

Brattle Street Safety Improvement Project Community Meeting

Mason St to Mt Auburn St

Separated Bike Lanes and Intersection Safety Improvements
August 2, 2022 | 6 p.m. | Zoom

Brattle Street Safety Improvement Project

Mason St to Mt Auburn St

Third Community Meeting

August 2, 2022 | City of Cambridge

Project Website:

cambridgema.gov/BrattleStSafety

We are Recording

- We will post the recording of tonight's meeting on the project page

Cameras + Microphones

- Your camera is off
- We will enable your microphone only when you are speaking

Provide Feedback after the Presentation

- You will find information on how to give feedback at the end of the presentation

Agenda

- Planning Background
- Project Overview
- Phase 1 Design: Mason St to Sparks St
- Phase 2 Design: Sparks St to Mt Auburn St
- Schedule/Next Steps
- Questions + Feedback

Implementation Schedule

Late Summer/Fall 2022

Phase 1 – Mason St to Sparks St

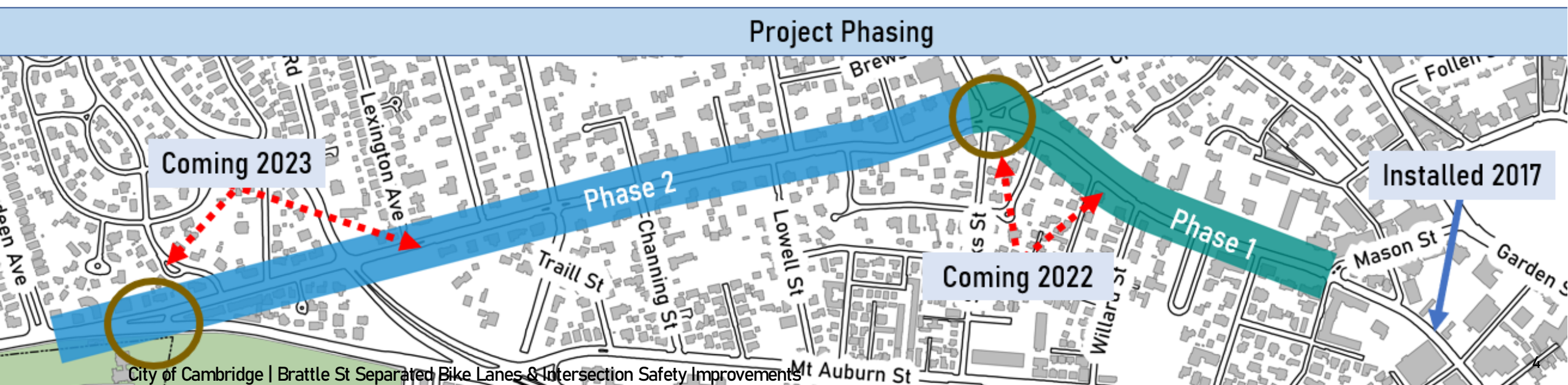
- Separated bike lanes
- Safety improvements at Brattle St and Sparks St/Craigie St intersection



Spring/Summer 2023

Phase 2 – Sparks St to Mt Auburn St

- Separated bike lanes
- Safety improvements west of Sparks St
- Intersection improvements at Brattle St/Fresh Pond Pkwy and Brattle St/Mt Auburn St



Project Schedule

Tonight: Community Meeting #3

- Final review of plans for Phase 1: Mason St to Sparks St
- Initial review of plans for Phase 2: Sparks St to Mount Auburn St

August 4: Cambridge Historical Commission Review

August 8: In-Person Drop-In Session

- **Location:** Buckingham, Browne & Nichols Lower School Lawn
- **Address:** 19 Craigie St
- **Time:** 5 p.m. to 7 p.m.

Late Summer/Fall 2022: Install Phase 1

- Install Mason Street to Sparks Street

Fall 2022: Community Meeting #4

- Ongoing community engagement on Phase 2: Sparks St to Mount Auburn St

Spring/Summer 2023: Install Phase 2

- Install Sparks Street to Mount Auburn Street

Planning Background Policies and Ordinances

What drives our street design?

We design for people of all ages and abilities.

This includes:

- People who may not have access to a car
- Safe and accessible facilities, including bike lanes, that can be used by a wide range of people

How we think about vehicle congestion and delay

- Moving people slowly is moving people safely
- We do not prioritize eliminating delay for people driving alone

Focus is on moving people and goods, not their vehicles

- Buses run less frequently than cars, but carry more people
- Cannot ignore access for trucks and local deliveries



Street Design – Enforcement – Education

Street Design

- A Safe System is a human-centered approach to street design, engineered to prevent errors as much as possible and lessen the impacts of errors when they do occur.
- Shifts away from individual blame
- Keep road users safe by designing for the most vulnerable (i.e. people not in cars)
- Crash prevention is more effective than crash mitigation

Enforcement and Education

- Enforcement and Education are supplemental to proper street design, not a replacement

Example:

A momentary distraction can mean a driver doesn't see a cyclist or vice versa.

Providing separation between people in cars and people on bikes decreases the chance that a momentary distraction leads to a deadly crash.

City Policies that Support Sustainable Transportation

- Vehicle Trip Reduction Ordinance
 - Parking & Transportation Demand Ordinance
 - Climate Protection Plan
 - School Wellness Policy
 - Envision Cambridge
- ▶ **Complete Streets**
 - ▶ **Vision Zero**
 - ▶ **Cycling Safety Ordinance**

Cycling Safety Ordinance Overview

2019: City Council Passed the Cycling Safety Ordinance

- Requires construction of separated bike lanes when streets are being reconstructed as a part of the City's **Five-Year Plan for Streets and Sidewalks** and when they have been designated for “Greater Separation” in the Bicycle Network Vision

2020: City Council Passed Amendments to the Ordinance

- The amendments set ambitious requirements for the installation of approximately 25 miles of separated bike lanes within the next five to seven years.
- The location of these facilities is informed by both the Cambridge Bicycle Network Vision and specific requirements in the Ordinance.



