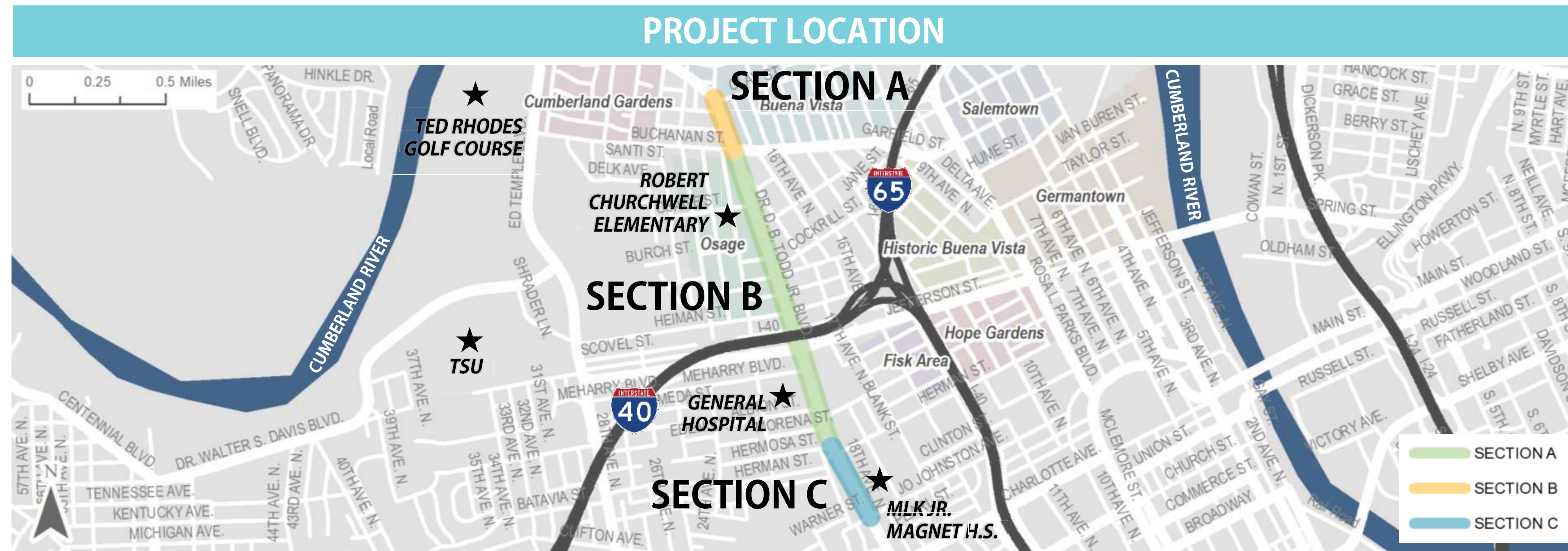




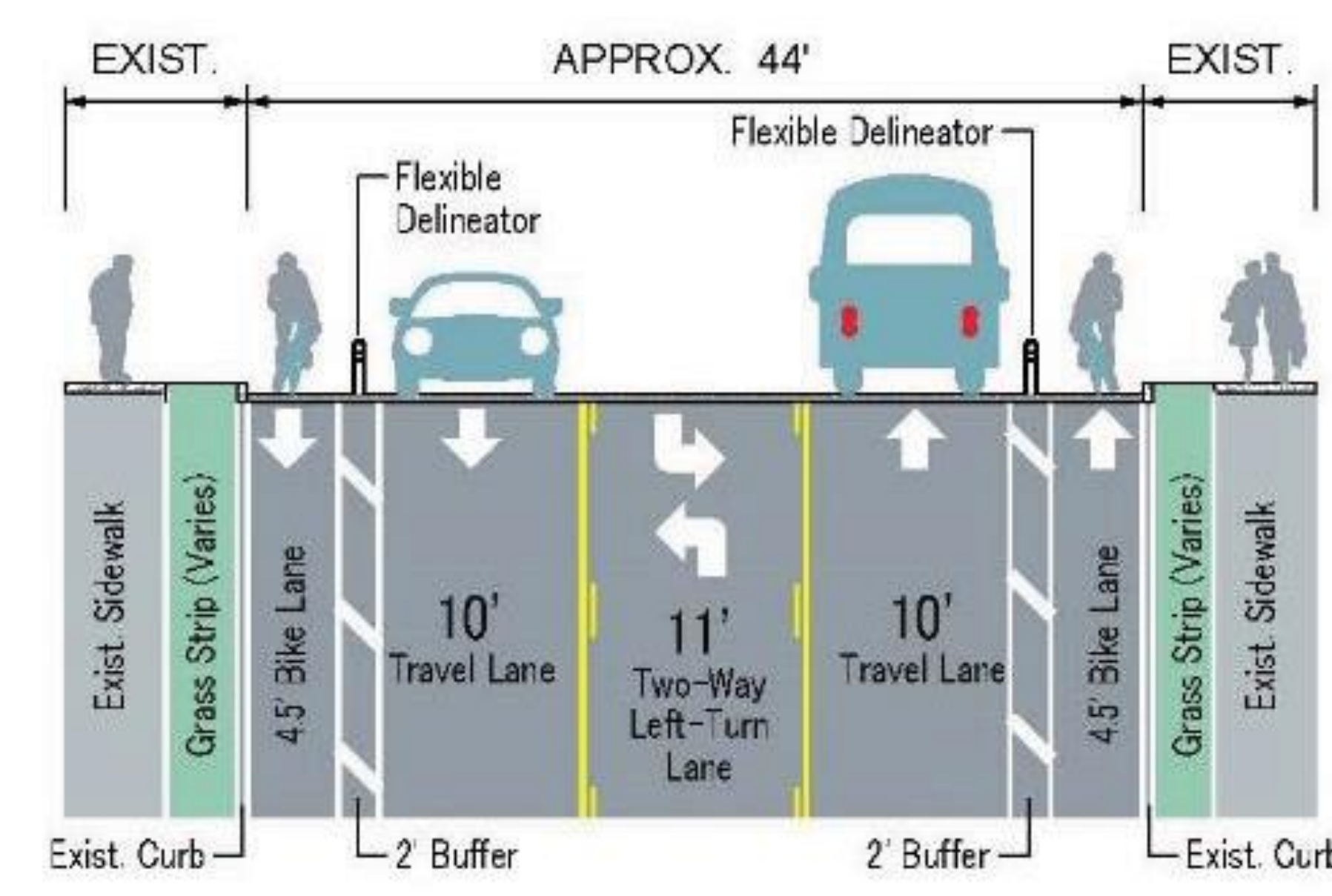
DR. D.B. TODD JR. BLVD. PROJECT INFORMATION SHEET



SEGMENT CROSS-SECTIONS

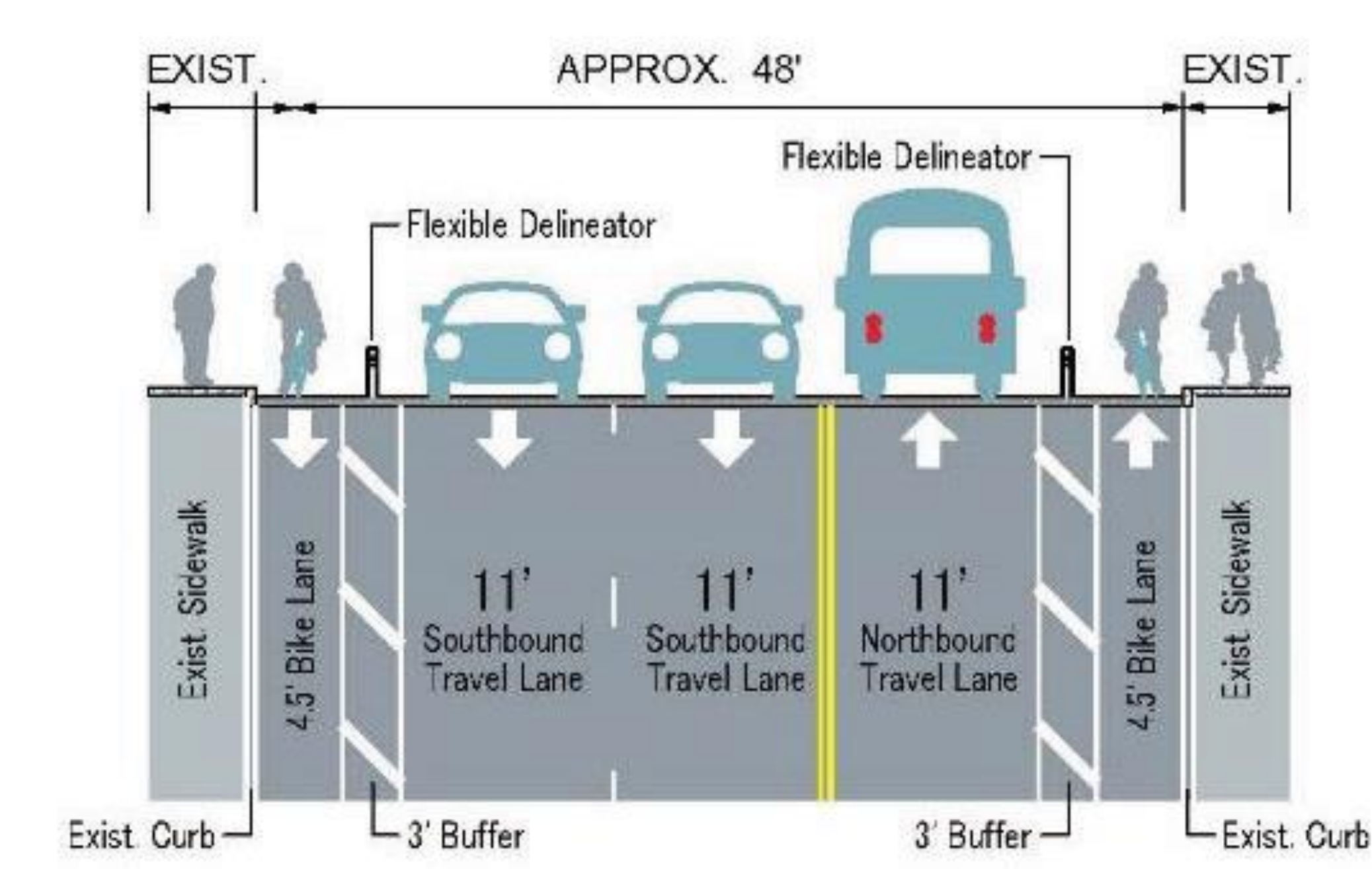
SECTION A: CLAY ST TO BUCHANAN ST

PROPOSED FACILITIES:



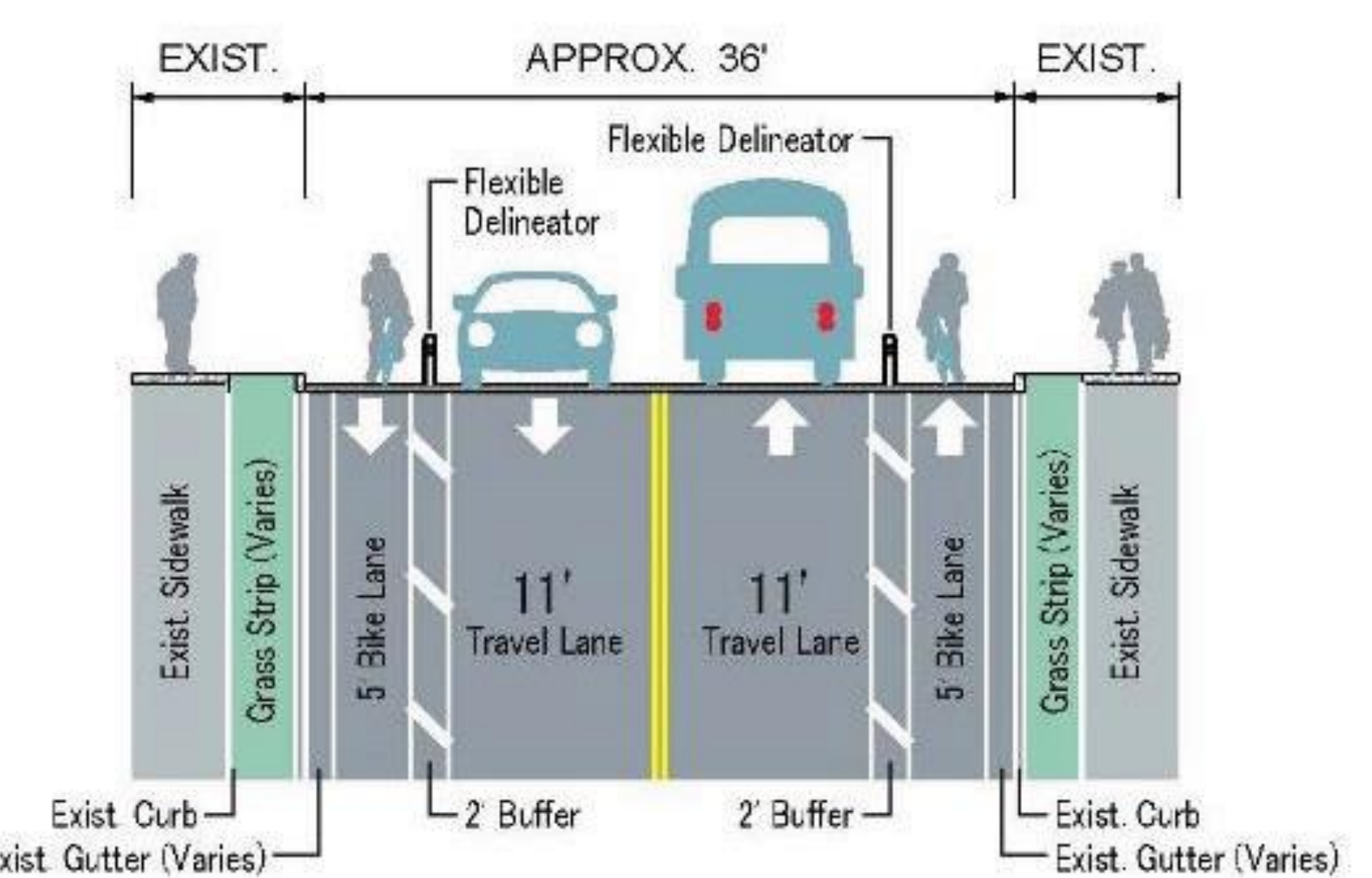
SECTION C: HERMOSA ST TO JO JOHNSTON ST

PROPOSED FACILITIES:



