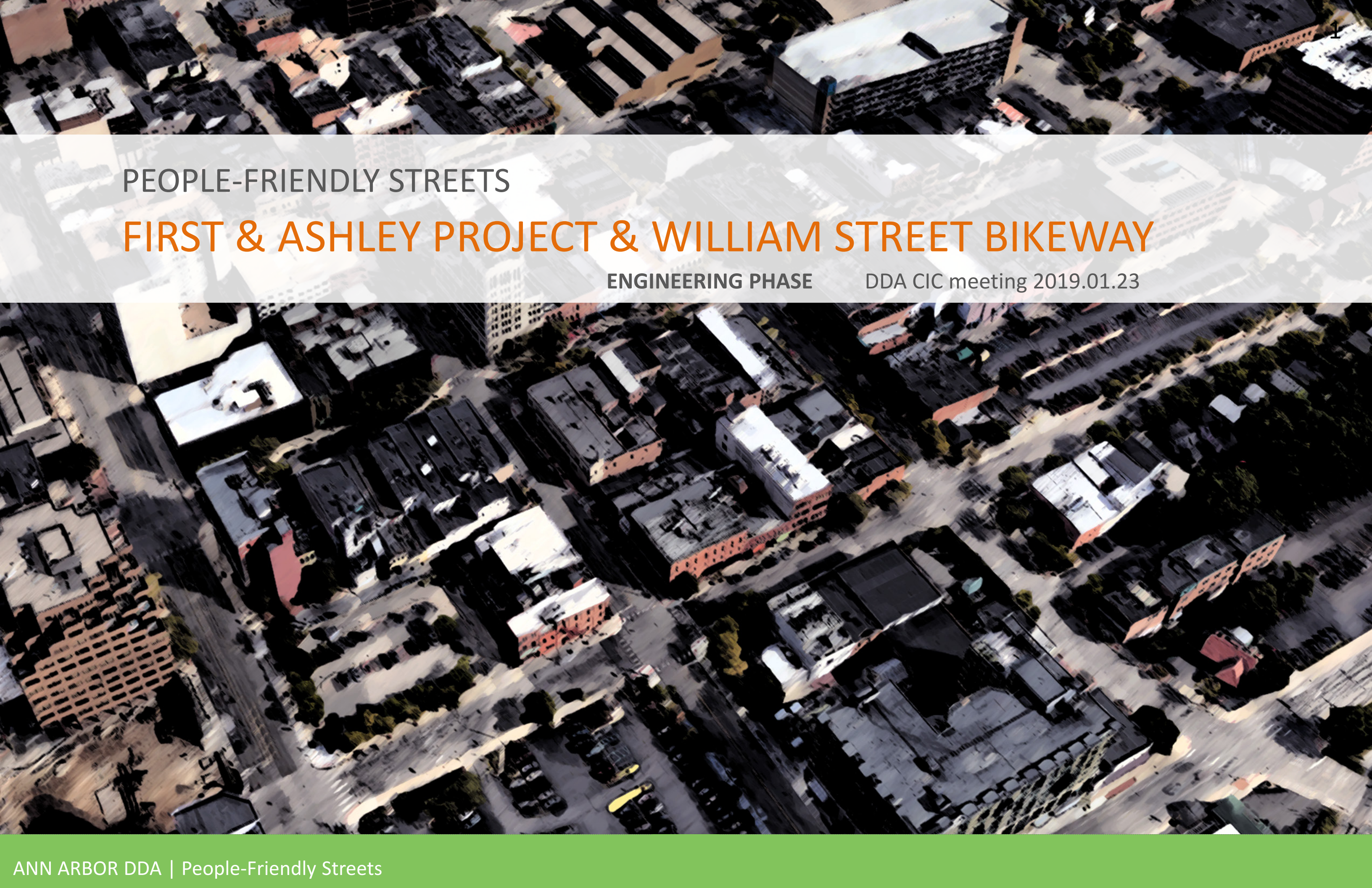


An aerial photograph of a city street grid, showing various buildings, streets, and green spaces. A semi-transparent white overlay covers the top portion of the image, containing the title and meeting information. The number '1' is visible in the top right corner of the image.

