

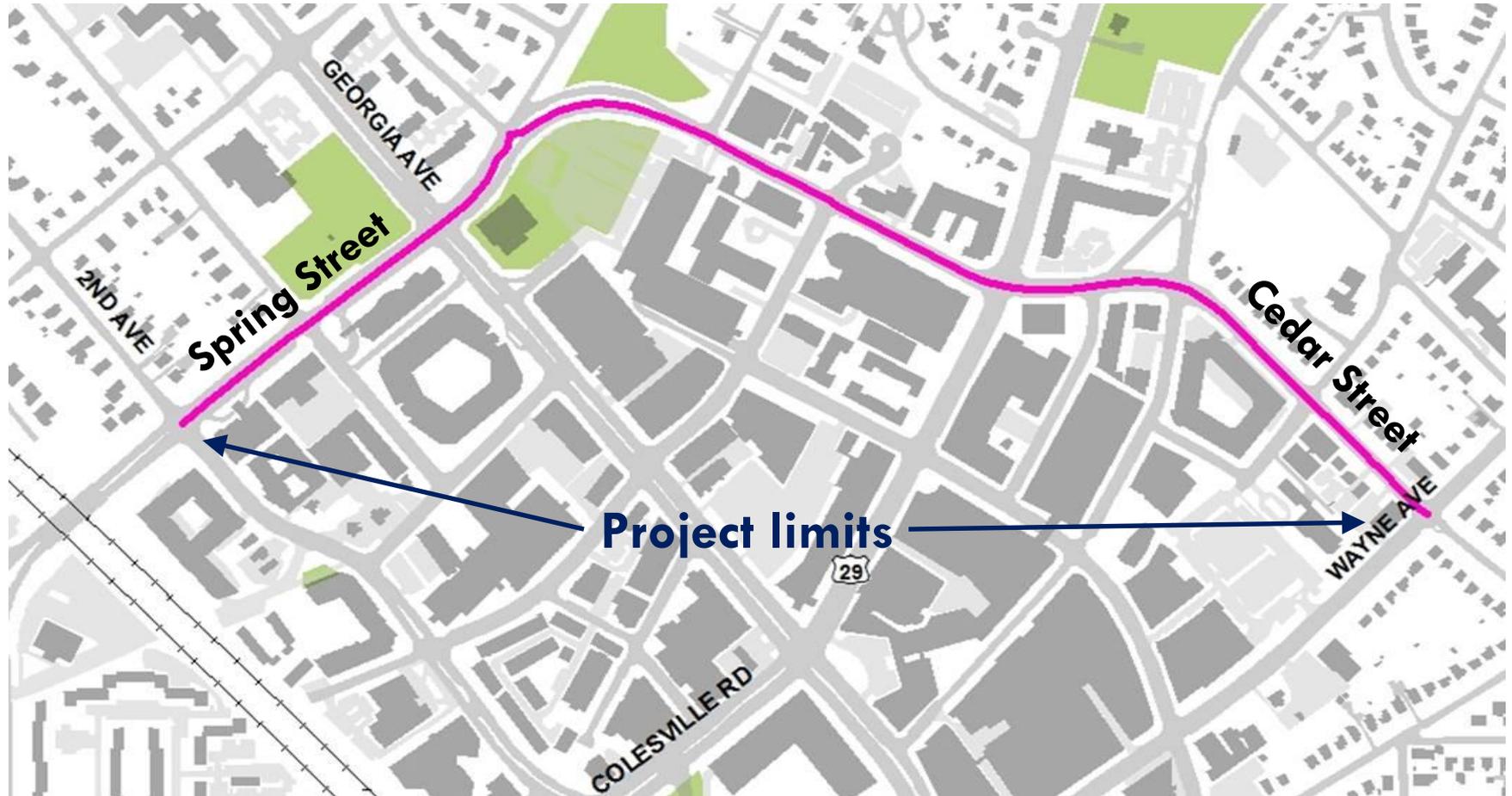
Community Meeting
February 2, 2016



PROPOSED SPRING ST/CEDAR ST SEPARATED BIKE LANES

Wayne Avenue to Second Avenue

Project map



Project background

3

□ Scope

- Construct bike lanes in accordance with Master Plan recommendations along Spring and Cedar Streets between Wayne and Second Avenues.

□ Why now?

- This project is being advanced now because Spring Street is programmed for repaving in Spring/Summer 2016.
- MCDOT analyzes roadways programmed for repaving for potential/recommendation for bike lanes.
- Spring/Cedar Street is a good candidate because of excess lane widths throughout the corridor.

Facility type

4

- One-way separated bike lane
 - ▣ A separated bike lane is a bike lane that includes a physical barrier between the bikeway and traffic. The barrier can be a curb, parked cars, flexposts, planters, or a similar object.
 - ▣ Separated bike lanes offer more protection and less stress for all types of cyclists than a traditional bike lane.



Facility type

5

- Montgomery County's second cycletrack
 - ▣ Woodglen Drive in White Flint was the first.
 - ▣ It's a two-way separated bike lane.



Why Spring Street?

