



Grant Circle NW Safety and Operations Improvement Study

11/08/2023

DISCLAIMER

- The concept drawings and graphics included in this presentation are intended to illustrate the feasibility of the proposed improvements for Grant Circle.
- These concepts aim to: 1) address issues identified in the needs assessment, 2) advance the project's goals of safety improvements for all modes.
- All features of this concept are approximate, may not be drawn to scale, and subject to change.

Introduction



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Challenges Observed



Exiting vehicle making a turn at a poor conflict angle with the bicycle lane and crosswalk



Pedestrian crossing when a vehicle is entering and exiting the circle



Circulating vehicle coming to a sudden stop to yield to a crossing pedestrian



Vehicle illegally parked in the bicycle lane



Vehicle illegally parked in the hatched area



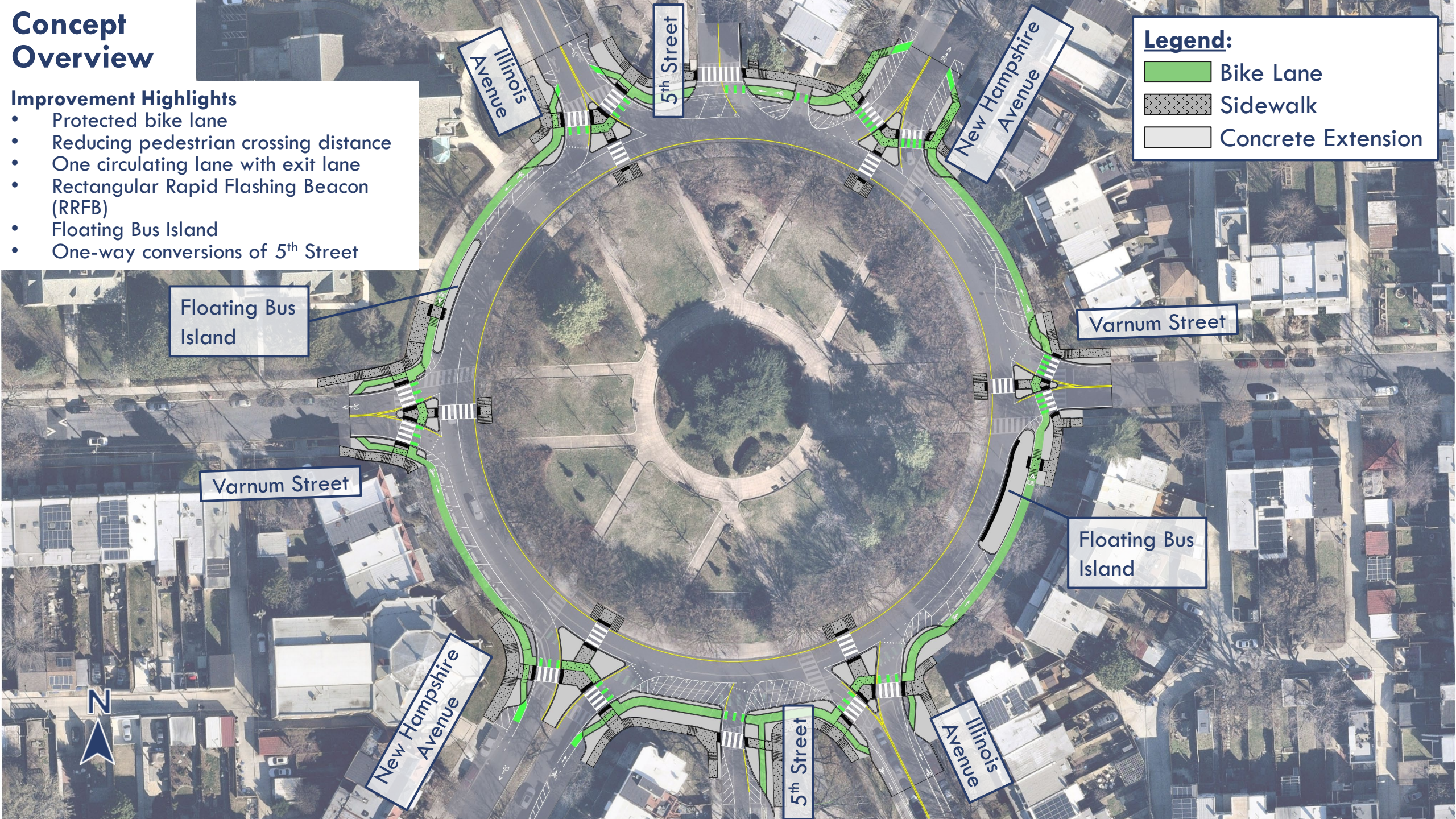
Southbound Illinois Avenue NW queues entering Grant Circle during the AM

