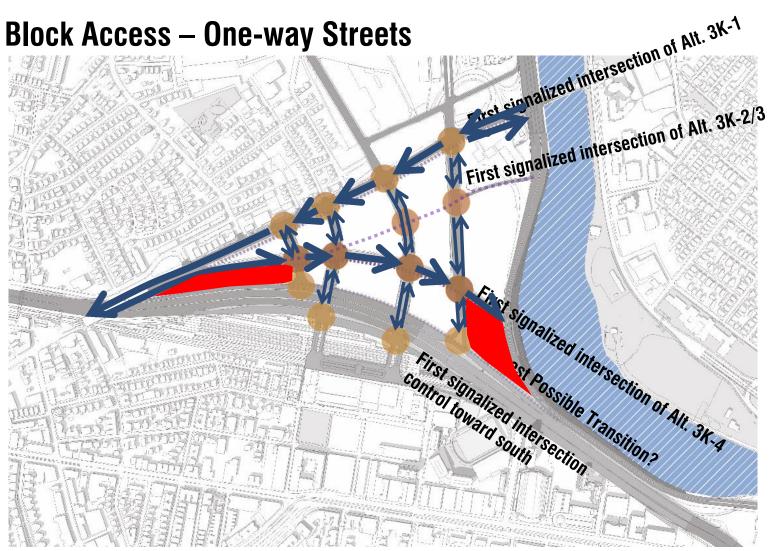
Block Access and Flexibility





Discussion Topic: Development Flexibility 圕

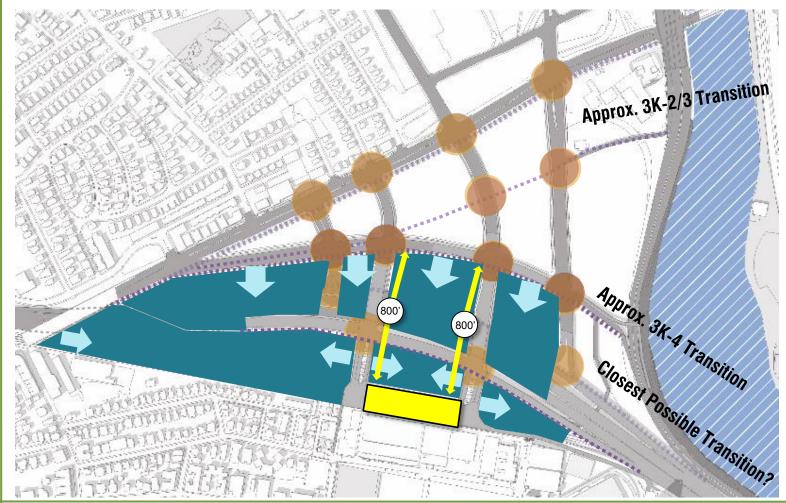
Block Access – One-way Streets





Discussion Topic: **I** Development Flexibility

Integration of West Station

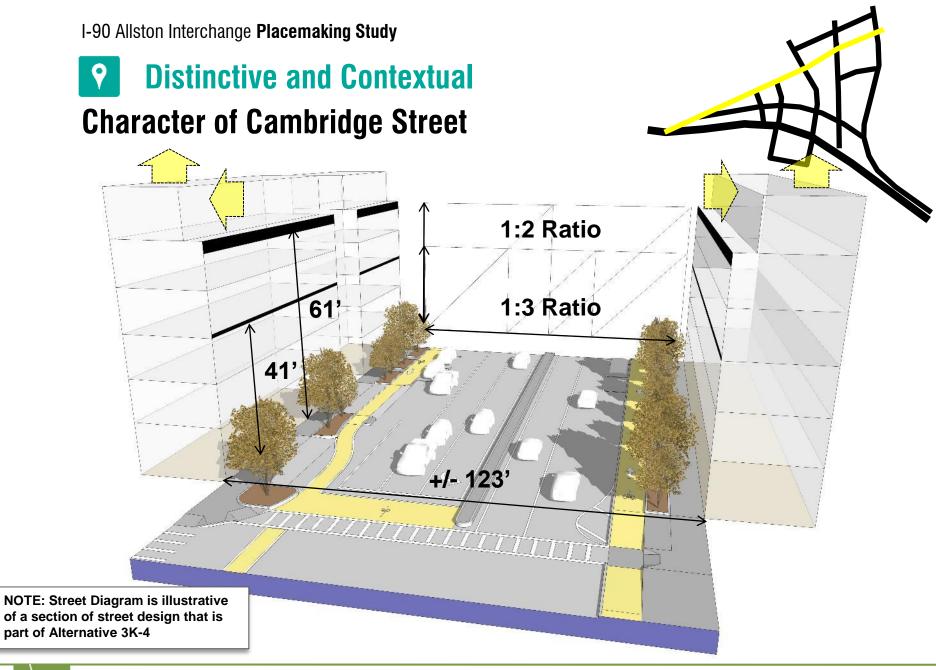


Works Session Focus: <a>Image Development Flexibility