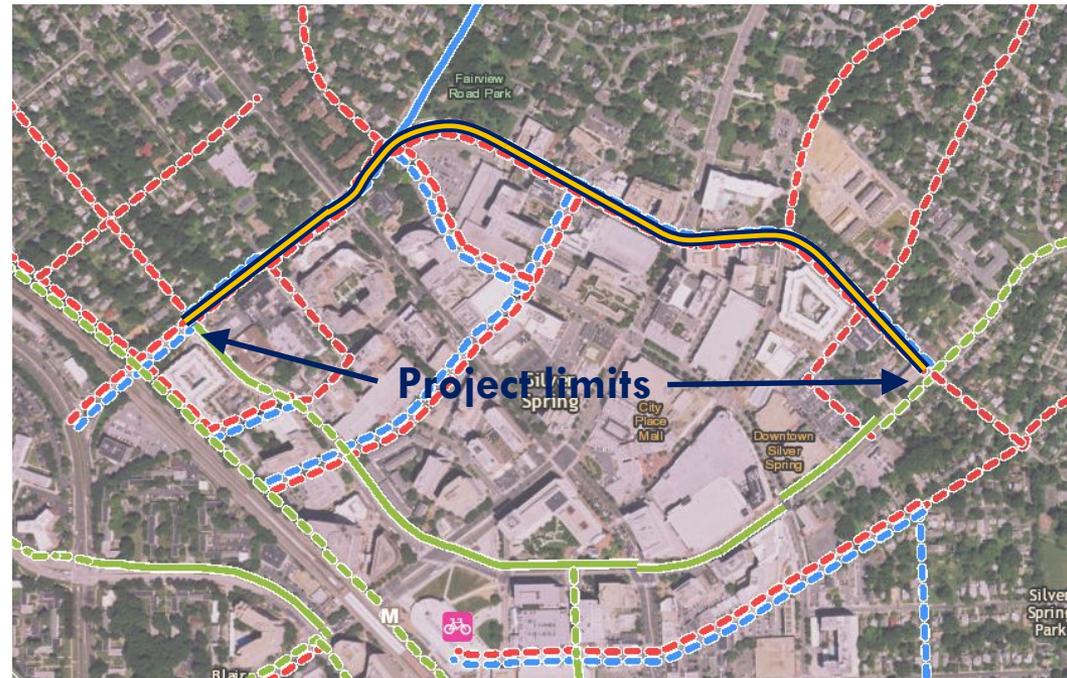
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- Bicycling is becoming more popular as a mode of transportation, and offers a sustainable way for people to get around the county.
- Silver Spring is growing more urban, and new cycling facilities are needed to help residents, workers, and shoppers get around safely.
- Spring and Cedar Streets connect other cycling facilities and will help cyclists connect to many nearby dwellings, jobs, and recreational and entertainment venues.

Connections

7

- Spring Street and Cedar Street connect several existing or proposed cycling facilities, including
 - ▣ Cedar Street contraflow bike lane
 - ▣ Second Avenue bike route
 - ▣ Ellsworth Drive bike route
 - ▣ planned Cameron St bike lanes
 - ▣ future Capital Crescent Trail
 - ▣ future Silver Spring Green Trail



Existing and planned bikeways. Map from Montgomery County Planning Dept.

Existing conditions

8

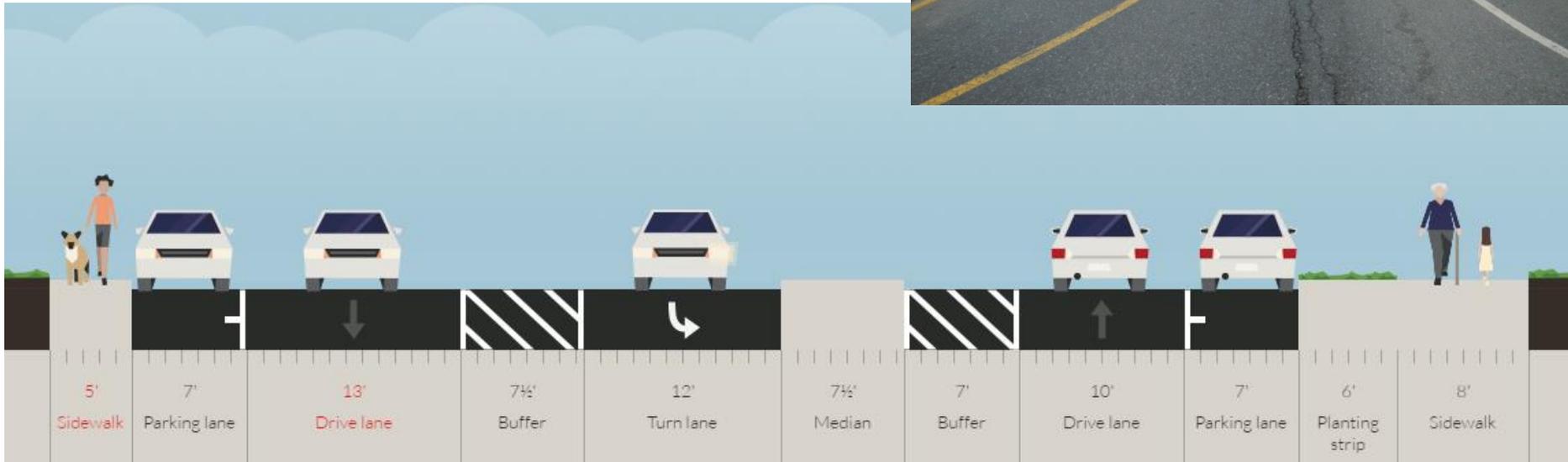
- Conditions along Spring and Cedar Streets vary greatly throughout the corridor
- Lanes:
 - ▣ 2 from Second to Cameron
 - ▣ 4 from Cameron to Ellsworth
 - ▣ 2 from Ellsworth to Wayne
- Parking: Second to Cameron & Ellsworth to Wayne
- Median: Second to Fairview & Colesville to Ellsworth

Existing sections

9

□ Spring at Second

- ▣ A “road diet” several years ago left extra space in the roadway
- ▣ Instead of 4 lanes, the street was narrowed to just 2



Example only. Conditions may vary.

