

NE 15TH/16TH STREET CORRIDOR

Bellevue City Council
March 14, 2011



Tonight's Agenda:

Review:

- Process leading up to this evening's discussion
- Policy Direction & Guiding Principles
- Corridor Elements
- Integrated Design, Key Considerations and Inter-Relationships
- Public input

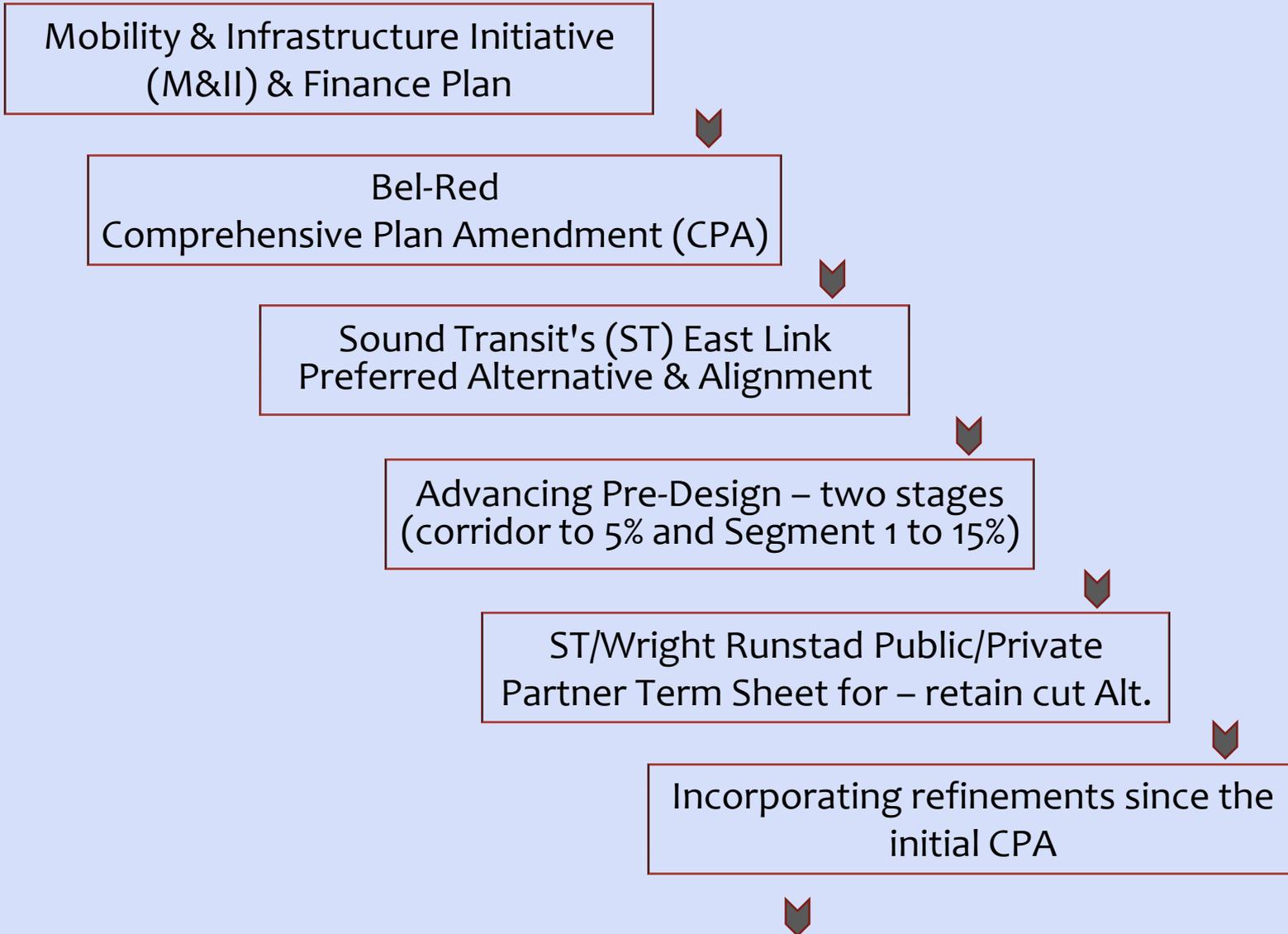
Present:

- Conceptual corridor plan and recommendations
- Review Design, Right-of-Way, and Construction estimated costs

Receive:

- Direction on preferred cross-sections and corridor plan
- Review next steps

Process leading to this evening's discussion:



Process leading to this evening's discussion (cont.):

Updated Traffic Analysis including Corridor VISSIM with Light Rail Transit(LRT)



Development of options and potential cross-sections



Council – October 25, 2010
Findings & draft perspectives



Public outreach and communications



Continued coordination with key stakeholders



Integrated Design Approach,
Key Considerations & Inter-Relationships



Next Steps



Council – March 14, 2011
Staff Recommendation &
Council Discussion

Policy Direction & Guiding Principles:

Policies call for:

- A Unique corridor
- A key Placemaking feature
- A Multi-Modal corridor
- A connective green spine linking landscape, open-space, and the corridor
- A High Quality pedestrian and bicycle connection
- LRT and LRT stations serving development nodes with a pedestrian orientation to support ridership supporting ridership

Guiding Principles:

- Meet the policies as outlined in the Subarea Plan
- Create a sense of place
- Strive toward narrowed cross-sections while striking a balance to provide all desirable elements
- Manage and limit impacts, and allow for transitions along the corridor including transition with development and/or phased implementation

Corridor Elements

- Sound Transit's East Link & light rail alignment:
 - Retained-Cut station at 120th Ave NE
 - At-Grade station and park and ride at 130th Ave NE
- Roadway alignment, travel & turn lanes:
 - Two through lanes in each direction west of 124th Ave NE
 - One through lane in each direction east of 124th Ave NE
- Fire Department standards (20') minimum width
- Non-Motorized facilities
- Land Use Interface & Placemaking (Identity)
- Landscaping & Green-space
- Topography

Integrated Design Process

- Organizational unity to achieve design objectives
 - Motorized & non-motorized mobility needs
 - Engineering challenges & constructability approach
 - Integration with light rail
 - Placemaking & character elements
 - Land use interface
 - Open space & natural drainage opportunities
 - Fire & life safety
- Coordination and input from public and private stakeholders
- Thorough discussion of trade-offs
- Provides for the most efficient use of right-of-way and capital dollars by meeting multiple objectives
- Exemplifies Bellevue's "One City" model of collaboration

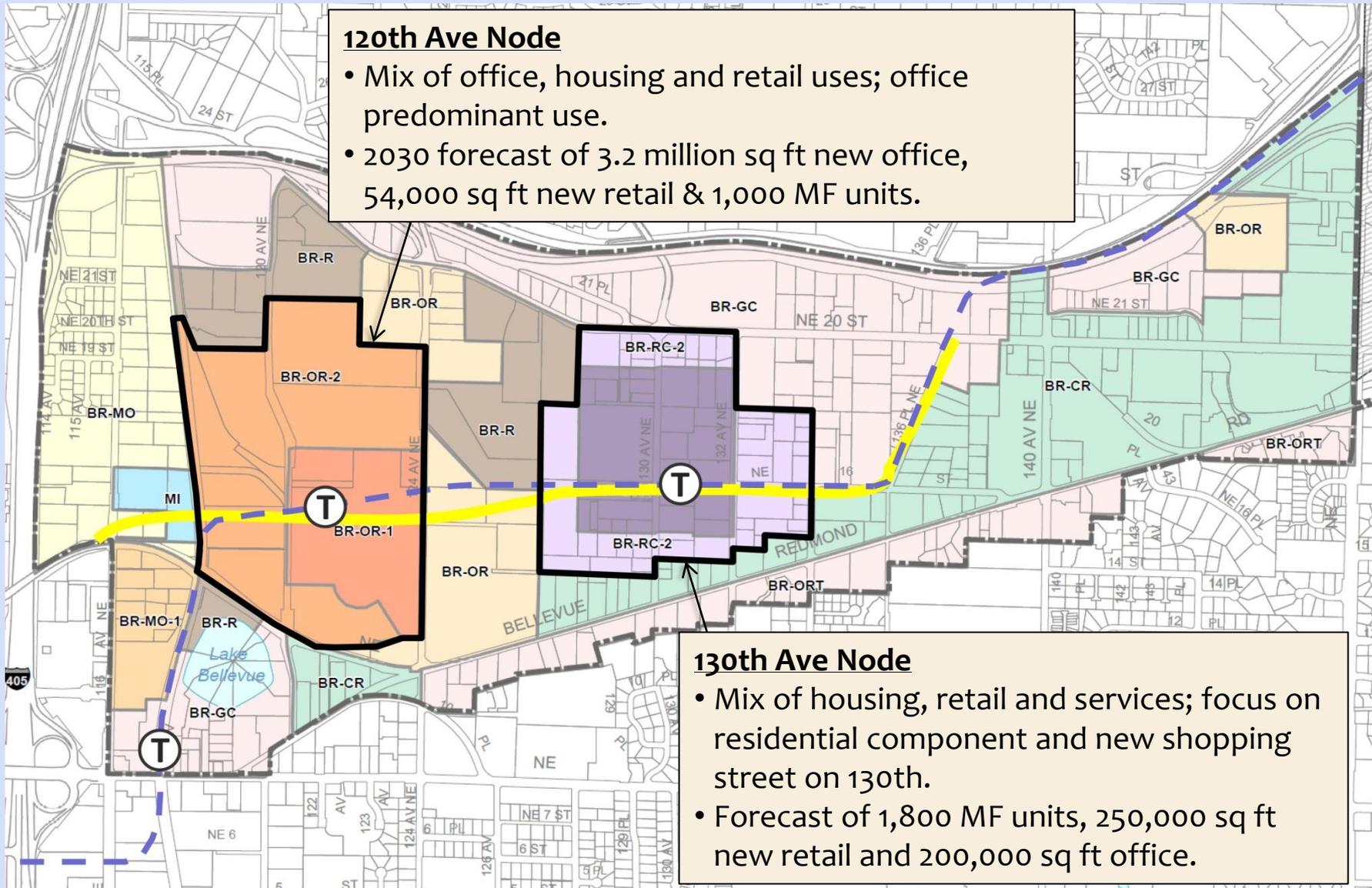
Key Considerations & Inter-Relationships

- On-Street Parking
 - Vitality to street activity and uses
 - Convenience
 - Location & limits
 - Internal local street grid with on-street parking
 - Use of space
 - Pedestrian safety – separation from traffic

- Landscaping – Median & Buffers
 - Corridor character – linear green-space and connectivity
 - Tree canopy & shading
 - Natural Drainage Practices (NDP) and other environmental benefits
 - Separation of traffic, Light Rail Transit (LRT), and pedestrians
 - Operational and visual effects

- Bicycle Facilities
 - Regional, sub-regional, local & internal connectivity
 - Attraction to ridership & age range of users
 - System continuity
 - Separating points of conflict
 - Land Use interface

Adopted Land Use Plan:



120th Ave Node

- Mix of office, housing and retail uses; office predominant use.
- 2030 forecast of 3.2 million sq ft new office, 54,000 sq ft new retail & 1,000 MF units.

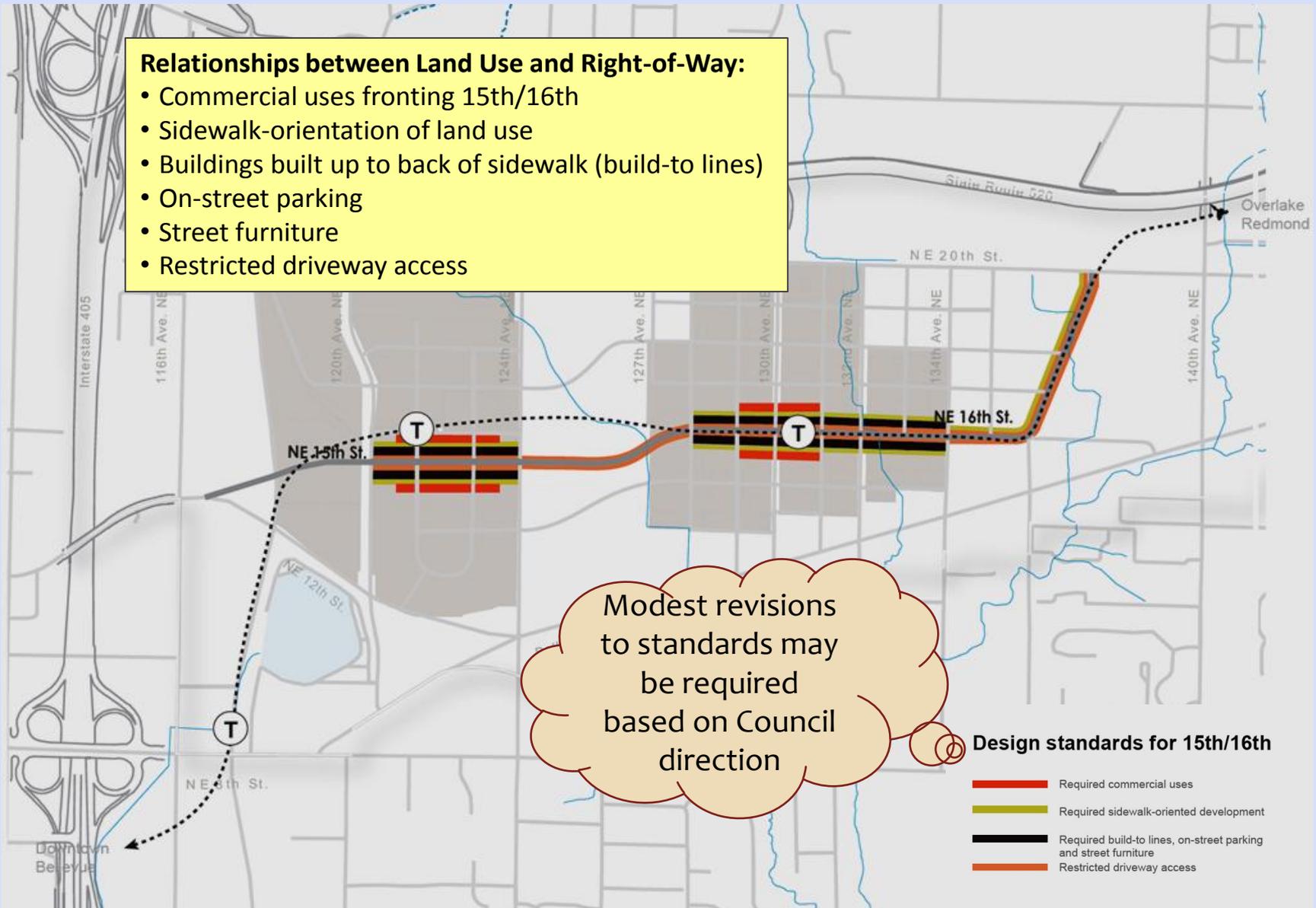
130th Ave Node

- Mix of housing, retail and services; focus on residential component and new shopping street on 130th.
- Forecast of 1,800 MF units, 250,000 sq ft new retail and 200,000 sq ft office.