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

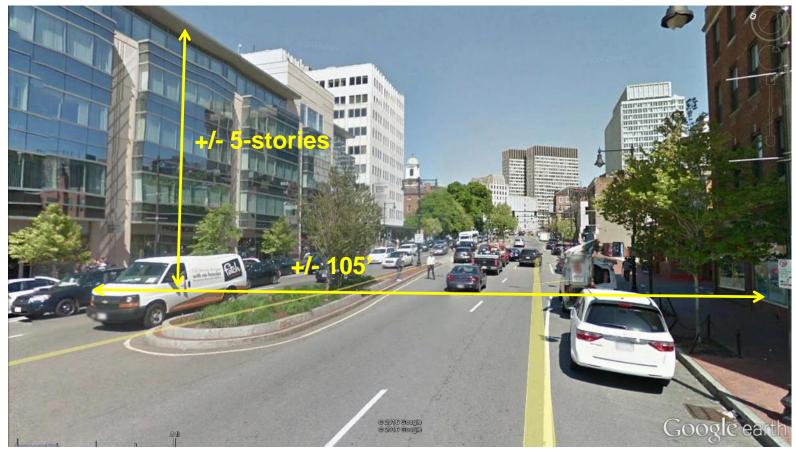






Obstinctive and Contextual Photo Example

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





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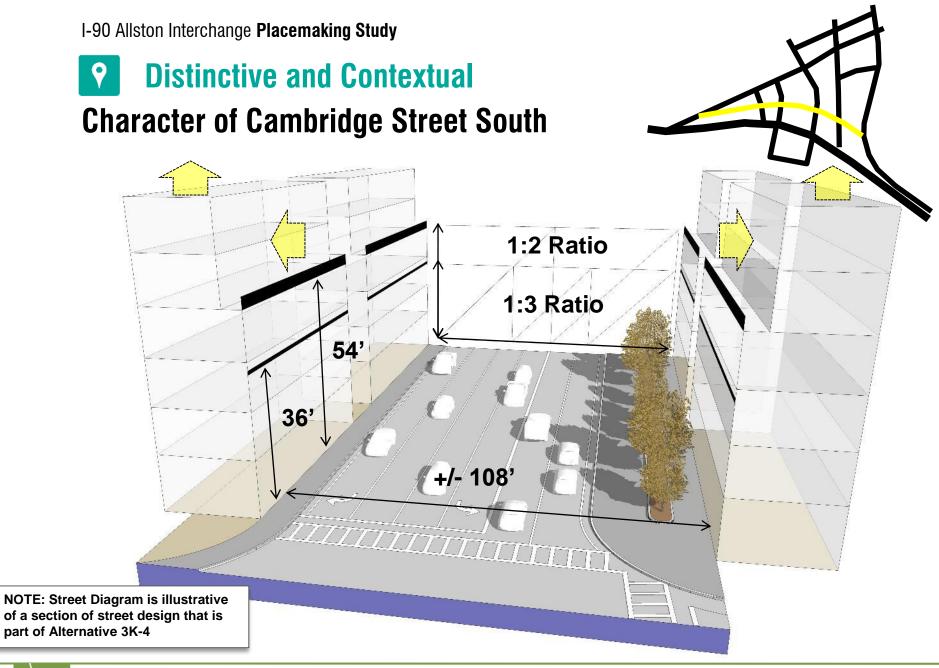
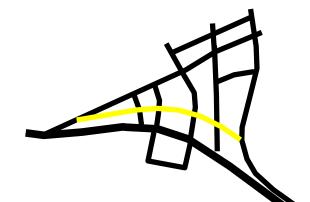