SECTION B: BUCHANAN ST TO HERMOSA ST

PROPOSED FACILITIES:



What we heard last time:

Priorities on the street

- 1 Make it easier, safer, more comfortable for pedestrians and bicyclists to cross
- 2 Create more space (including buffers from traffic) for pedestrians and bicyclists
- 2 Find opportunities for art and other creative placemaking/neighborhood branding
- 4 Slow Down Cars
- 5 Find opportunities for trees and other green/storm water features
- 6 Move lots of cars through quickly
- 7 Create more parking

Comments

- It's difficult to cross Jefferson on DB Todd on foot

TIMELINE: Construction Goal – Fall 2018

COST ESTIMATE: \$293,000

NEAR-TERM

Intersection Crossings

DESCRIPTION: Many applications can be implemented to improve safety for pedestrians and bicyclists crossing major or minor street intersections.

INTERSECTION CROSSING IMPROVEMENTS - SIGNALIZED



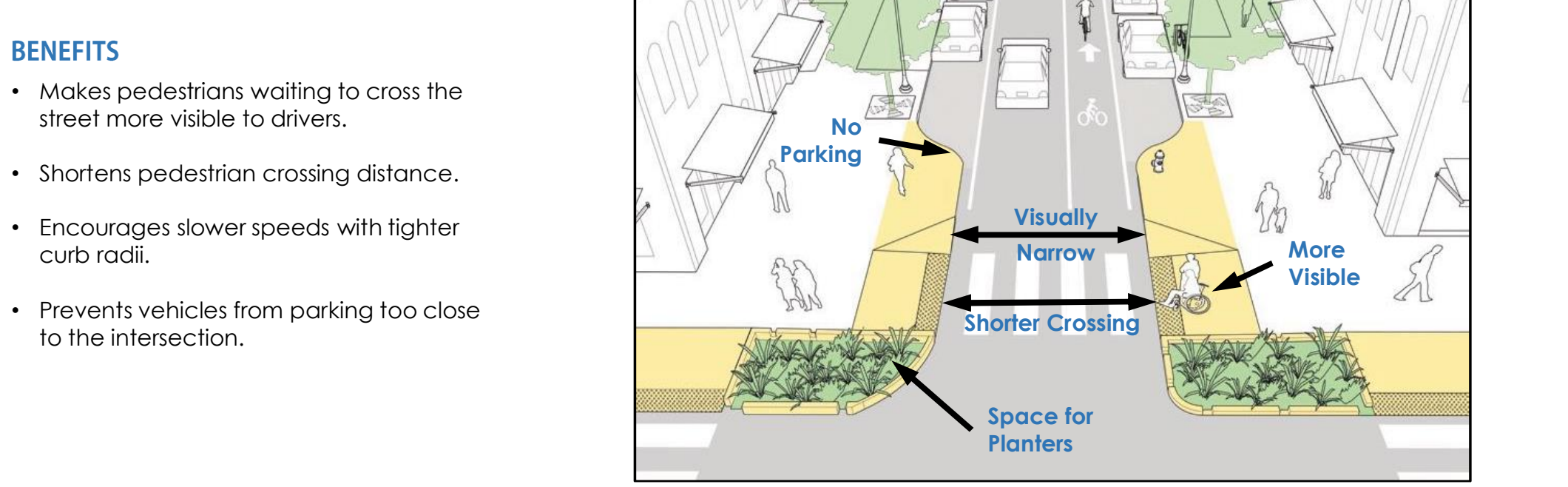
INTERSECTION CROSSING IMPROVEMENTS - UNSIGNALIZED



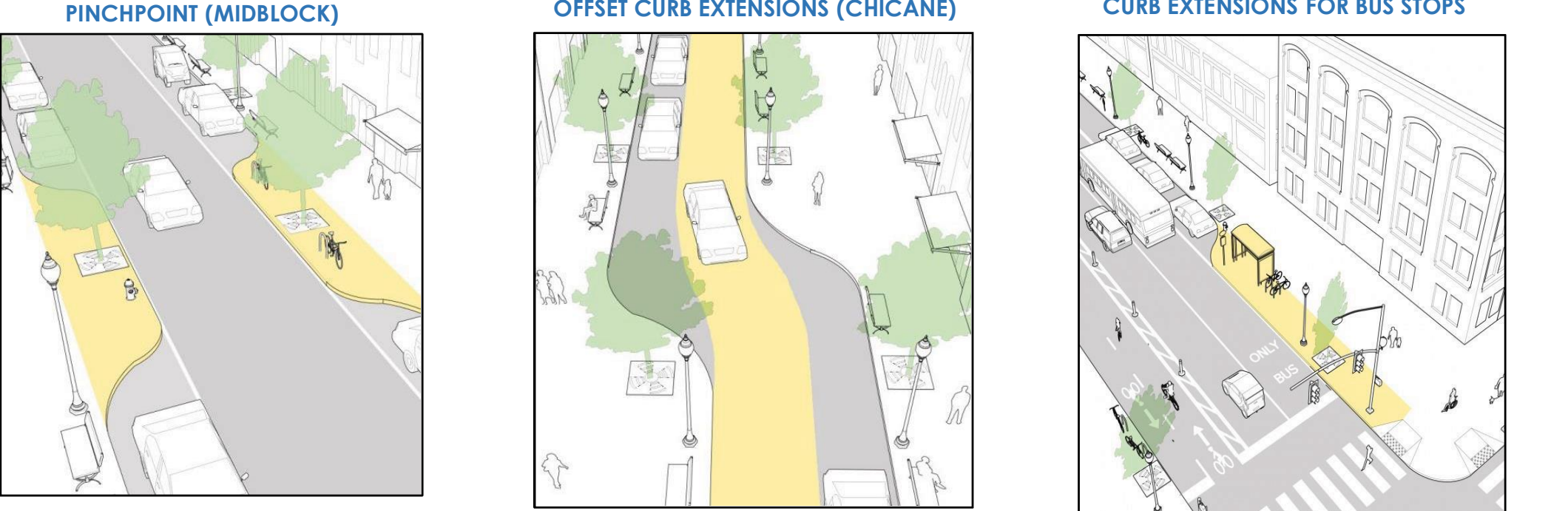
Curb Extensions (Bulb-Outs)

DESCRIPTION: Curb extensions (bulb-outs) modify the curb to extend into the existing parking lane to visually and physically narrow the roadway.

DESIGN FEATURES



DIFFERENT STREET DESIGNS - USING CURB EXTENSIONS (BULB-OUTS)



EXAMPLES OF CURB EXTENSIONS (BULB-OUTS)



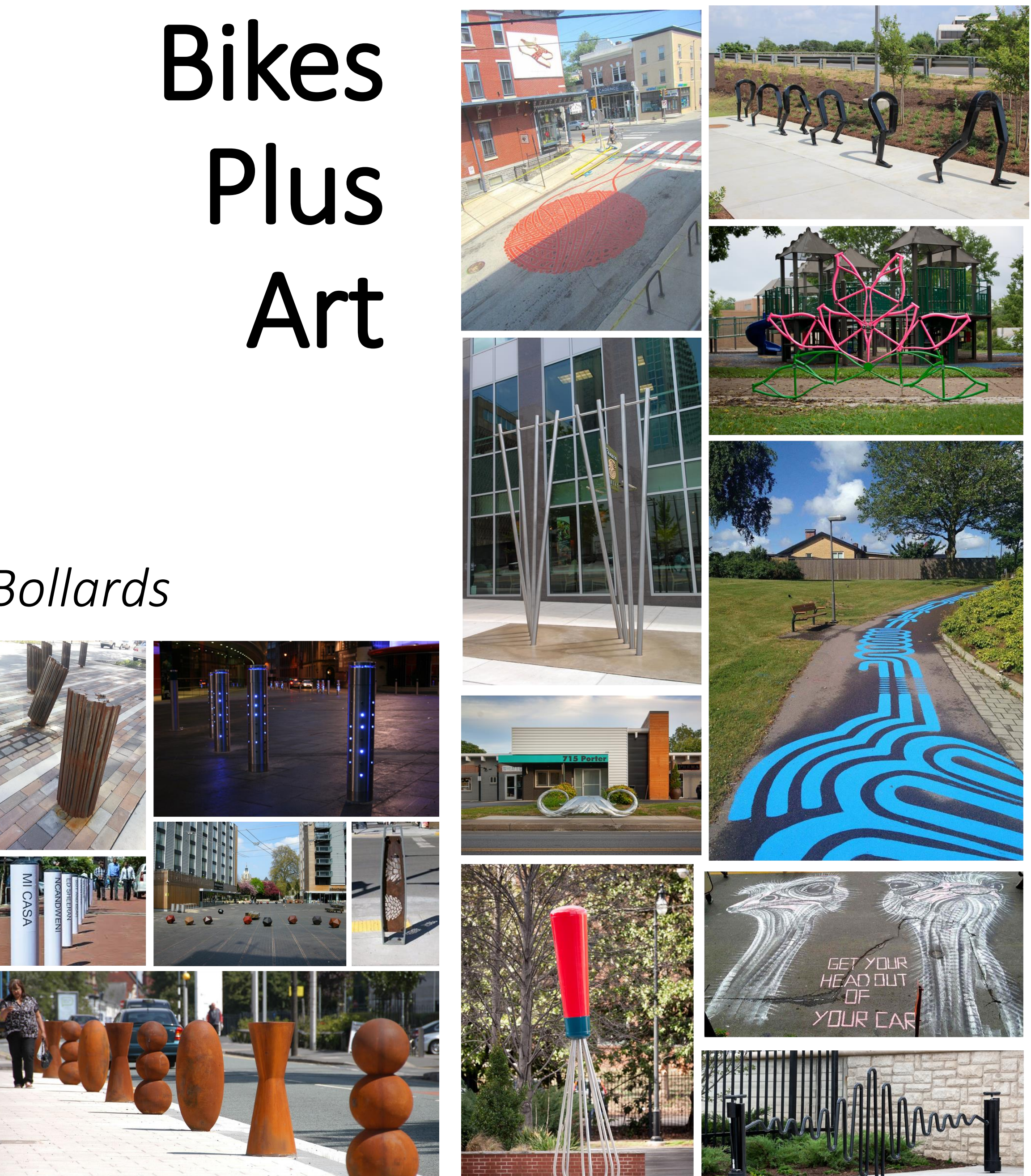
Bikeway Buffer Types

DESCRIPTION: Bikeway buffers increase the attractiveness of bicycling for potential users by increasing the overall safety and comfort of bikeway facilities.