Existing sections

10

- Spring at Fairview
 - ▣ Lanes are wider than necessary

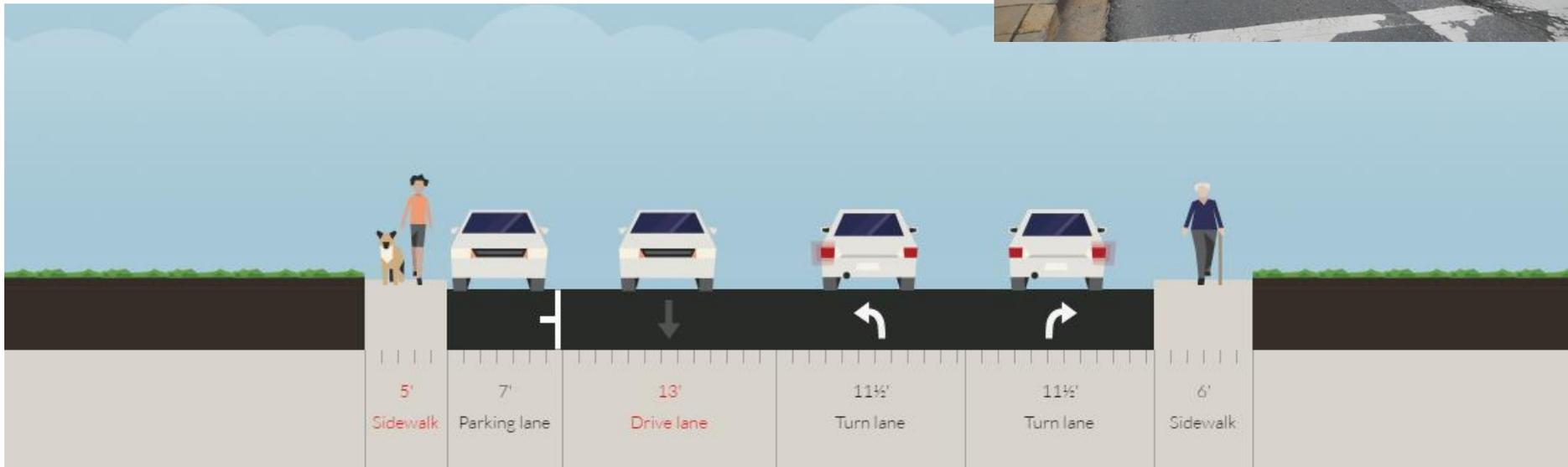


Example only. Conditions may vary.

Existing sections

11

- Cedar at Wayne
 - ▣ Lanes are wider than necessary
 - ▣ Narrowest section of the corridor



Example only. Conditions may vary.

Proposed conditions

12

- The project will construct separated bike lanes for the majority of the corridor. Except:
 - ▣ Pershing to Wayne (conventional bike lane)
 - ▣ Westbound at Spring & Colesville and Spring & Georgia (floating bike lane with mixing zone)
- Parking will be retained along most of the corridor. Spaces removed:
 - ▣ Cedar between Pershing and Wayne
 - ▣ Cedar between Ellsworth and Pershing (one side only)

Proposed sections

13

- Spring at Second
 - ▣ Bike lanes separated by parked cars.
 - ▣ Travel lanes, turn lanes, and parking retained.

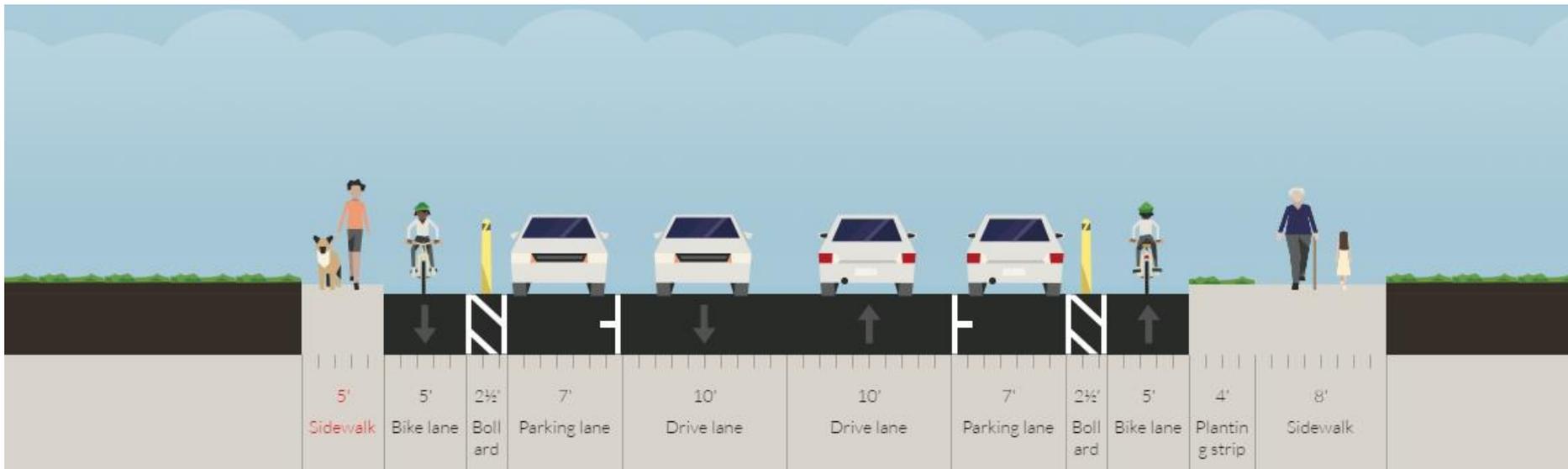


Example only. Conditions may vary.

Proposed sections

14

- Spring at Fairview
 - ▣ Bike lanes separated by parked cars.
 - ▣ Travel lanes and parking retained.