Urban Design framework for 15th/16th (May 2009)

Relationships between Land Use and Right-of-Way:

- Commercial uses fronting 15th/16th
- Sidewalk-orientation of land use
- Buildings built up to back of sidewalk (build-to lines)
- On-street parking
- Street furniture
- Restricted driveway access



Modest revisions to standards may be required based on Council direction

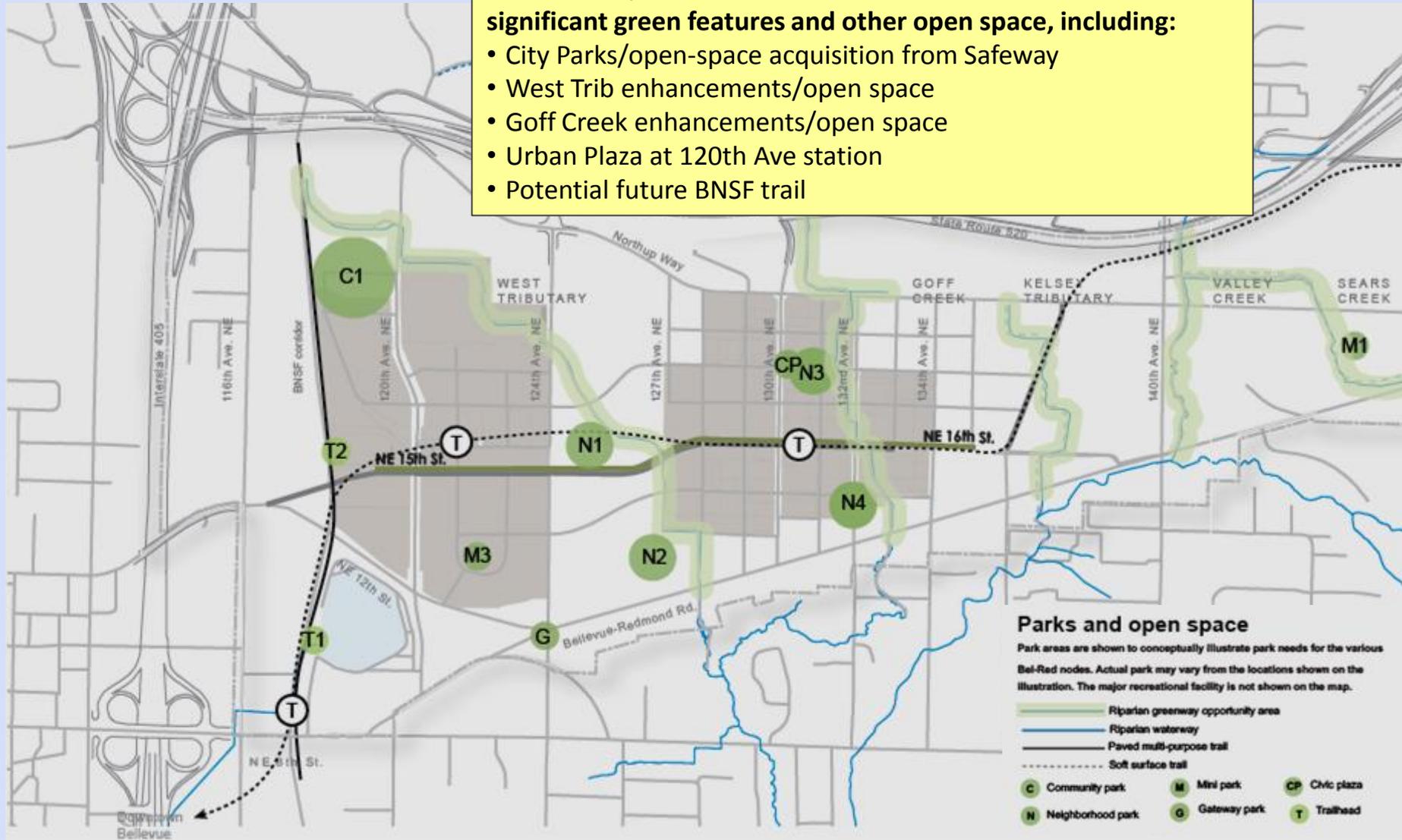
Design standards for 15th/16th

- █ Required commercial uses
- █ Required sidewalk-oriented development
- █ Required build-to lines, on-street parking and street furniture
- █ Restricted driveway access

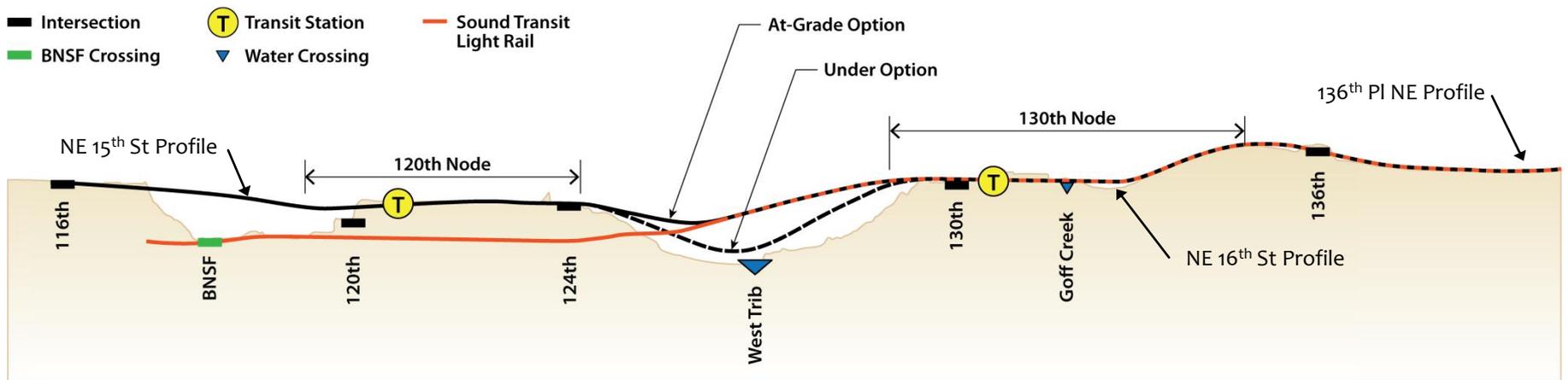
Sub-Area Plan for Parks & Open Space (Feb 2009)

The NE 15th/16th corridor will interface with a series of significant green features and other open space, including:

- City Parks/open-space acquisition from Safeway
- West Trib enhancements/open space
- Goff Creek enhancements/open space
- Urban Plaza at 120th Ave station
- Potential future BNSF trail



Influences: Topography



Public Input & Communications

- February 2 - Open-House
 - 90 notices mailed to businesses and other interested parties
 - 31 attendees
 - 3 written response forms returned
- Social Media – Internet & Website
 - Information published on City's website - <http://www.bellevuewa.gov/ne-15th-street-construction.htm>
 - Other links connected to City's website
 - Additional social media comments received
- On-going coordination with Sound Transit and other key stakeholders

A few comments from Open-House and Internet

“The open house was quite good. The renderings and maps portray a very different approach than what Council and Transportation were reviewing even 6 months ago. I think the message is getting through”

“On-Street Parking is a deterrent to access and takes space from greenery or private enterprise. Loading zones are a good idea.”

“A mixed use path both for bikers and walkers would be most cost effective measure while giving a greater degree of safety to riders and walkers.”

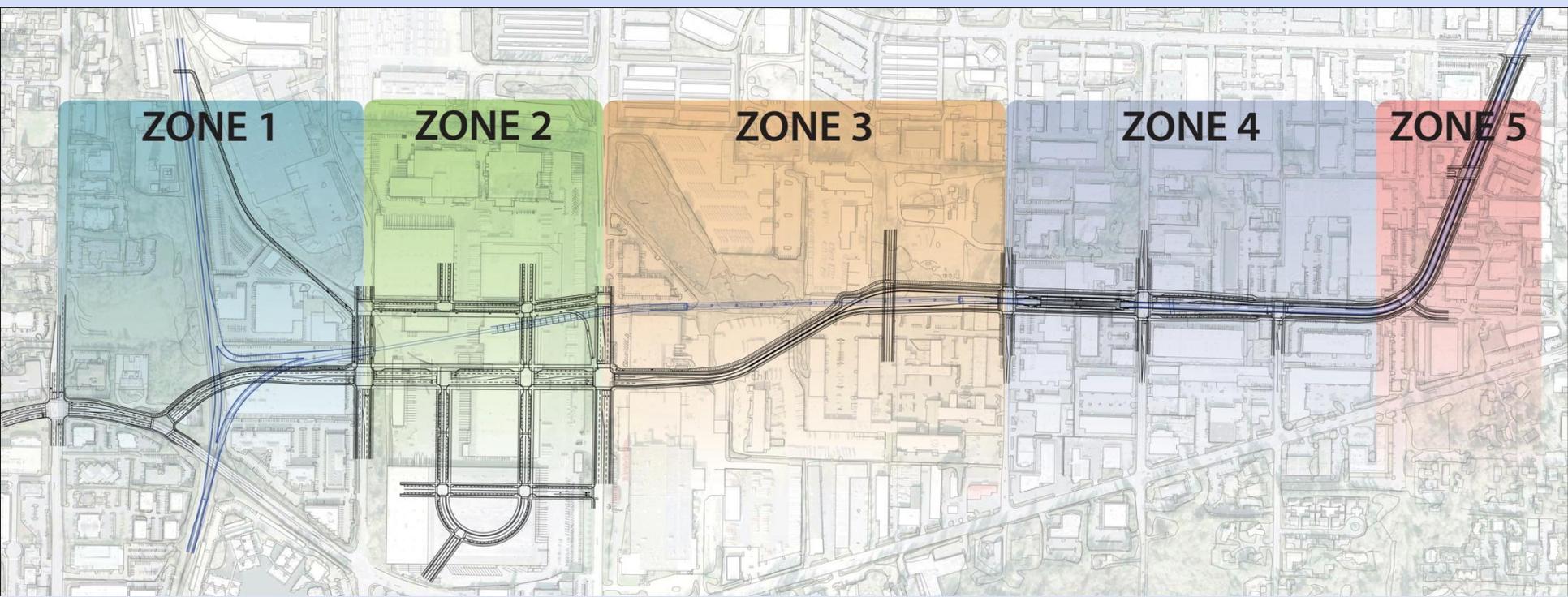
“I’ve been defending the wider option, but I have to admit, this does look a lot better”

“Would prefer 12’ sidewalks and bike paths (7.5’) [protected zones] to replace parking”

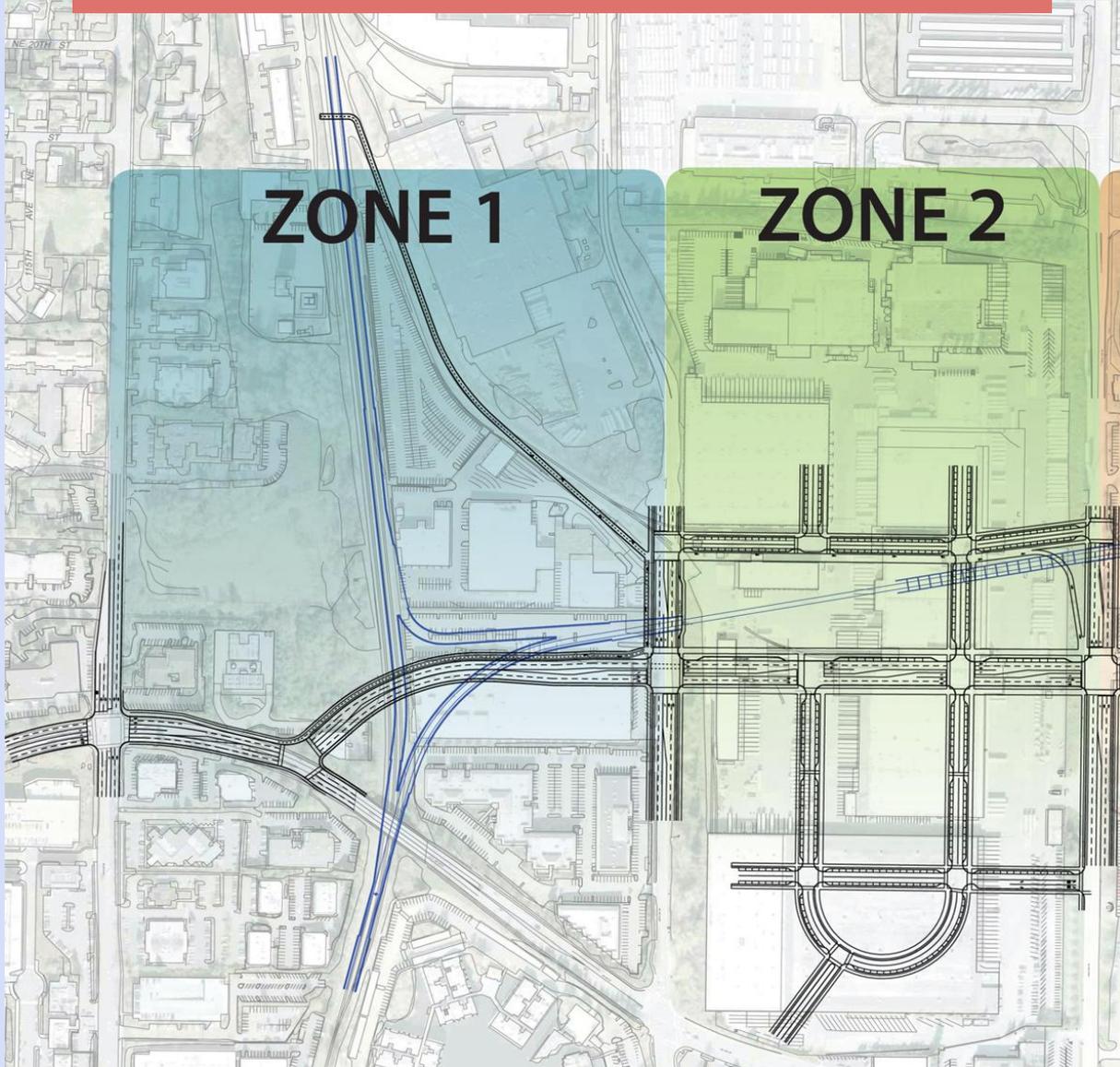
“Provide on-street parking in zone 2; eliminate development in zone 4.”

“Do not permit bicycle travel in the NE 15th/16th Corridor.”