Concept Overview

- ### Improvement Highlights
- Protected bike lane
 - Reducing pedestrian crossing distance
 - One circulating lane with exit lane
 - Rectangular Rapid Flashing Beacon (RRFB)
 - Floating Bus Island
 - One-way conversions of 5th Street

Legend:

-  Bike Lane
-  Sidewalk
-  Concrete Extension



Floating Bus Island

Varnum Street

Varnum Street

Floating Bus Island

New Hampshire Avenue

5th Street

Illinois Avenue

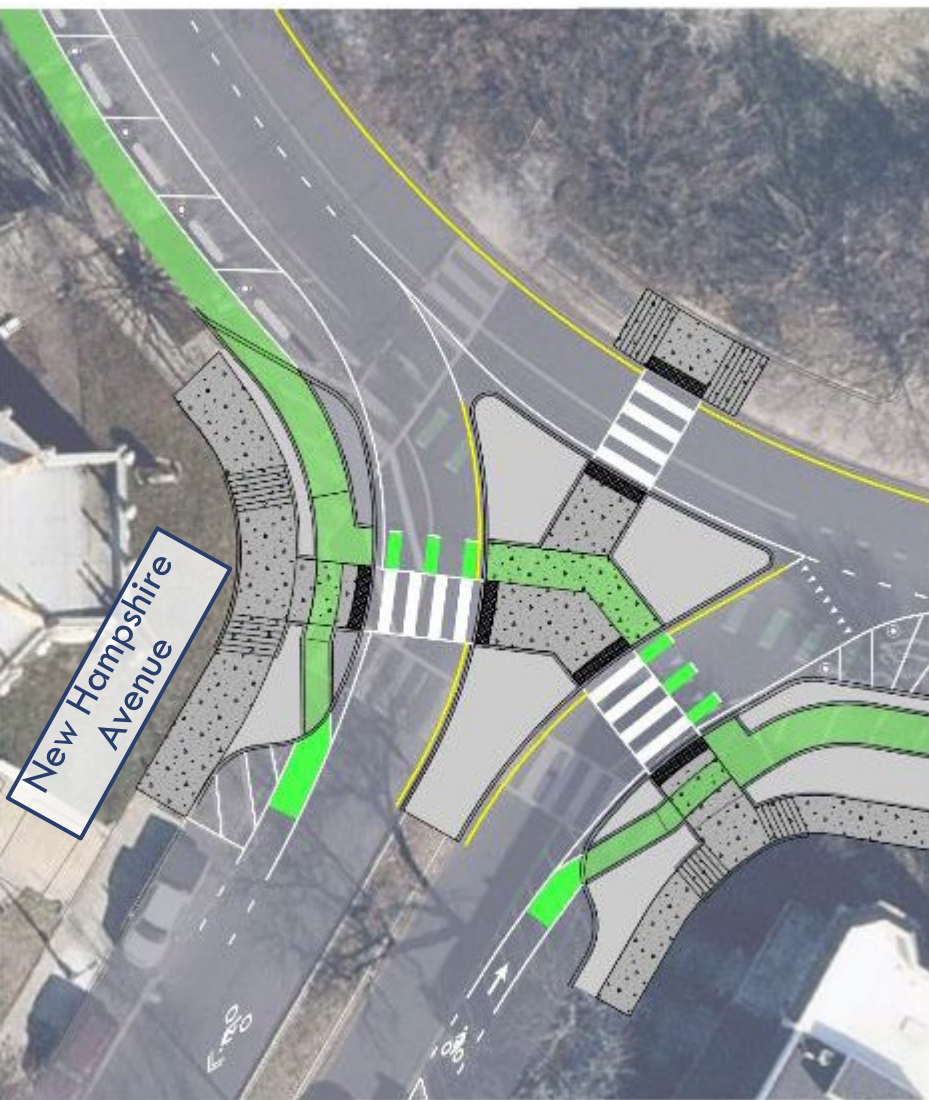
Illinois Avenue

5th Street

New Hampshire Avenue



Concept Details



- One Circulating Lane with Exit Lane and Protected Bike Lane
 - Installs a fully protected bicycle lane
 - Creates one yield point for exiting and entering vehicles
 - Eliminates multilane threat at 5 of 6 crosswalks and reduces crossing distances
 - Improves vehicle conflict angle with pedestrians and bikes
 - Addresses lane changing/sideswipe crashes
 - Adds bus platforms at the two bus stops within the circle