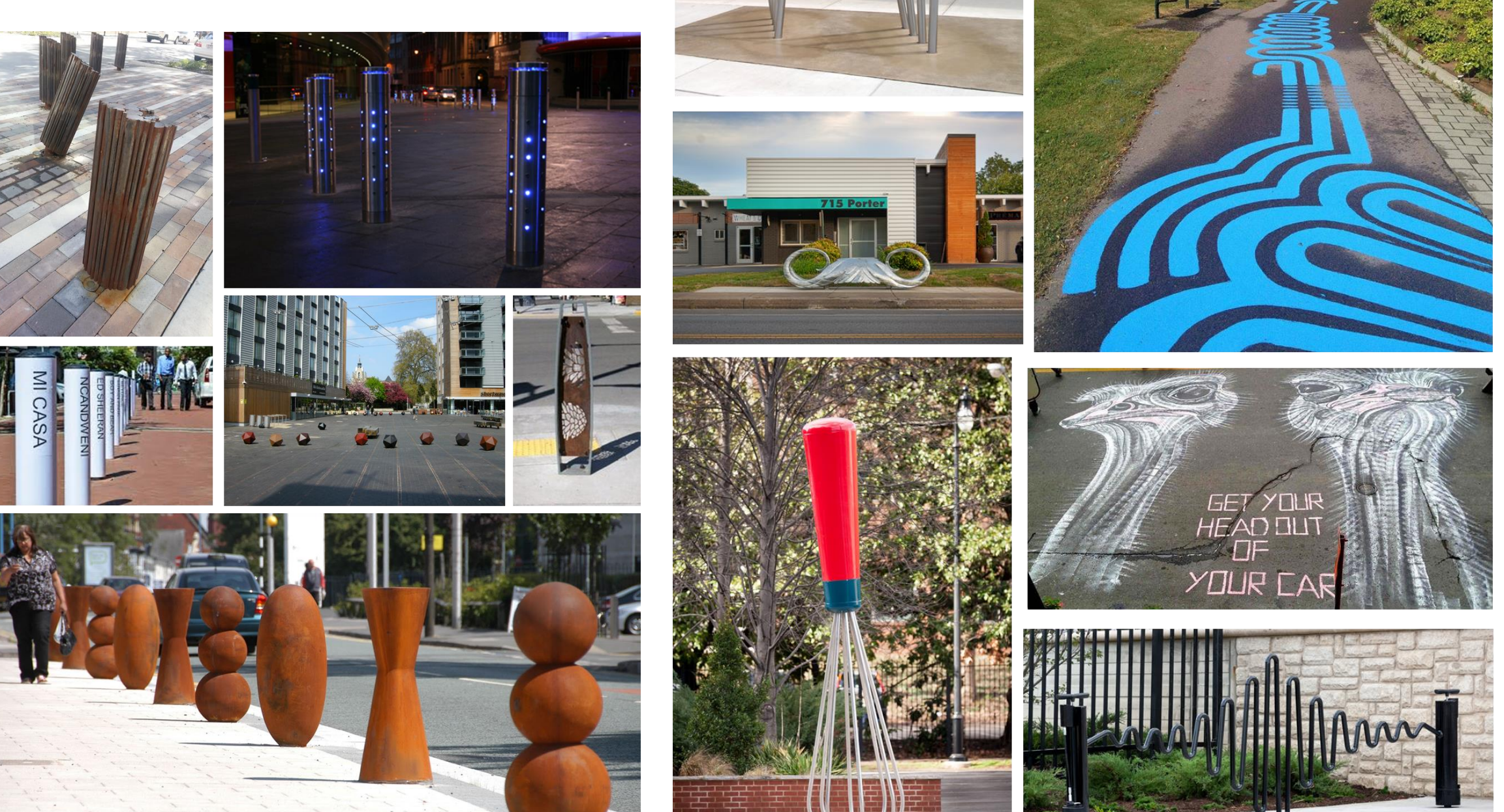
FORMS OF SEPARATION - BUFFER TYPES



Bike Racks + Paint



Bollards



Bikes Plus Art



ARTHUR AVE + MONROE AVE

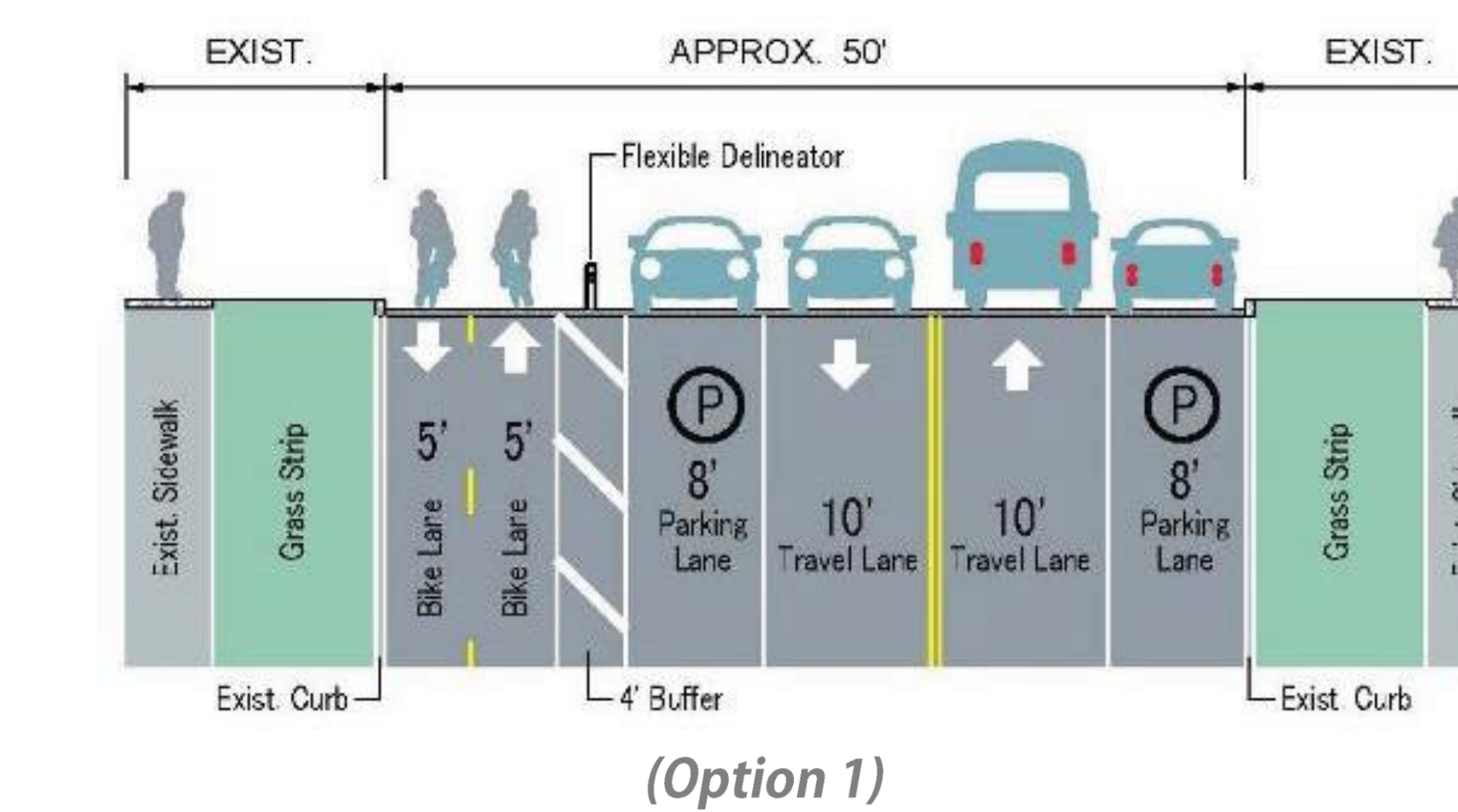
PROJECT INFORMATION SHEET



PROJECT A: ARTHUR STREET

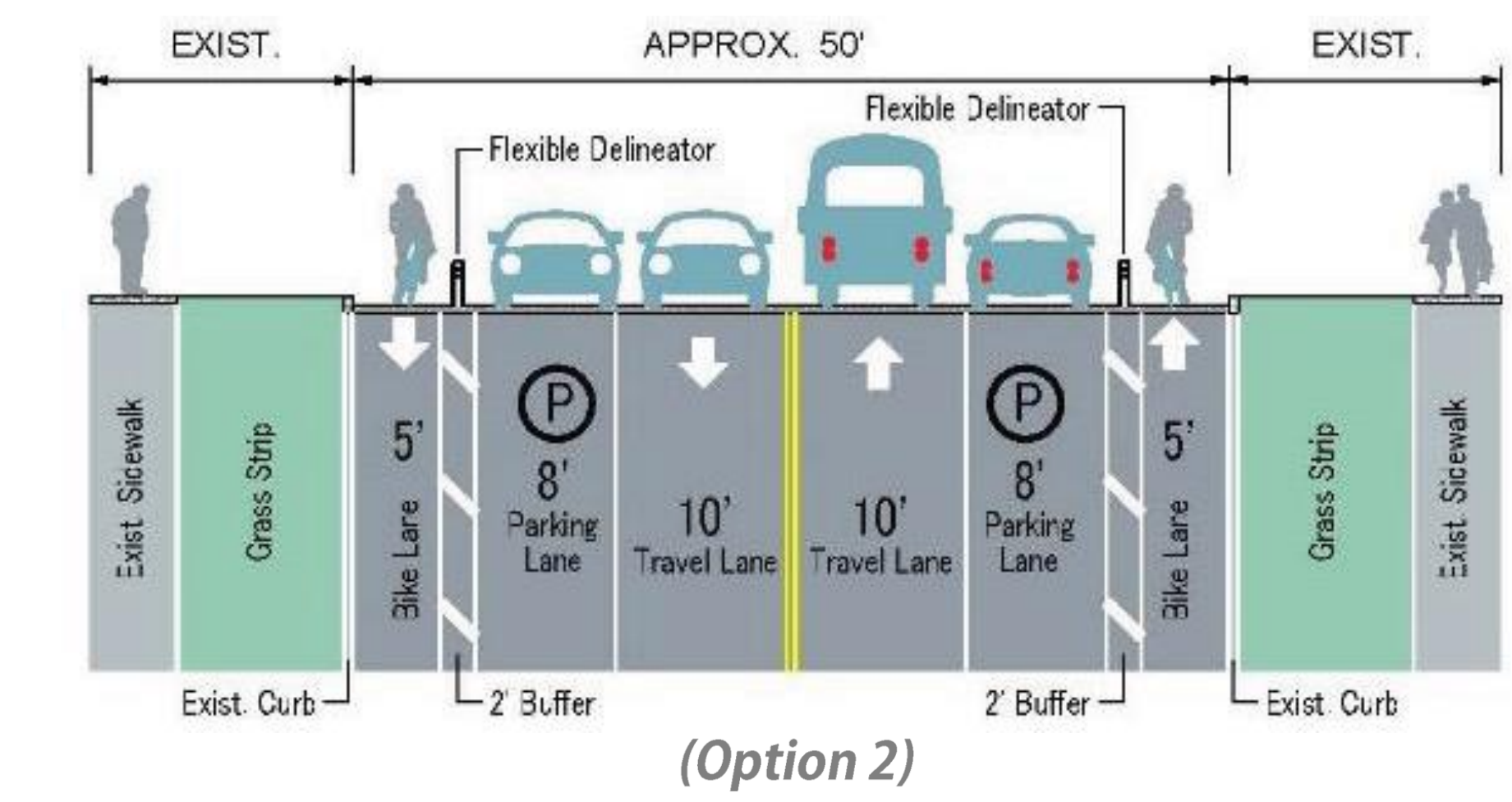
PROPOSED FACILITY:

Buchanan St to Monroe St



TIMELINE:
Construction Goal – Fall 2018

COST ESTIMATE:
\$190,000

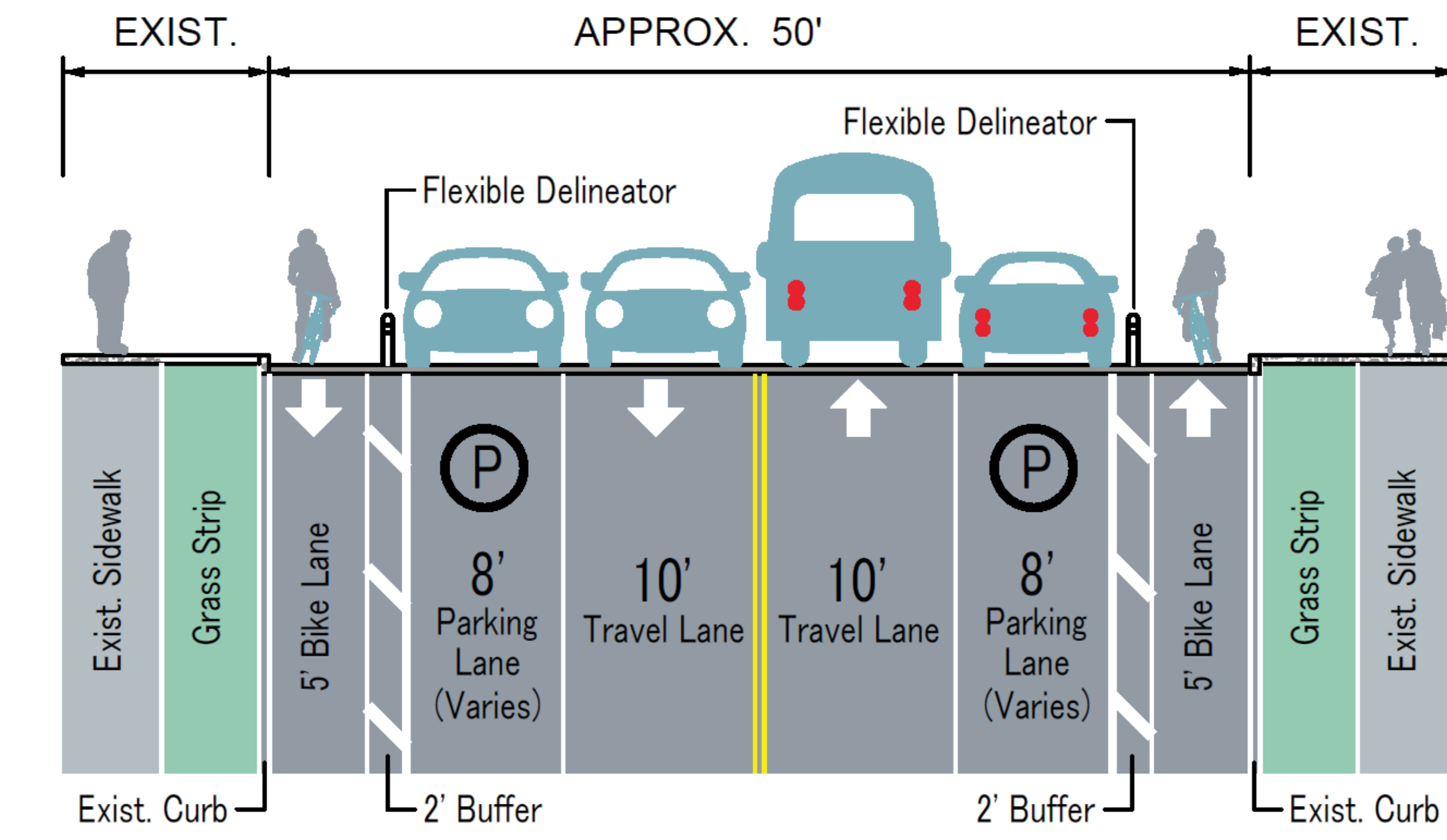


MONROE AVE - SEGMENT CROSS-SECTIONS

PROJECT B: MONROE STREET

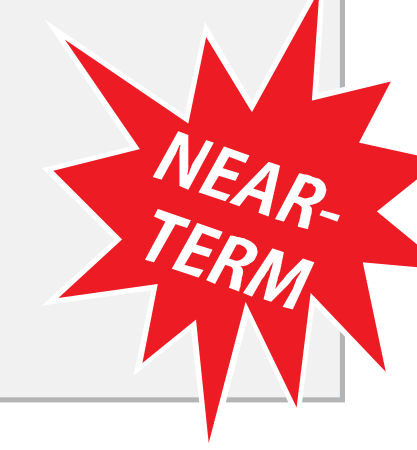
PROPOSED FACILITIES:

Arthur Ave to Rosa L. Parks Blvd



TIMELINE:
Construction Goal – Fall 2018

COST ESTIMATE:
\$238,000



What we heard last time:

Priorities on the street

- | | |
|-------------------|--|
| Arthur Ave | <ol style="list-style-type: none"> Slow Down Cars Make it easier, safer, more comfortable for pedestrians and bicyclists to cross Create more space (including buffers from traffic) for pedestrians and bicyclists Find opportunities for trees and other green/storm water features Create more parking Find opportunities for art and other creative placemaking/neighborhood branding Move lots of cars through quickly |
| Monroe St | <ol style="list-style-type: none"> Make it easier, safer, more comfortable for pedestrians and bicyclists to cross Slow Down Cars Create more space (including buffers from traffic) for pedestrians and bicyclists Find opportunities for trees and other green/storm water features Find opportunities for art and other creative placemaking/neighborhood branding Create more parking Move lots of cars through quickly |

Comments

- A parking protected bike lane for Arthur and Monroe
- Art/Historical Info/Buffer
- Bad drainage on Arthur; not safe to park in alleys, want more trees; the bridge under Arthur fills with water and has swept cars away

Intersection Crossings

DESCRIPTION: Many applications can be implemented to improve safety for pedestrians and bicyclists crossing major or minor street intersections.

INTERSECTION CROSSING IMPROVEMENTS - SIGNALIZED



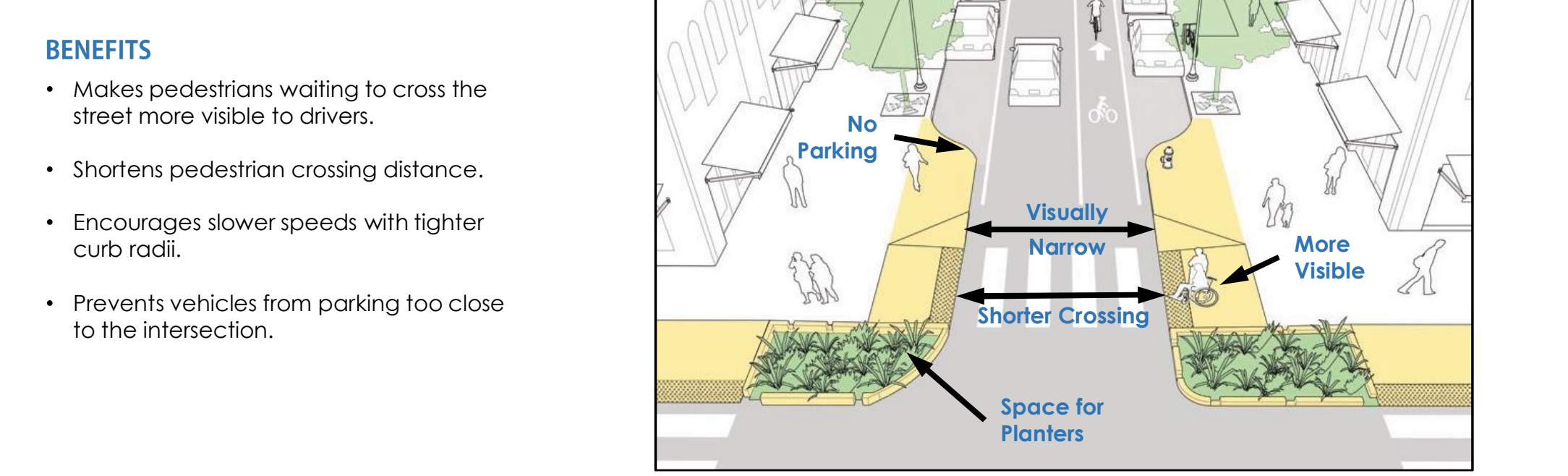
INTERSECTION CROSSING IMPROVEMENTS - UNSIGNALIZED



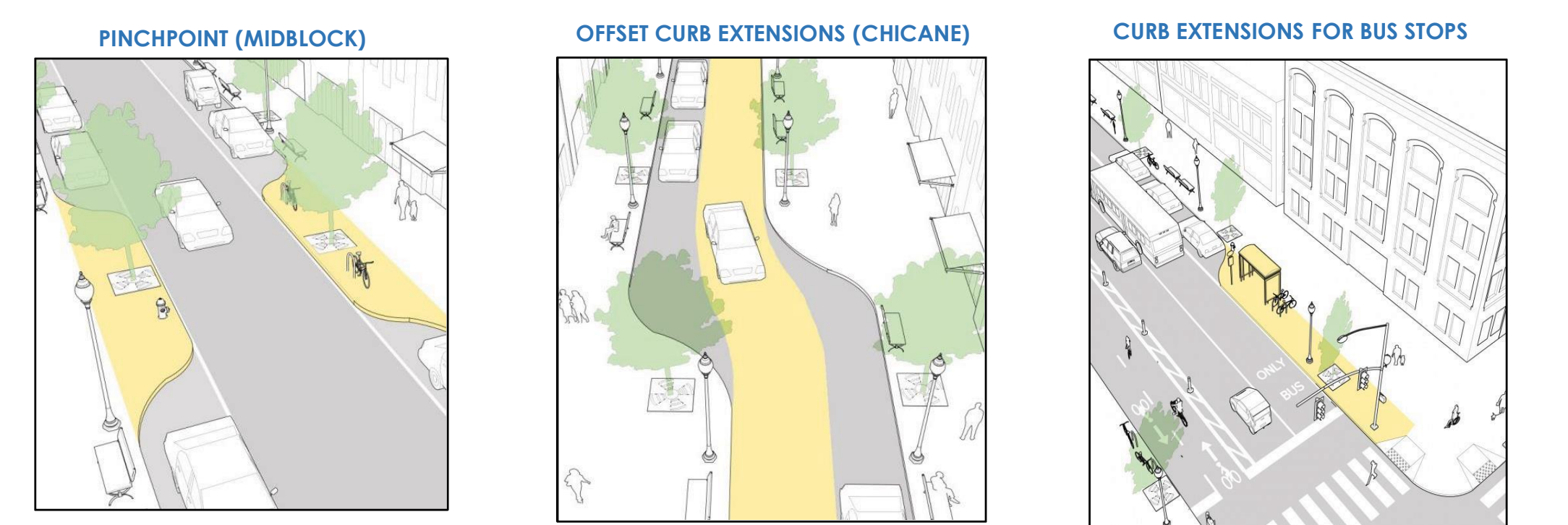
Curb Extensions (Bulb-Outs)

DESCRIPTION: Curb extensions (bulb-outs) modify the curb to extend into the existing parking lane to visually and physically narrow the roadway.

DESIGN FEATURES



DIFFERENT STREET DESIGNS - USING CURB EXTENSIONS (BULB-OUTS)



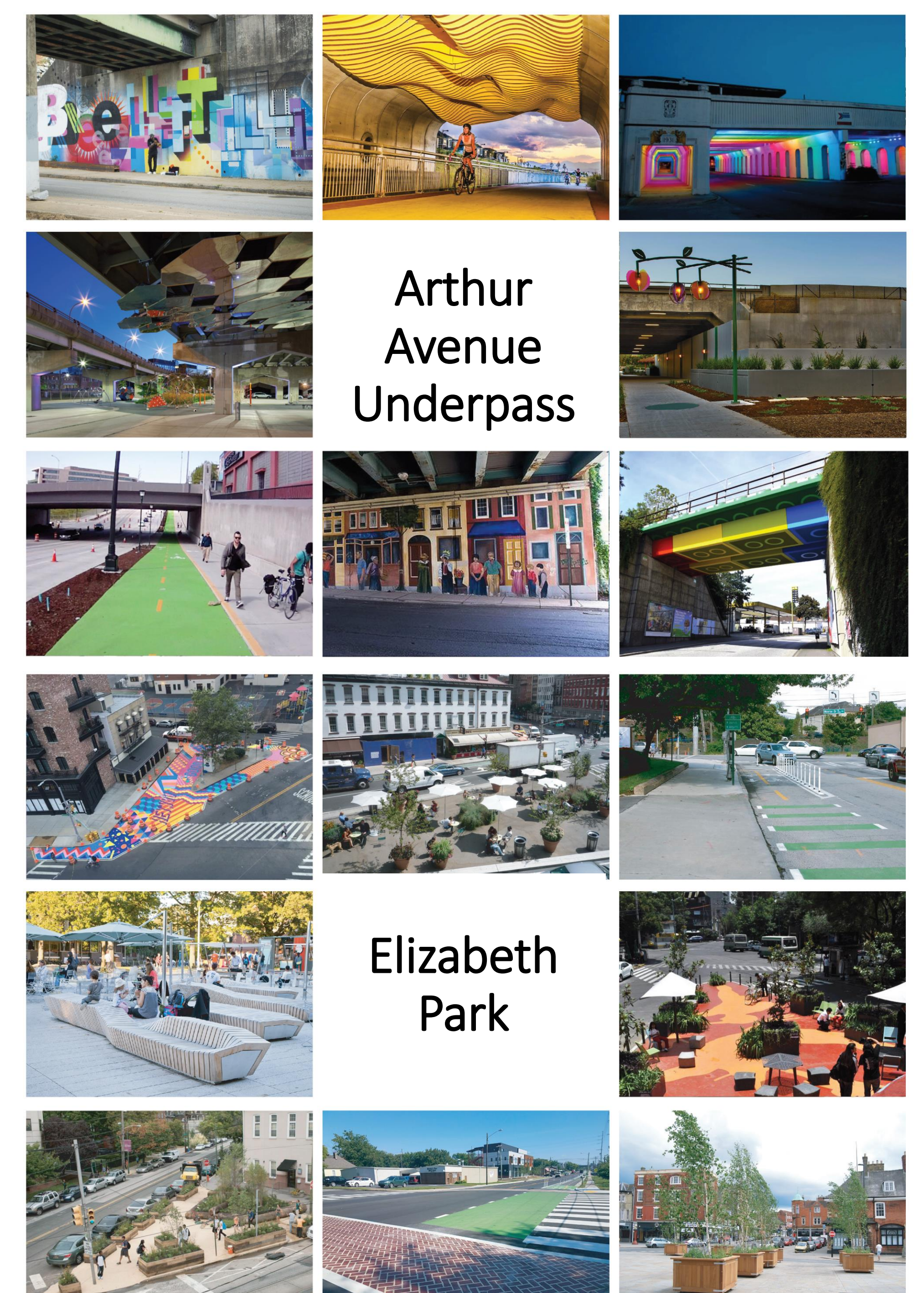
EXAMPLES OF CURB EXTENSIONS (BULB-OUTS)



Bikeway Buffer Types

DESCRIPTION: Bikeway buffers increase the attractiveness of bicycling for potential users by increasing the overall safety and comfort of bikeway facilities.