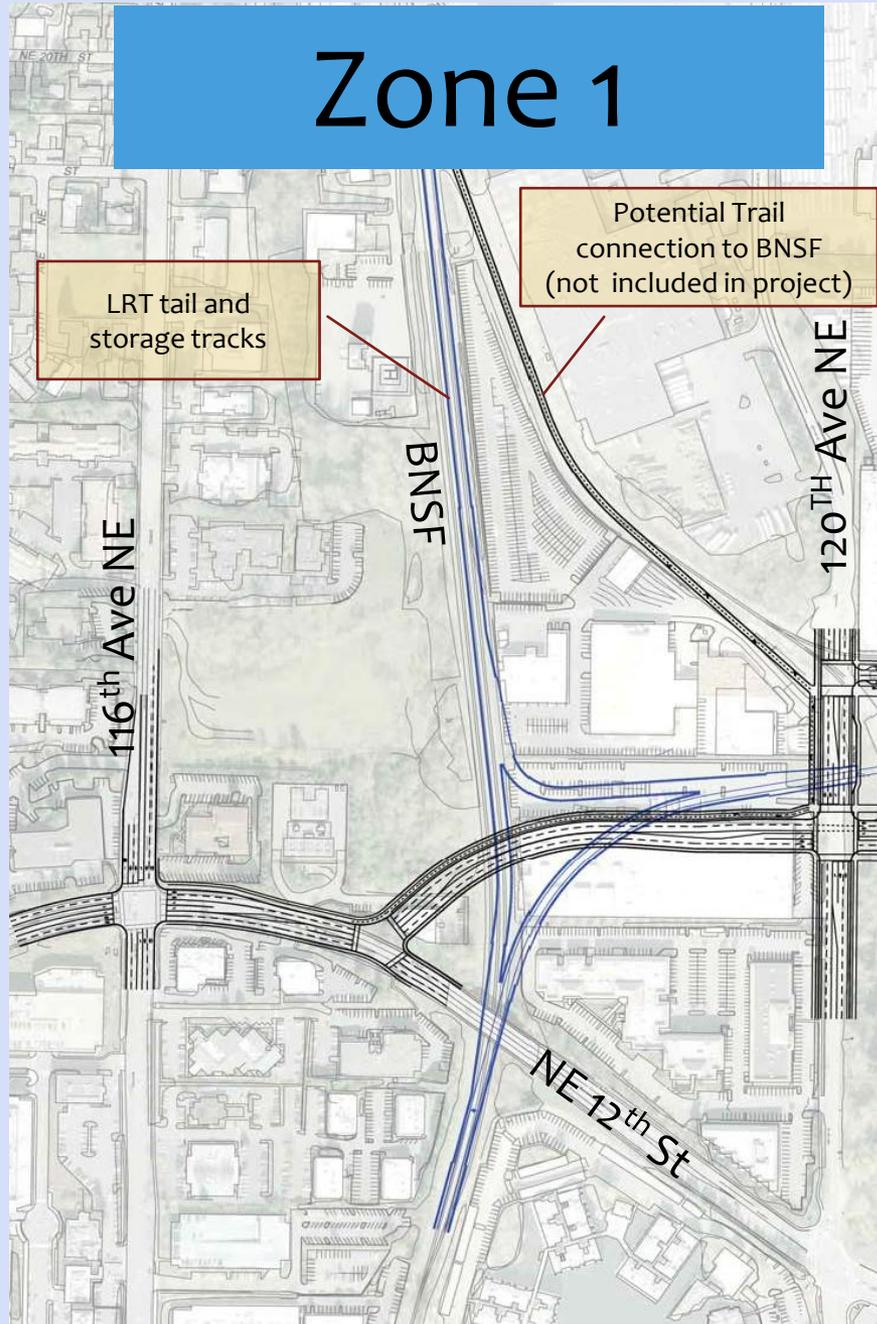
Corridor Concept Plan 116th Ave NE – NE 20th Street



SEGMENT 1



Zone 1



LRT tail and storage tracks

Potential Trail connection to BNSF (not included in project)

116th Ave NE

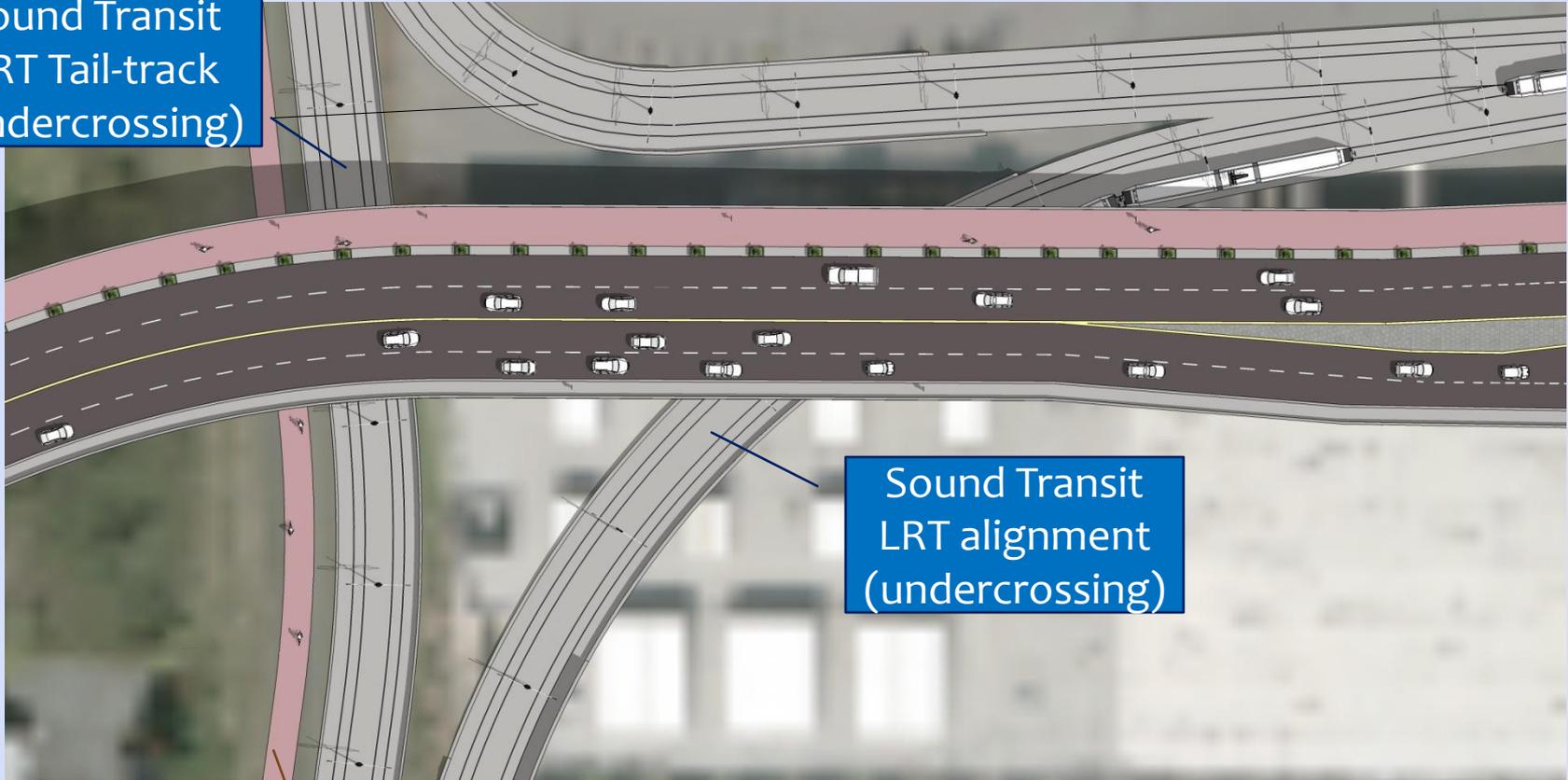
BNSF

120th Ave NE

NE-12th St

Zone 1 – 116th Ave NE to 120th Ave NE (at LRT undercrossing)

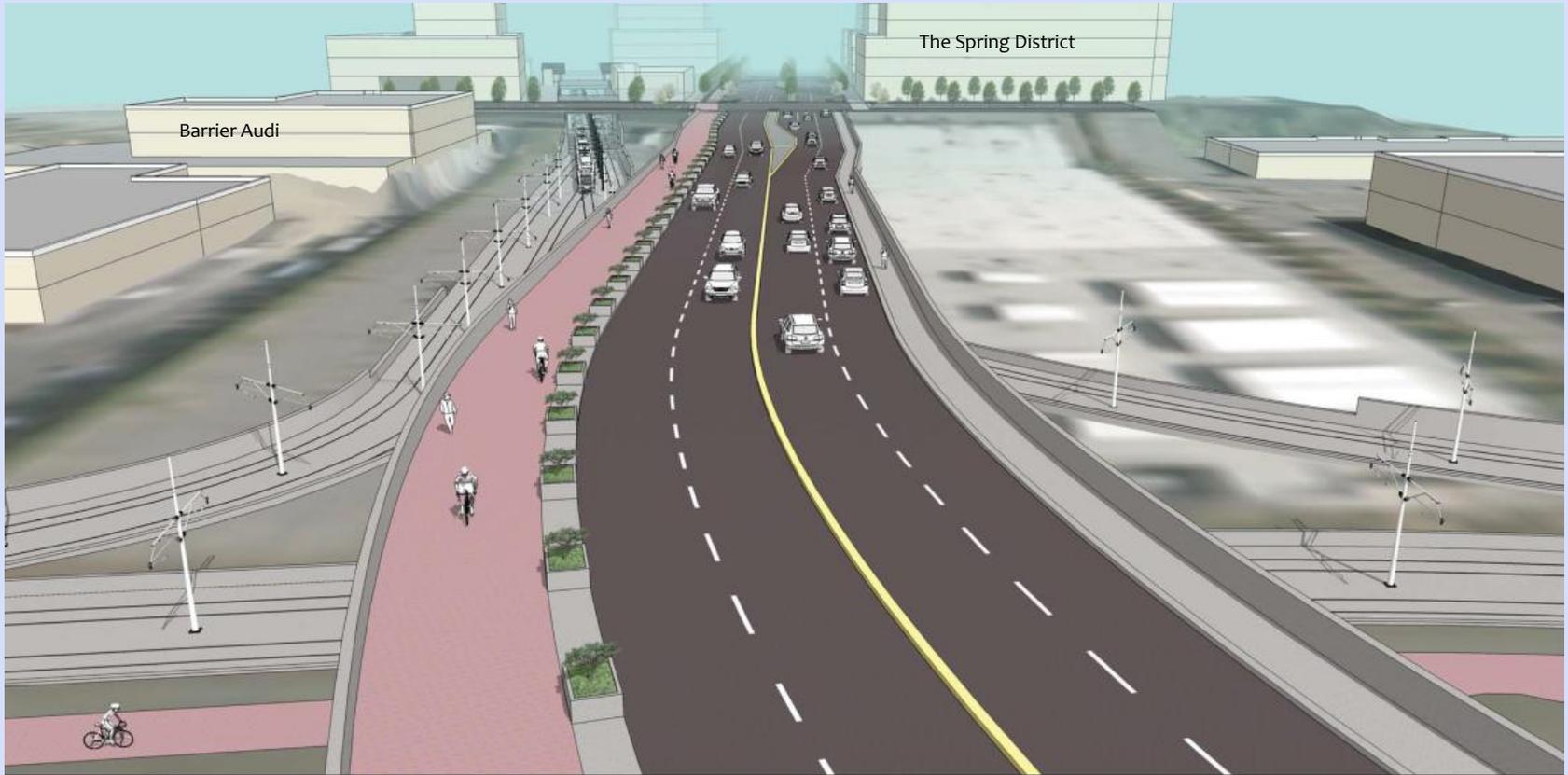
Sound Transit
LRT Tail-track
(undercrossing)



Sound Transit
LRT alignment
(undercrossing)

Potential BNSF
regional trail

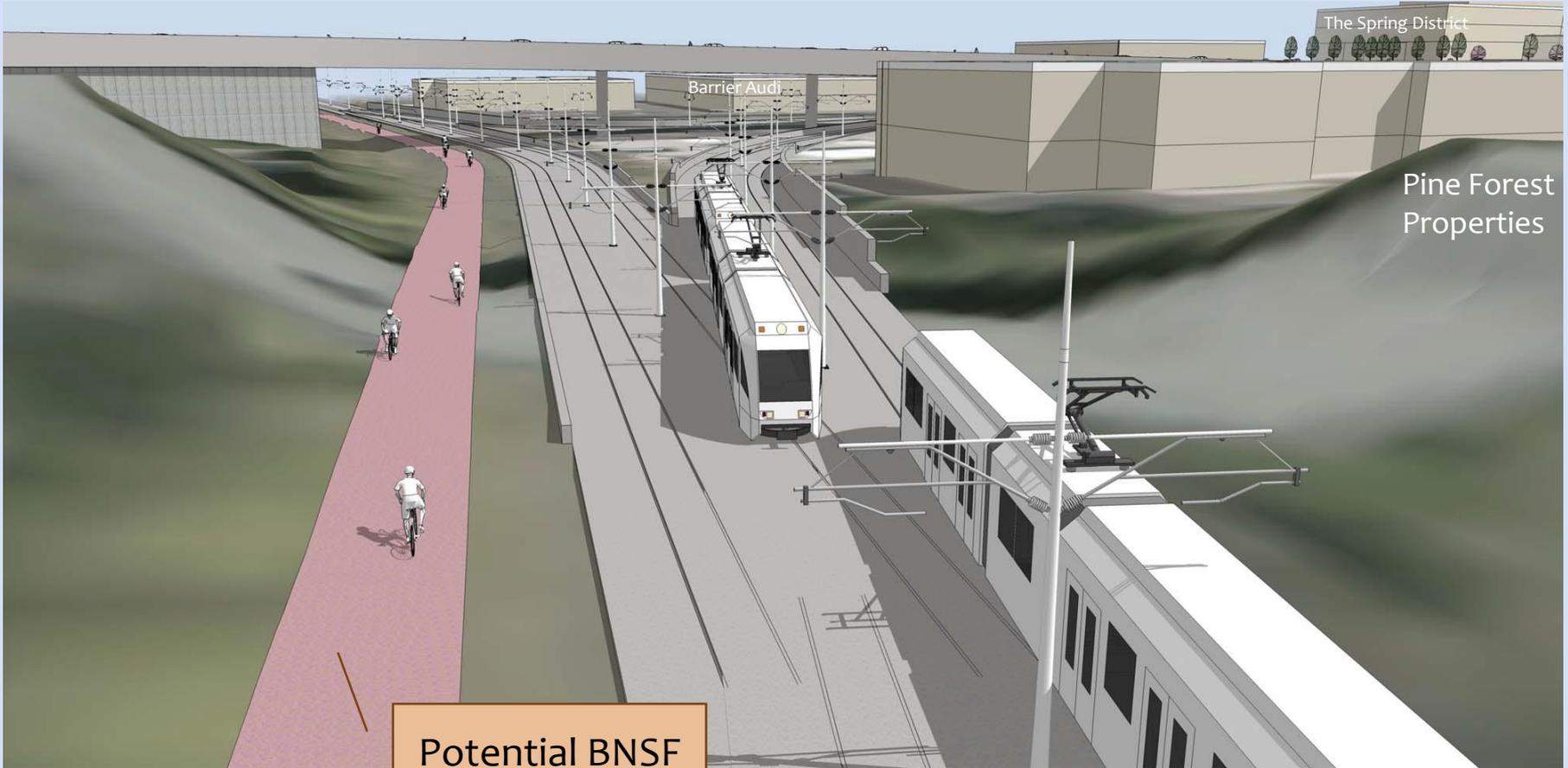
Zone 1 – 116th Ave NE to 120th Ave NE (looking east)



	Multi-Purpose Path	Landscape planters	Roadway ↓	Roadway ↓	Roadway ↑	Roadway ↑	Sidewalk	
	16'	4'	12'	13'	13'	12'	6'	
	76'							

Zone 1 – 116th Ave NE to 120th Ave NE

(looking north to roadway bridge with LRT undercrossing)



The Spring District

Barrier Audi

Pine Forest Properties

Potential BNSF regional trail

Zone 1 – Summary:

Recommendation:

76' Typical Cross-Section

16' Multi-Purpose Pathway – north side

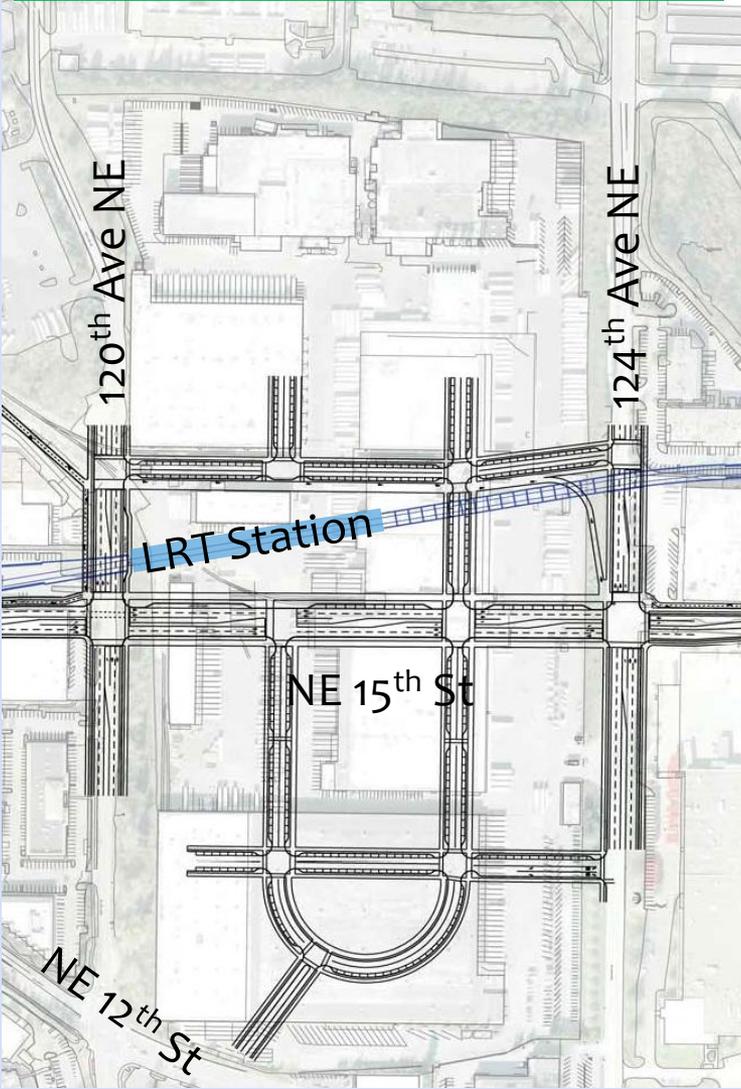
Connects with MPP west of 116th crossing at NE 12th ST
(WSDOT I-405 Braid project)

5' Landscape strip on fill approach and 4' planter boxes on bridge (at MPP)

Re-connection of NE 12th Street Intersection

Elevations/setbacks consistent with rail-banking provisions of BNSF corridor

Zone 2



Zone 2: 120th to 124th

Alternative A:

- NE 15th Street cross-section - 122'
 - Wider sidewalks for non-motorized access
 - Widened landscape strips for Natural Drainage Practices (NDP) & green character
- 14' Multi-Purpose Path (MPP) located on NE 16th Street
- Short term on-street parking - north side only
- Drop-off/pick-up zone at plaza – north side only

Alternative B:

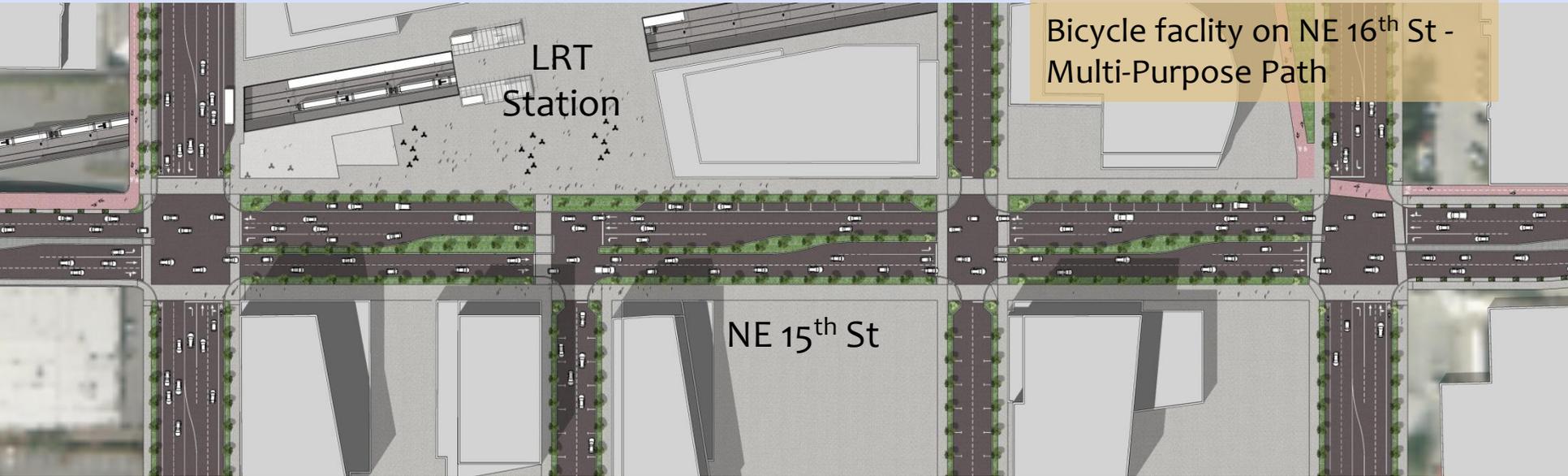
- NE 15th Street cross-section - 135'
 - 7.5' Buffered Bike Lanes on NE 15th Street
 - 5' adjacent landscaping for greater NDP, green character, and separation of traffic/pedestrians
- Short term on-street parking – north side only
- Drop-off/pick-up zone at plaza – north side only

Zone 2 – 120th Ave NE to 124th Ave NE

Alternative A:

8' wide landscape strip with
16' wide sidewalks on NE 15th
Street

Bicycle facility on NE 16th St -
Multi-Purpose Path



120th Ave NE

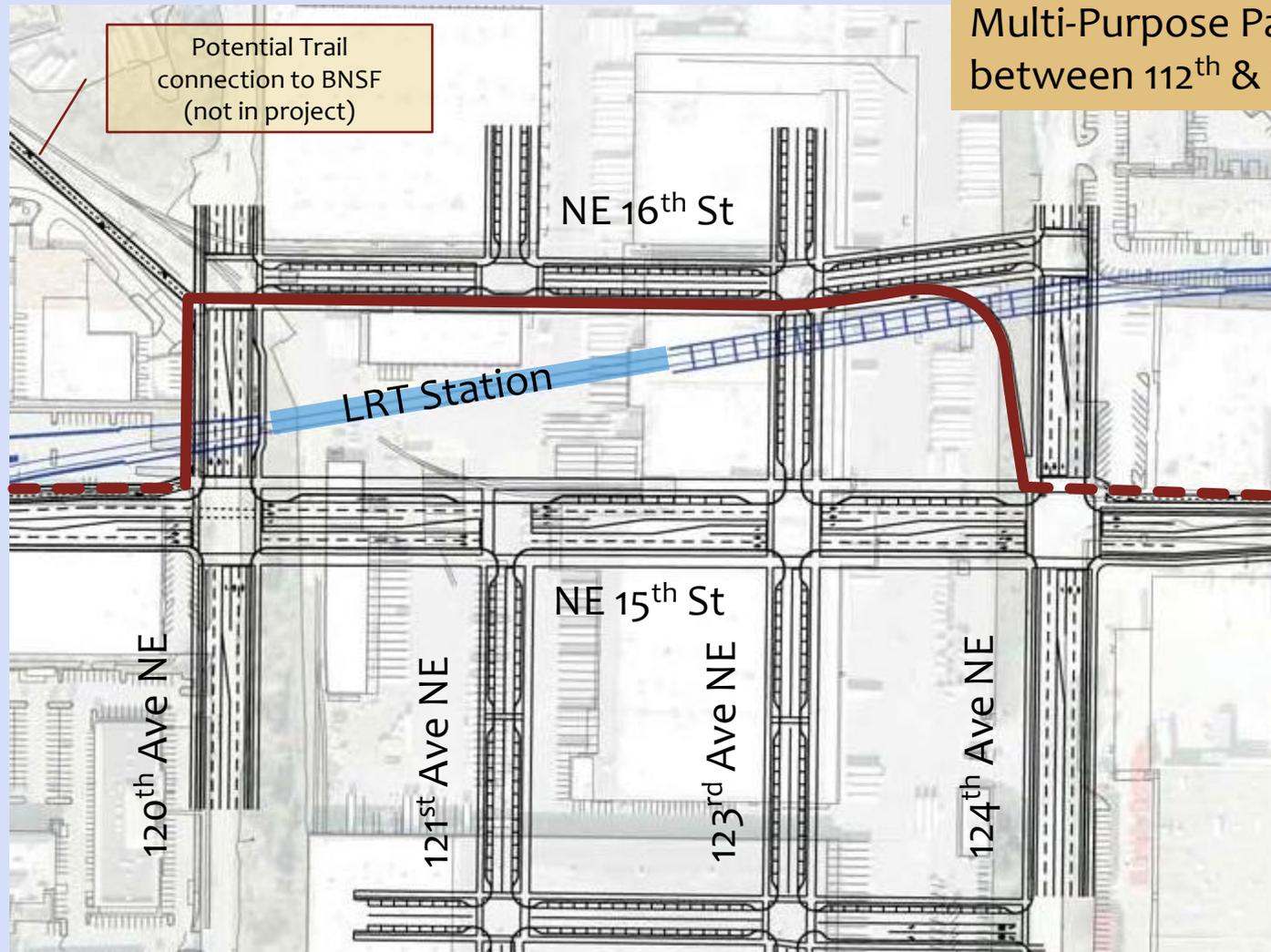
121st Ave NE

123rd Ave NE

124th Ave NE

Zone 2 – 120th Ave NE to 124th Ave NE

Alternative A:

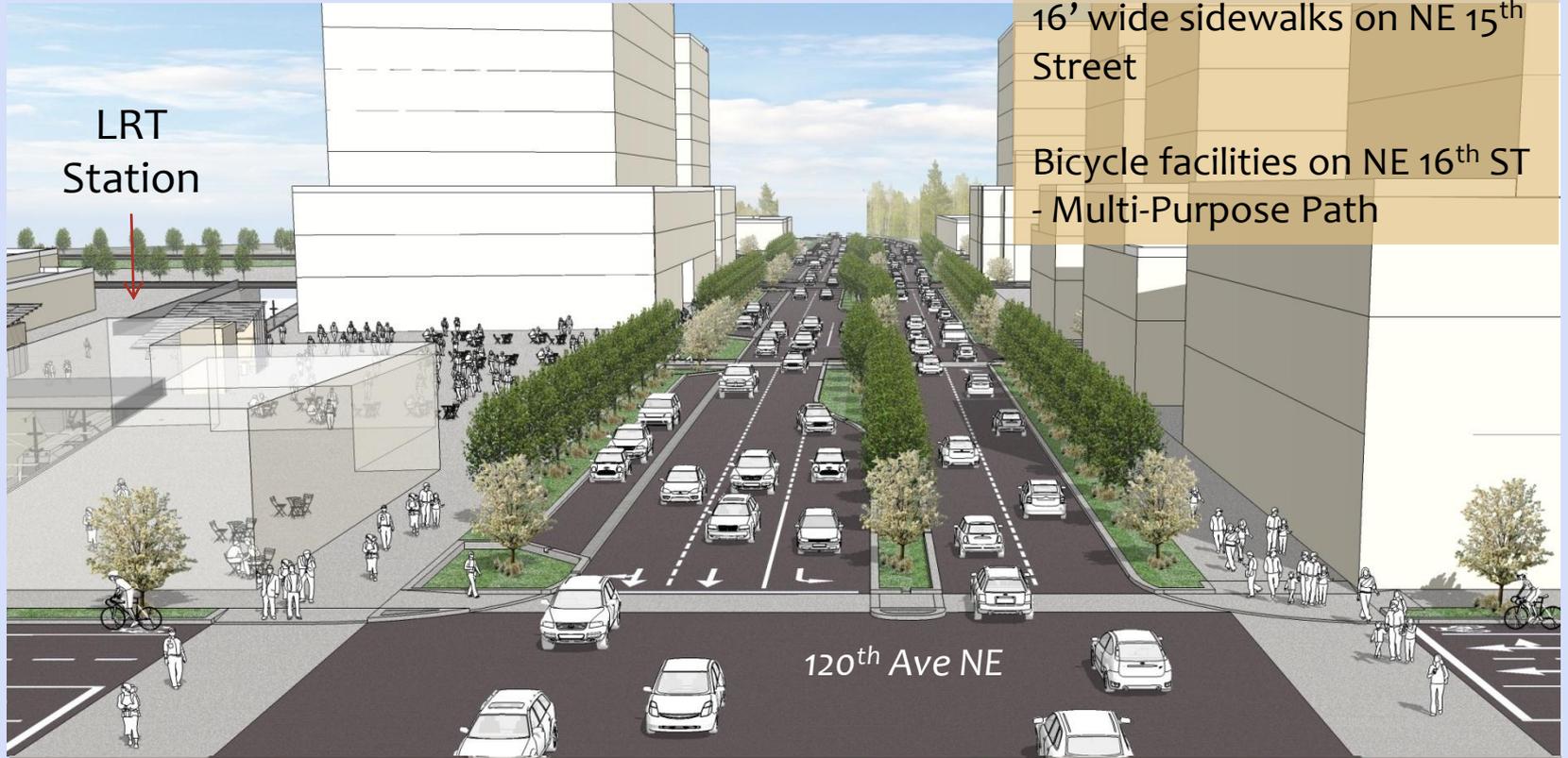


Provides a continuous Multi-Purpose Pathway between 112th & 130th

Zone 2 – 120th Ave NE to 124th Ave NE

(looking east from 120th Ave NE)

Alternative A:



8' wide landscape strip with 16' wide sidewalks on NE 15th Street

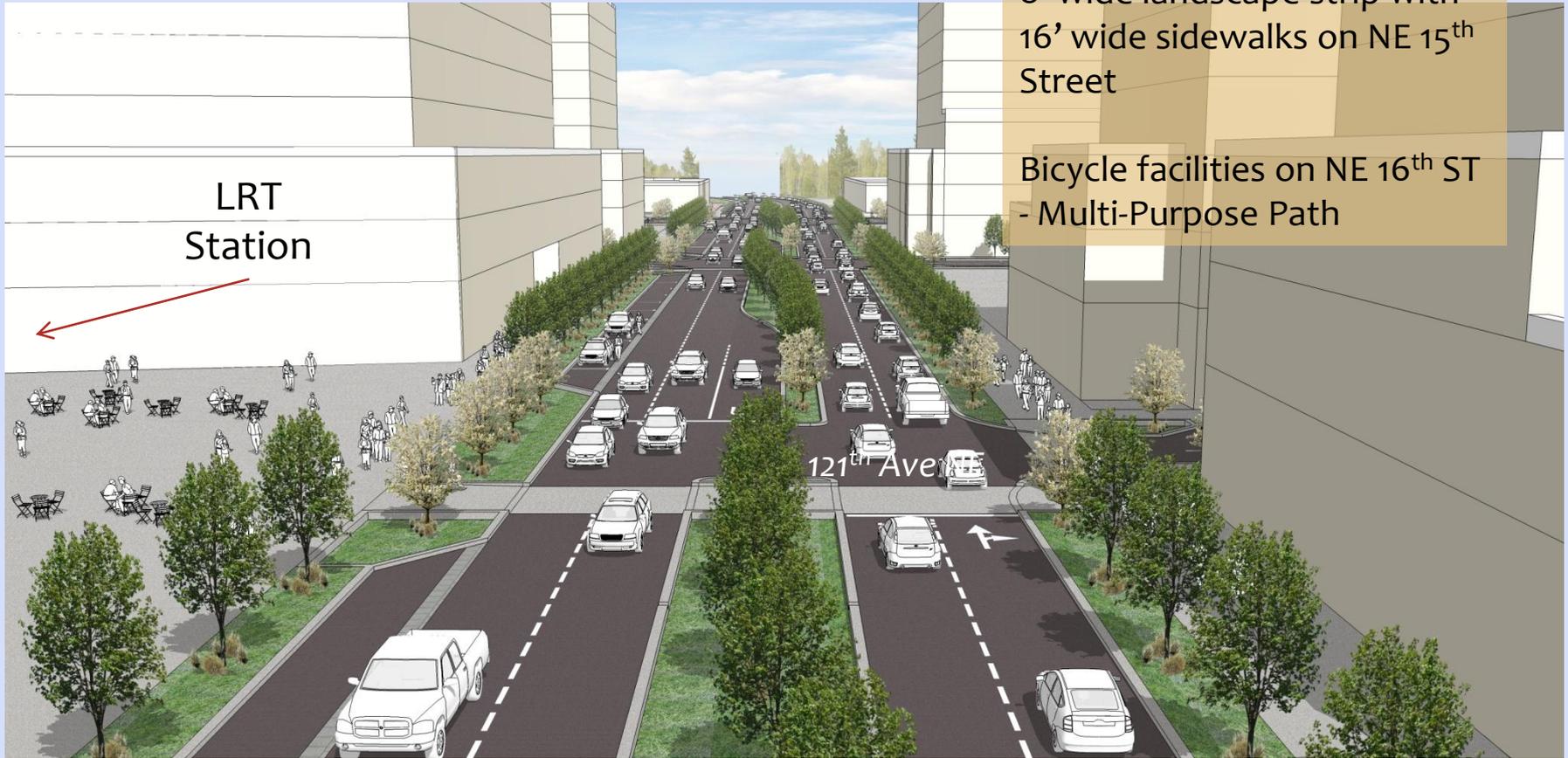
Bicycle facilities on NE 16th ST - Multi-Purpose Path