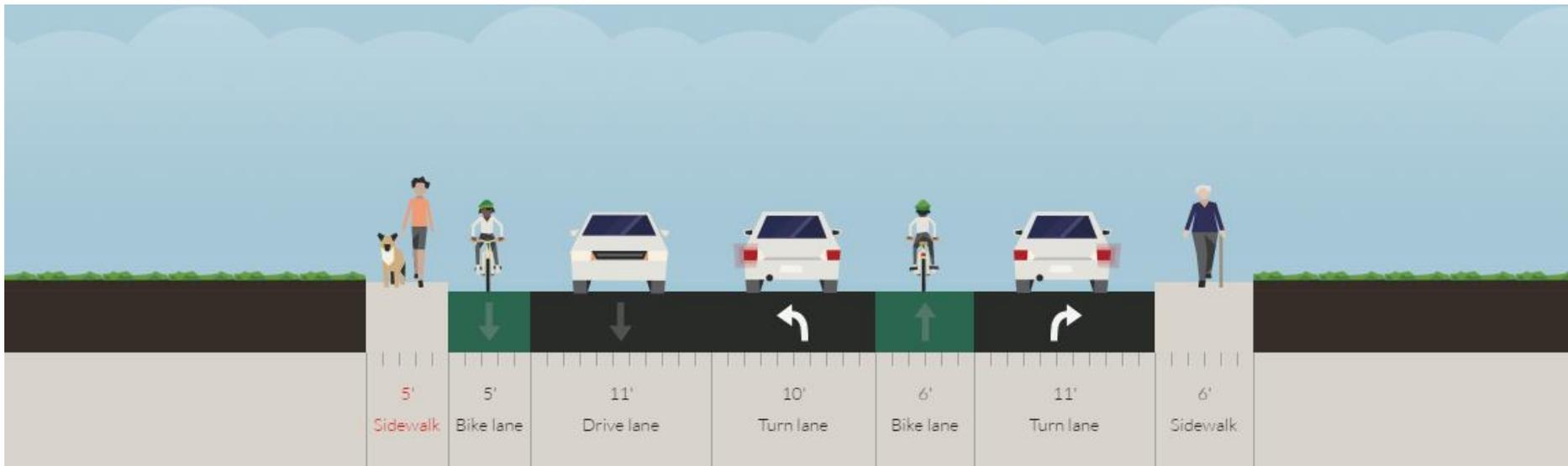


Example only. Conditions may vary.

Proposed sections

15

- Cedar at Wayne
 - ▣ Conventional bike lanes on this block.
 - ▣ Eastbound lane connects to existing Cedar Street contraflow bike lane.
 - ▣ Parking removed.



Example only. Conditions may vary.

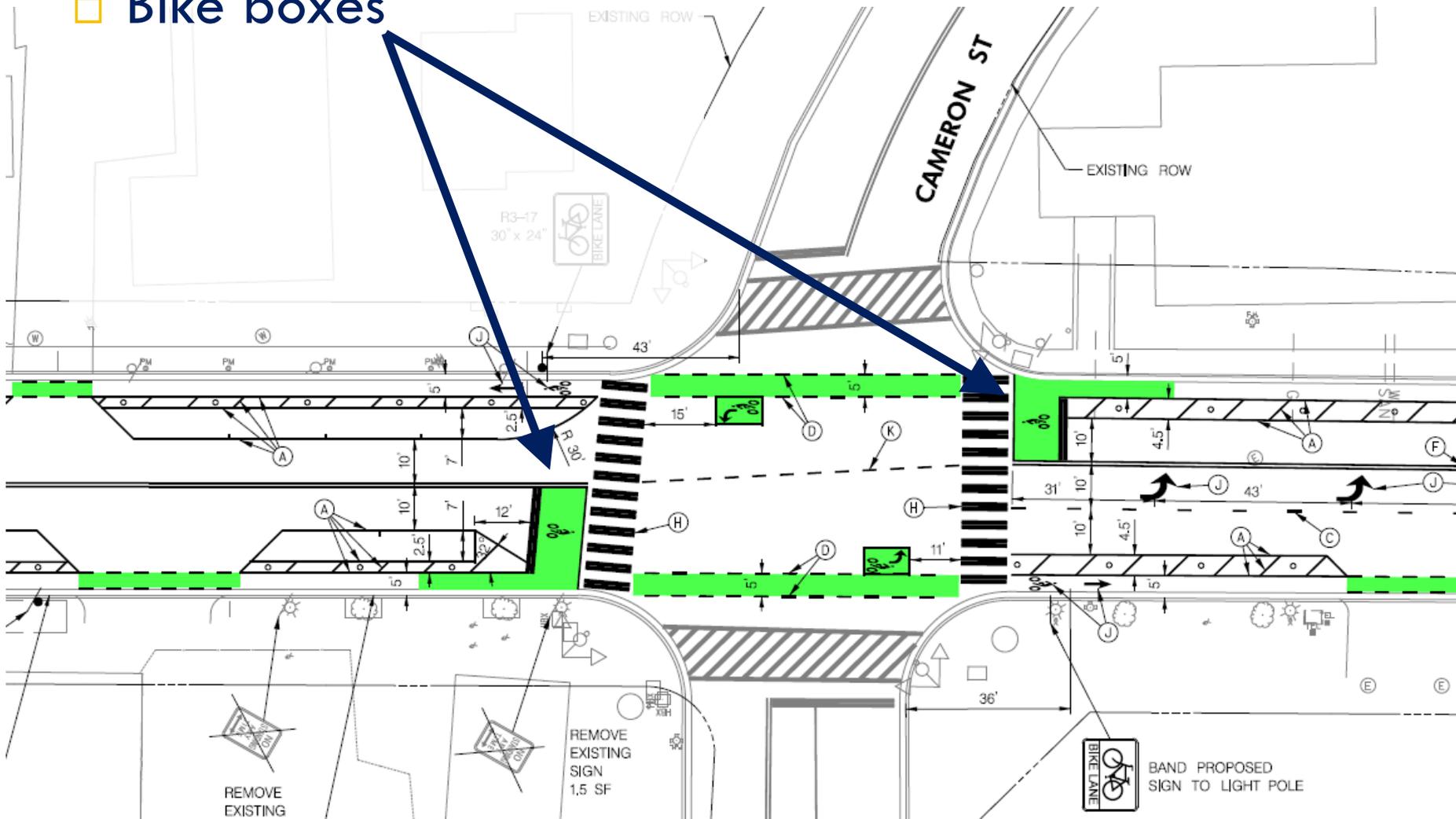
Parking

16

- The project will require the removal of some metered parking spaces.
 - ▣ Cedar between Wayne and Pershing:
 - Remove 10 spaces
 - ▣ Cedar between Pershing and Ellsworth:
 - Remove 5 spaces on N side, add 4 on S side (OPTION A) [net -1]
OR
 - Remove 9 spaces on south side (OPTION B) [net -9]
 - ▣ Spring between Alton and Cameron:
 - Add 3 spaces
 - ▣ Spring between First and Georgia:
 - Remove 3 spaces