Illinois Avenue (North) Looking Towards Grant Circle



Existing Conditions - Google Streetview

Illinois Avenue (North) Looking Towards Grant Circle



Grant Circle Looking Towards Illinois Avenue (North)



Existing Conditions - Google Streetview



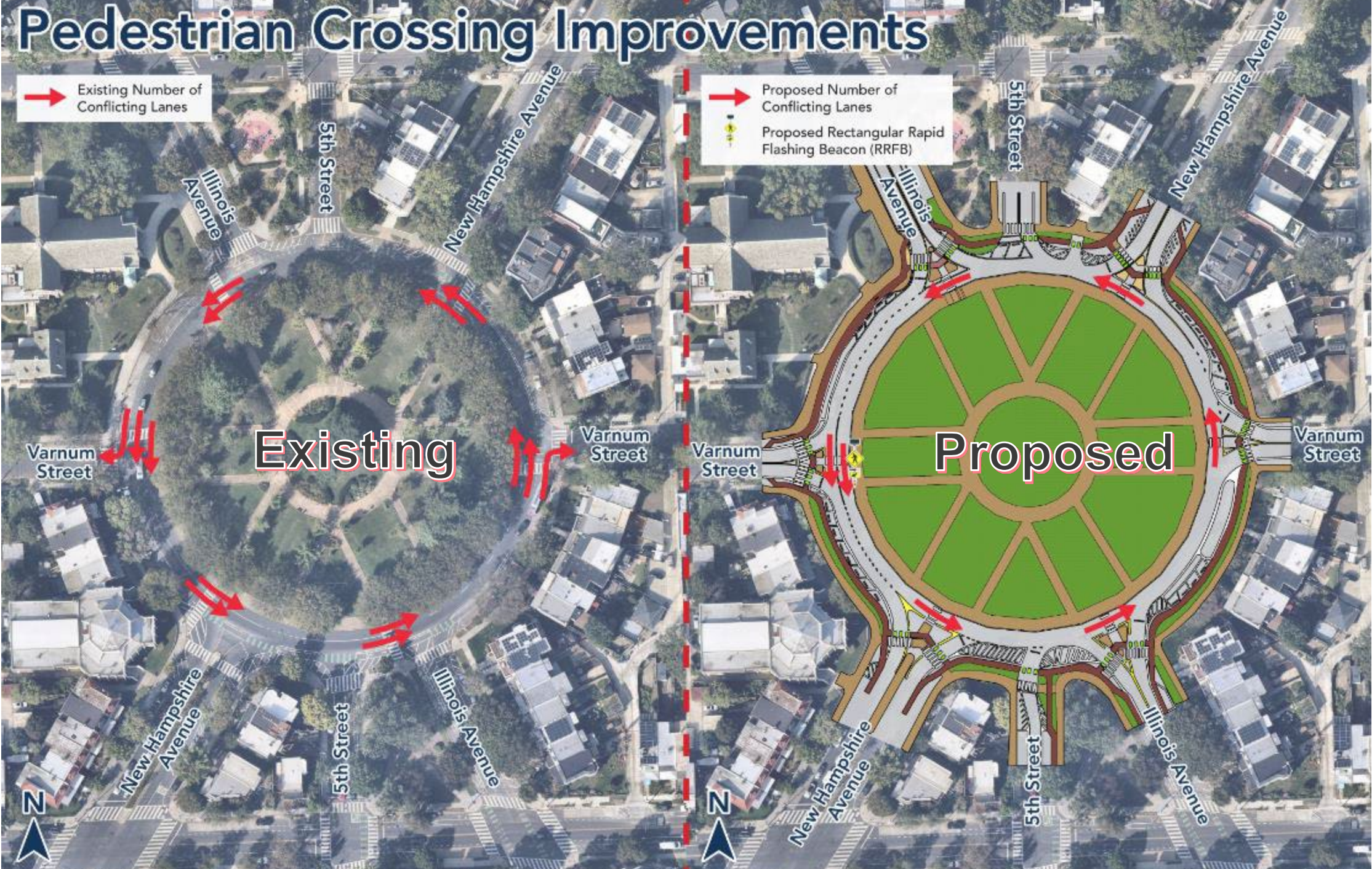
Grant Circle Looking Towards Illinois Avenue (North)