Image: A separated bike lane on Brattle St;
Credit: Kyle Klein

Cycling Safety Ordinance Overview - Continued

In general, the amendments to the Ordinance require the installation of separated bike lanes on:

- All of Massachusetts Ave;
- Garden St, eastbound from Huron Ave to Berkeley St, and westbound from Mason St to Huron Ave;
- Broadway from Quincy St to Hampshire St;
- Cambridge St from Oak St to Second St;
- Hampshire St from Amory St to Broadway; and
- **11.6 miles of separated bike lanes in other locations within the Bicycle Network Vision**
 - **Brattle St is part of these 11.6 miles**

Learn more at
cambridgema.gov/cycling-safety-ordinance

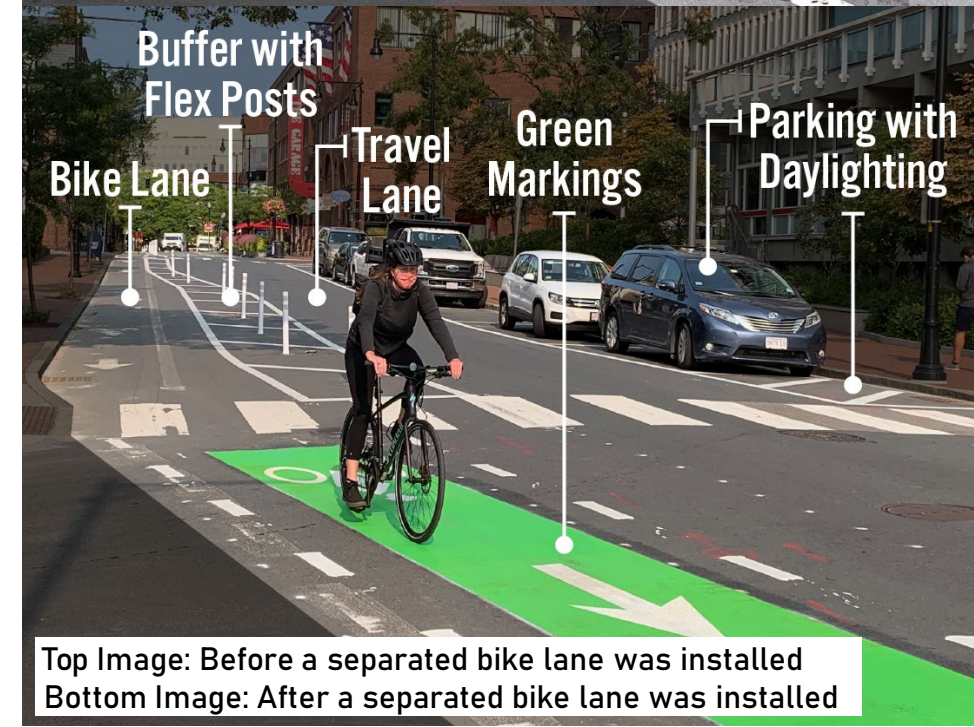


Image: A person riding a bicycle on Ames Street; Credit: Kyle Klein

Planning Background: Separated Bike Lanes and the Bike Plan

Separated Bike Lane Benefits

- Increases comfort and access for people of all ages and abilities
- Reduces crash and injury risk
- Eliminates threat of "dooring" from parked vehicles
- Reduces potential conflicts between vehicles and people biking
- Provides shorter crossing distance and increased separation from vehicles for people walking
- Encourages slower traffic speeds by visually narrowing the roadway width



Separated Bike Lane Benefits- Continued

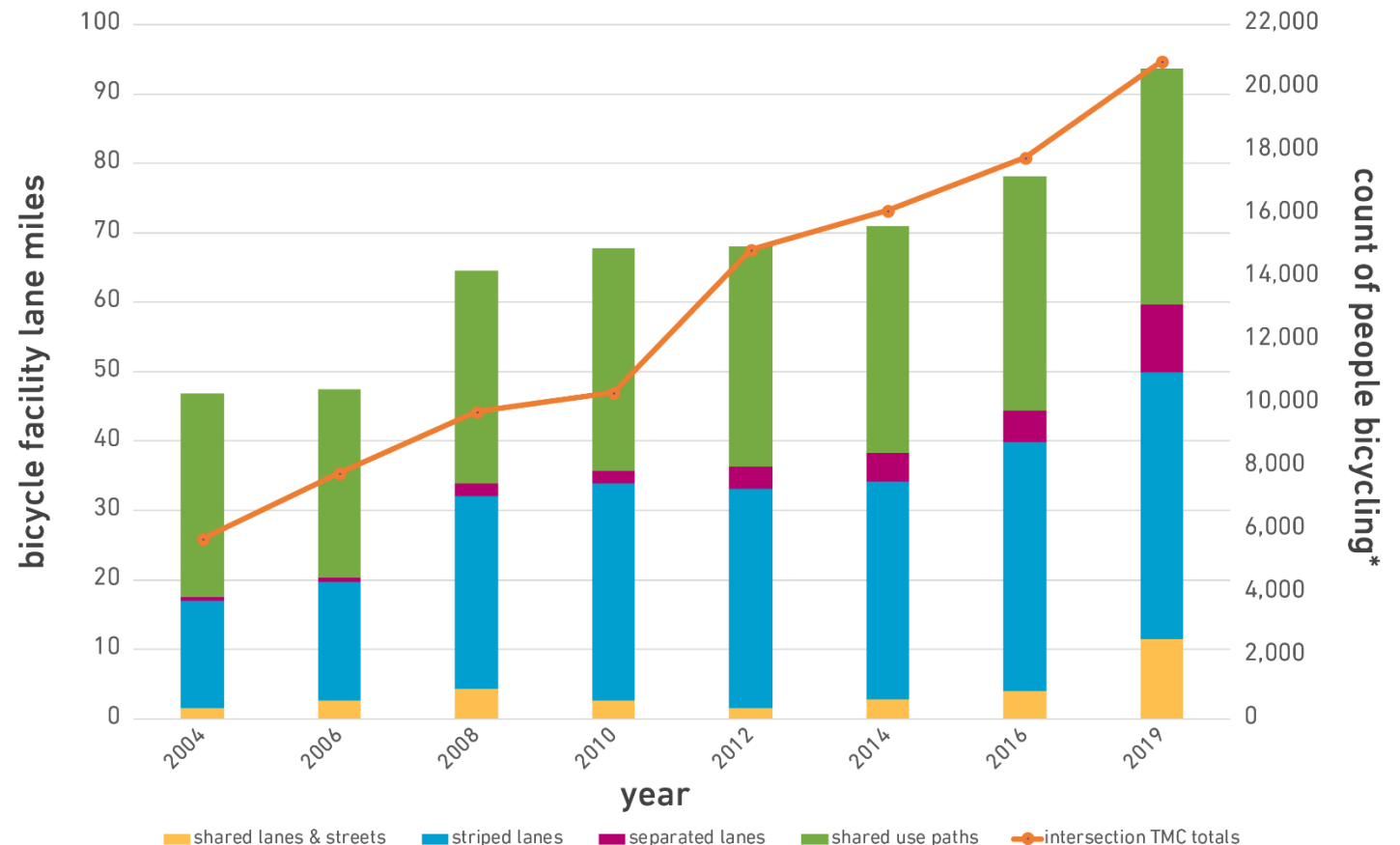
More people ride bicycles when we build more bicycle infrastructure.