Sidewalk	Landscape	(P)	Roadway	Roadway	Turn Lane	Landscape Median	Roadway	Roadway	Landscape	Sidewalk
16'	8'	10'	11'	11'	12'	8'	11'	11'	8'	16'
					122'					

Zone 2 – 120th Ave NE to 124th Ave NE

(looking east at 121st Ave NE)

Alternative A:



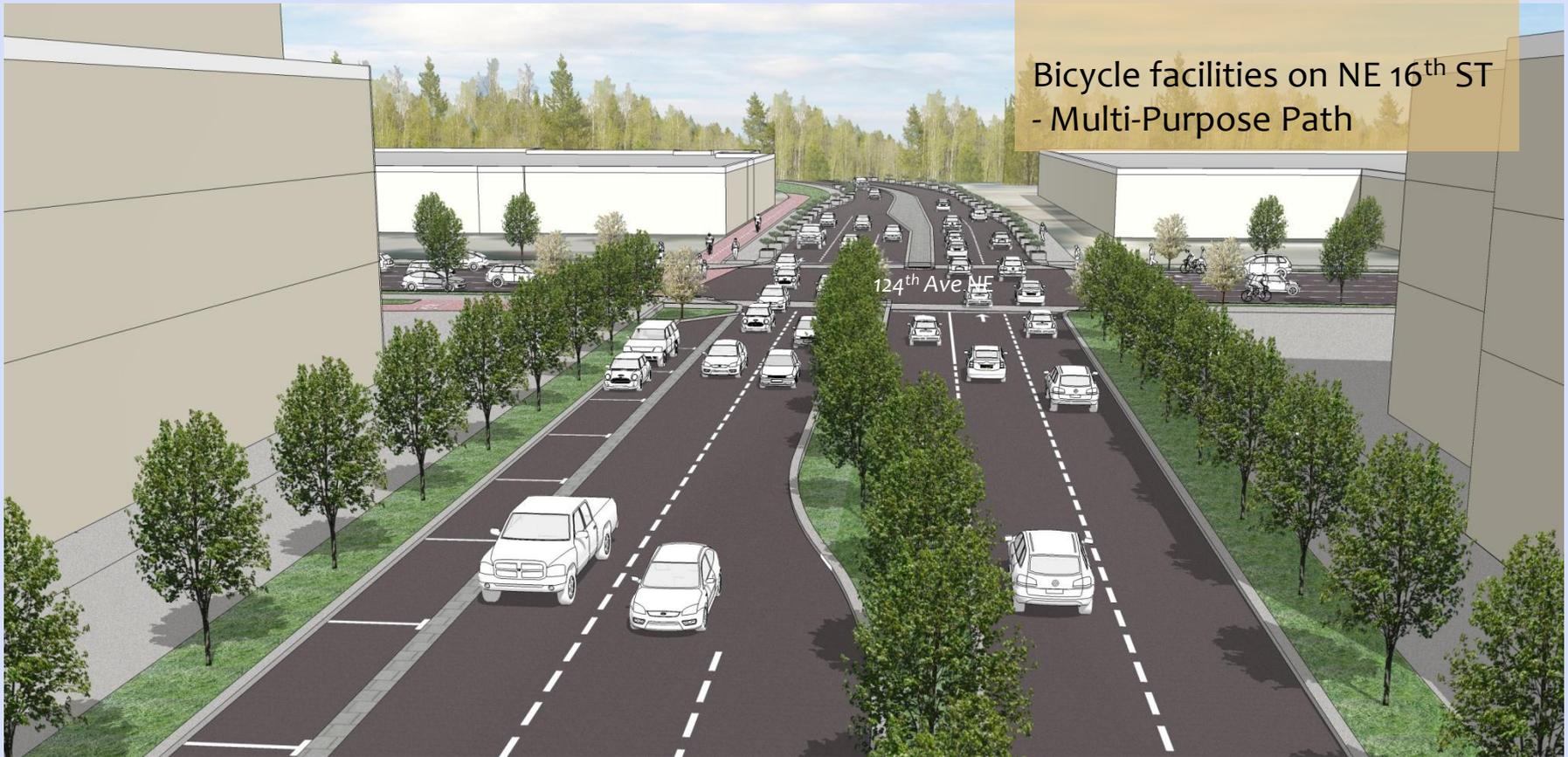
Zone 2 – 120th Ave NE to 124th Ave NE

(looking east at 124th Ave NE)

Alternative A:

8' wide landscape strip with
16' wide sidewalks on NE 15th
Street

Bicycle facilities on NE 16th ST
- Multi-Purpose Path



Zone 2 – 120th Ave NE to 124th Ave NE

(looking east from 120th Ave NE)

Alternative B:

Net delta between Alt's A and B is 13'
 Sidewalk reduced (-8' total)
 Bike facility added (15' total)
 Additional landscape (6' total)



Sidewalk	Landscape	Bike Lane	Landscape	(P)	Roadway ↓	Roadway ↓	Turn Lane ↘	Landscape Median	Roadway ↑	Roadway ↑	Landscape	Bike Lane	Landscape	Sidewalk
12'	5'	7.5'	6'	10'	11'	11'	12'	8'	11'	11'	6'	7.5'	5'	12'
135'														

Zone 2 – 120th Ave NE to 124th Ave NE

(looking east at 121st Ave NE)

Alternative B:

Net delta between Alt's A and B is 13'
Sidewalk reduced (-8' total)
Bike facility added (15' total)
Additional landscape (6' total)



Zone 2 – Summary:

Recommendation – Alternative A:

122' Typical Cross-Section

14' Multi-Purpose Pathway (MPP) – south side of NE 16th Street
Connects with MPP to west and east supporting continuity
(construction with NE 15th Street)

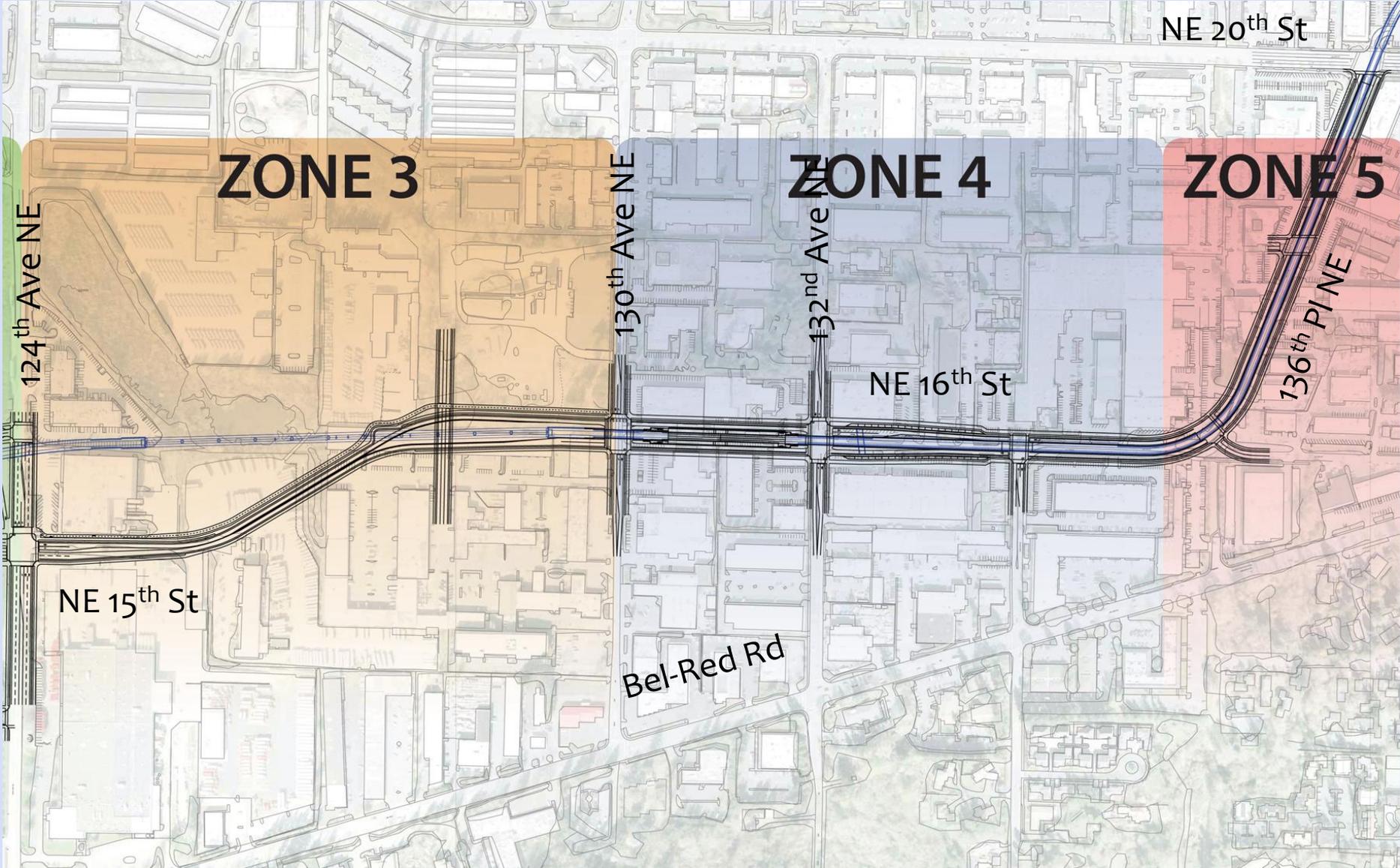
8' Landscape strips supporting enhanced green-space and application of NDP

16' Sidewalks supporting pedestrian zone and adjacent private program space

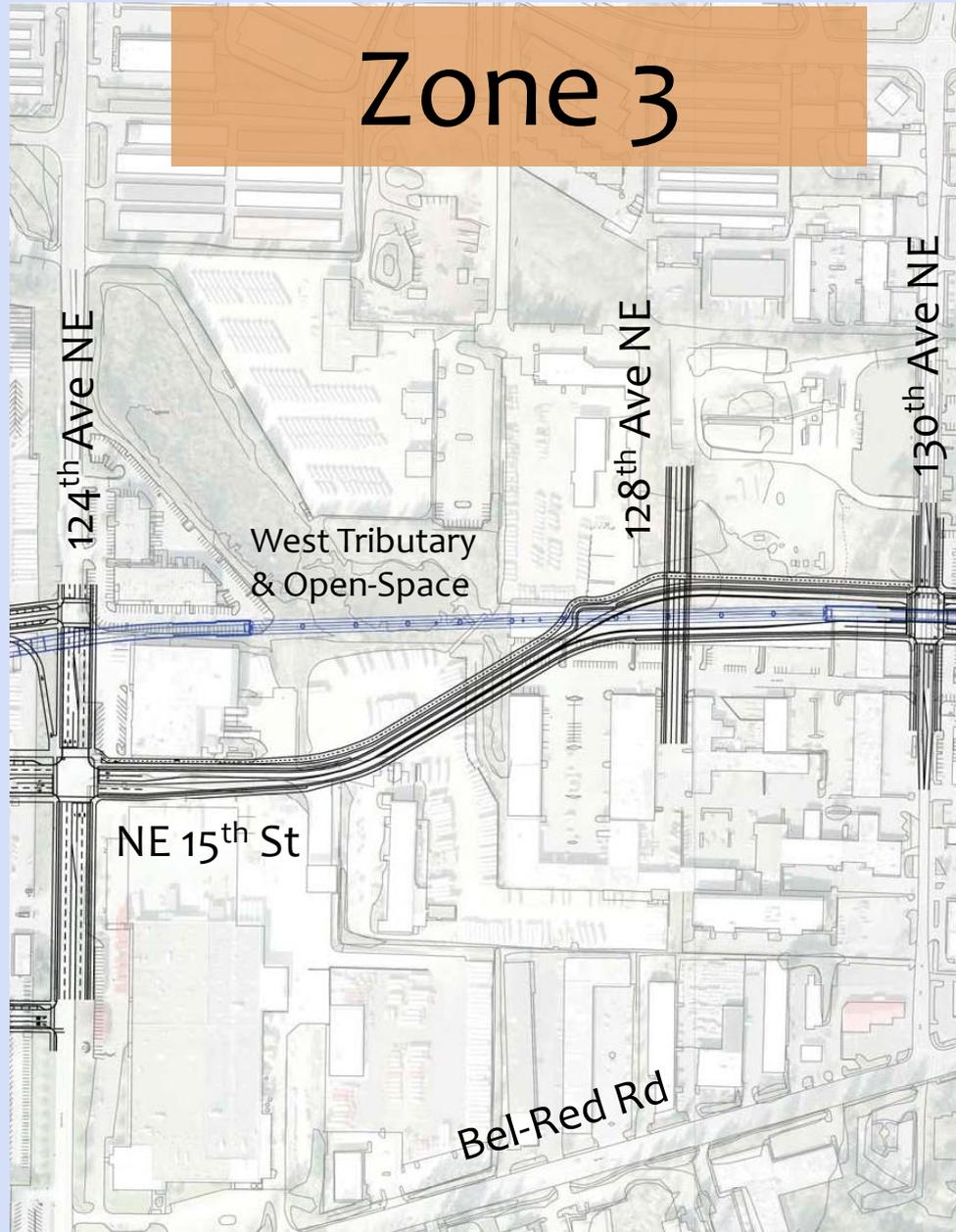
Permanent on-street parking – north side only between 121st and 124th