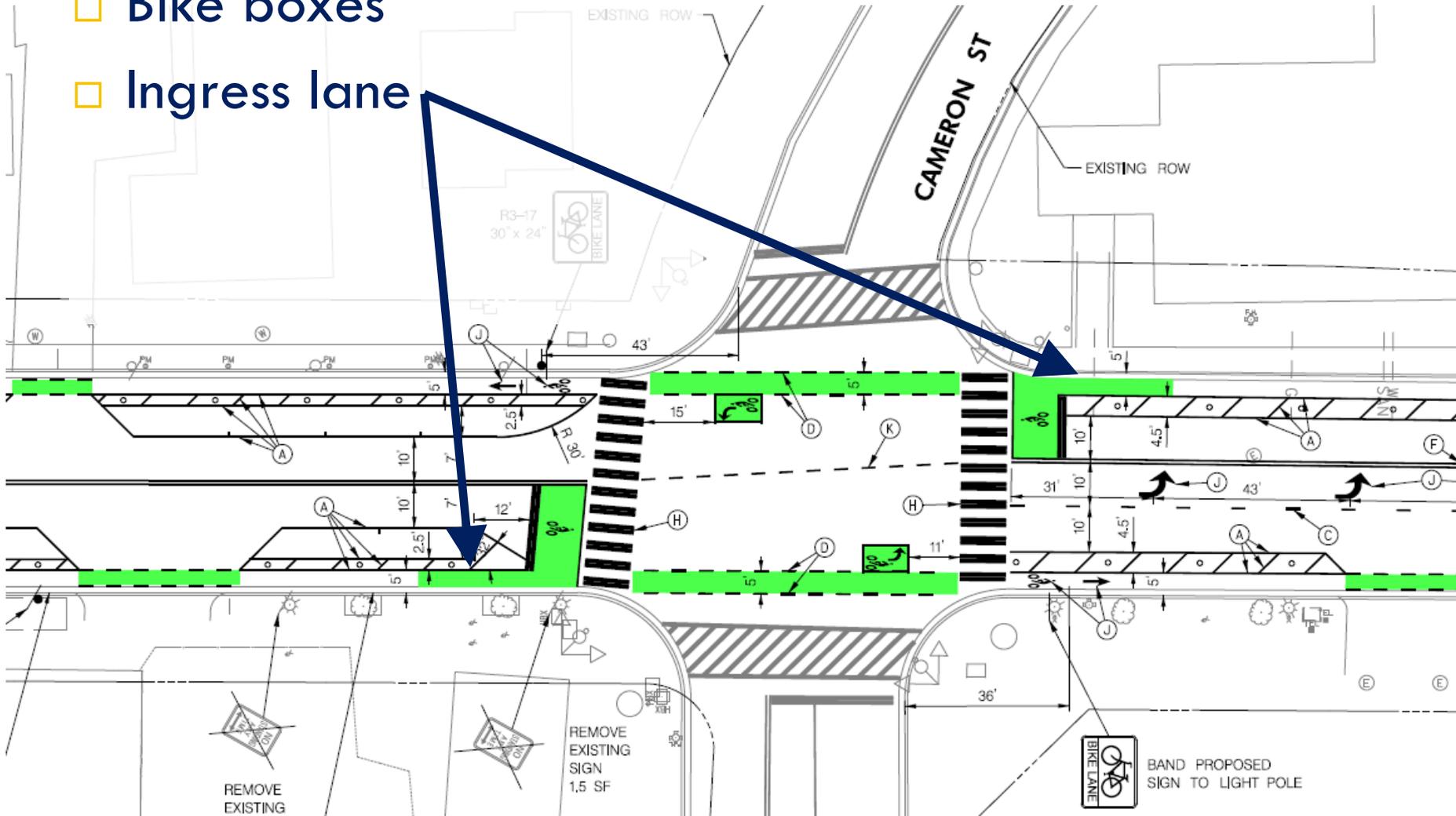
Intersections

□ Bike boxes



Intersections

- Bike boxes
- Ingress lane



Intersections

19

- **Bike boxes**
 - ▣ Most signalized intersections will get bike boxes.
 - ▣ Benefits of bike boxes:
 - Allow cyclists to position themselves to be visible to drivers.
 - Increase the throughput of the intersection for cyclists and reduce delay.
 - Facilitate left turns during the red phase of the signal.