Pedestrian Crossing Improvements

→ Existing Number of Conflicting Lanes

→ Proposed Number of Conflicting Lanes
⚡ Proposed Rectangular Rapid Flashing Beacon (RRFB)



Existing

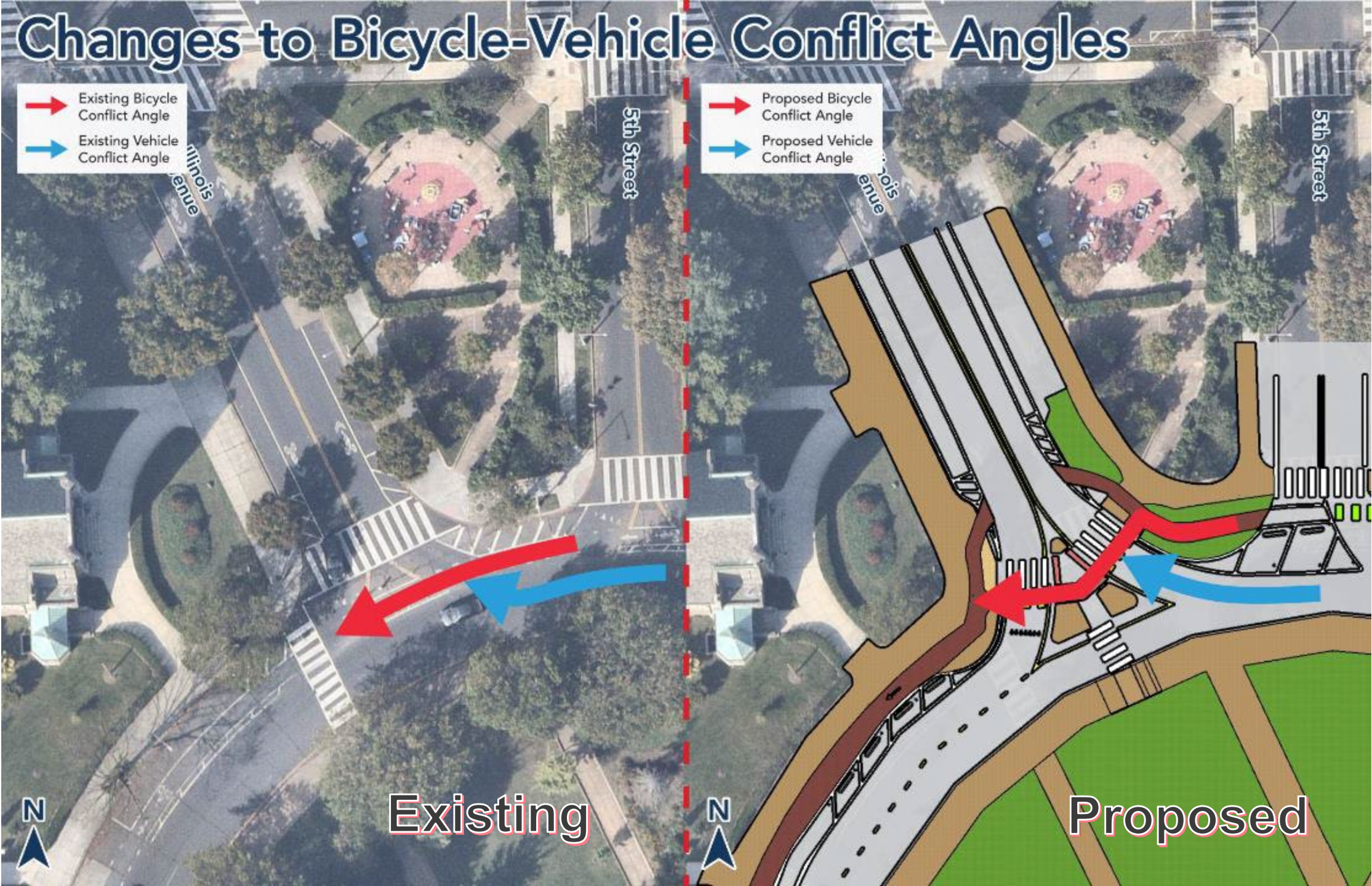
Proposed



Changes to Bicycle-Vehicle Conflict Angles