PEOPLE-FRIENDLY STREETS

FIRST & ASHLEY PROJECT & WILLIAM STREET BIKEWAY

ENGINEERING PHASE

DDA CIC meeting 2019.01.23

Project Elements: Street Type

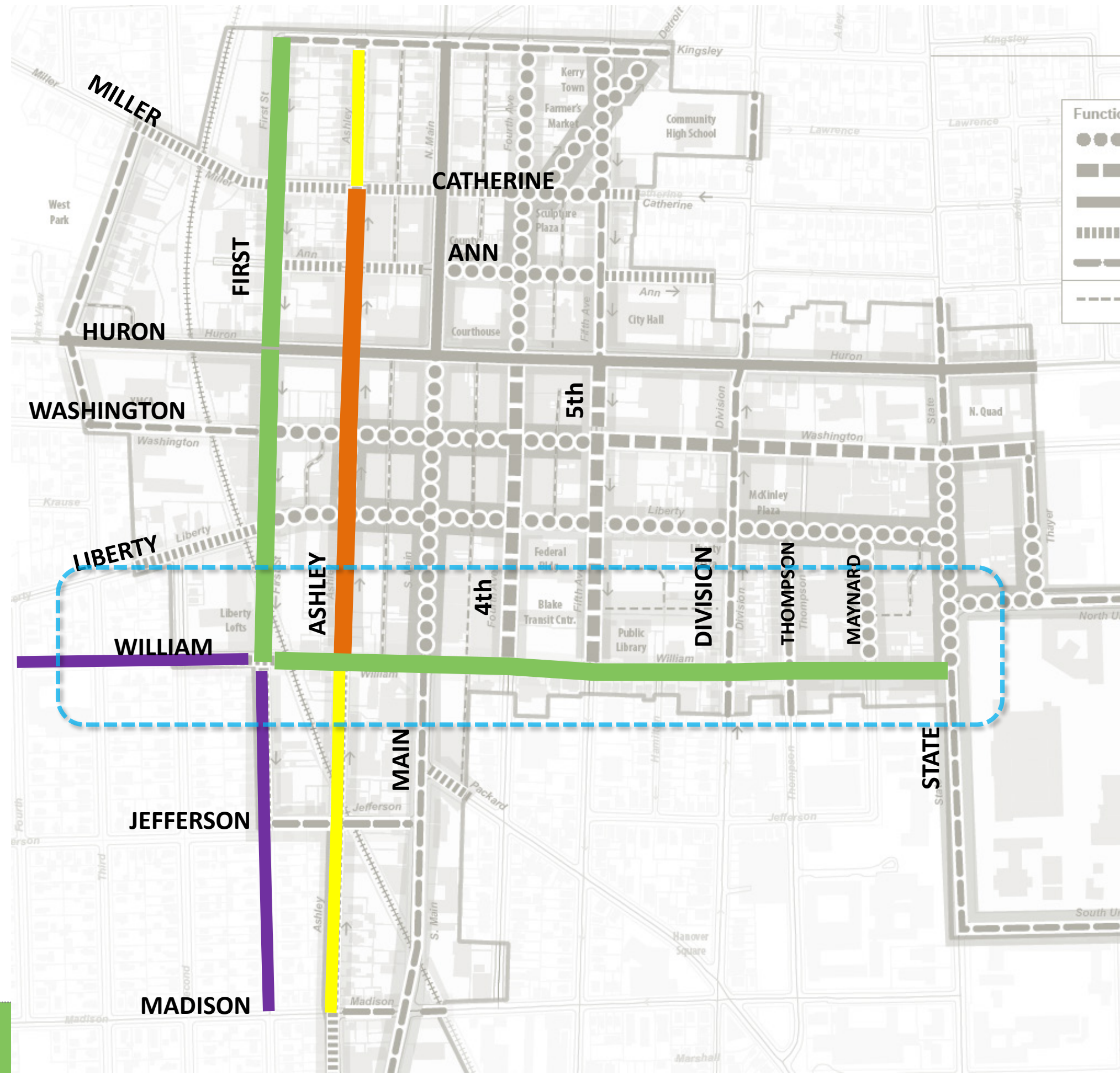
- Bikeway – (2-way protected bike lane)**
- Commercial Street (high viz sharrows)**
- Neighborhood Street with Advisory Bike Lanes**
- Neighborhood Street**

William Street = 2019 Construction

- 2-way bikeway
- Road resurfacing
- Intersection improvements
- Watermain consolidation (city funded)

First & Ashley = 2020 Construction

- Two-way street restoration
- 2-way bikeway
- Streetscape improvements
- Resurfacing
- Watermain upsizing