Photo Example

Brighton Avenue in Allston

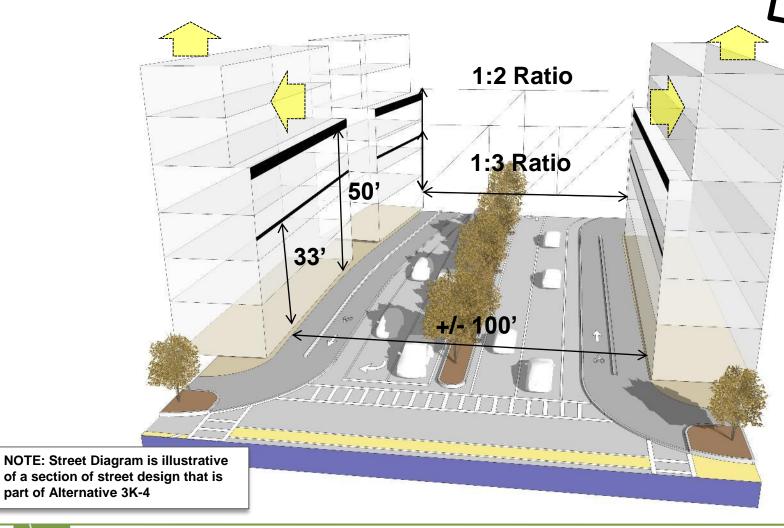






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Obstinctive and Contextual Character of West Street Connector



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Obstinctive and Contextual Photo Example

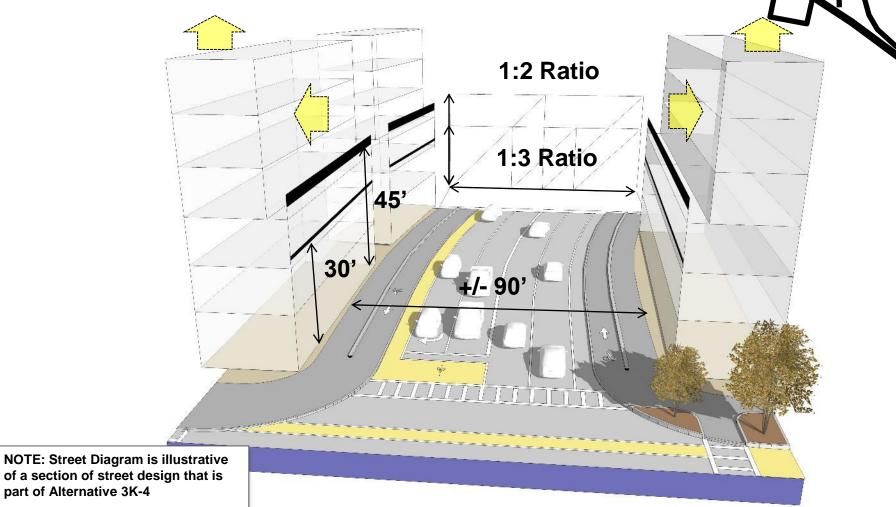
Kneeland Street in Chinatown





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Obstinctive and Contextual Character of Seattle Street Connector