Intersections

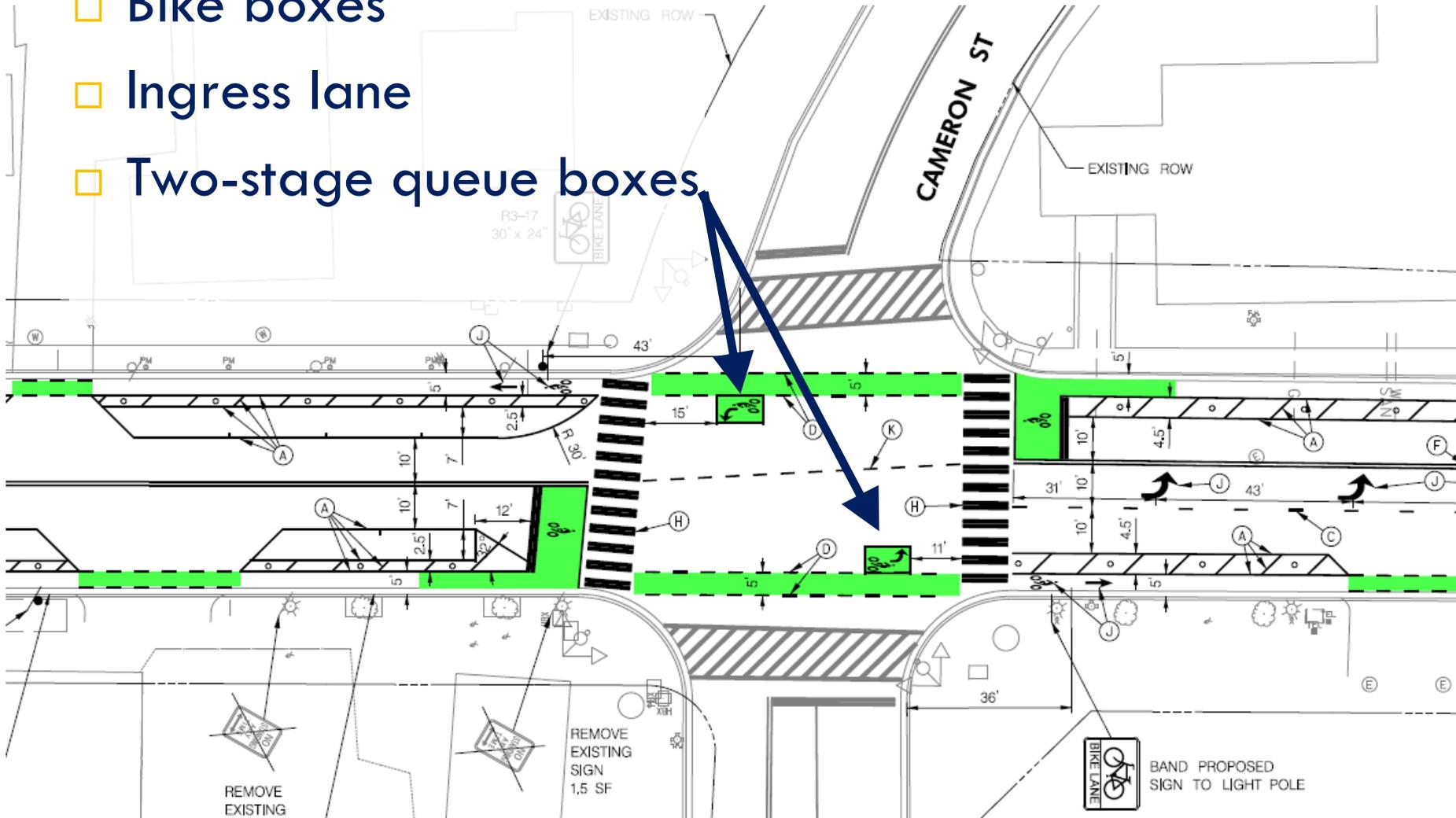
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- Bike boxes
 - ▣ Montgomery County already has one of these on Woodglen Drive.



Intersections

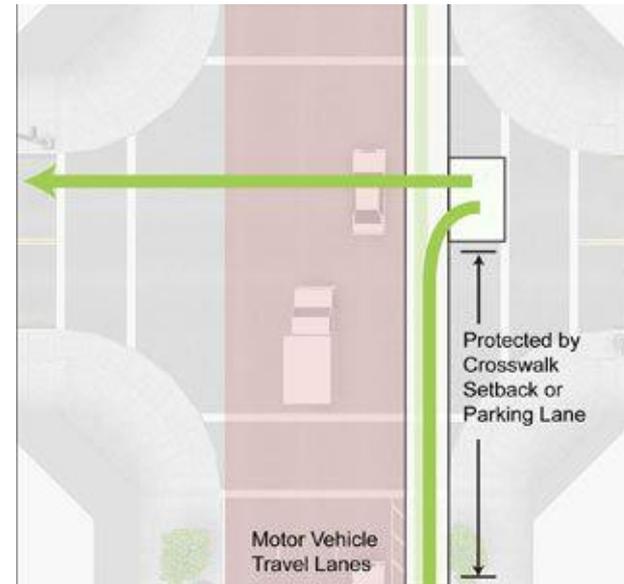
- Bike boxes
- Ingress lane
- Two-stage queue boxes



Intersections

22

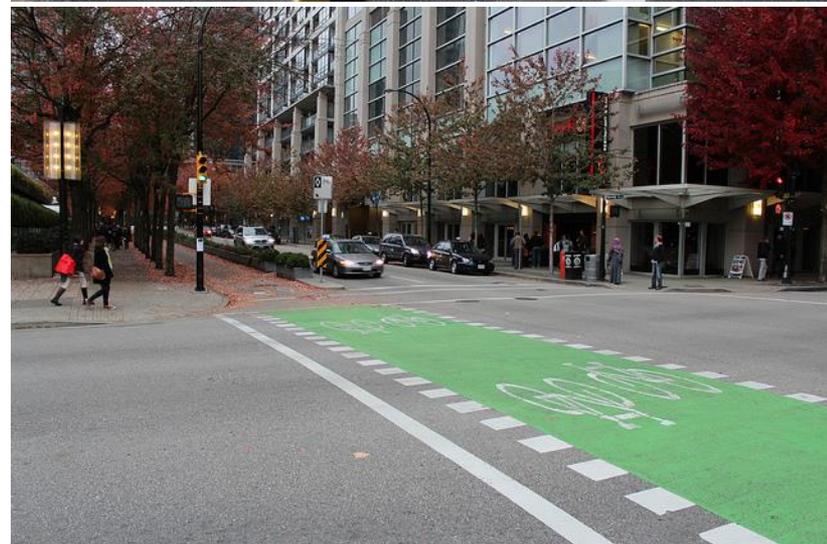
- Two-stage queue boxes
 - ▣ Most signalized intersections will get two-stage queue boxes.
 - ▣ Benefits of two-stage queue boxes:
 - Allows safer/more comfortable left turns for cyclists off of the cycletrack.
 - Separates turning cyclists from through cyclists.
 - Reduces turning conflicts between cyclists and motorists.