Permanent drop-off / pick-up zone - north side only between 120th and 121st

SEGMENT 2



Zone 3



124th Ave NE

West Tributary
& Open-Space

128th Ave NE

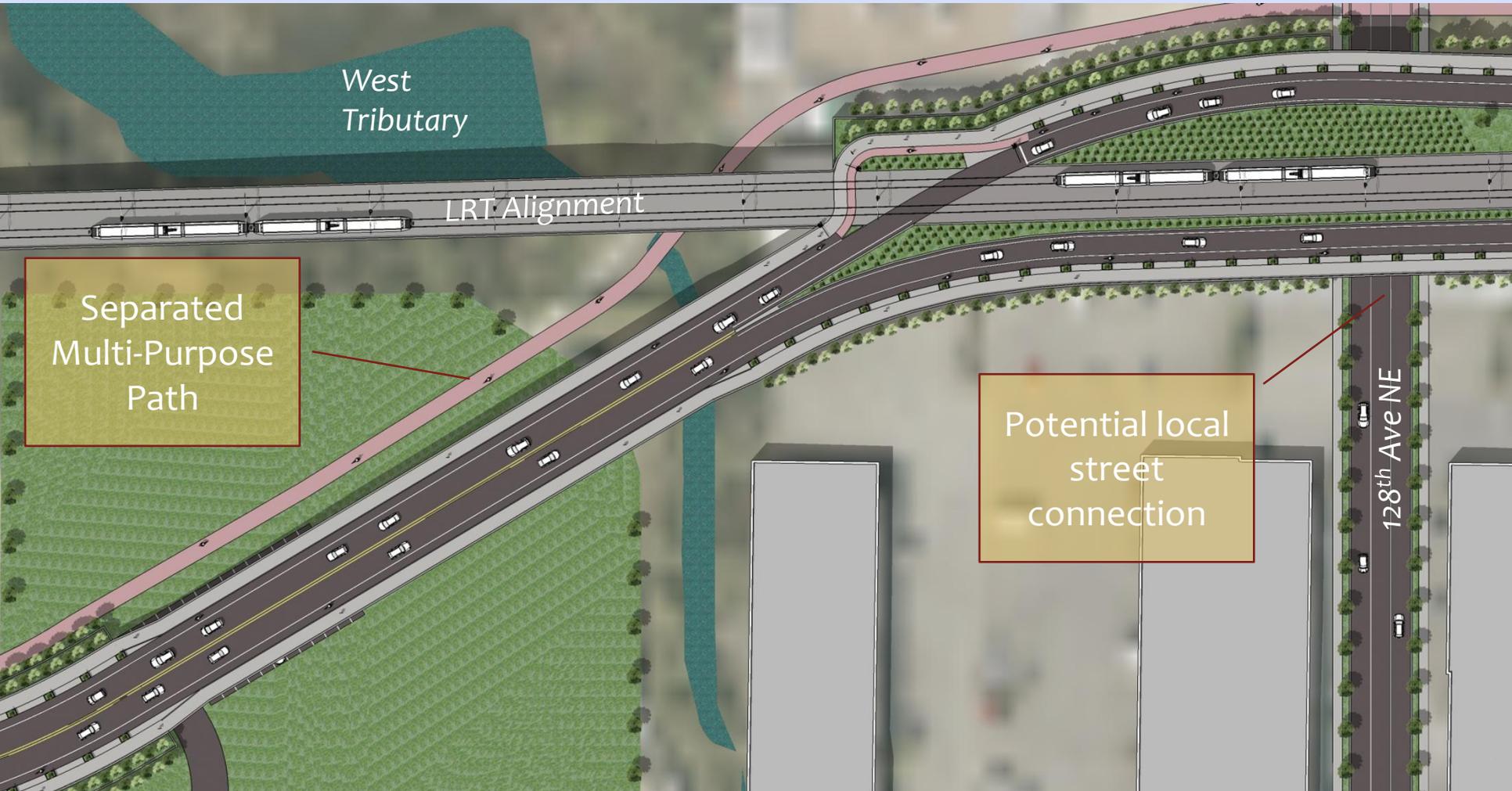
130th Ave NE

NE 15th St

Bel-Red Rd

Zone 3 – 124th Ave NE to 130th Ave NE

(westbound roadway at-grade crossing)
(West Tributary area)



Separated
Multi-Purpose
Path

Potential local
street
connection

128th Ave NE

Zone 3 – 124th Ave NE to 130th Ave NE

(looking east westbound roadway crossing of LRT)
(West Tributary area)



	Sidewalk	Land- scape plant- ers	Roadway shoulder	Roadway ↓	Roadway ↑	Roadway shoulder	Land- scape plant- ers	Side- walk	
	8'	6'	4'	14'	14'	4'	6'	8'	
				64'					

Zone 3 – 124th Ave NE to 130th Ave NE

(looking north within City park & open-space area)



Zone 3 – 124th Ave NE to 130th Ave NE

(looking north along potential 128th Ave NE undercrossing)



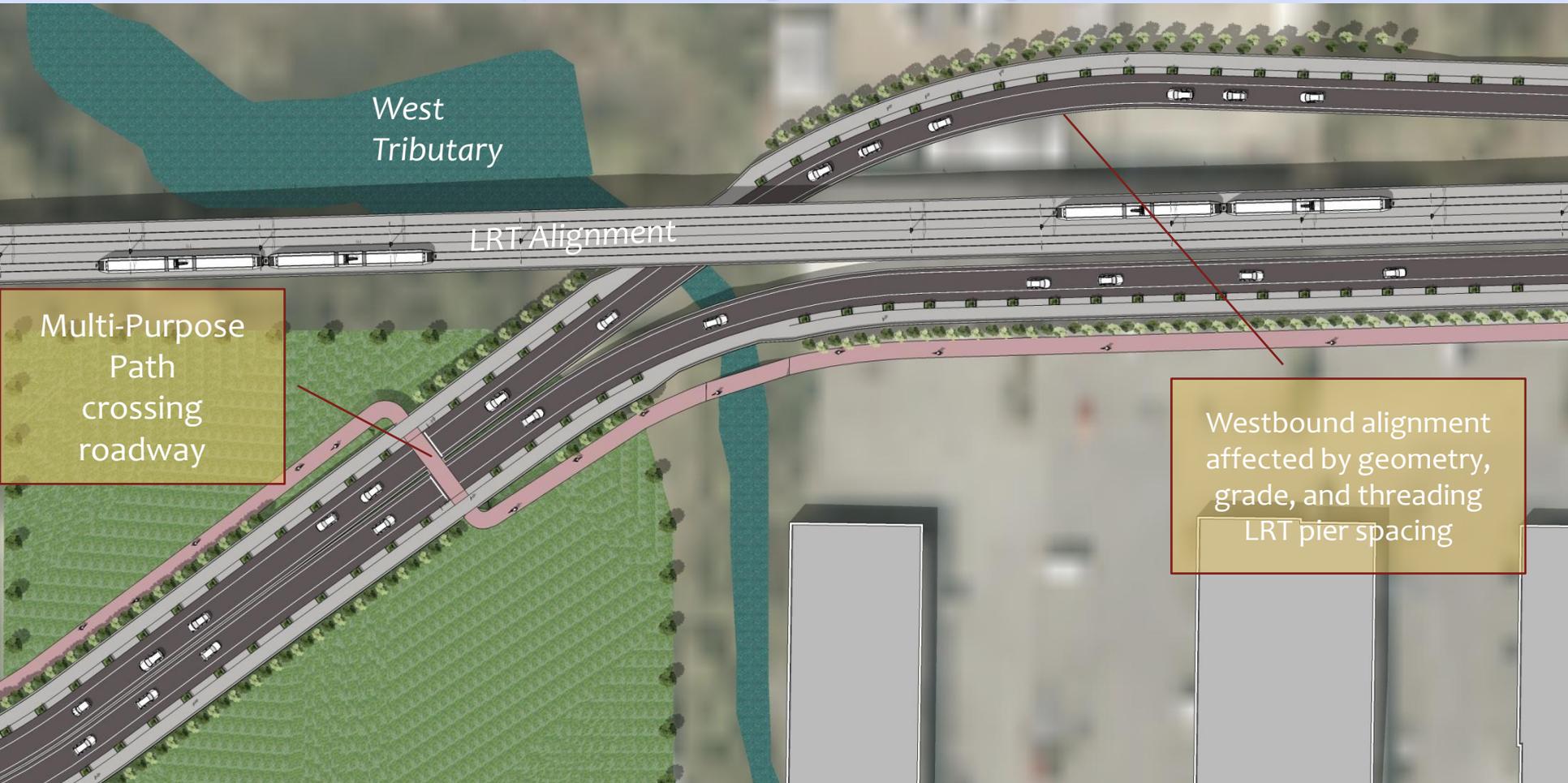
Zone 3 – 124th Ave NE to 130th Ave NE

(looking west – toward Spring District)



Zone 3 – 124th Ave NE to 130th Ave NE

(westbound bridge undercrossing)



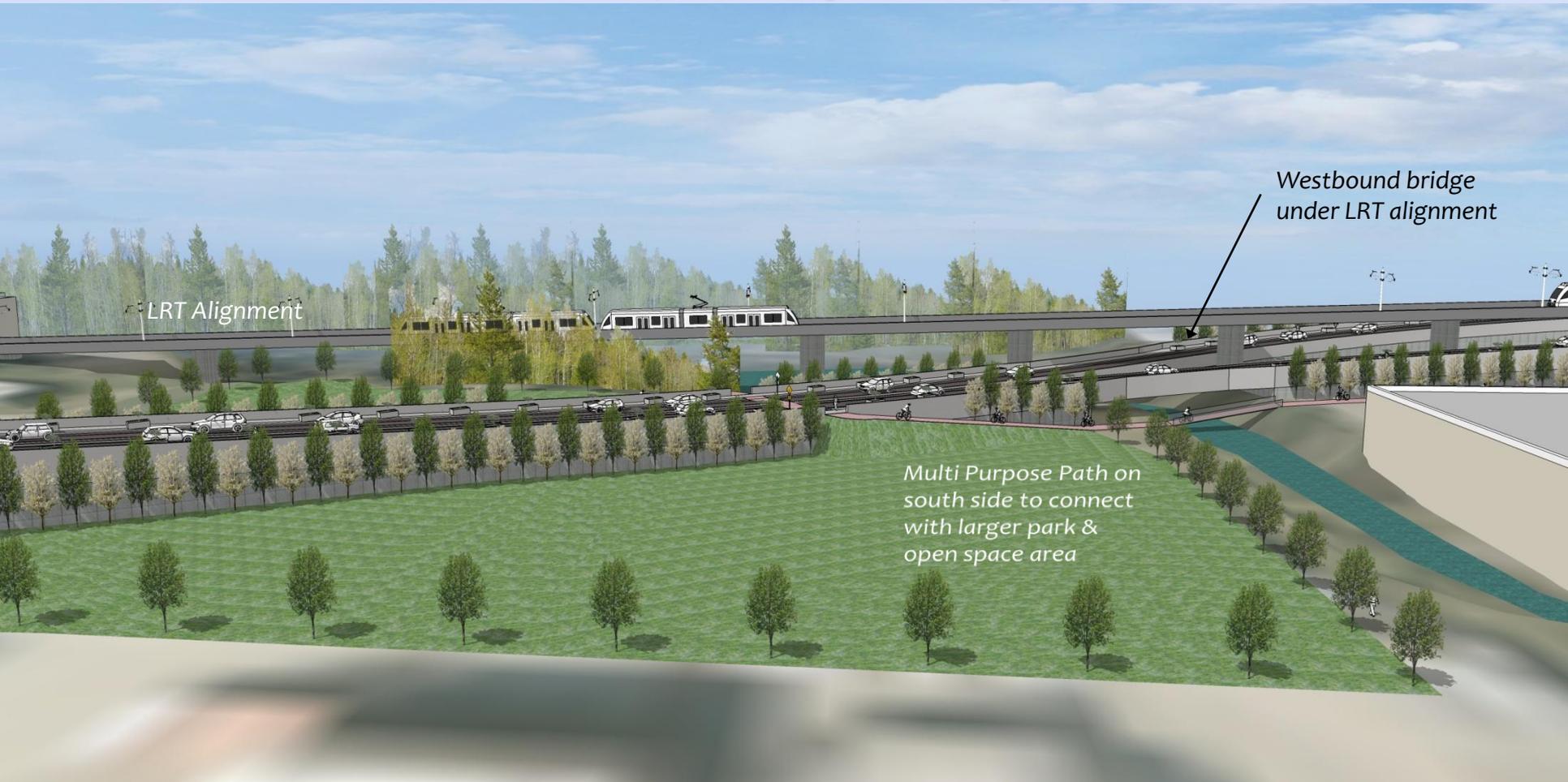
Zone 3 – 124th Ave NE to 130th Ave NE

(looking east along north side of roadway)



Zone 3 – 124th Ave NE to 130th Ave NE

(westbound roadway under LRT with
Multi-Purpose Path at-grade crossing)



Westbound bridge
under LRT alignment

LRT Alignment

Multi Purpose Path on
south side to connect
with larger park &
open space area

Zone 3 – 124th Ave NE to 130th Ave NE

(westbound roadway under LRT – looking north)



Zone 3 – 124th Ave NE to 130th Ave NE

(westbound roadway under LRT – lower height of structures)



Zone 3 – Summary:

Recommendation:

64' Typical Cross-Section

Recommending at-grade crossing of westbound travel lane and LRT guide way
Alternative is an undercrossing or overcrossing of the LRT guide way

14' Multi-Purpose Pathway – separated from roadway

- Separate path eliminates vehicular conflict
- Allows for early implementation
- Connects with park and open-space

5' Landscape strip on fill approach and 4' planter boxes on bridge

Standard 4' shoulders permit cyclist use

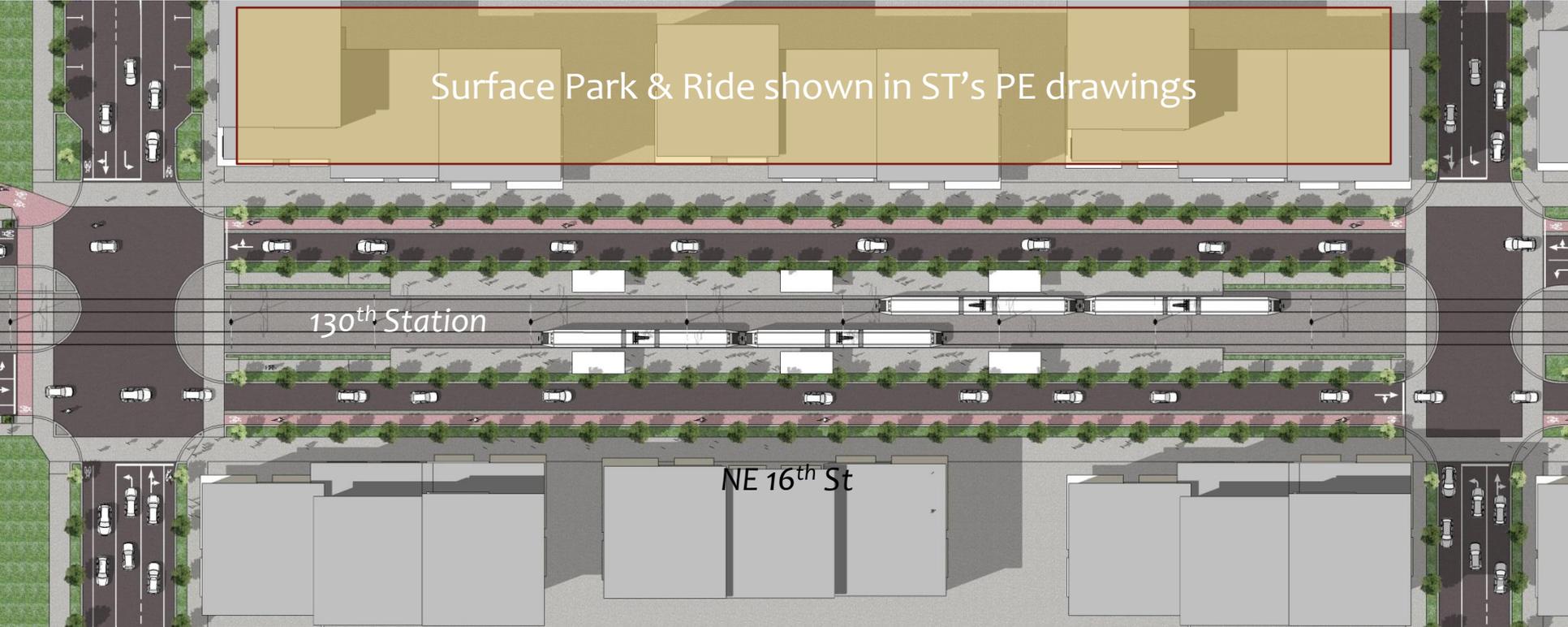
Design with provisions for internal local street undercrossing