Oistinctive and Contextual Photo Example

Mass. Ave. in Cambridge





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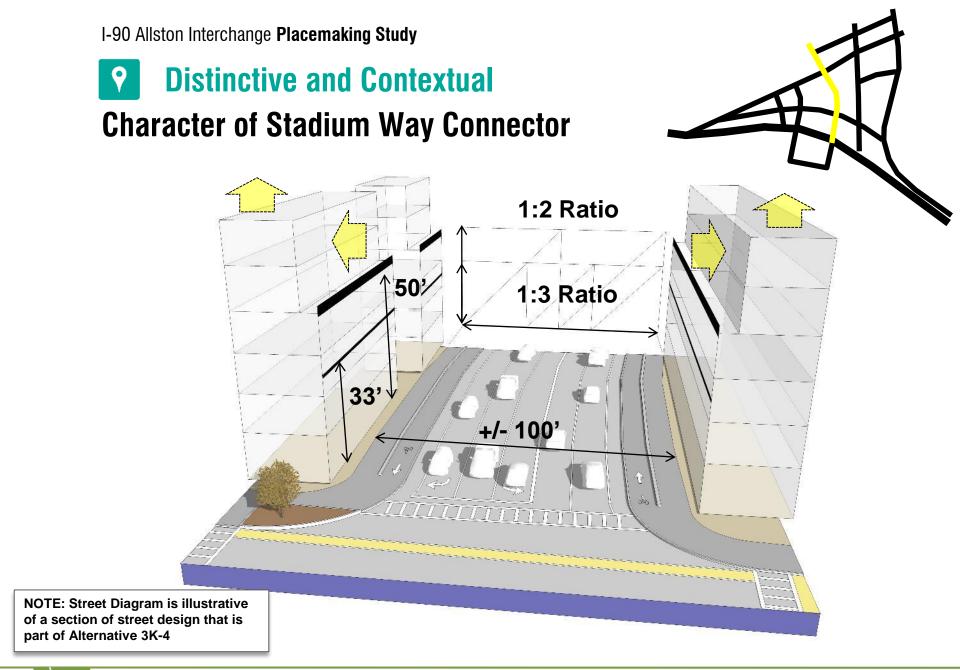
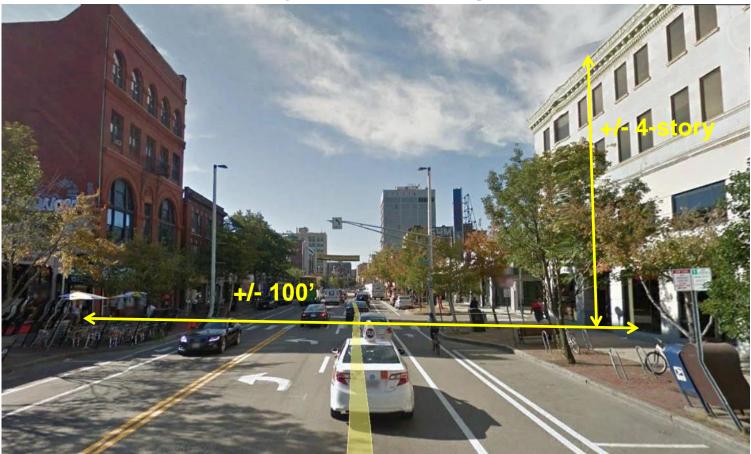