- Existing Bicycle Conflict Angle
- Existing Vehicle Conflict Angle

- Proposed Bicycle Conflict Angle
- Proposed Vehicle Conflict Angle



Existing

Proposed

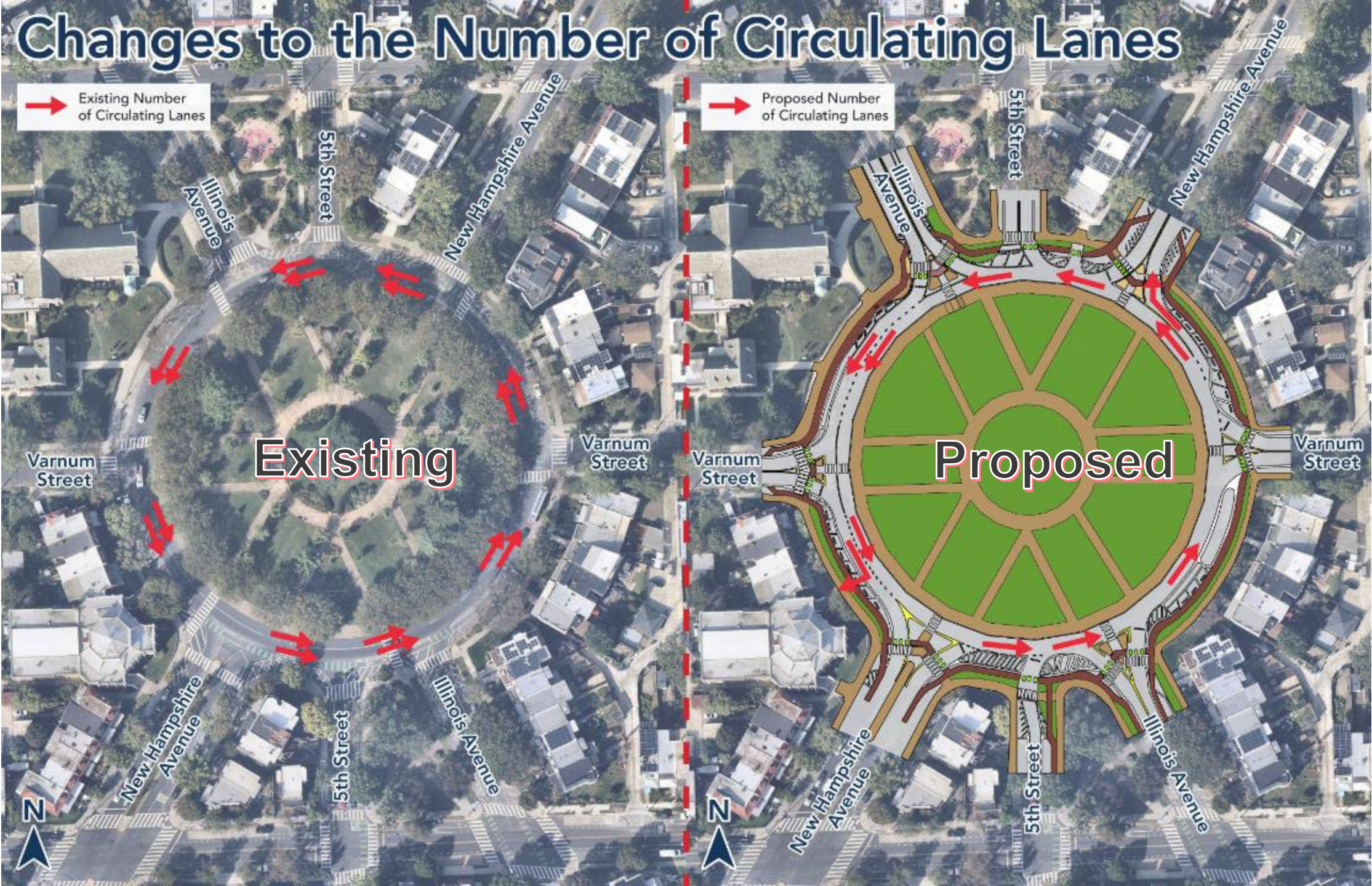
Changes to the Number of Circulating Lanes