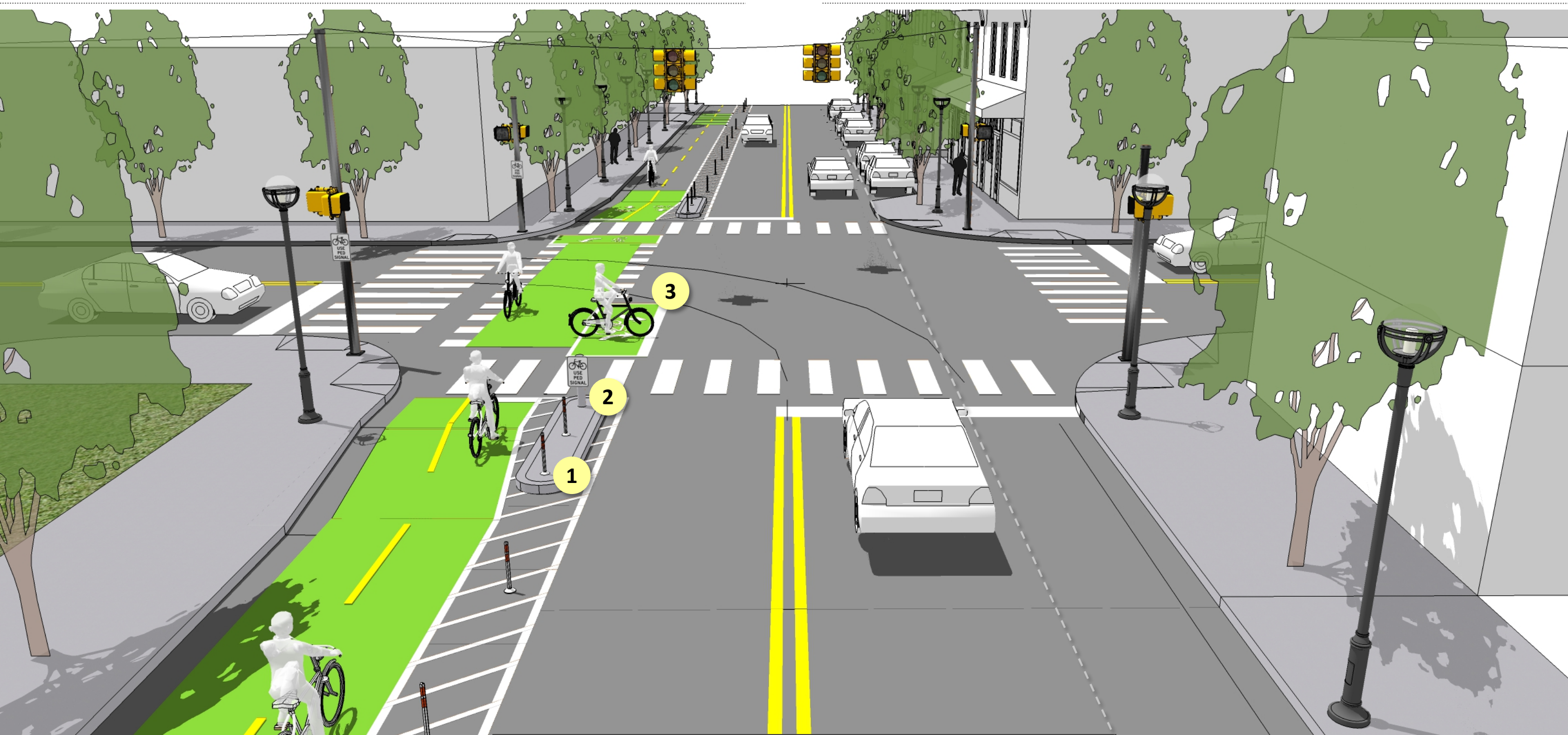


- **William Street Bikeway**

- February 18, 2019: Out for bid
- March 15th: Bid opening
- March 20 / April 3rd: CIC approval / Board approval
- Spring 2019 (May 1st): Construction begins
- 12-16 week construction period (estimated completion in September).

- **Coordination**

- AAATA / The Ride bus stop location adjustments
- Communication & Educational Program
- UM for bikeway connection onto campus
 - * *Shared concept design with UM*
- MDOT railroad (for rail crossings)
 - * *Diagnostic meeting in January*
- City Maintenance
 - * *Solid Waste & Snow Removal*
- Ann Arbor District Library
- Adjacent neighbors, businesses, and stakeholders
- Other City Units / Street Design Team



^	10' Bikeway (8' at some intersections)	4-6' Buffer (2' min)	10' Travel Lane	10' Travel Lane	8' Parking & Loading	12' Pedestrian Zone
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12' Pedestrian Zone

(w/ delineator posts)

(or bump-out)

- 1 Curb islands at Corners
- 2 Bikes Use Ped Signal Signs
- 3 2-Stage Turn Queue Bike Box