A lack of safe and accessible routes and facilities for people of all ages and abilities prevents many people from biking.

As we've built more, we've enabled a wider variety of people to bike



BICYCLE FACILITY LANE MILES AND NUMBER OF PEOPLE BICYCLING (2004-2019)



Cambridge Bicycle Plan

Vision from the Cambridge Bicycle Plan:

Cambridge will be a place where bicycling is equally available to everyone, all destinations can be reached by bike, and streets are designed to accommodate bicycling for people of all ages, abilities and identities.

A variety of barriers make it harder for people to choose to bicycle, even though they would like to. Creating safe and comfortable streets is a necessary condition to enable everyone to have this choice. This reflects the philosophy that people are at the center of transportation planning and design.



Brattle Street in the Cambridge Bicycle Plan

- Plan identifies need for separated bike lanes on Brattle Street
- Avoids busier streets with buses, such as Mt Auburn Street
- Connects West Cambridge to the Charles River and important locations to the east (e.g., Harvard and Central Squares)



Learn more at
cambridgema.gov/2020bikeplanupdate

Project Overview

Separated Bikes Lanes: Types of Separation

1. Pre-Cast Concrete Curbs

- Reduce visual clutter
- More durable material

2. Flex Posts

- Higher visibility
- Installed at driveways, side-streets, and as needed
- Provide clarity to road users



Separated Bike Lanes: Types of Separation

Pre-Cast Concrete Curbs and Flex Posts



Example images of pre-cast concrete curbs with strategically placed flex-posts

City of Cambridge | Brattle Street Separated Bike Lanes & Intersection Safety Improvements



Separated Bike Lanes: Types of Separation

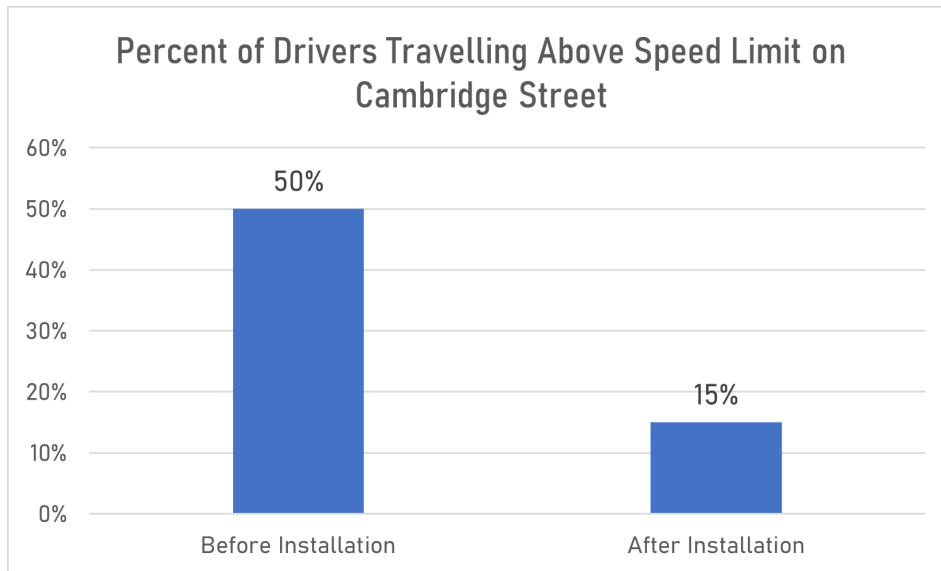
Pre-Cast Concrete Curbs



Example image of pre-cast concrete curbs without flex posts

Traffic Calming – Speed Reduction

- This project will narrow the roadway for drivers, both physically and visually
- We expect this to decrease driver speeds and increase pedestrian safety
- A similar project (Cambridge St) saw a reduction in speeds of about 25%
- Lower speeds are safer for all users, including drivers and pedestrians



Cambridge St Speed and Count Study ([Click for Link](#))