Intersections

24

- Colored conflict areas
 - ▣ Signalized and unsignalized crossings and driveways will be marked with colored pavement.
 - ▣ Benefits of colored conflict areas:
 - Increases the visibility of cyclists
 - Raises awareness of conflict areas to both cyclists and motorists.
 - Reinforces cyclist priority over turning vehicles.
 - Guides cyclists through the intersection.
 - Makes bicycle movements more predictable.



Intersections

26

- Dealing with right turn lanes
 - ▣ There are heavy turn volumes at Spring/Georgia and Spring/Colesville (westbound).
 - ▣ We cannot modify the signals at this time to get an exclusive/protected bike phase.
 - ▣ At these intersections, the right turn lane will be to the right of the bike lane with a mixing zone at the approach.
 - ▣ We hope to use flexposts to prevent crossovers in the queue area.

Intersections

28

□ Pocket bike lane

- Where there's a right turn lane, the bike lane needs to be to the left of it.
- Benefits of a pocket lane:
 - Prevents “right hook” collisions.
 - Moves crossing movements away from the intersection.
- Drawbacks:
 - Requires a mixing zone.
 - Bike lane loses separation.

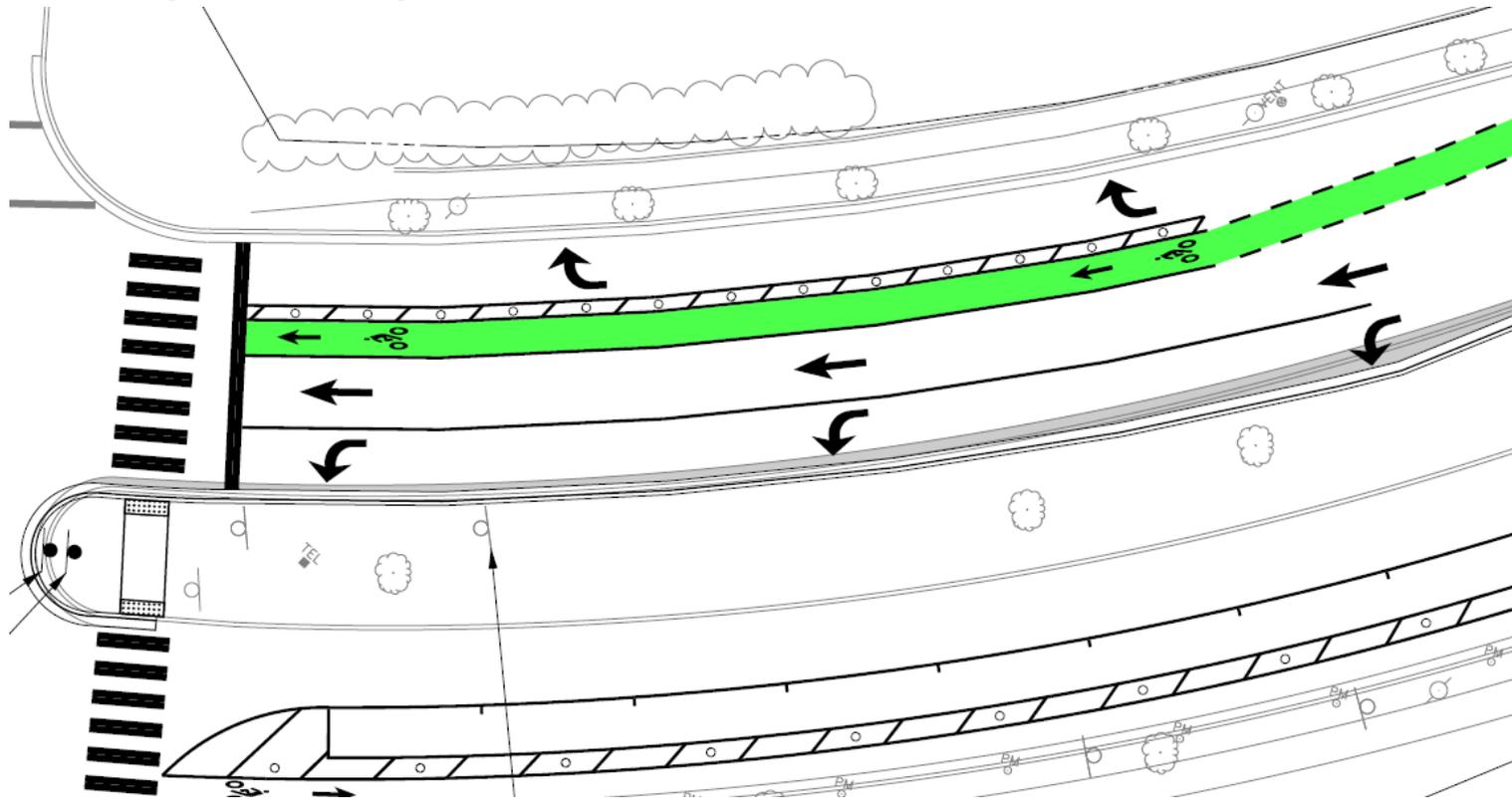


Intersections

29

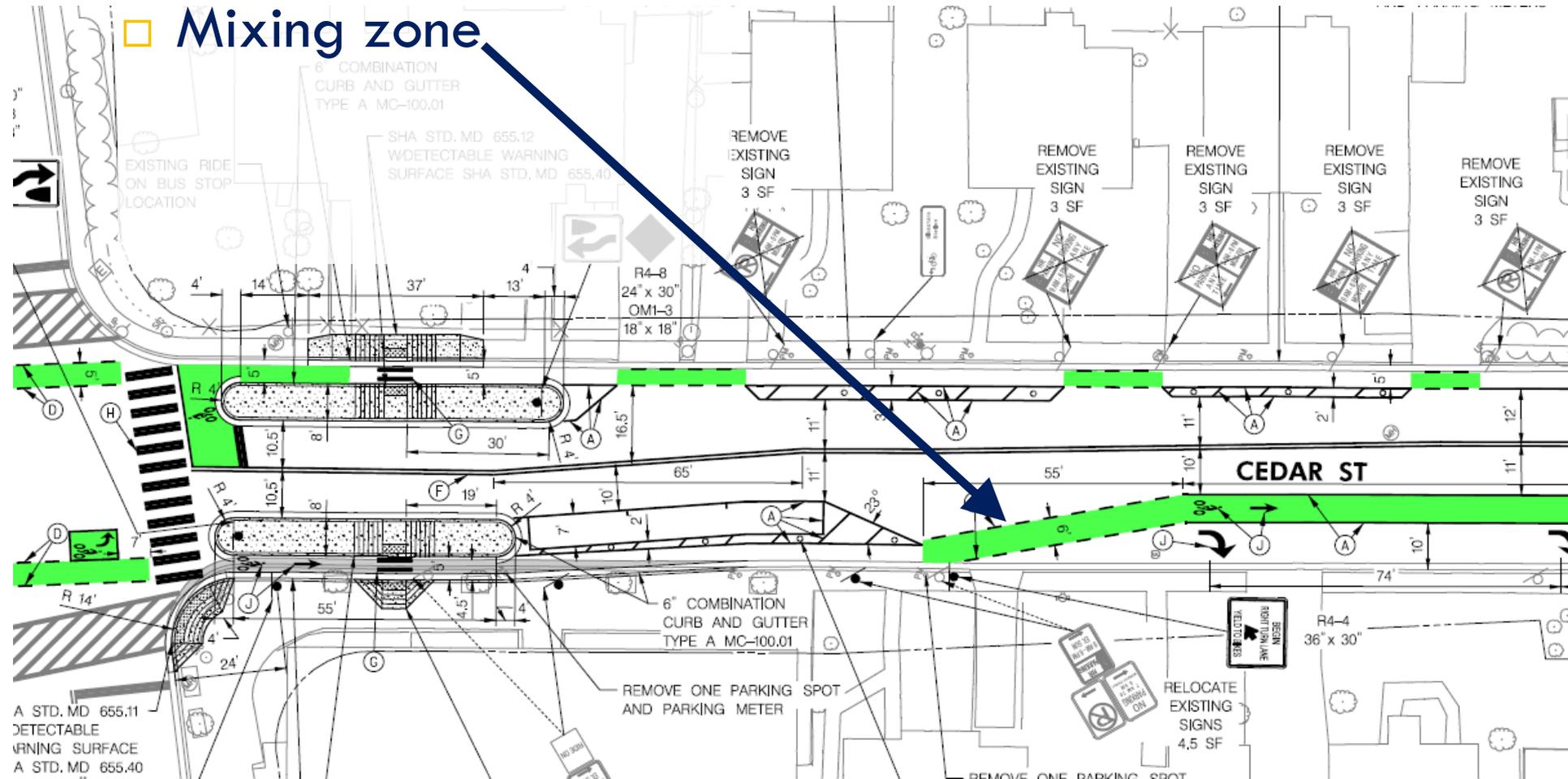