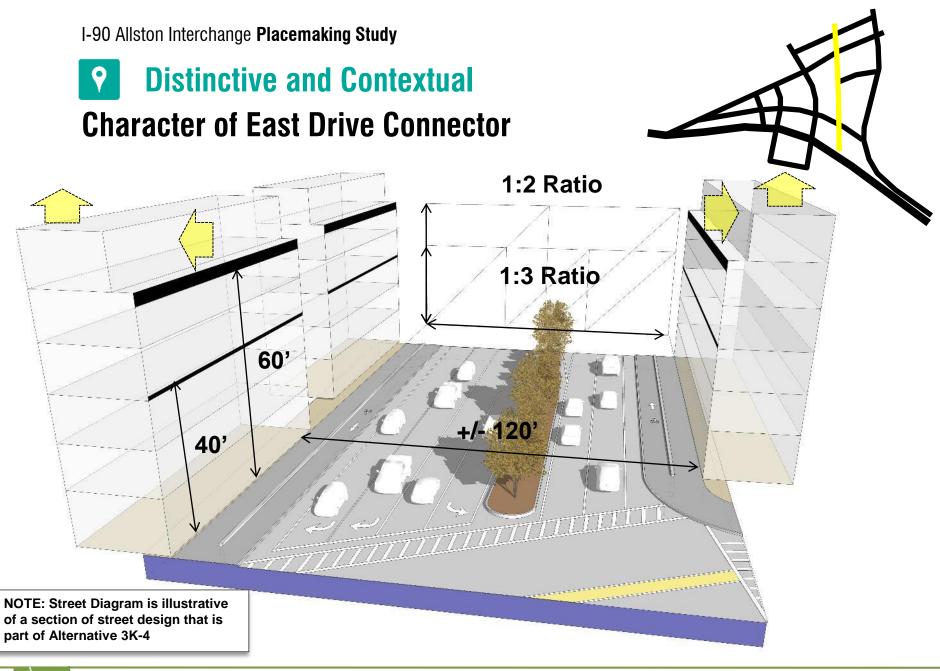
Photo Example

Mass. Ave. in Cambridge at Central Square





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Objective and Contextual Photo Example

Columbia Road in Dorchester





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Works Session Focus: **?** Distinctive and Contextual

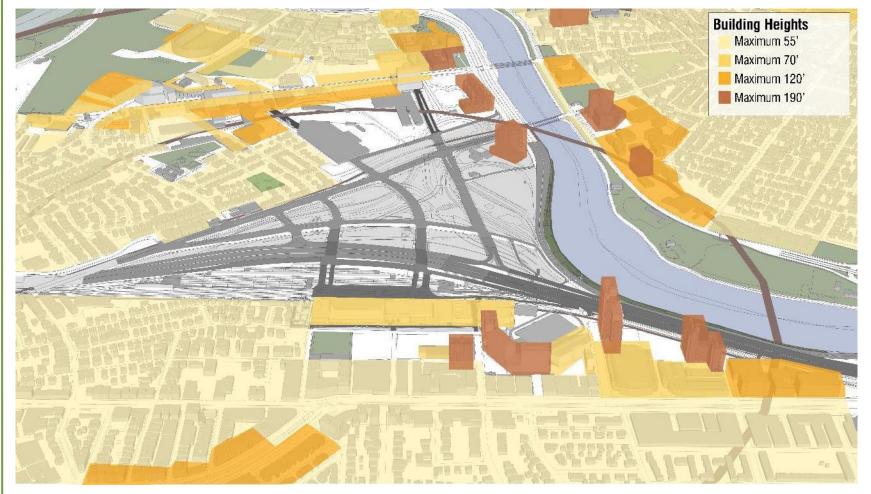
Future district considerations:

- 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:





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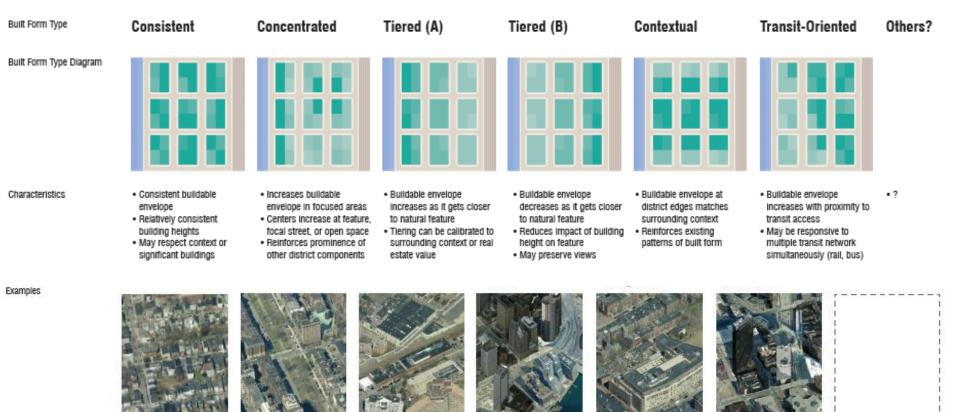
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Discussion Topic:





District Wide Built Form Typologies Matrix





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South Boston

Back Bay at Commons

Charles River

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Boston's Greenway

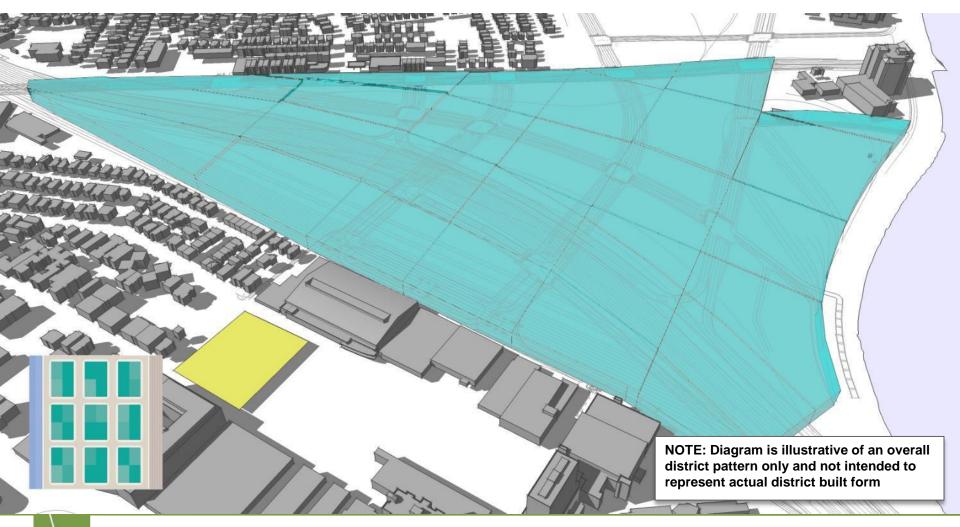
· South End Washington St.

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Back Bay Station area

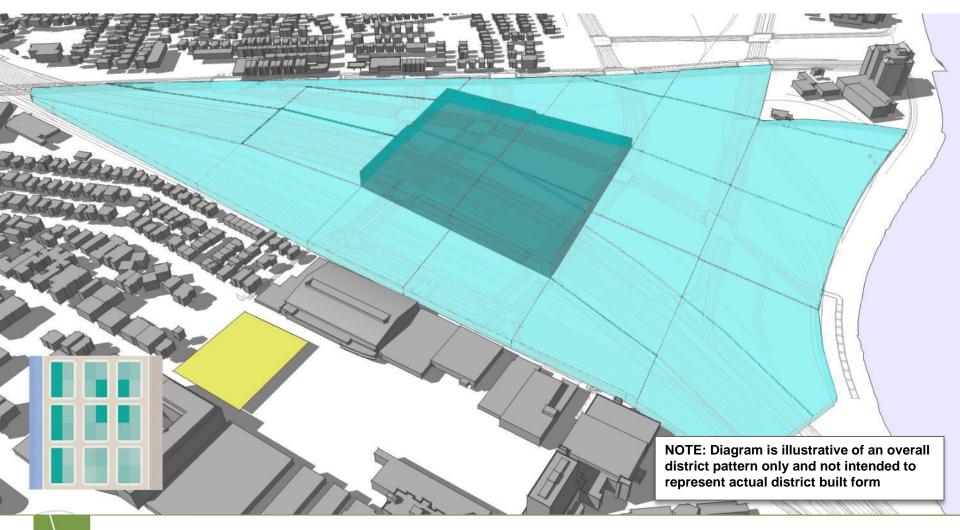
Works Session Focus: **O** Distinctive and Contextual