Cambridge St Separated Bike Lanes

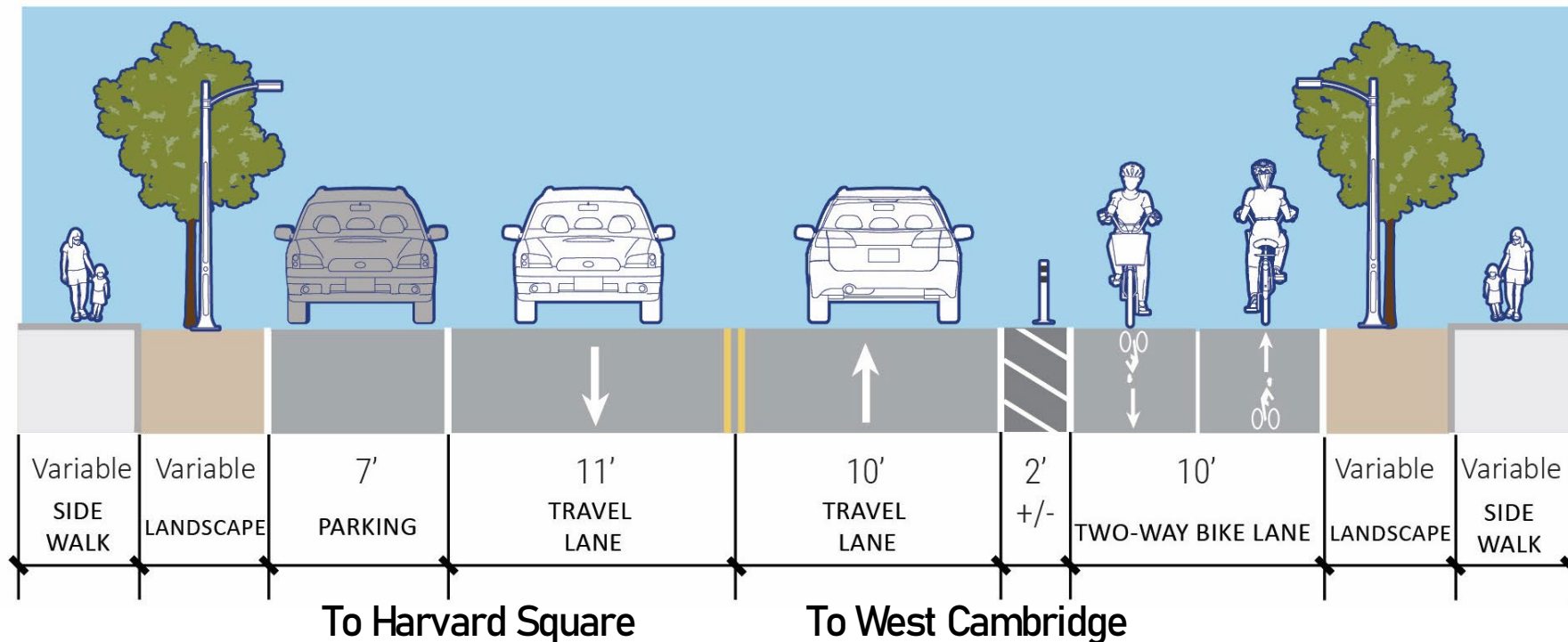
Mason St to Sparks St Design

Phase 1: Installation Planned for 2022

Two-Way Separated Bike Lane

Mason St to Sparks St

- Room for parking on one side of the street
- People biking will need to cross the road to access the south side of the street