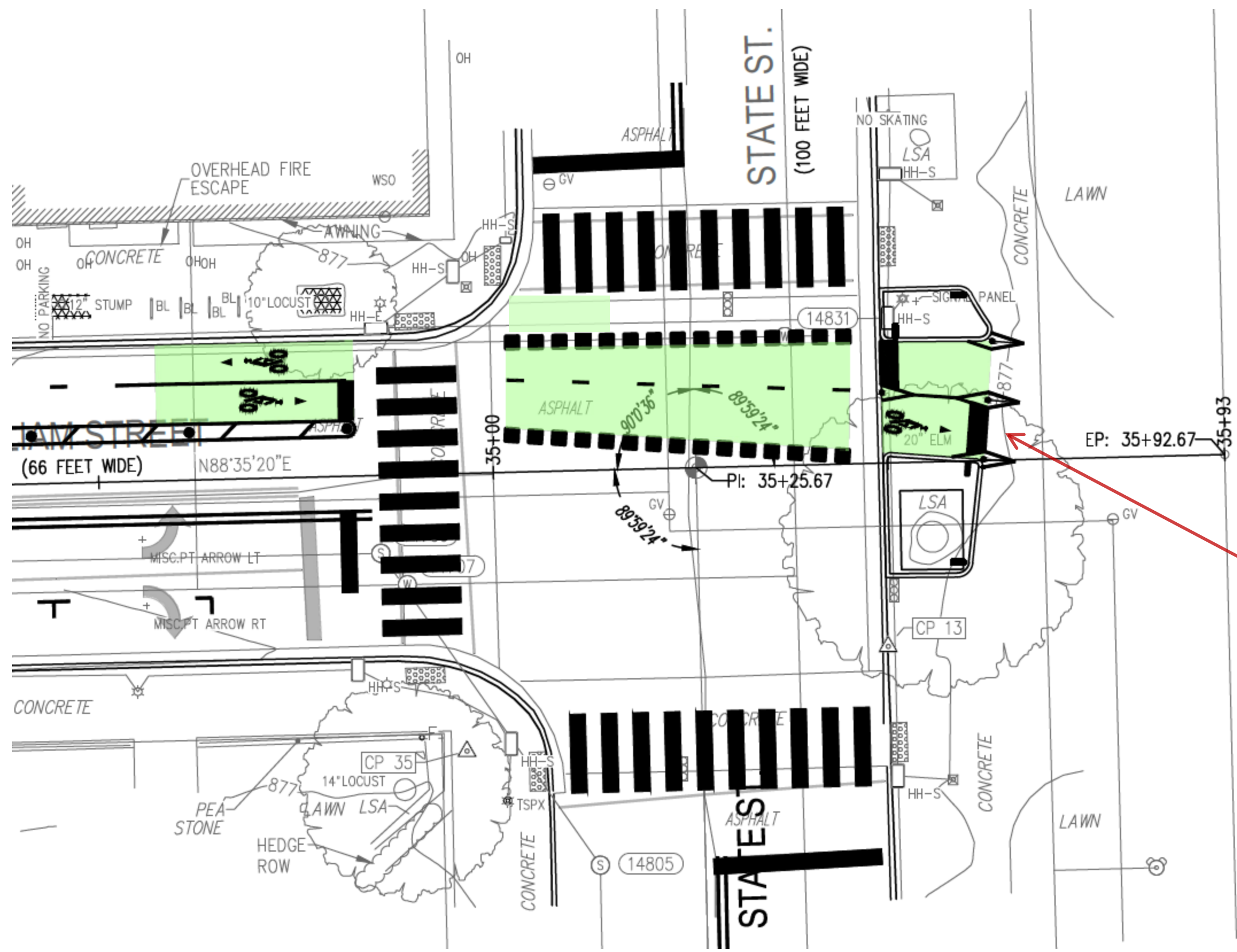


- **Midblock** = Delineator posts
 - Available in different colors depending on make (yellow, white, orange most common)
 - Could use different color at corner vs. at midblock locations
 - Curbed islands at corners will protect delineators from turning cars & snow plows
- **At Corners** = 10-15' section of raised curb island (width varies, 3'-4' typically) with delineator posts.



Screw-in delineator posts with cap (when posts removed)