Future district considerations: Consistent District Built Form Type



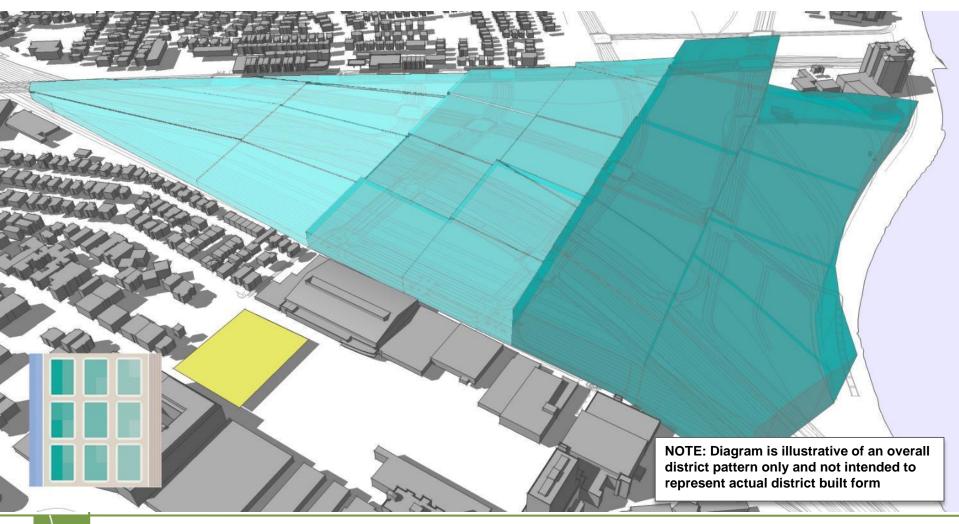
Works Session Focus: **?** Distinctive and Contextual

Future district considerations: Concentrated District Built Form Type



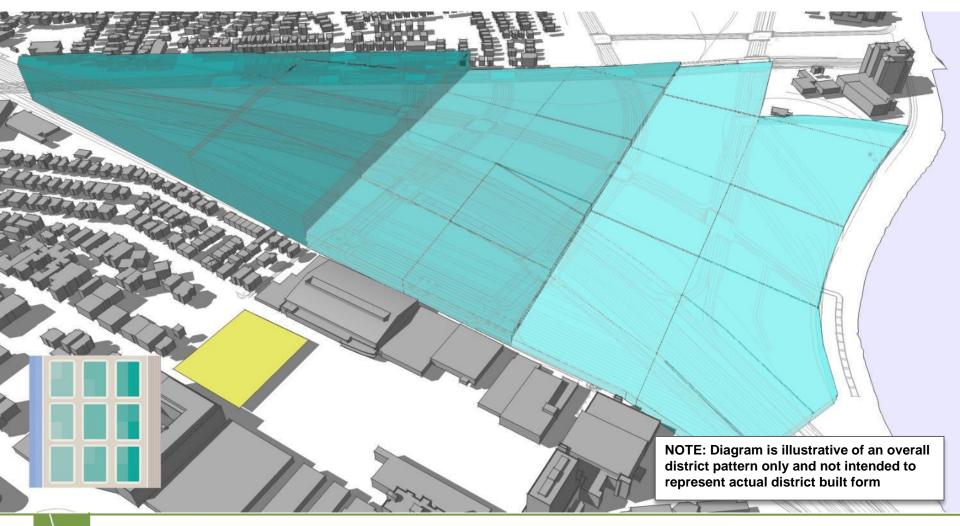
Works Session Focus: **?** Distinctive and Contextual