Two-Way Separated Bike Lane





Mason St to Hawthorn St

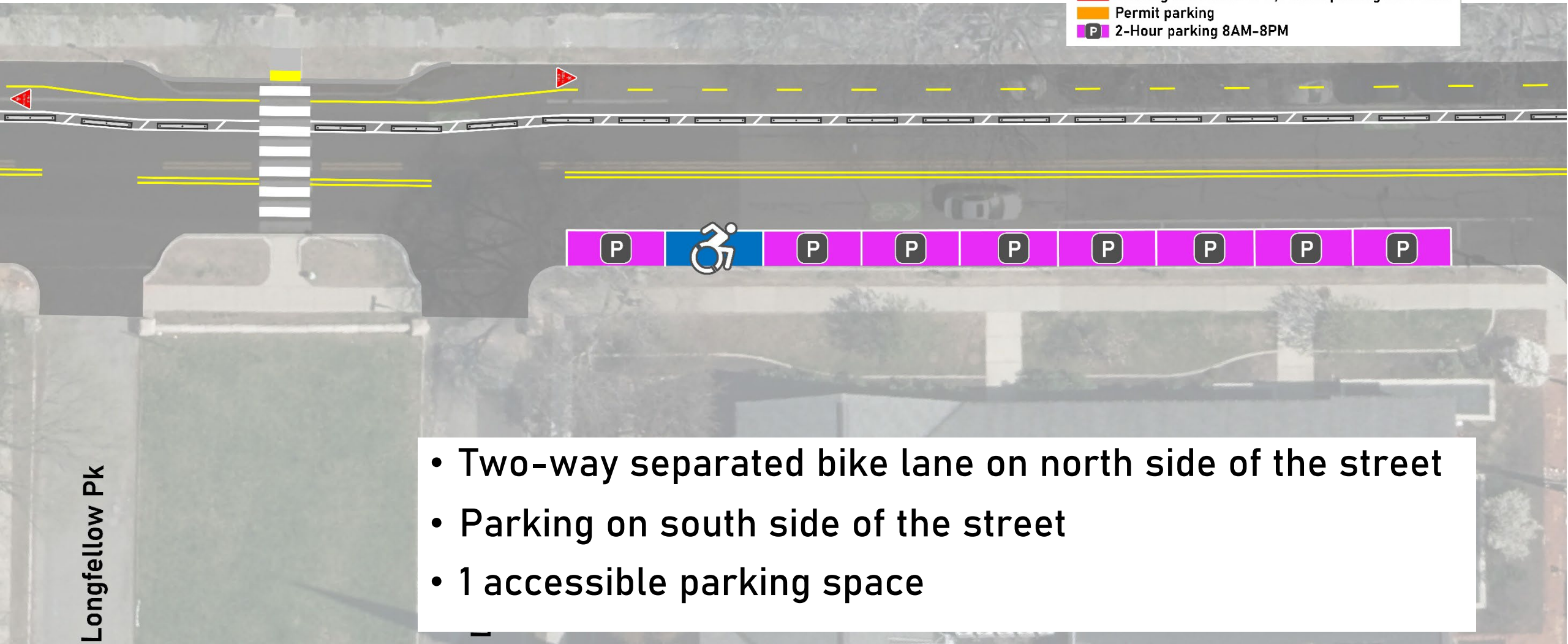


Two-Way Separated Bike Lane

Hawthorn St to Longfellow Park

Parking Key

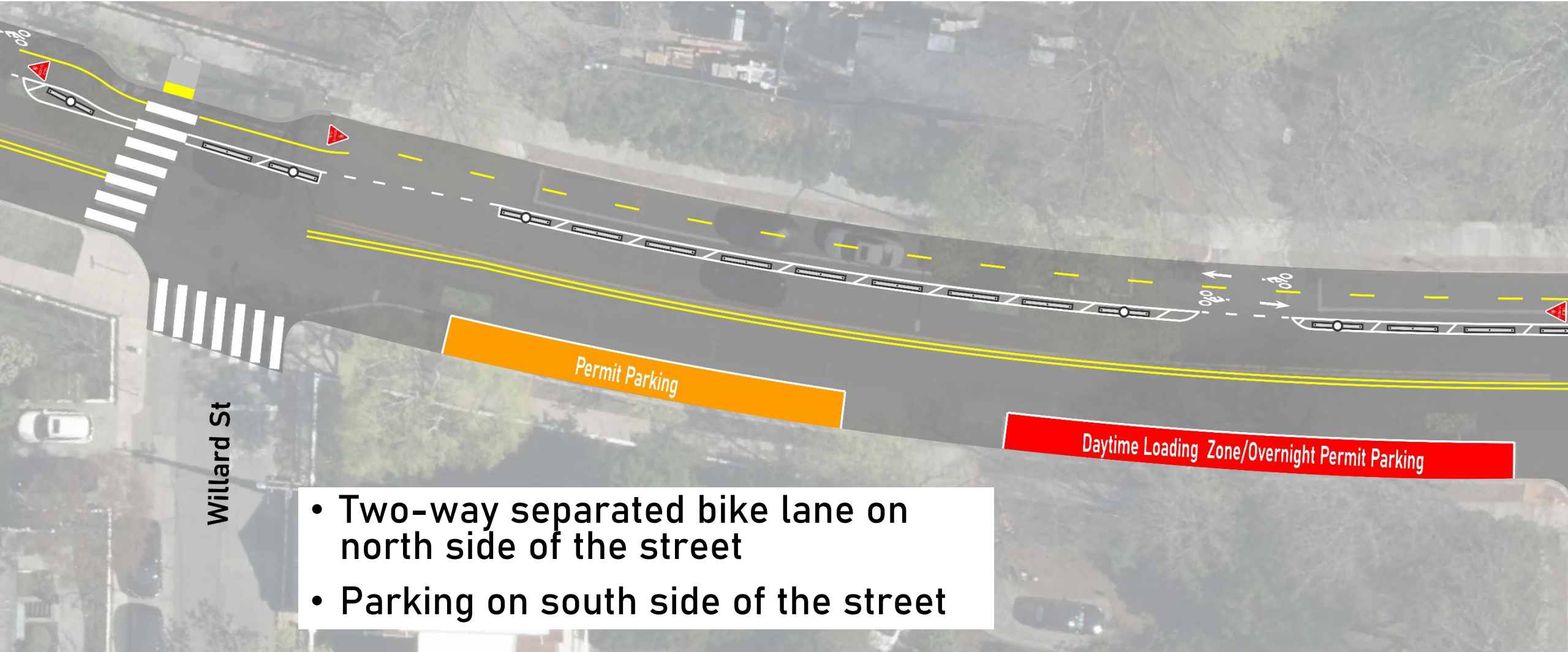
-  Accessible space
-  Loading zone 8AM-4PM/Permit parking 4PM-8AM
-  Permit parking
-  2-Hour parking 8AM-8PM



- Two-way separated bike lane on north side of the street
- Parking on south side of the street
- 1 accessible parking space