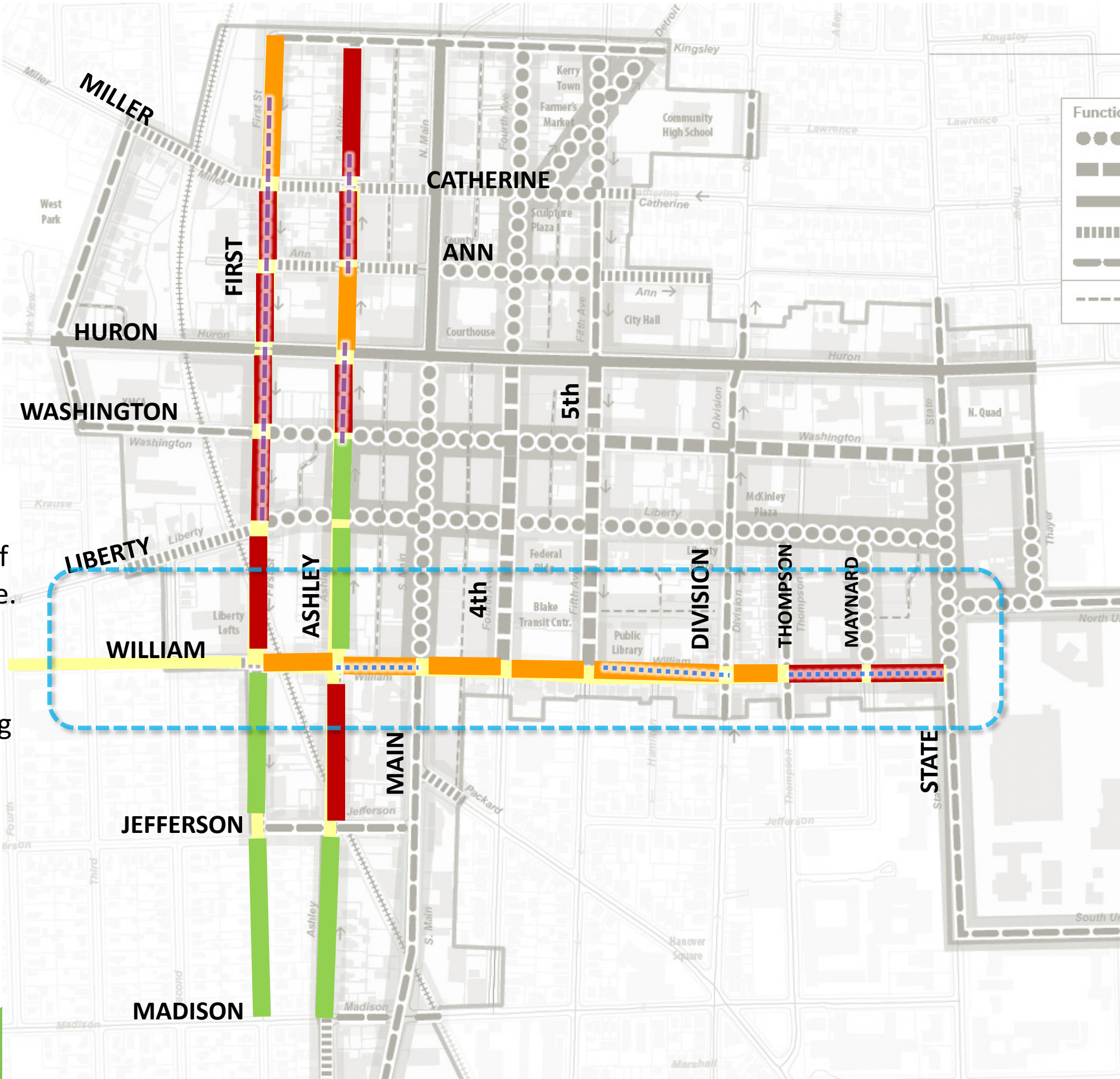


“Yield” marking with
“bikes yield to
pedestrians” signage

Planned Treatments

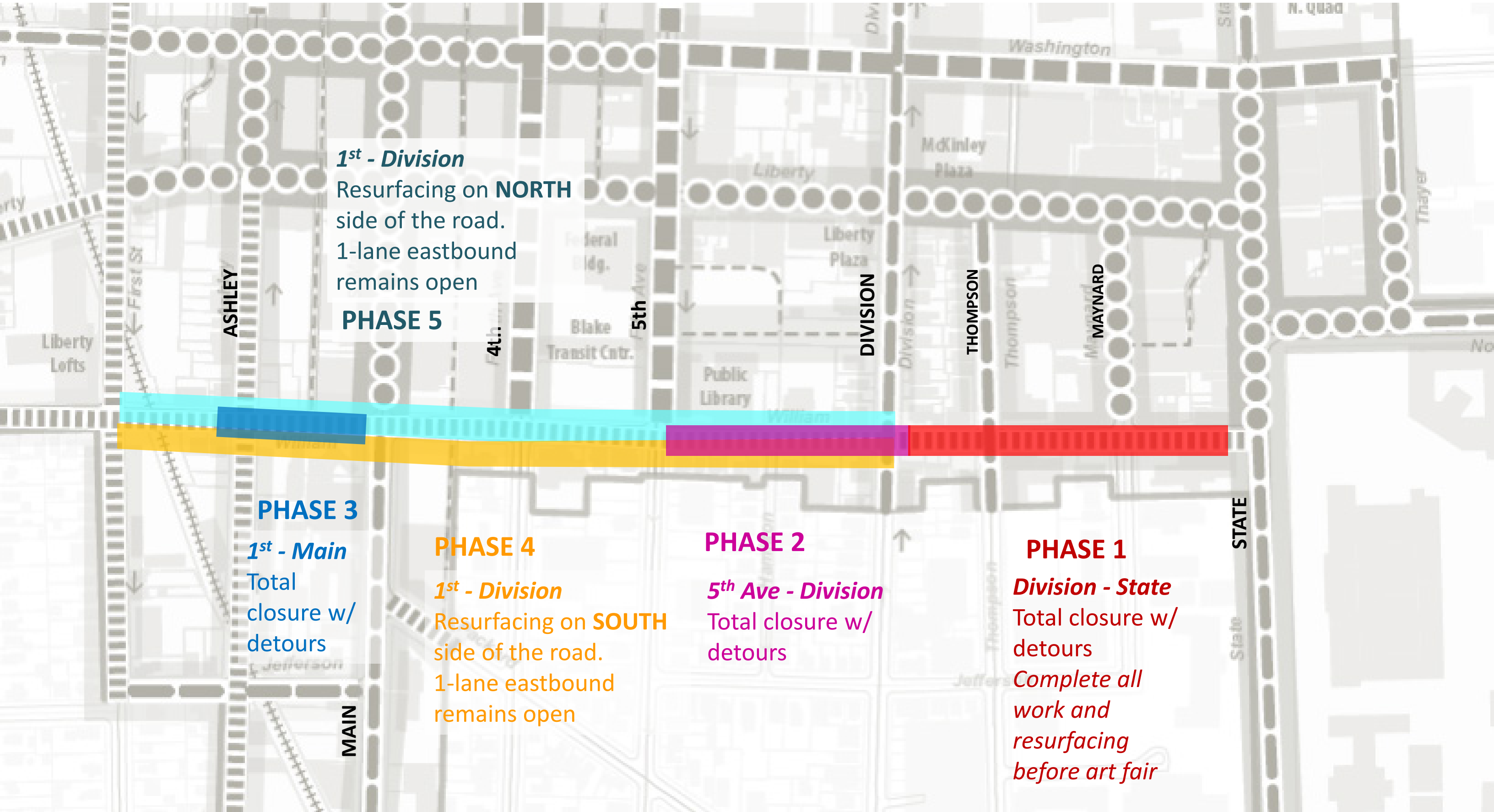
- Mill & Resurface (3" typical)
- Rehab
- Cape Seal
- Watermain Consolidation (William)

- Repaving is important due to creation of bikeway and desire for a smooth surface.
- Pavement marking durability better on newly paved streets
- DDA is coordinating w/ City’s resurfacing program to share costs for repaving.





THANK YOU



1st - Division
Resurfacing on **NORTH** side of the road.
1-lane eastbound remains open
PHASE 5