Zone 4



Zone 4 – 130th Ave NE to 136th PI NE

(130th Ave NE – 132nd Ave NE)



Surface Park & Ride shown in ST's PE drawings

130th Station

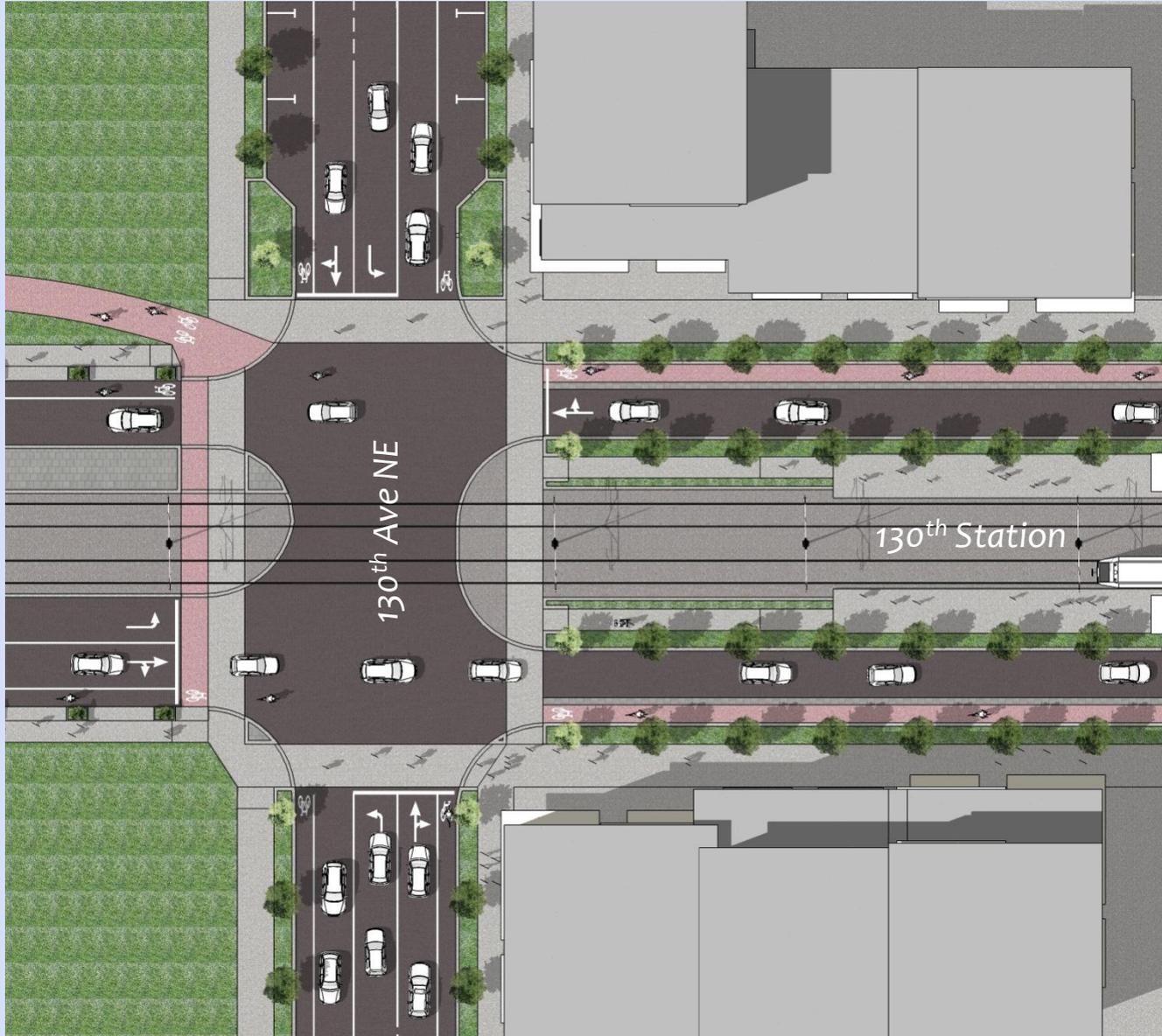
NE 16th St

130th Ave NE

132nd Ave NE

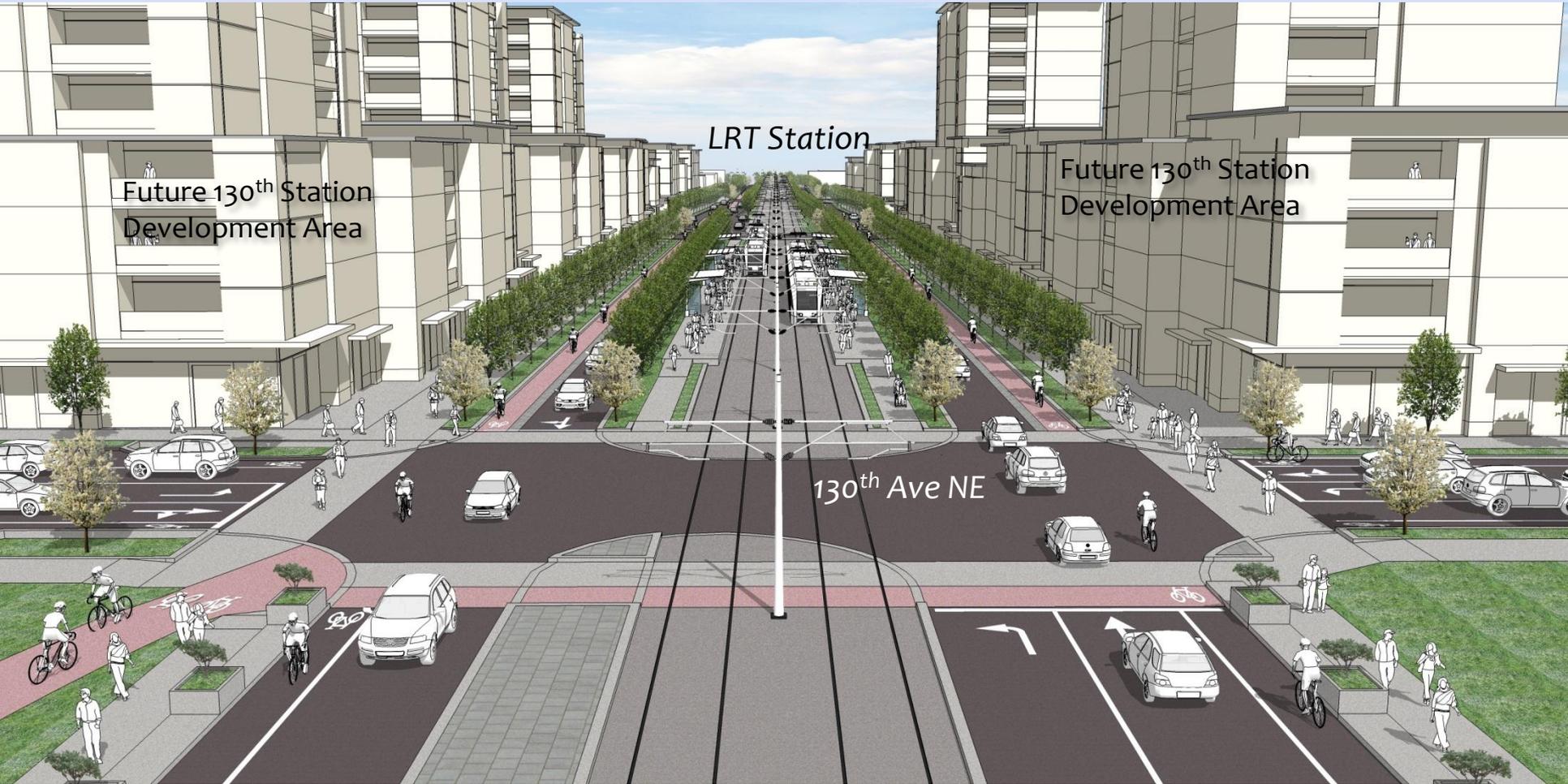
Zone 4 – 130th Ave NE to 136th PI NE

(130th Ave NE Intersection)



Zone 4 – 130th Ave NE to 136th PI NE

(looking east at 130th Ave NE)



Zone 4 – 130th Ave NE to 136th PI NE

(looking east from 130th Ave NE)



Zone 4 – 130th Ave NE to 136th PI NE

(looking east from 130th Ave NE)



Side-walk	Land-scape	Bike Lane	BUFFER	Roadway ↓	Land-scape	Sound Transit Track ↓ ↑		Land-scape	Roadway ↑	BUFFER	Bike Lane	Land-scape	Side-walk
12'	5.5'	5'	2'	13'	5'	52'		5'	13'	2'	5'	5.5'	12'
137'													

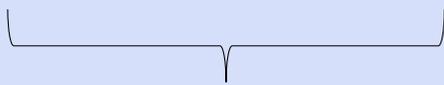
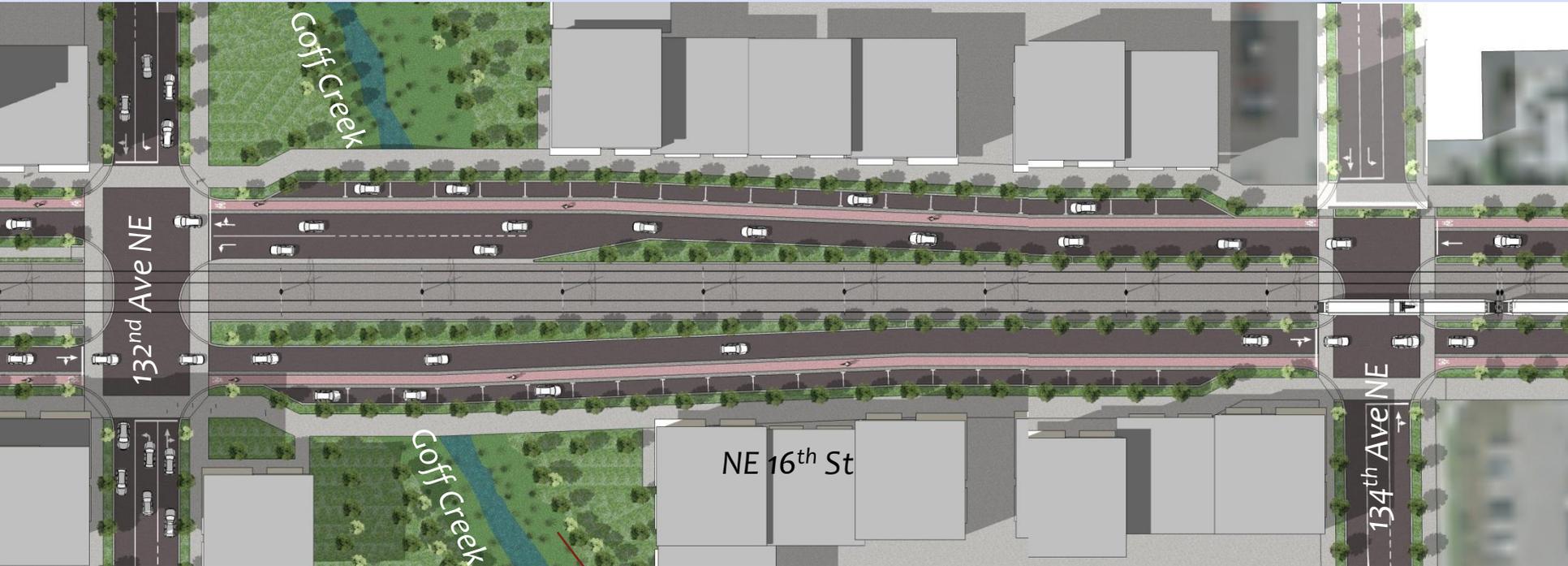
Zone 4 – 130th Ave NE to 136th PI NE

(transition from LRT Station west to on-street parking east)

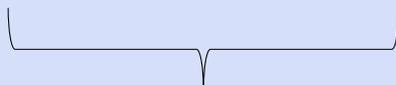


Zone 4 – 130th Ave NE to 136th Pl NE

(132nd Ave NE to 134th Ave NE)
LRT station to west



153'



135'

Conceptual stream
channel day-
lighting/align-
ment
(50' buffers)

137'

115'

Zone 4 – 132nd Ave NE

(looking east with stream channel re-alignment/day-lighting with 50' buffer each side)
(LRT station to west)



Zone 4 – 130th Ave NE to 136th PI NE

(looking east from 132nd Ave NE)



Goff Creek

Zone 4 – 130th Ave NE to 136th PI NE

(looking east from 132nd Ave NE)



Sidewalk	Land-scape	(P)	Bike Lane	B U F F E R	Roadway	Land-scape	Sound Transit Track	Land-scape	Roadway	B U F F E R	Bike Lane	(P)	Land-scape	Sidewalk
12'	5.5'	10'	5'	2'	13'	5'	30'	5'	13'	2'	5'	10'	5.5'	12'
135'														

Zone 4 – 130th Ave NE to 136th PI NE

(transition at 134th Ave NE)



Zone 4 – 130th Ave NE to 136th PI NE

(looking east from 134th Ave NE)



Sidewalk	Land-scape	Bike Lane	B U F F E R	Roadway ↓	Land-scape	Sound Transit Track ↓ ↑	Land-scape	Roadway ↑	B U F F E R	Bike Lane	Land-scape	Sidewalk
12'	5.5'	5'	2'	13'	5'	30'	5'	13'	2'	5'	5.5'	12'
115'												

Zone 4 – Summary:

Recommendation:

137' typical section at LRT station

No on-street parking

Additional landscaping buffer along LRT

153' - 135' typical section 132nd Ave NE to 134th Ave NE

Maximum width at 132nd where parking ends/station area begins

Includes on-street parking both sides

Additional landscaping buffer along LRT

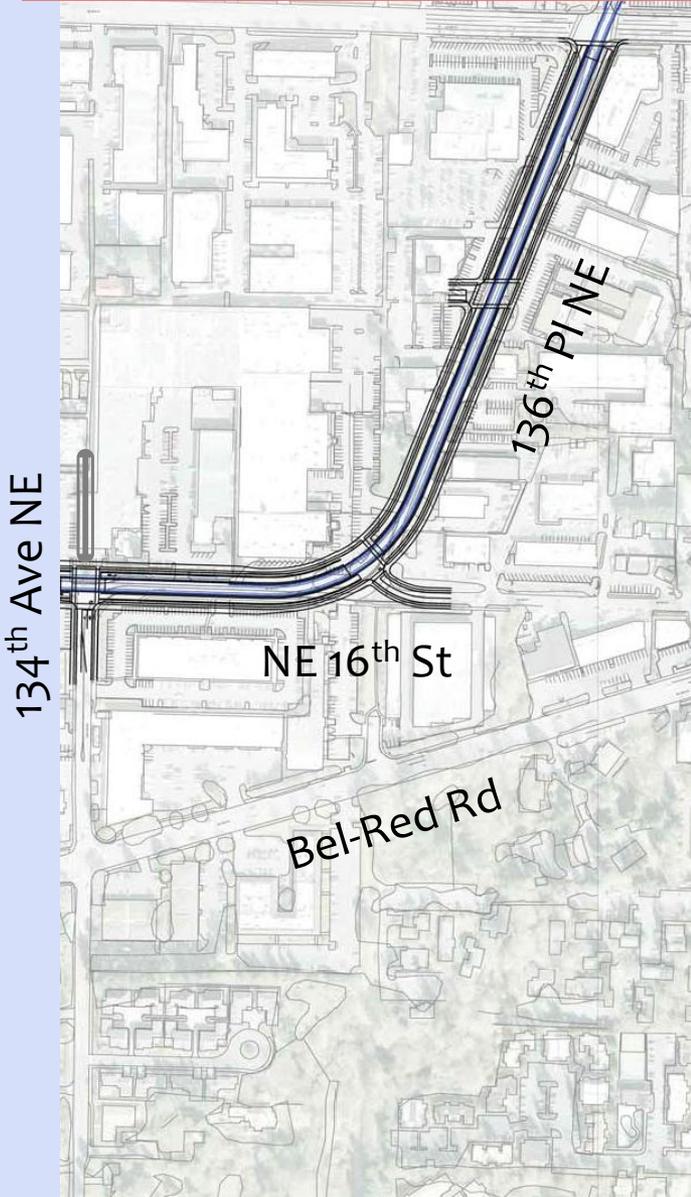
115' typical section 134th Ave NE to 136th PI NE

5' Protected bike lanes with 2' buffer within 20' pavement width

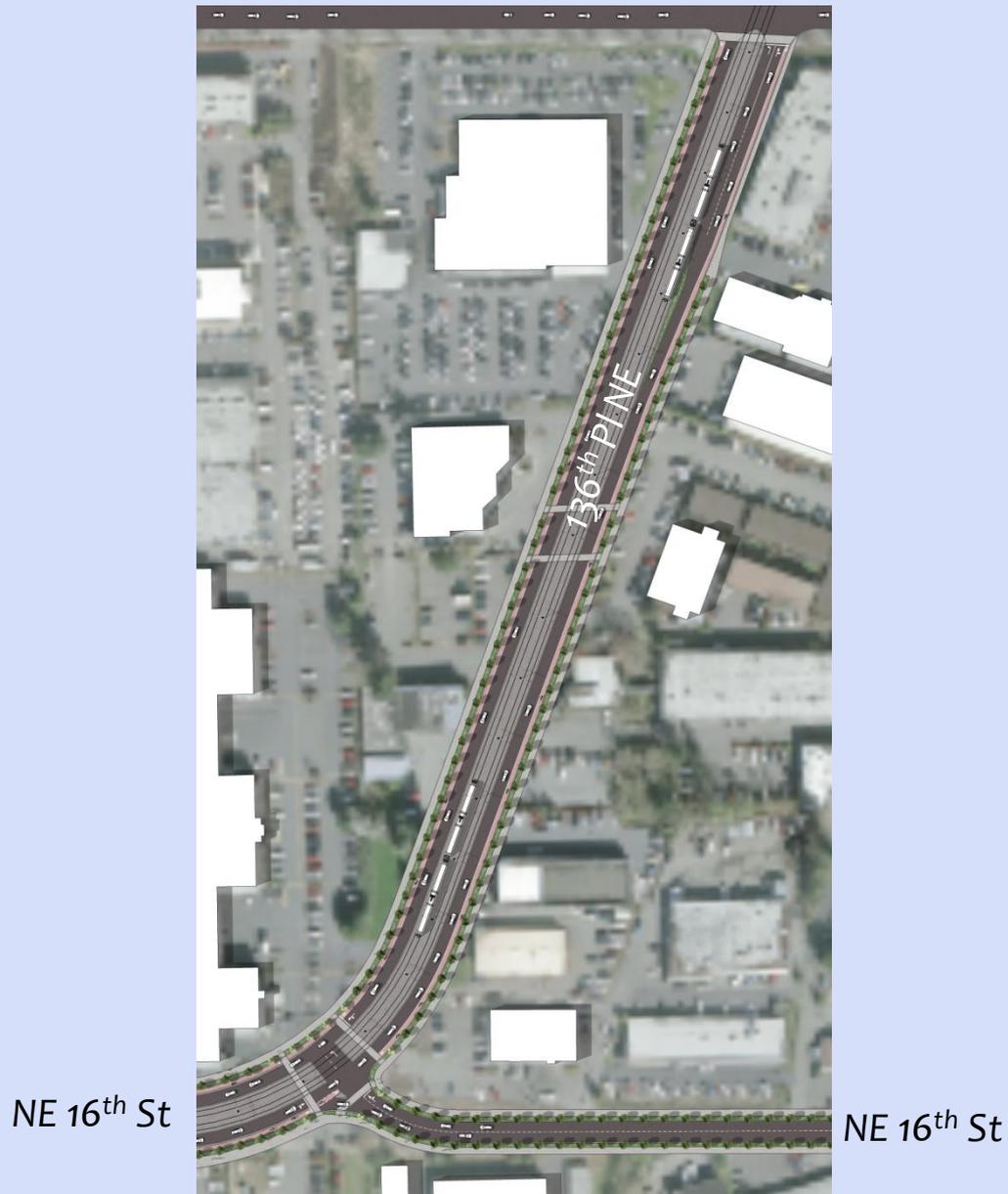
5.5' Landscape strips

12' Sidewalks

Zone 5



Zone 5 – 136th Place NE



Zone 5 – 136th Place NE

(looking east to 136th PI NE)



Zone 5 – 136th Place NE

(at NE 16th St intersection)



End of LRT
landscape
buffer

Zone 5 – 136th Place NE

(looking northeast along 136th PI NE)



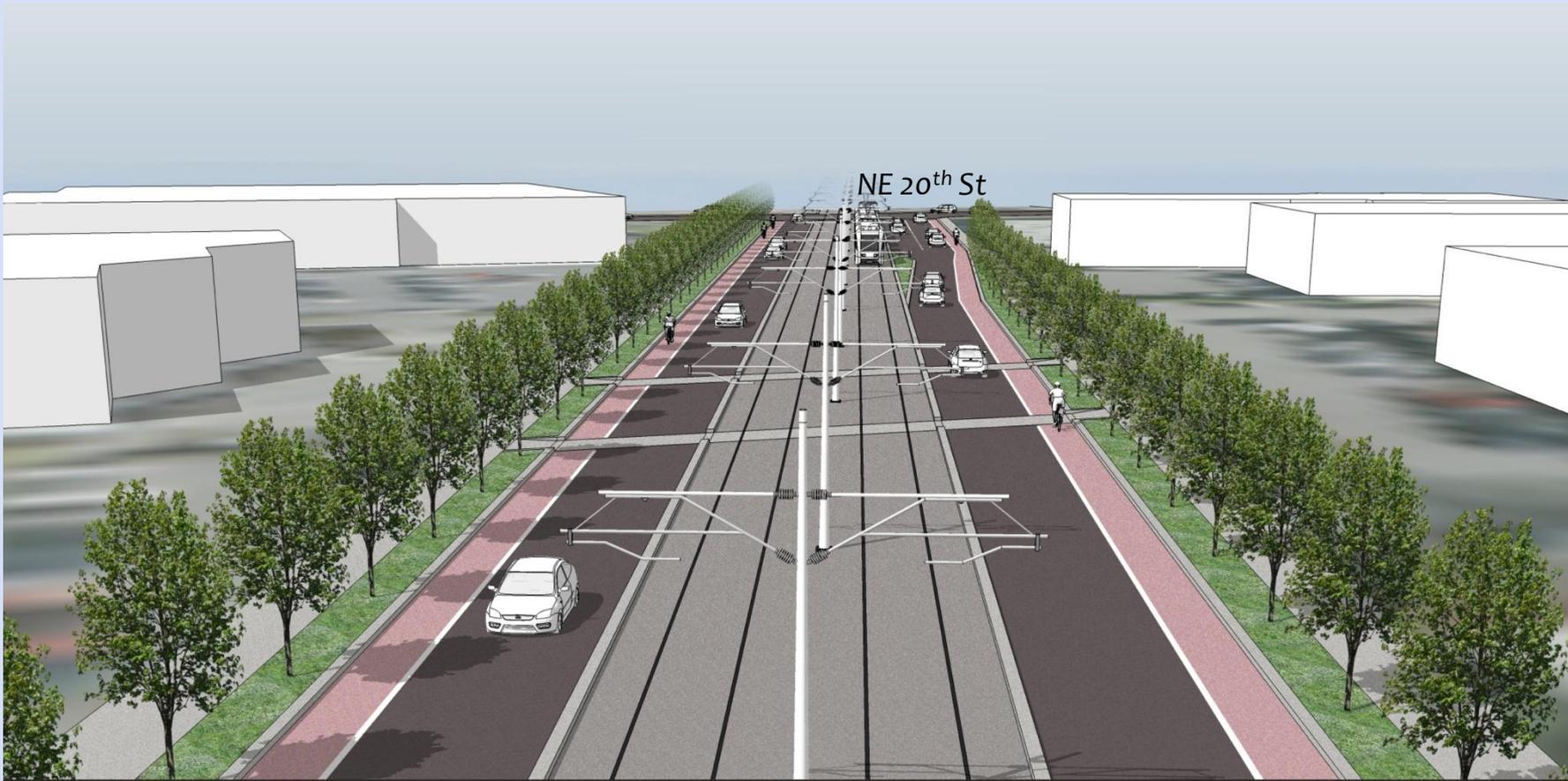
Zone 5 – 136th Place NE

(looking east of 134th Ave NE vicinity)



Zone 5 – 136th Place NE

(looking northeast mid-block to NE 20th St)



Sidewalk	Land- scape	Bike Lane	Roadway ↓	Sound Transit Track ↓ ↑		Roadway ↑	Bike Lane	Land- scape	Sidewalk
8'	5.5'	5'	15'	30'		15'	5'	5.5'	8'
97'									

Zone 5 – Summary:

Recommendation:

97' typical section

No on-street parking

2' paved buffer between LRT and adjacent travel lane

5' bike lanes within 20' pavement width

5.5' Landscape strips - Reduced Landscape strips where needed to avoid conflicts

8' Sidewalks

Conceptual Plan cost estimates (2009\$):

(in millions)

Segment 1 (116th Ave NE – 124th Ave NE)

	<u>Zone 1</u>	<u>Zone 2</u>	<u>Total</u>
Design	\$ 5.0	\$ 2.0	\$ 7.0
Right-of-Way	\$34.1	\$ 6.7	\$40.8
Construction	\$19.3	\$ 6.9	\$26.2
Sub-Total	\$58.4	\$15.6	\$74.0

Segment 2 (124th Ave NE – NE 20th St)

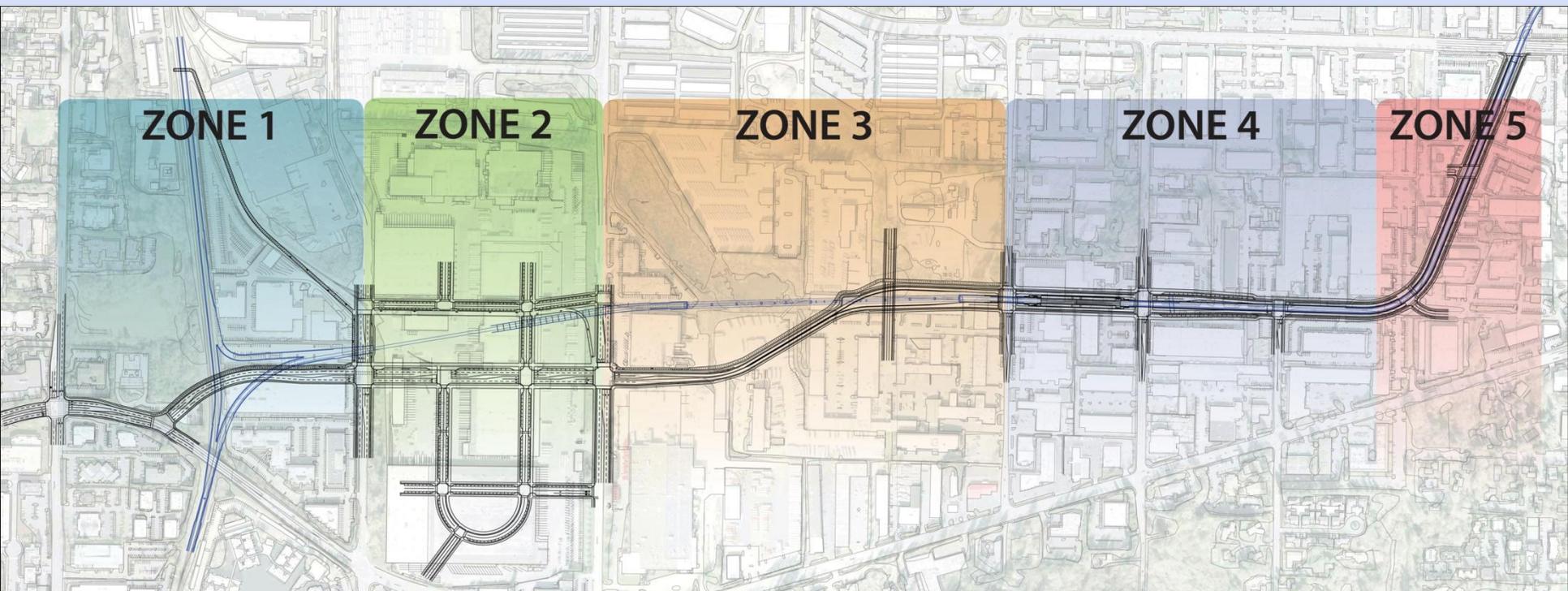
	<u>Zone 3</u>	<u>Zone 4</u>	<u>Zone 5</u>	<u>Total</u>
Design	\$ 6.3	\$ 3.7	\$ 2.1	\$ 12.1
Right-of-Way	\$10.2	\$28.1	\$ 5.2	\$43.5
Construction	\$25.0	\$ 12.5	\$ 6.8	\$44.3
Sub-Total	\$41.5	\$44.3	\$14.1	\$99.9

Total \$173.9

Estimates exclude water and wastewater utilities

Zone 4 & 5 Construction estimate includes embedded track flat work

Discussion



Next Steps:

- Advance design engineering of NE 15th St (segment 1):
 - Zone 1 15%
 - Zone 2 60% - supplement to consultant agreement
 - Develop computer model of the corridor
 - Refine cost estimates
- Coordinate design with 120th Ave NE and 124th Ave NE projects and station area planning work
- Advance developing stormwater management system
 - Sound Transit, Private Development, and City projects in Bel-Red Area
- Complete constructability analysis of critical roadway & LRT crossings
- Coordinate development of Spring District Master Plan
- Council to review priorities and timing of Mobility and Infrastructure Initiative projects
- Council to address changes to Comprehensive Plan and Land Use Code as necessary