Existing Number of Circulating Lanes

Proposed Number of Circulating Lanes

Existing

Proposed



Changes to the Direction of Flow

Existing Direction of Flow

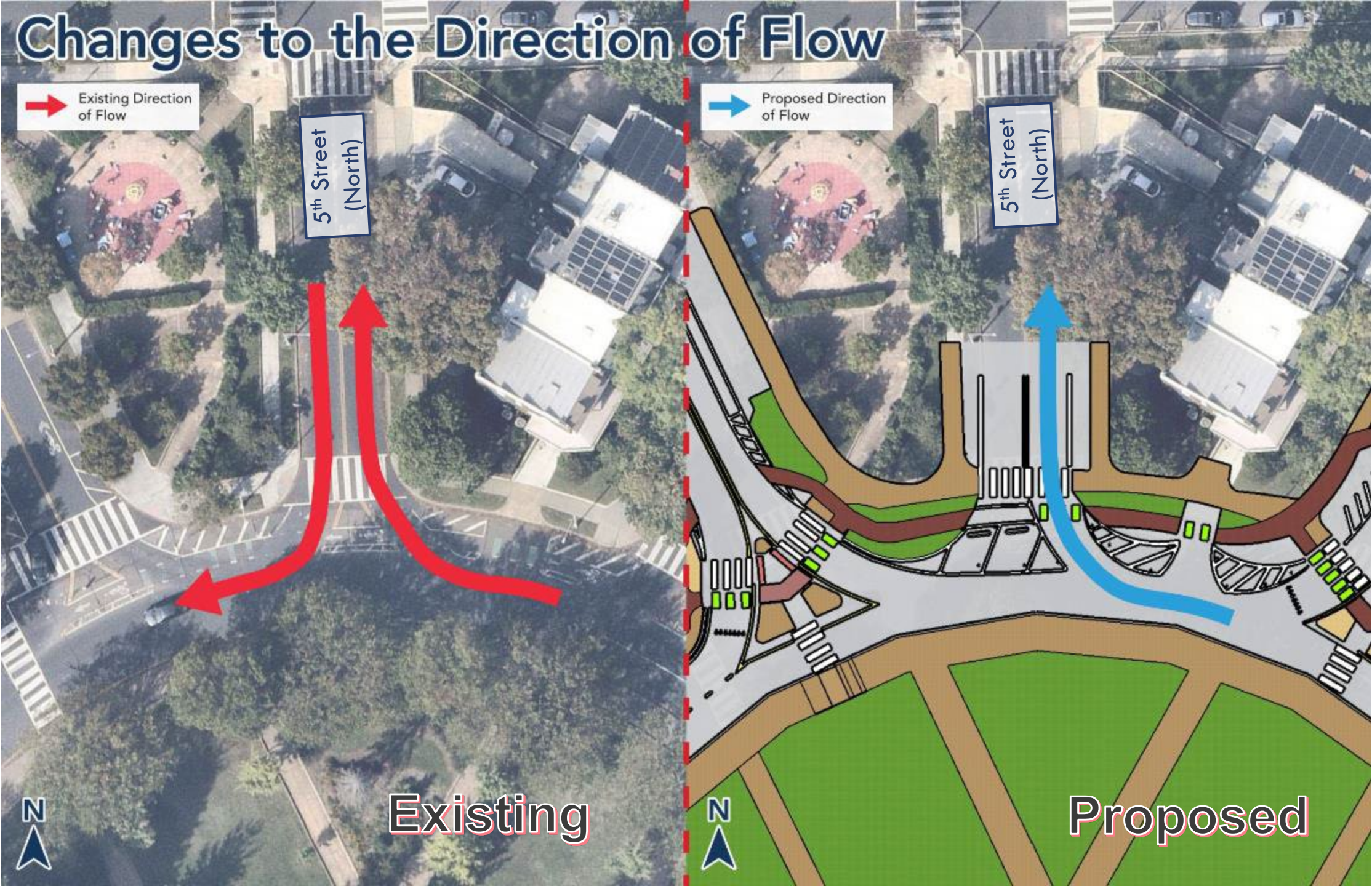
Proposed Direction of Flow

5th Street (North)

5th Street (North)