FORMS OF SEPARATION - BUFFER TYPES





BUCHANAN ST - SEGMENT CROSS-SECTIONS

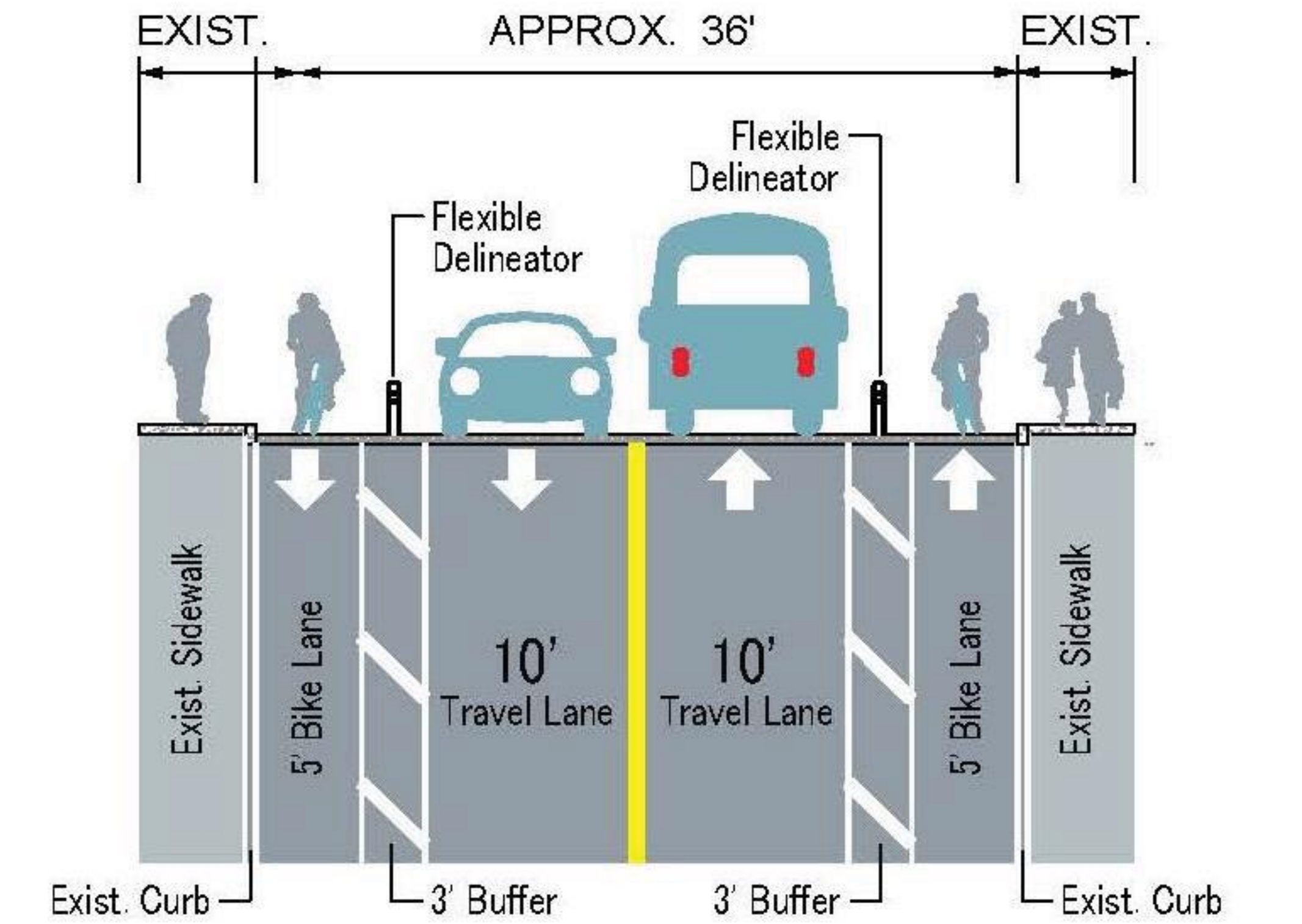
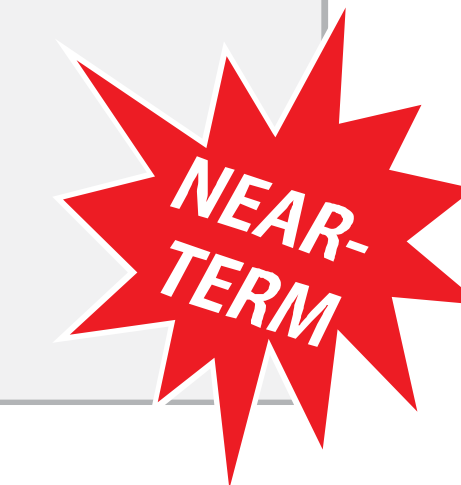
PROJECT A: BUCHANAN STREET

PROPOSED FACILITY:

Dr. D.B. Todd Jr. Blvd to 9th Ave N

TIMELINE:
Construction Goal – Fall 2018

COST ESTIMATE:
\$163,000

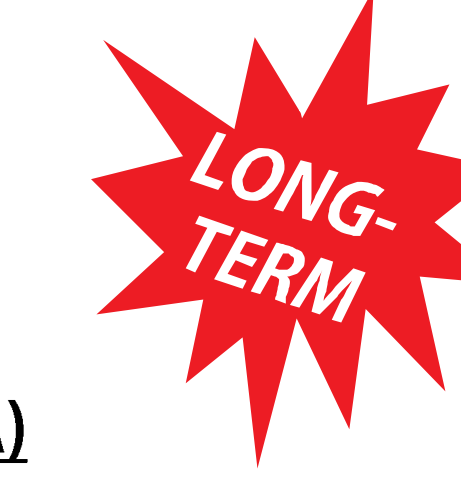


GARFIELD ST - SEGMENT CROSS-SECTIONS

PROJECT B: GARFIELD STREET

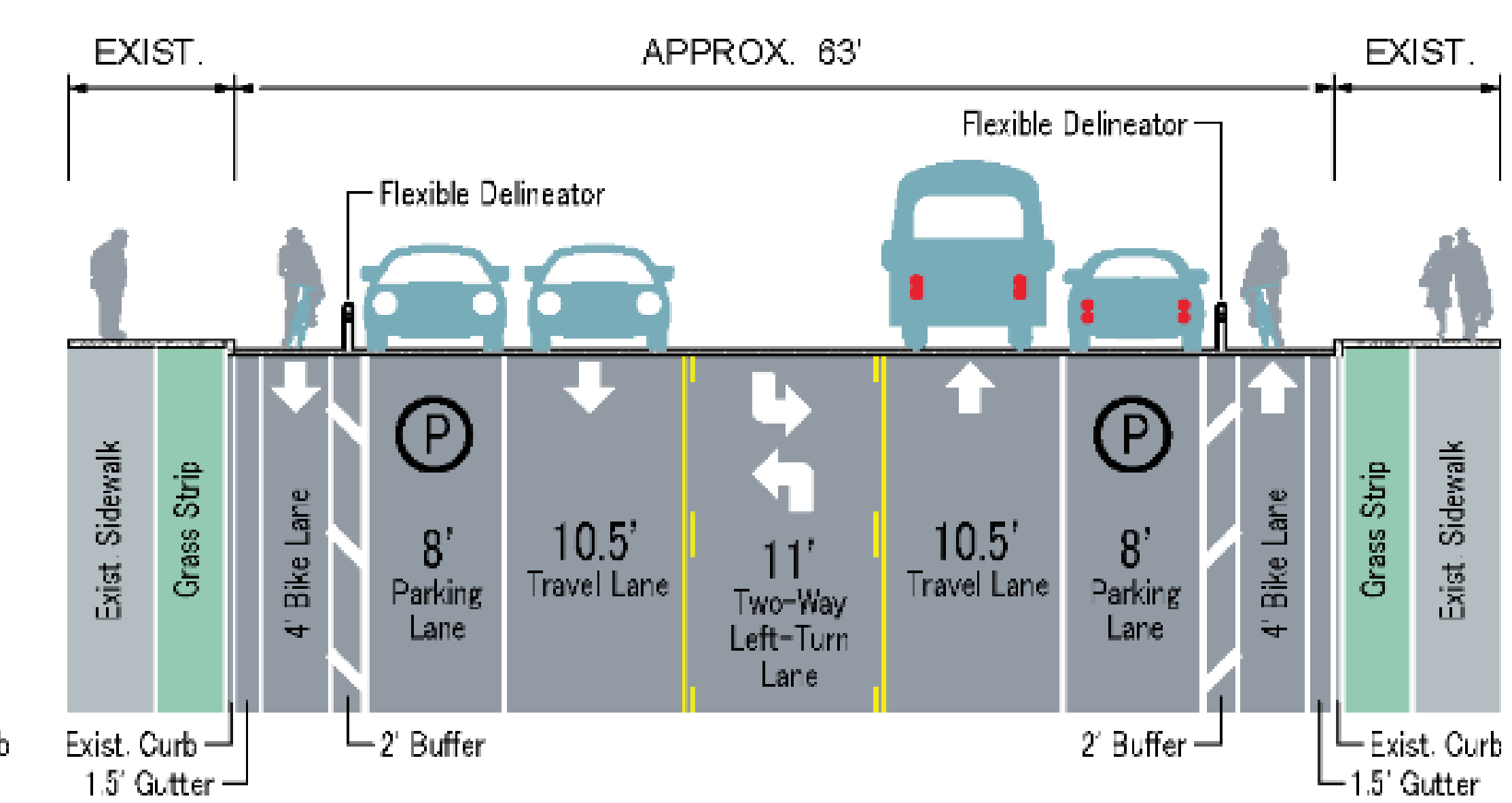
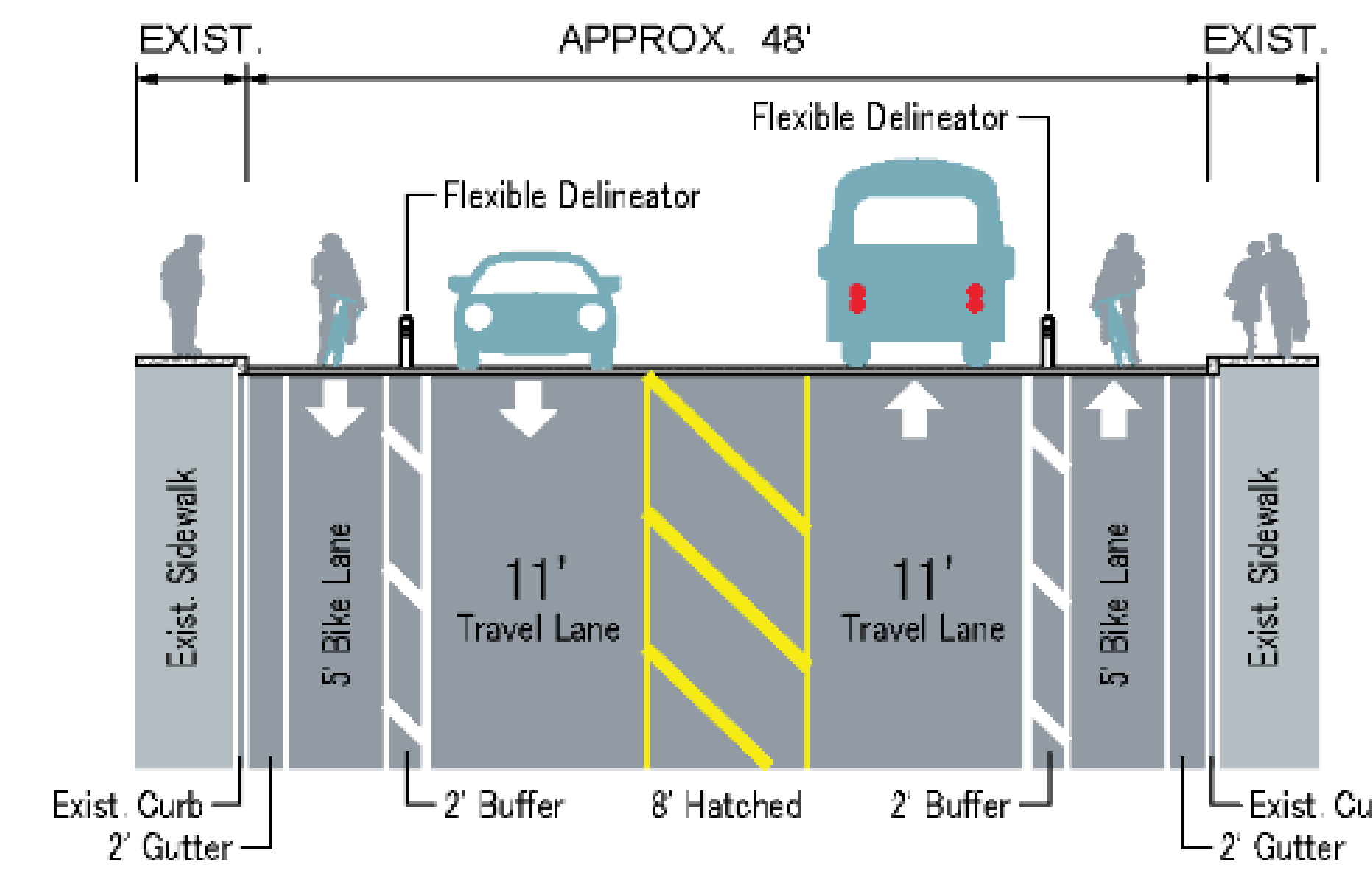
PROPOSED FACILITIES:

9th Ave N to Delta Ave (Section A)



TIMELINE: Desired Connection Only
COST ESTIMATE: Funding to be Determined at a Later Date

Delta Ave to Rosa L. Parks Blvd (Section B)



What we heard last time:

Priorities on the street

Comments

- 1 Make it easier, safer, more comfortable for pedestrians and bicyclists to cross
 - 2 Create more space (including buffers from traffic) for pedestrians and bicyclists
 - 2 Slow Down Cars
 - 4 Find opportunities for trees and other green/storm water features
 - 4 Find opportunities for art and other creative placemaking/neighborhood branding
 - 6 Create more parking
 - 7 Move lots of cars through quickly
- Slow down Arthur between Monroe and Buchanan
 - Plants, trees, and art for major protected bikeway
 - Traffic circle? The five point intersection (Garfield and Delta) has lots of pedestrian traffic and is extremely dangerous for everyone. Middle lane causes near head-on collisions of speeding cars
 - Sidewalks should be a priority
 - Wheelchairs need to be protected; I've seen people get hit with wheelchairs. Need crosswalks at 25th/26th and Clarksville Highway for grocery store
 - W have had a pedestrian fatality in the area and almost no infrastructure changes
 - 9th by Cheatham Place, back corner of Elizabeth Park, nowhere to ride, no stop signs, both sides on 11th on Arthur on either side of Elizabeth Husky; issues with poles and screws sticking up out of sidewalks near Padica School
 - I live and walk in the area; my concern is that drivers go too fast and don't pay attention—need crosswalks; also need crosswalk in front of Slim and Husky; issues with poles and screws sticking up out of sidewalks near Padica School
 - Crossing the highway overpass is very scary! Please put a fence up!
 - A farmers market or community store would be amazing
 - Moving cars through quickly will be necessary as neighborhood traffic builds; a lot of these goals could end up coming together as a package

Intersection Crossings

FOR INFORMATION ONLY
Many applications can be implemented to improve safety for pedestrians and bicyclists crossing major or minor street intersections.

INTERSECTION CROSSING IMPROVEMENTS - SIGNALIZED

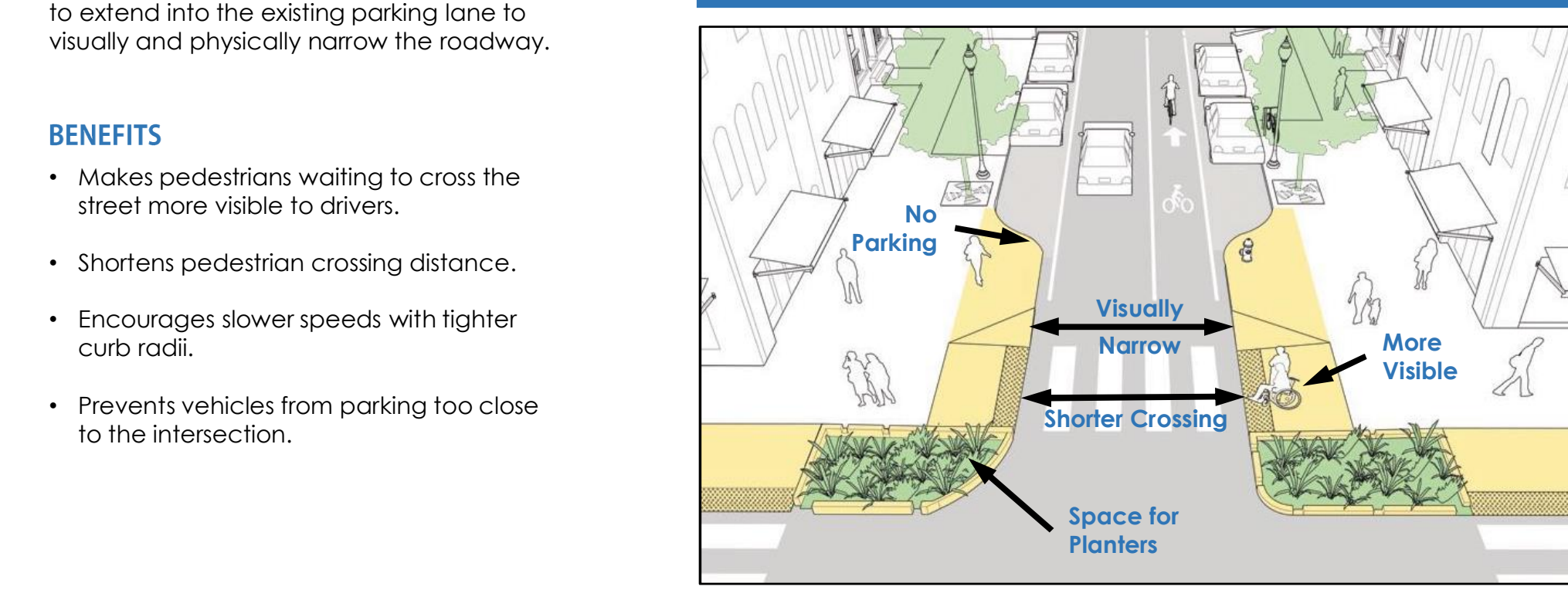


INTERSECTION CROSSING IMPROVEMENTS - UNSIGNALIZED

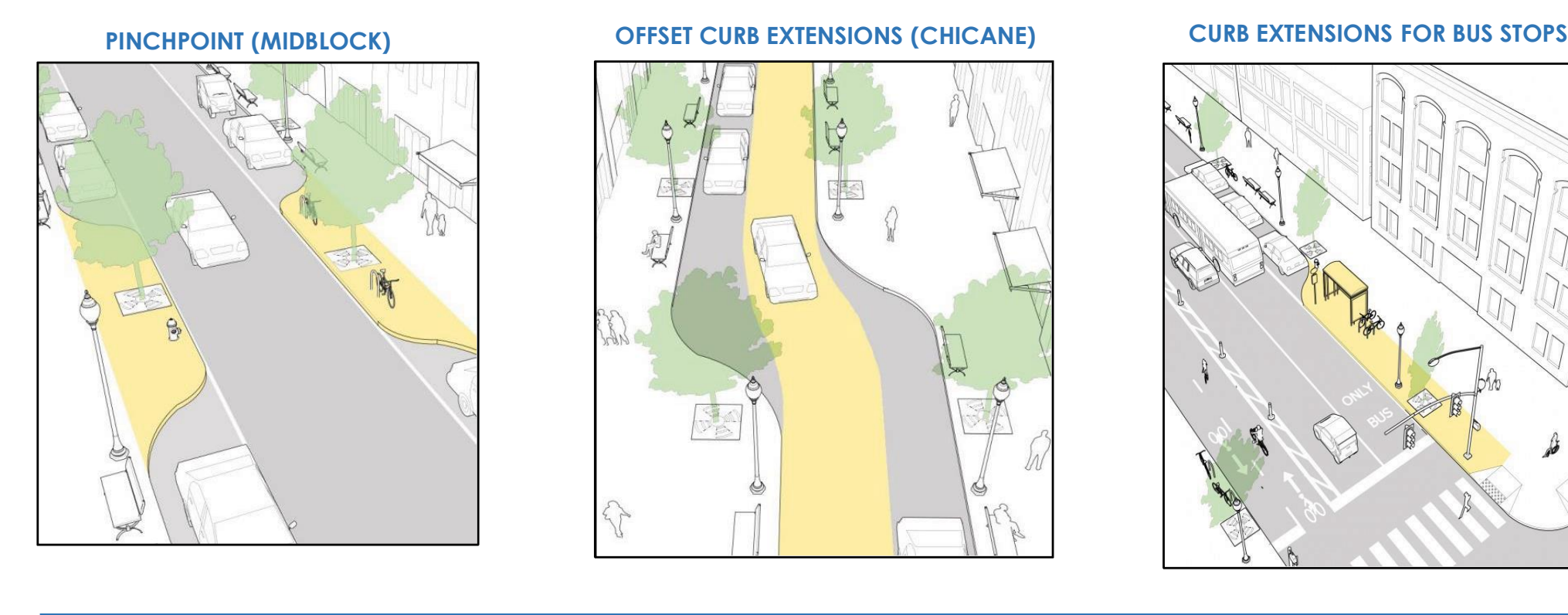


Curb Extensions (Bulb-Outs)

FOR INFORMATION ONLY
Curb extensions (bulb-outs) modify the curb to extend into the existing parking lane to visually and physically narrow the roadway.



DIFFERENT STREET DESIGNS - USING CURB EXTENSIONS (BULB-OUTS)



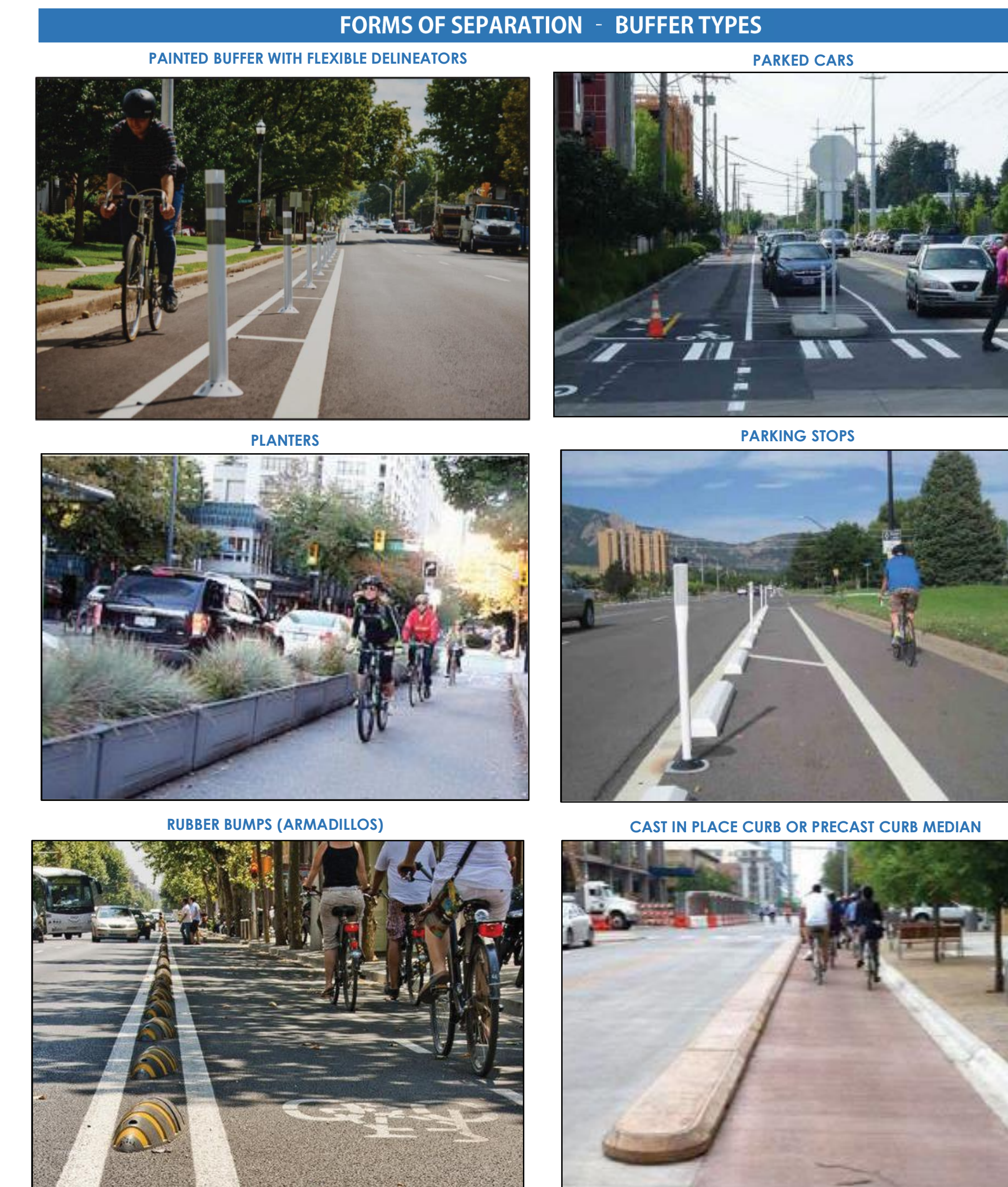
EXAMPLES OF CURB EXTENSIONS (BULB-OUTS)