Two-Way Separated Bike Lane

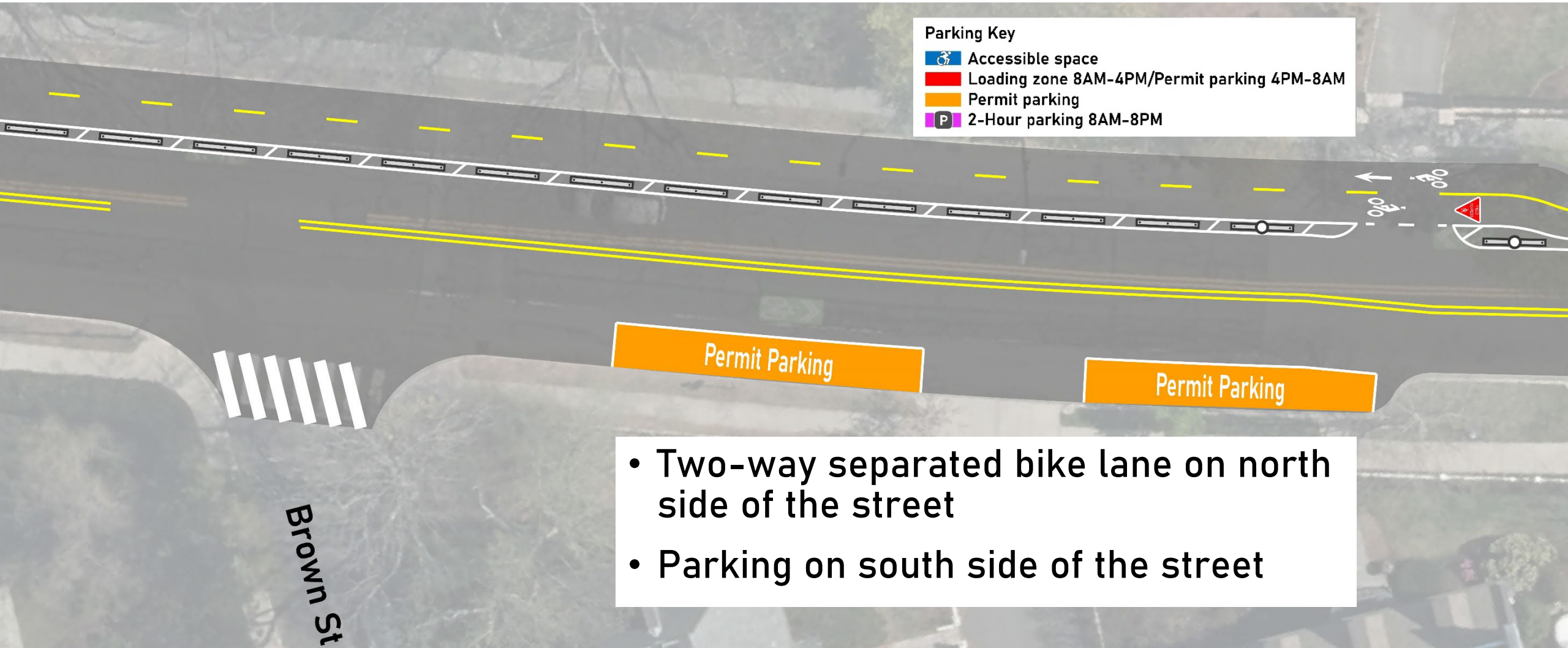
Longfellow Park to Willard St



- Two-way separated bike lane on north side of the street
- Parking on south side of the street