Existing

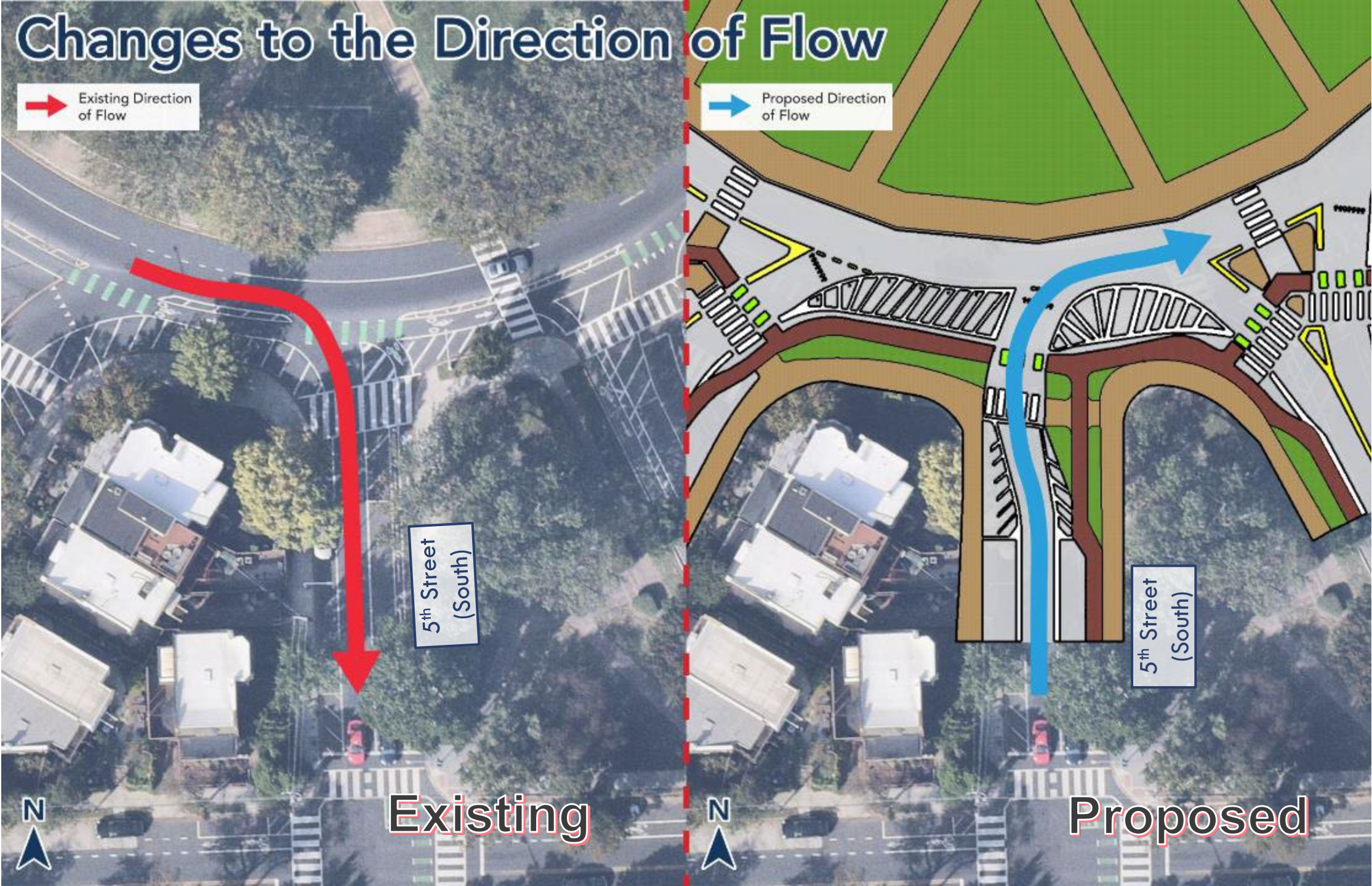
Proposed



Changes to the Direction of Flow

Existing Direction of Flow

Proposed Direction of Flow



5th Street (South)

5th Street (South)