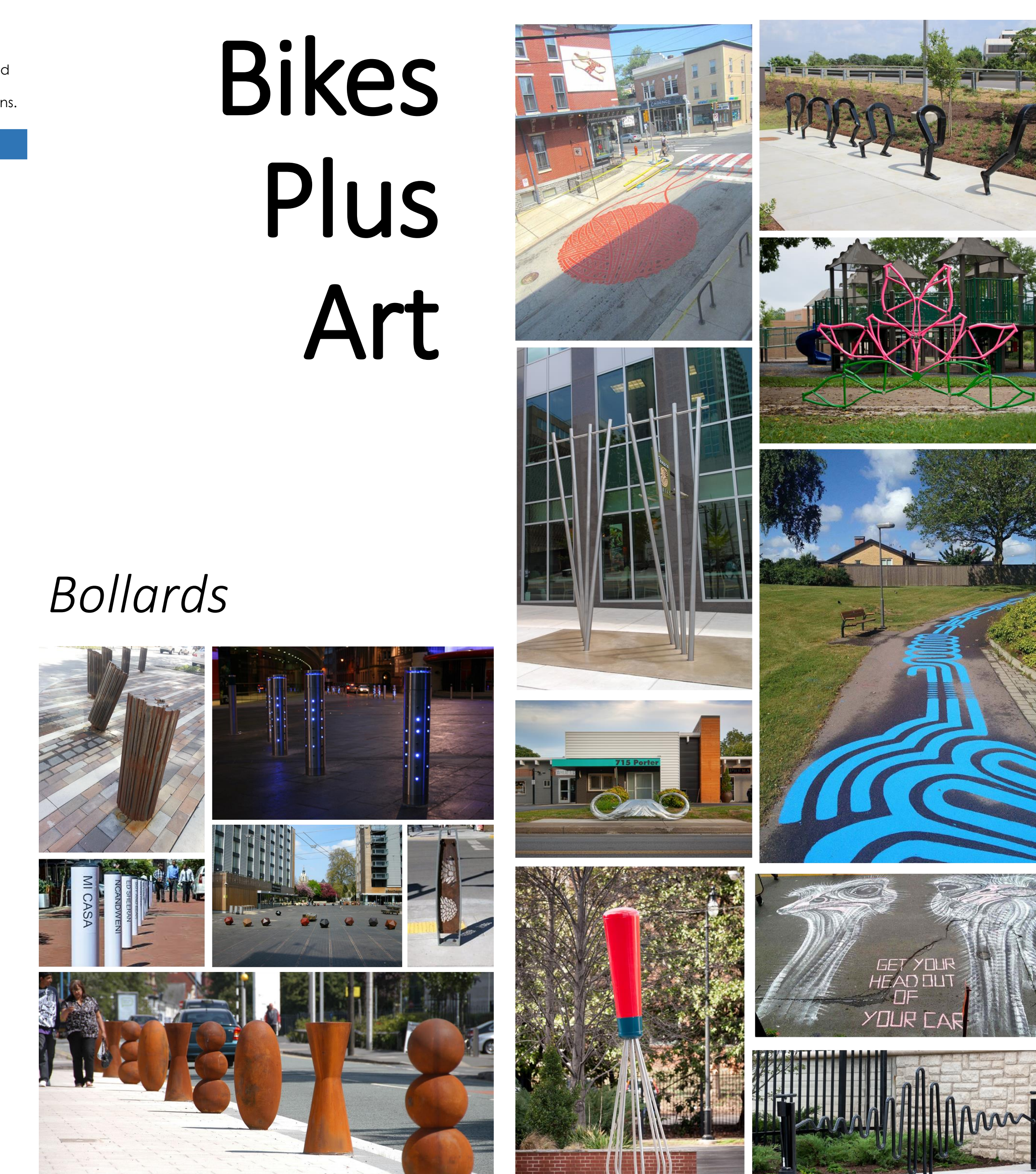
Bikeway Buffer Types

FOR INFORMATION ONLY
Bikeway buffers increase the attractiveness of bicycling for potential users by increasing the overall safety and comfort of bikeway facilities.

FORMS OF SEPARATION - BUFFER TYPES

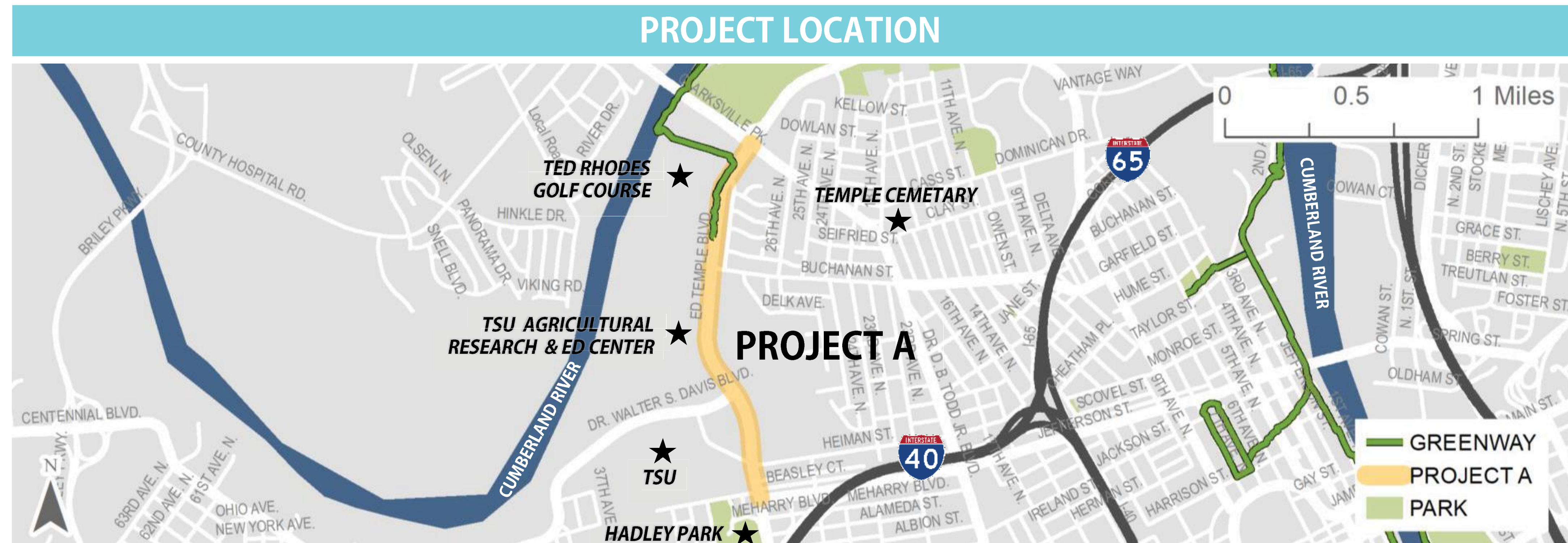


Bike Racks + Paint





28TH AVE N/ED TEMPLE BLVD PROJECT INFORMATION SHEET



What we heard last time:

Priorities on the street

- 1 Slow Down Cars
- 2 Create more space (including buffers from traffic) for pedestrians and bicyclists
- 3 Make it easier, safer, more comfortable for pedestrians and bicyclists to cross
- 4 Find opportunities for art and other creative placemaking/neighborhood branding
- 5 Find opportunities for trees and other green/storm water features
- 6 Create more parking
- 7 Move lots of cars through quickly

Comments

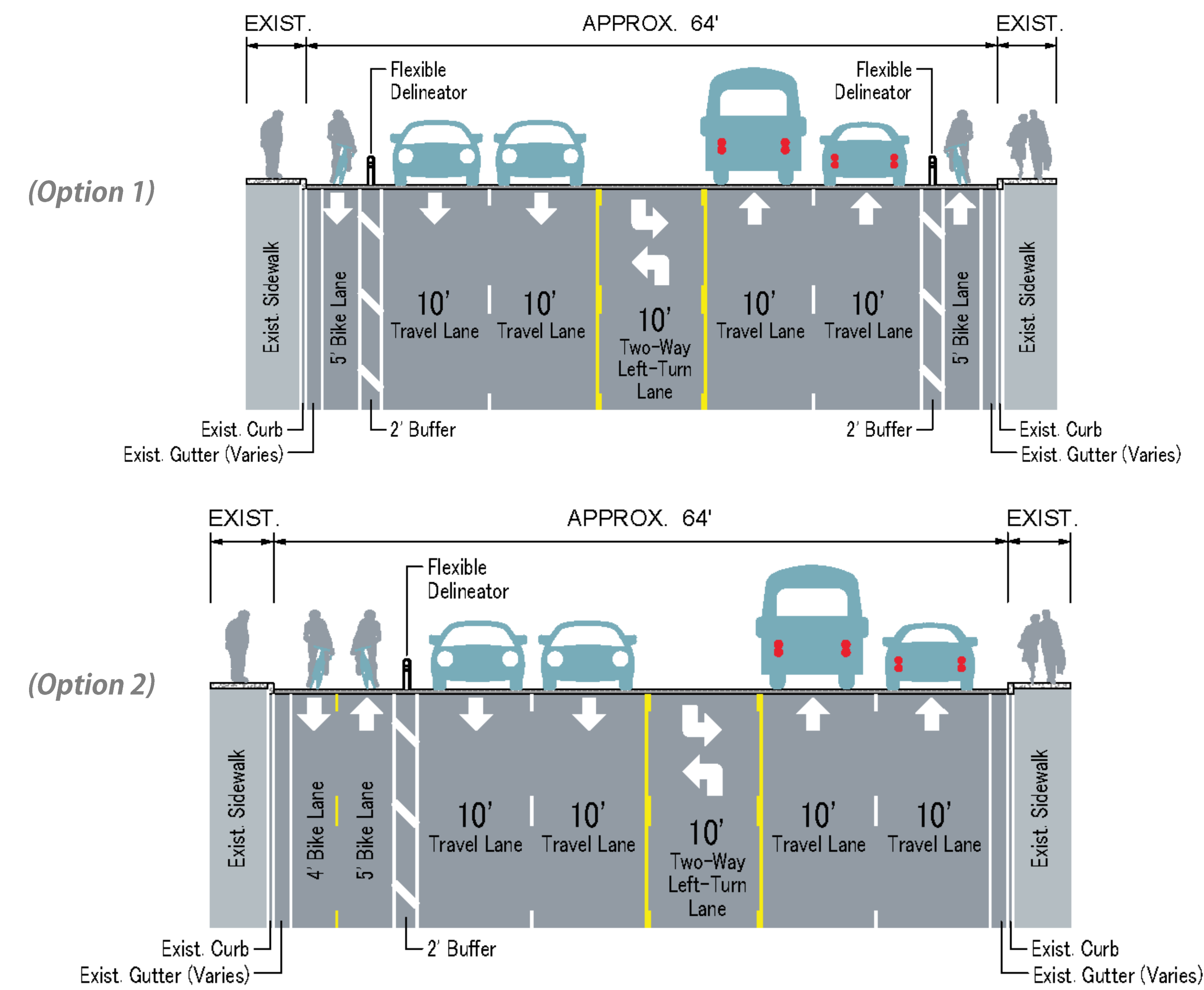
- Sidewalks should be a priority
- I have to drive across the street to use the greenway because the street is so dangerous to cross—especially with children

28TH AVE N / ED TEMPLE BLVD - SEGMENT CROSS-SECTION

PROJECT A: 28TH AVENUE N / ED TEMPLE BLVD

PROPOSED FACILITIES:

Jefferson St to Clarksville Pk / Rosa L. Parks Blvd



TIMELINE:

Construction Goal – Fall 2018

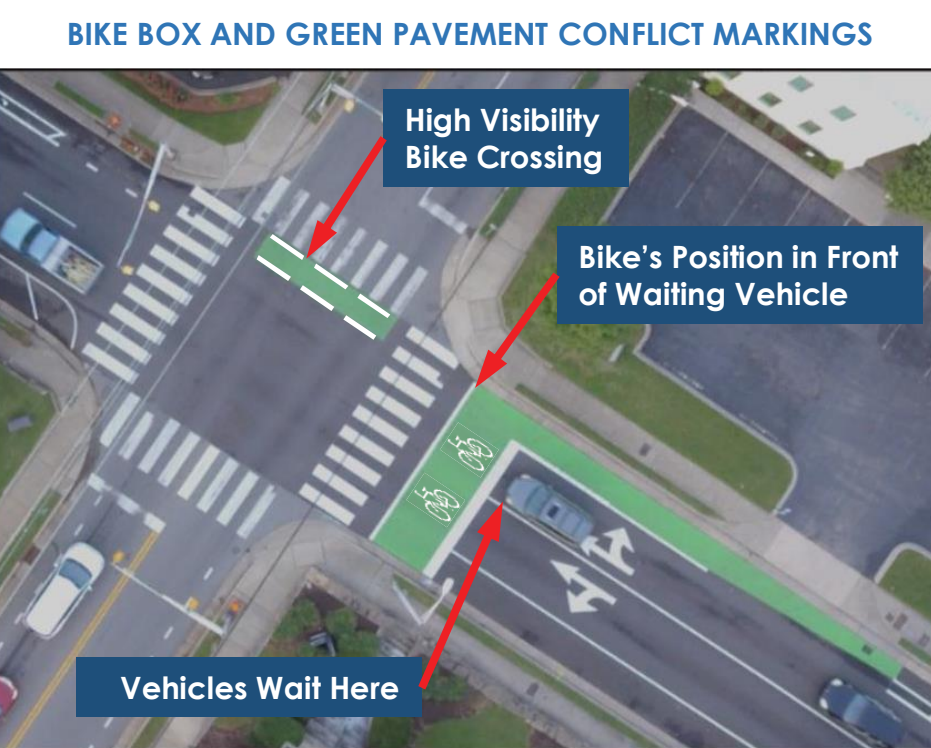
COST ESTIMATE:

\$330,000

Intersection Crossings

DESCRIPTION: Many applications can be implemented to improve safety for pedestrians and bicyclists crossing major or minor street intersections.