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



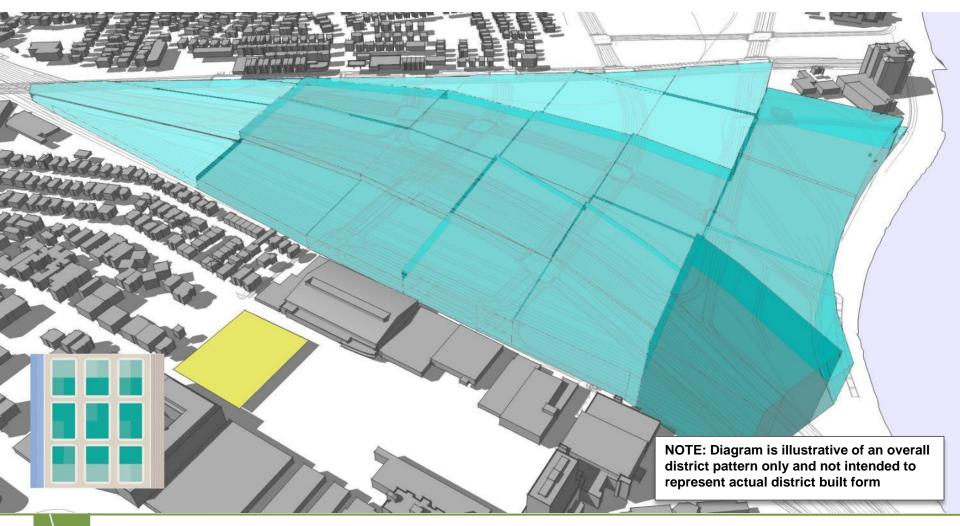
Works Session Focus: **?** Distinctive and Contextual

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



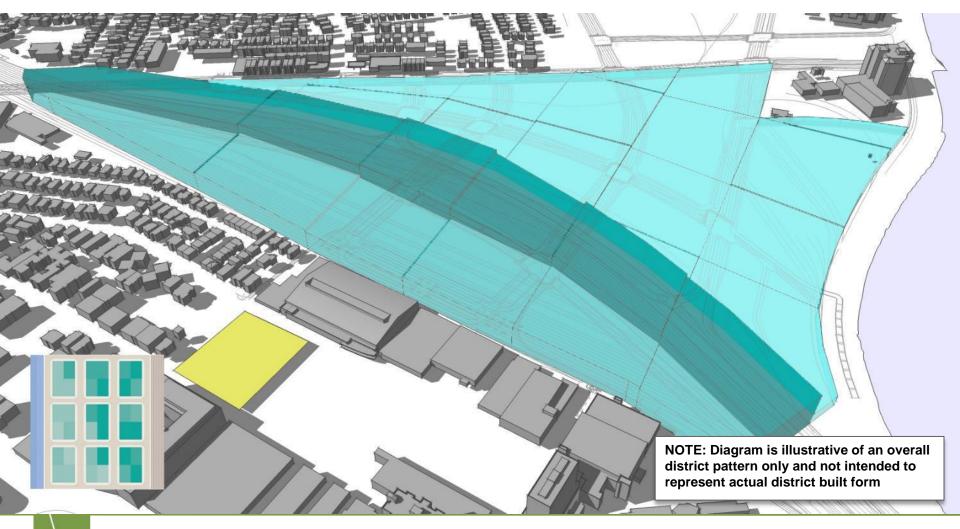
Works Session Focus: **?** Distinctive and Contextual

Future district considerations: Contextual District Built Form Type



Works Session Focus: **9** Distinctive and Contextual

Future district considerations: Transit-oriented District Built Form Type



Next Steps

BASELINE

District Wide Built Form Types

SCENARIO A

- 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

Block/Grid Type Diagram



Open Space Type

Open Space Type Diagram

Built Form Type Diagram

Built Form Type



Tiered (A)

Linear



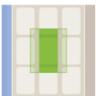
SCENARIO B

- 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









Contextual



SCENARIO C

- 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



Focal Street(s)



Distributed



Concentrated



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Next Steps

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



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