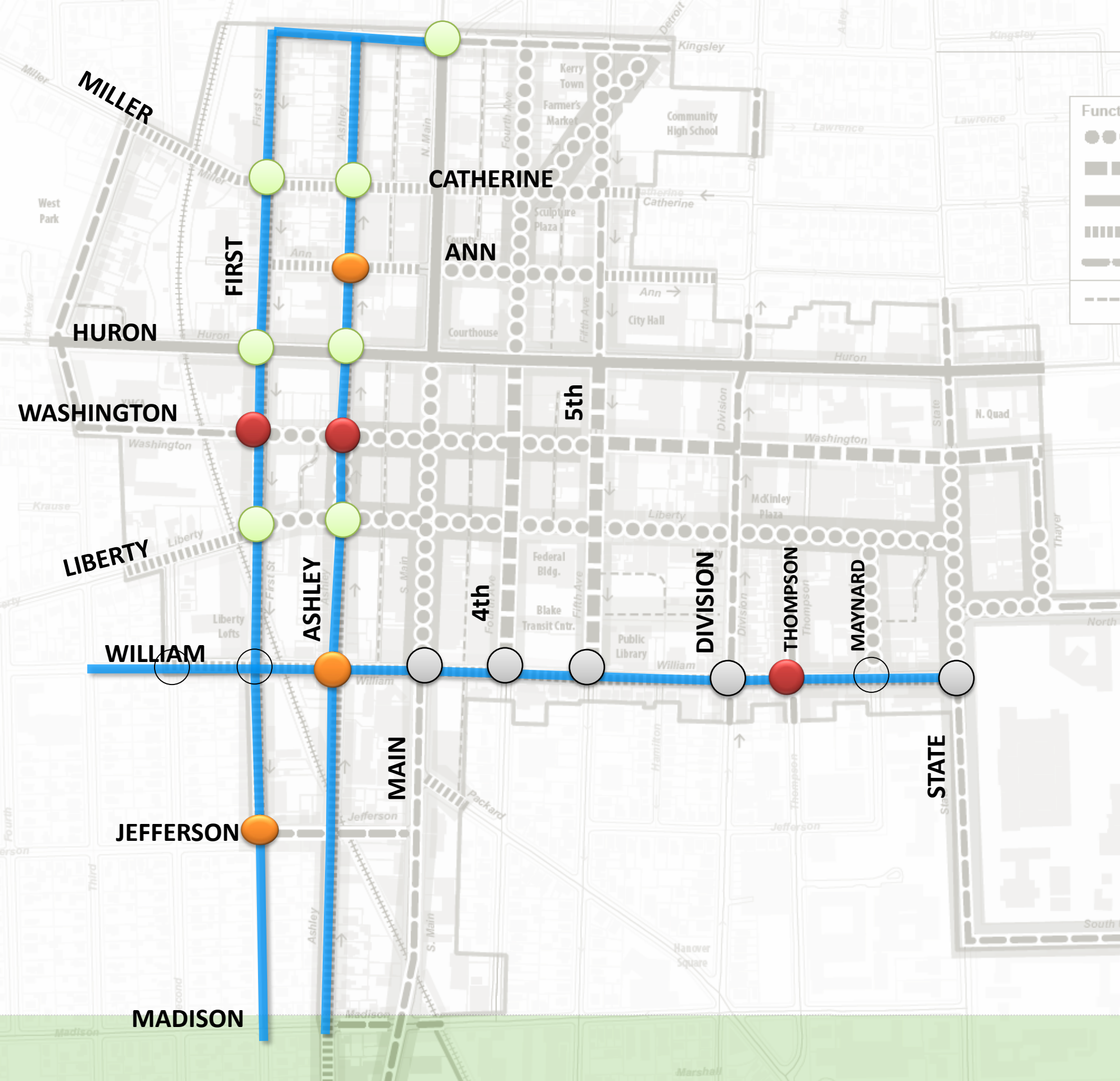
PHASE 3
1st - Main
Total closure w/ detours

PHASE 4
1st - Division
Resurfacing on **SOUTH** side of the road.
1-lane eastbound remains open

PHASE 2
5th Ave - Division
Total closure w/ detours

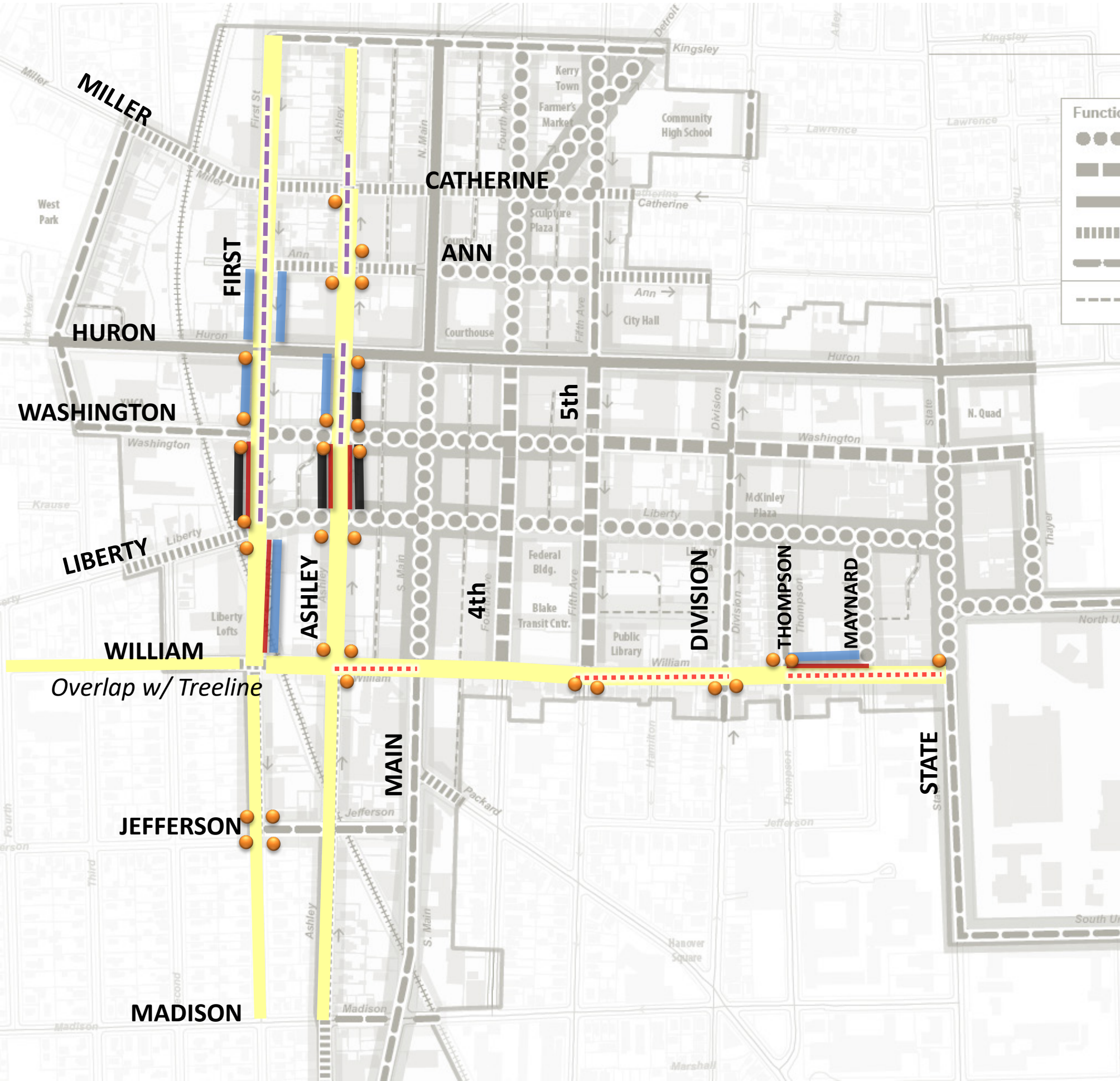
PHASE 1
Division - State
Total closure w/ detours
Complete all work and resurfacing before art fair