Two-Way Separated Bike Lane

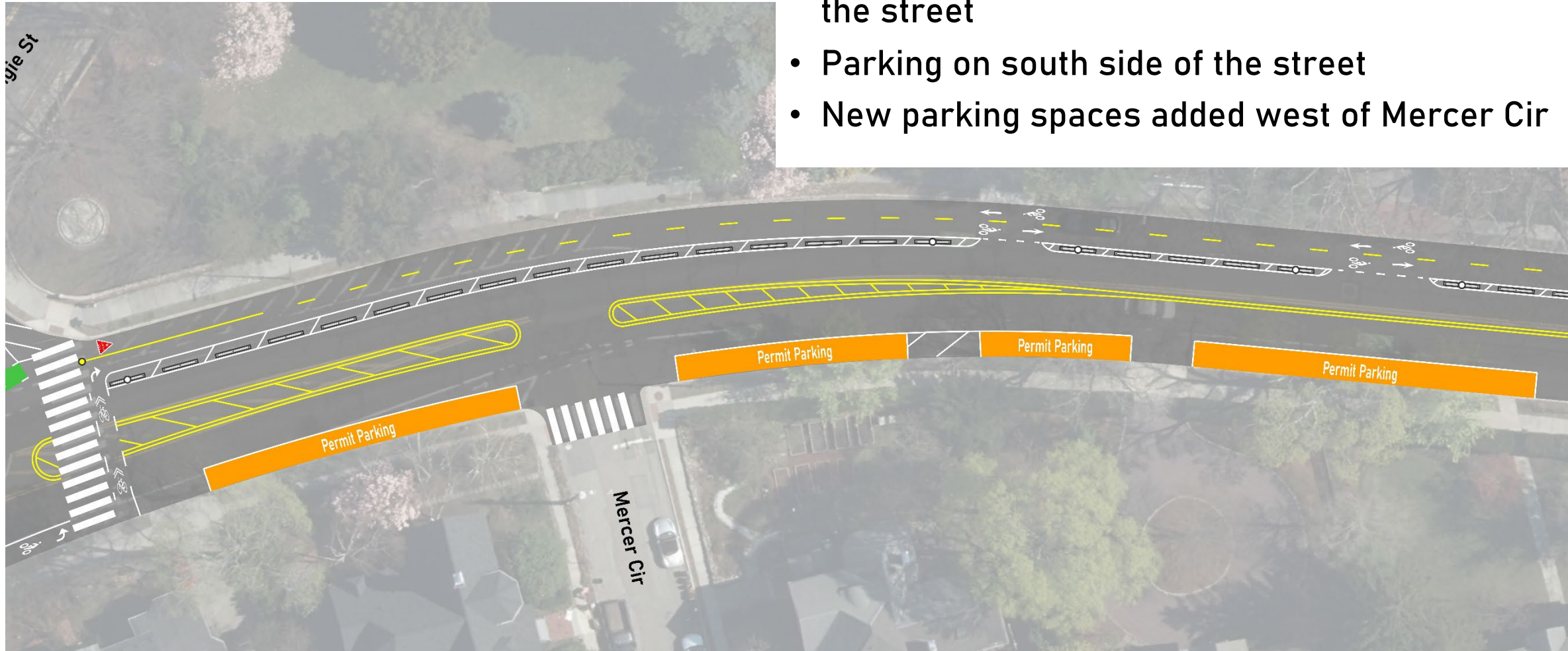
Willard St to Brown St



Two-Way Separated Bike Lane

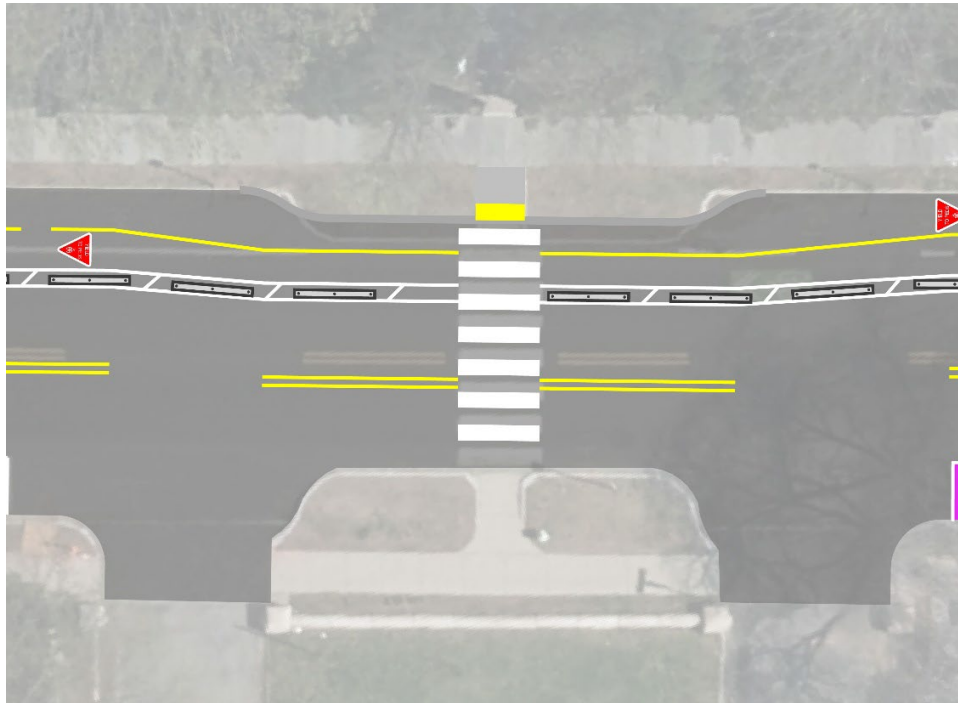
Brown St to Craigie St

- Two-way separated bike lane on north side of the street
- Parking on south side of the street
- New parking spaces added west of Mercer Cir



Pedestrian Crossing – Brattle St @ Longfellow Park

- Two-way separated bike lane on north side of street
- We will cut-back the north side curb extension by 2 feet
 - Space is removed from the grass strip between the road and sidewalk
- No impact on existing bluestone sidewalk



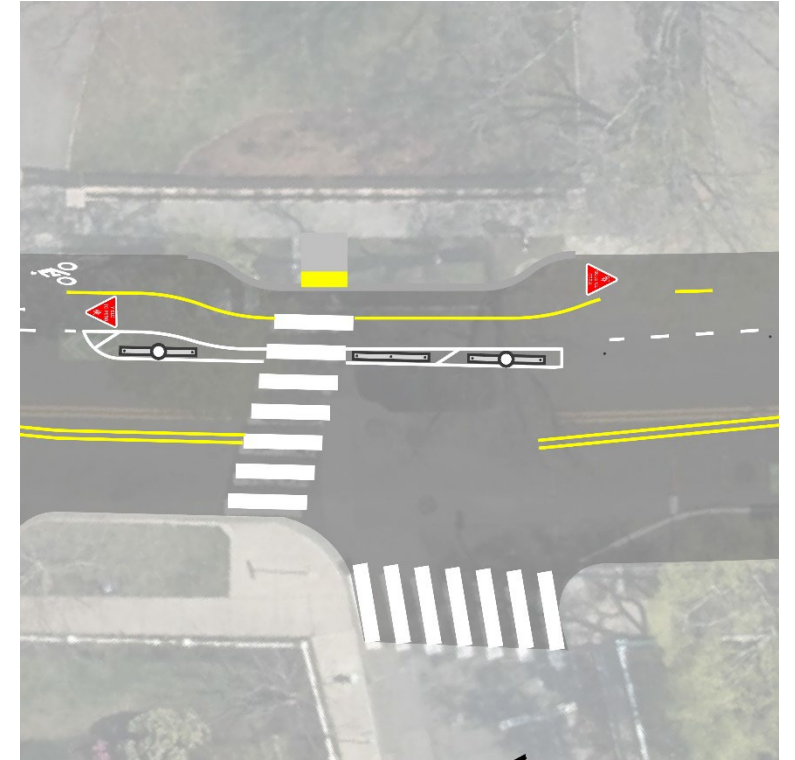
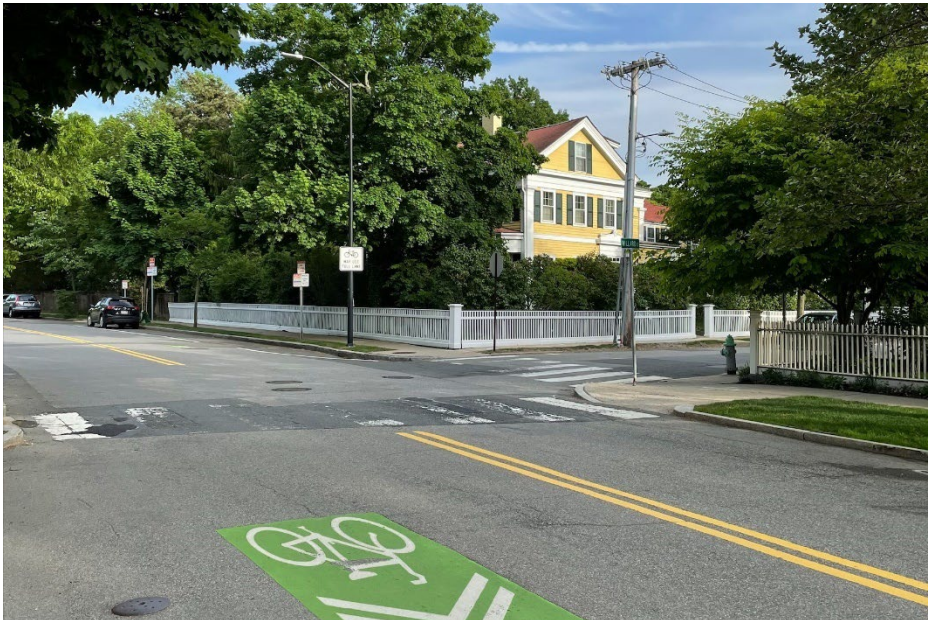
Longfellow Park Crossing