INTERSECTION CROSSING IMPROVEMENTS - SIGNALIZED



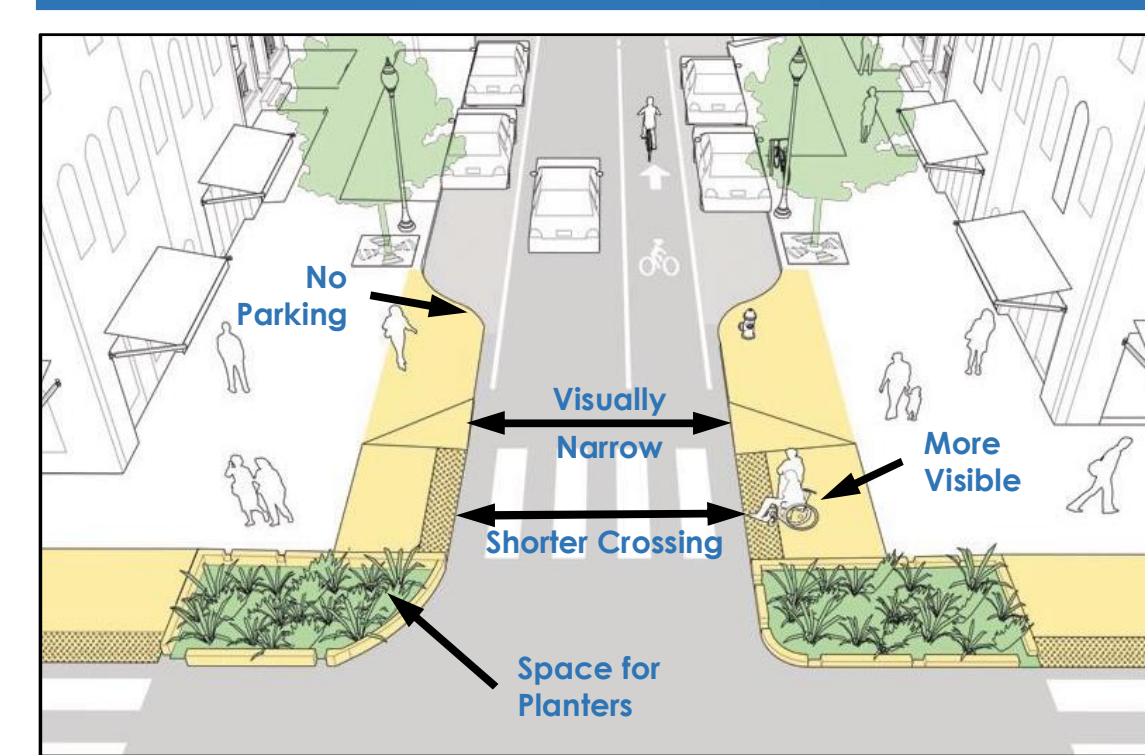
INTERSECTION CROSSING IMPROVEMENTS - UNSIGNALIZED



Curb Extensions (Bulb-Outs)

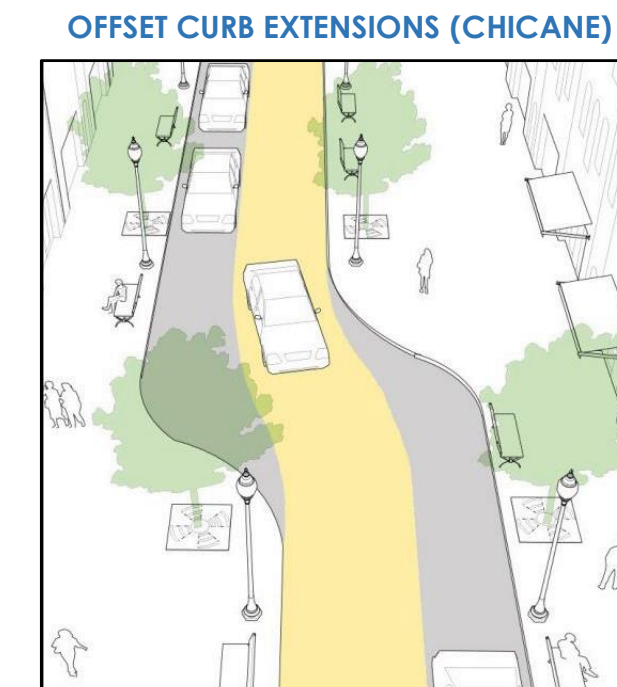
DESCRIPTION: Curb extensions (bulb-outs) modify the curb to extend into the existing parking lane to visually and physically narrow the roadway.

DESIGN FEATURES



- BENEFITS**
- Makes pedestrians waiting to cross the street more visible to drivers.
 - Shortens pedestrian crossing distance.
 - Encourages slower speeds with tighter curb radii.
 - Prevents vehicles from parking too close to the intersection.

DIFFERENT STREET DESIGNS - USING CURB EXTENSIONS (BULB-OUTS)



EXAMPLES OF CURB EXTENSIONS (BULB-OUTS)



Bikeway Buffer Types

DESCRIPTION: Bikeway buffers increase the attractiveness of bicycling for potential users by increasing the overall safety and comfort of bikeway facilities.

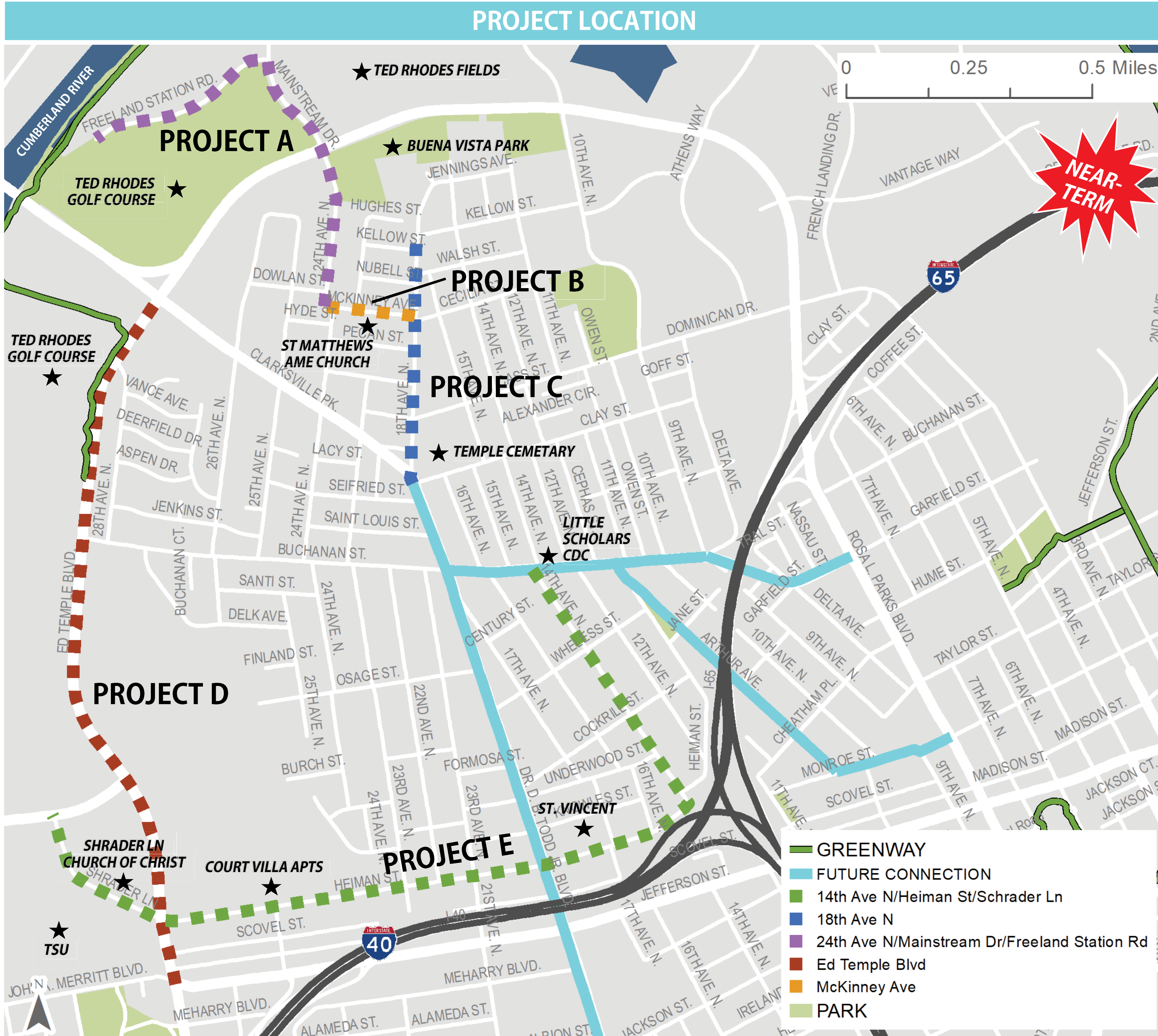
BENEFITS

- Provides a more comfortable experience and encourages bicycling for all types of riders.
- Separates bicycle traffic from adjacent motor vehicles.
- Can provide increased safety from turning vehicles at intersections.

FORMS OF SEPARATION - BUFFER TYPES



Additional Comments:



'NEIGHBORWAY' CONNECTIONS

PROJECT A:
24TH AVENUE N

McKinney Ave to Cumberland River Greenway

PROJECT B:
MCKINNEY AVENUE

24th Ave North to 18th Ave North

PROJECT C:
18TH AVENUE N

Kellow St to Clarksville Pk / Dr. D.B. Todd Jr. Blvd

PROJECT D:
28TH AVENUE N / ED TEMPLE BLVD

Jefferson St to Clarksville Pk / Dr. D.B. Todd Jr. Blvd

PROJECT E:
SHRADER LN / HEIMAN ST / 14TH AVENUE N

Dr. Walter S. Davis Blvd to Buchanan St

TIMELINE: Construction Goal – Fall 2018
COST ESTIMATE: Varies depending on project length

'NEIGHBORWAY'
→ "Share the Road" Facility Type

Traffic Calming Treatments

Between Intersections



Pine Street and 12th Avenue South - Nashville, TN - via Google Maps

Advantages:

- Effective in reducing speeds
- Very cost effective
- Can reduce crossing distance for pedestrians at intersections

Disadvantages:

- Must be very sensitive to context
- May reduce parking
- Requires additional maintenance



Shelby Park - Nashville, TN - via Google Maps

Advantages:

- Very effective at reducing speeds
- Increased visibility of crossing pedestrians

Disadvantages:

- May reduce parking
- May impact drainage



Fairfax Avenue - Nashville, TN - via Google Maps

Advantages:

- Effective in reducing speeds
- Very cost effective
- Lots of options: can be used for green space, art, parking, etc.

Disadvantages:

- May require extra maintenance
- Introduces a new design that drivers will have to get used to



Roberts Avenue - Nashville, TN - Google Maps

Advantages:

- Effective in reducing speeds
- Opportunity for more trees or other green space

Disadvantages:

- May require extra maintenance
- Requires additional cost
- May reduce access via left turns between intersections, including into driveways



1st Avenue South - Nashville, TN

Advantages:

- Inexpensive treatment
- Can be effective at calling drivers' attention to a pedestrian crossing ahead on busier streets

Disadvantages:

- Most effective when paired with other treatments
- May cause noise impact



Eastland Avenue - Nashville, TN - Google Maps

Advantages:

- Effective in reducing speeds
- Cost effective
- Lots of options: can be used for bike lanes, pedestrian walkways, green space, art, parking, etc.

Disadvantages:

- May require extra maintenance



51st Avenue South - Nashville, TN

Advantages:

- Most effective way to reduce speed
- Minimizes impacts on fire and emergency vehicles

Disadvantages:

- May reduce parking
- Drivers may swerve to partially avoid cushions
- May shift traffic to other streets
- Only applicable to streets where the desired speeds are 20mph

At Intersections



15th Avenue South and Elmwood Street - Nashville, TN

Advantages:

- Improved safety and efficiency
- Typically, no need for widening
- Great opportunity to add art or greenery to the street

Disadvantages:

- Forces bicyclists to merge with cars
- Wrong-way left turns can occur
- Possible driver confusion—especially when first installed



Portland, OR - via www.pedbikesafe.org

Advantages:

- Enables bicyclists and pedestrians to comfortably cross busy streets
- Reduces the number of vehicles cutting through neighborhoods

Disadvantages:

- Prohibits left turns onto the neighborhood street
- Prohibits vehicles from turning left or going straight across the busier cross street



12th Avenue South and Montrose Avenue - Nashville, TN - via Google Maps

Advantages:

- Effective in reducing turning speeds
- Very cost effective
- Typically no impact to parking
- Reduces crossing distance for pedestrians

Disadvantages:

- Can require extra maintenance