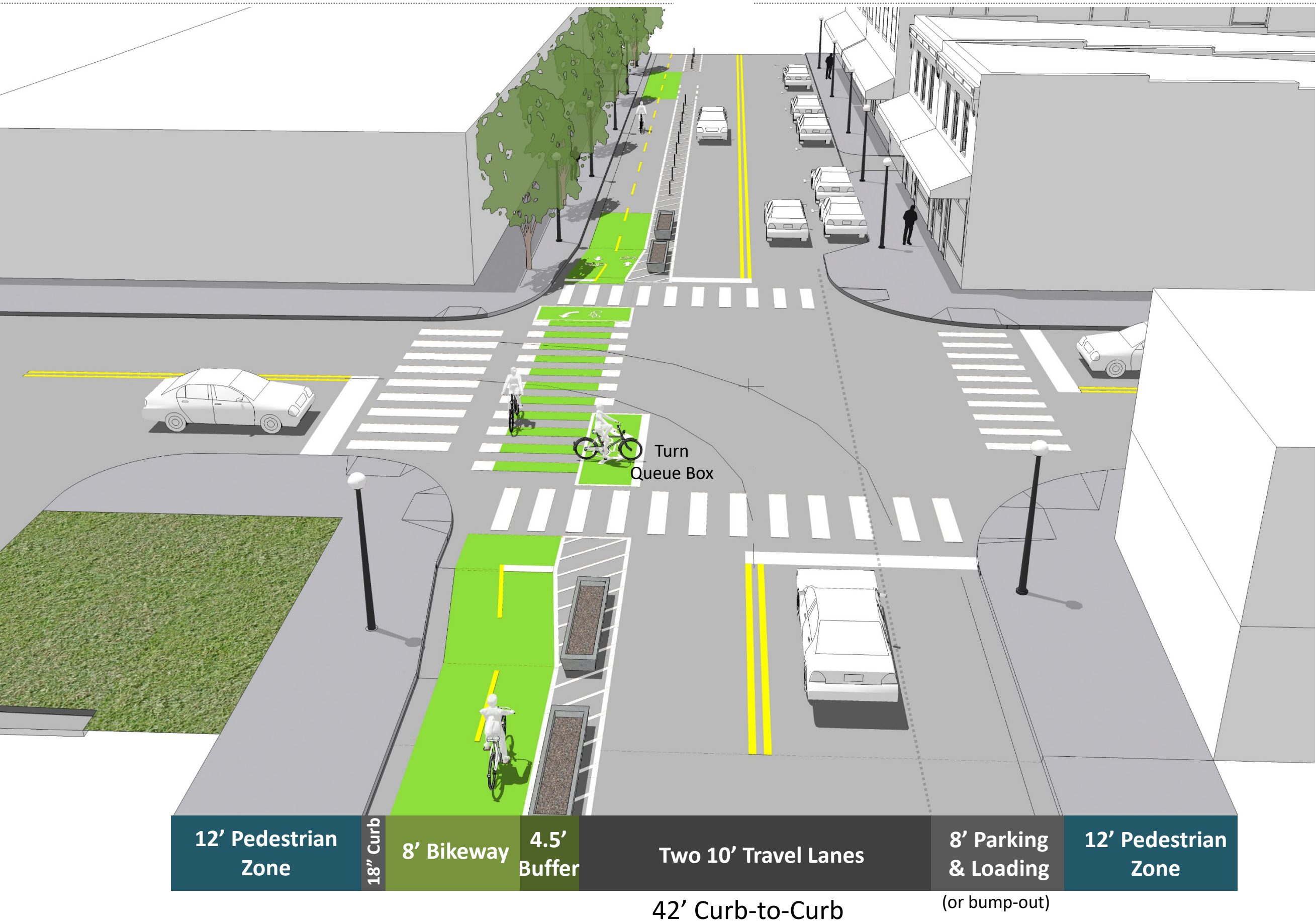
-  **PLANNED** signal to 4-way stop
-  **PLANNED** 2-way to 4-way stop sign
-  **Signalized intersection** - adjustment to two-way traffic
-  **Signalized intersection** – unchanged
-  **All-way Stop sign controlled intersection** – unchanged



-  **Curb adjust:** widen roadway (for bikeway accommodation)
-  **Curb adjust:** narrow roadway (for more sidewalk/streetscape space)
-  **Streetscape enhancement A** (street trees, street lighting, sidewalk rehab)
-  **Streetscape enhancement B** (tree replacement as needed, street lighting, sidewalk repair as needed)
-  **Water main upsizing**
-  **Water main consolidation** (city funded)
-  **Corner Bumpouts**

The exact extend/limit of streetscape enhancement will continue to evolve as the budget allows.