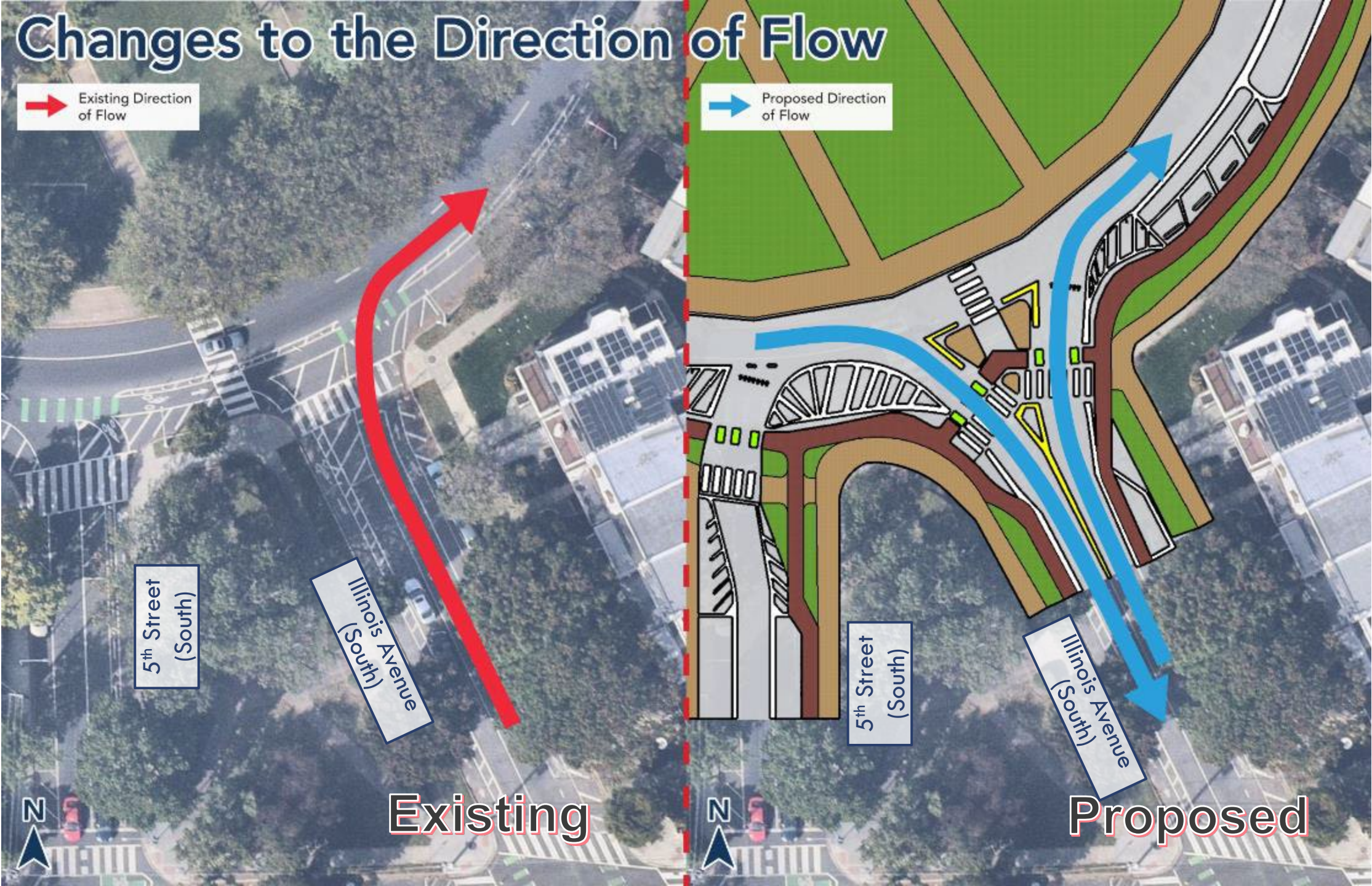
Existing

Proposed

Changes to the Direction of Flow

Existing Direction of Flow

Proposed Direction of Flow



5th Street (South)

Illinois Avenue (South)

5th Street (South)

Illinois Avenue (South)

Existing

Proposed

On-Street Parking Impacts

Existing Parking

19 spaces around the Circle
8 spaces on the west side of Illinois Ave (south)

Proposed Parking

3 spaces remained in the Circle
Total loss of 24 spaces



3 spaces to remain

Parking on the east side of Illinois Ave will remain

Next Steps

- Review of Community Feedback (2023)
- Preliminary Design (2024)
- Final Design (2024)
- Construction (2025)

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District Department of Transportation