□ Pocket bike lane

- At Spring/Georgia and Spring/Colesville, we will use flexposts to prevent cross over traffic at the intersection.



Intersections

- Pocket lane
- Mixing zone



Intersections

31

□ Mixing zones

▣ A mixing zone allows bicycles and right turning vehicles to cross over each other before the intersection.

▣ Benefits:

- Reduces chances of “right hook” at the intersection.
- Correctly positions cyclists and vehicles for intersection.

▣ Drawback

- Removes separation.



Intersections

33

□ Floating bus stop

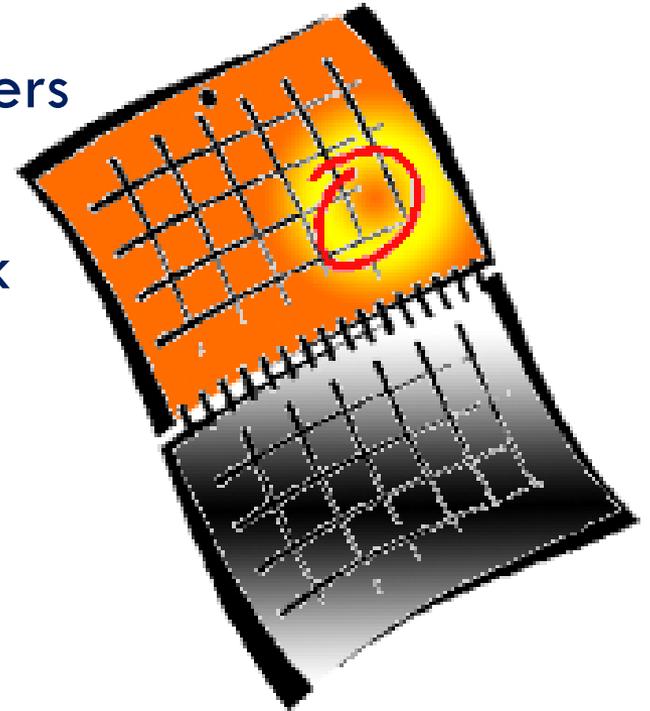
- A floating transit stop avoids requiring buses to pull into the bike lane to discharge passengers.
- Benefits:
 - Avoids buses pinching cyclists against curb.
 - Transit patrons have exclusive waiting area.



Schedule

35

- MCDOT hopes to construct the Spring/Cedar Street separated bike lanes in Spring/Summer 2016
- Construction sequence
 - Move/remove/add parking meters
 - Move & reconstruct curbs and medians and other concrete work
 - Repave roadway
 - Paint lane markings
 - Open bike lanes!



Comment period



36

**Public comment period closes
February 19**

Send comments to
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37

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