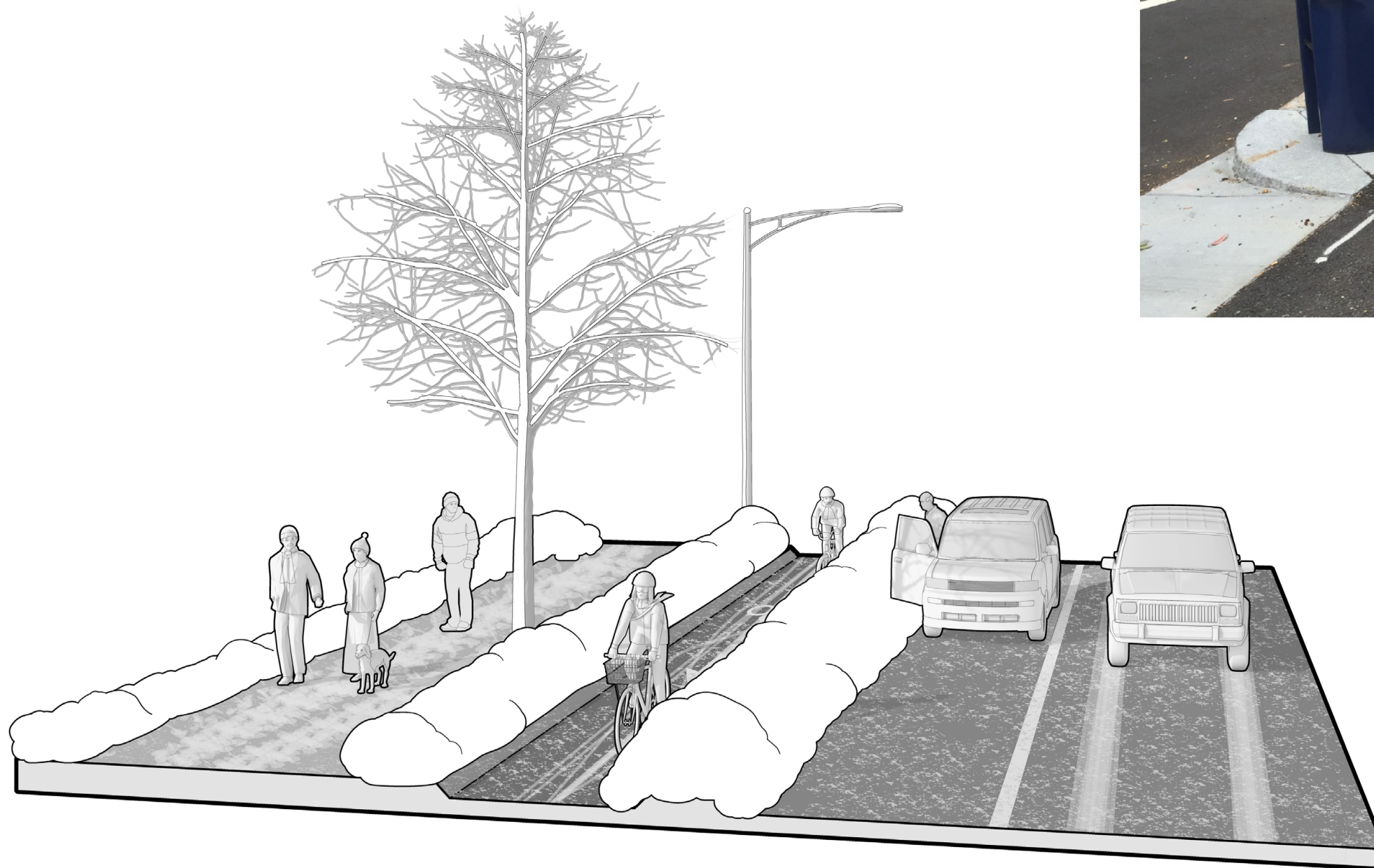
14' Pedestrian Zone	8' Parking & Loading (or bump-out)	Two 11' Travel Lanes (with High-Viz Sharrows) 38' Curb-to-Curb	8' Parking & Loading (or bump-out)	14' Pedestrian Zone
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16' Pedestrian & Landscape Zone	7' Parking	20' Shared Lane with Advisory Bike Lanes	7' Parking	16' Pedestrian & Landscape Zone
(or bump-out)		34' Curb-to-Curb	(or bump-out)	

- Refuse Service

- Buffer widths of 3' or more can accommodate hand carts within the buffer zone
- Narrow buffers will require staging carts behind the curb. Very little of this condition present.



- Snow Clearing

- Snow can be piled on buffer and/or behind the curb.
- Minimum bikeway width = 8' throughout corridor, with a 4-6' wide buffer.
- Plowing sequence (roadway first – then bikeway with smaller plows)