Rendering of Longfellow Park Crossing

Pedestrian Crossing – Brattle St @ Willard St

- Refresh crosswalk markings
- Two-Way separated bike lane on north side of street
- We will cut-back the north side curb extension by 2 feet to fit the preferred cross section



Willard St Crossing

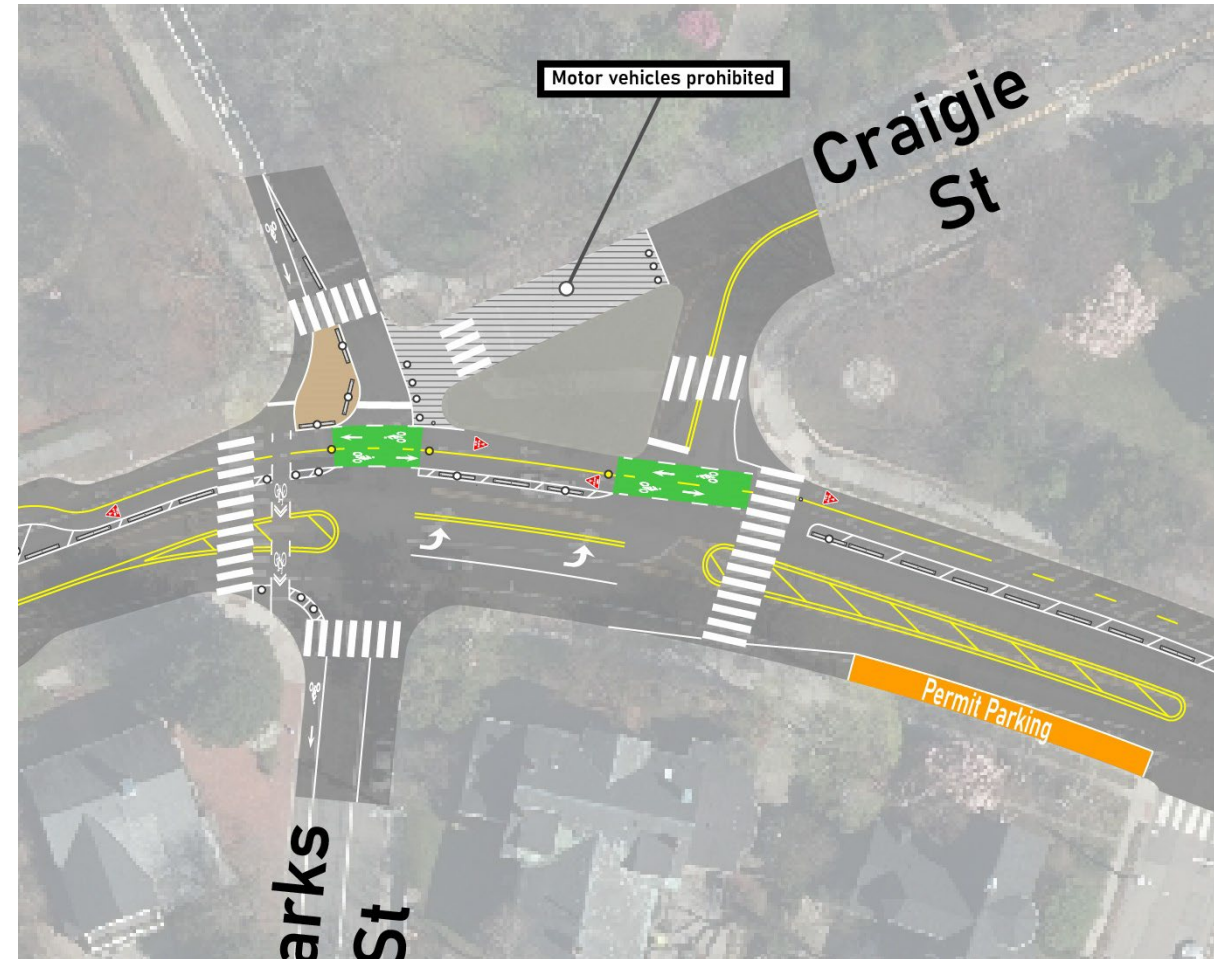
Short-Term Intersection Improvements

Spark St / Craigie St / Brattle St

- Creates two distinct intersections
 1. Brattle St @ Craigie St
 2. Brattle St @ Sparks St
- Includes interim bicycle markings during Phase 1

Benefits

- Improves safety
- Simplifies intersection and reduces conflict points
- Narrows crossing of Sparks St for pedestrians



Intersection Safety Improvements at Sparks St/Craigie St/Brattle St

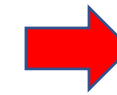
Short-Term Intersection Improvements

Narrowing of Craigie St Entrance

- Two-way traffic in a section of Craigie St that is currently one-way

How is this safer?

- Narrower space for drivers forces people turning to slow down
- Slower speeds reduce crashes that result in injuries

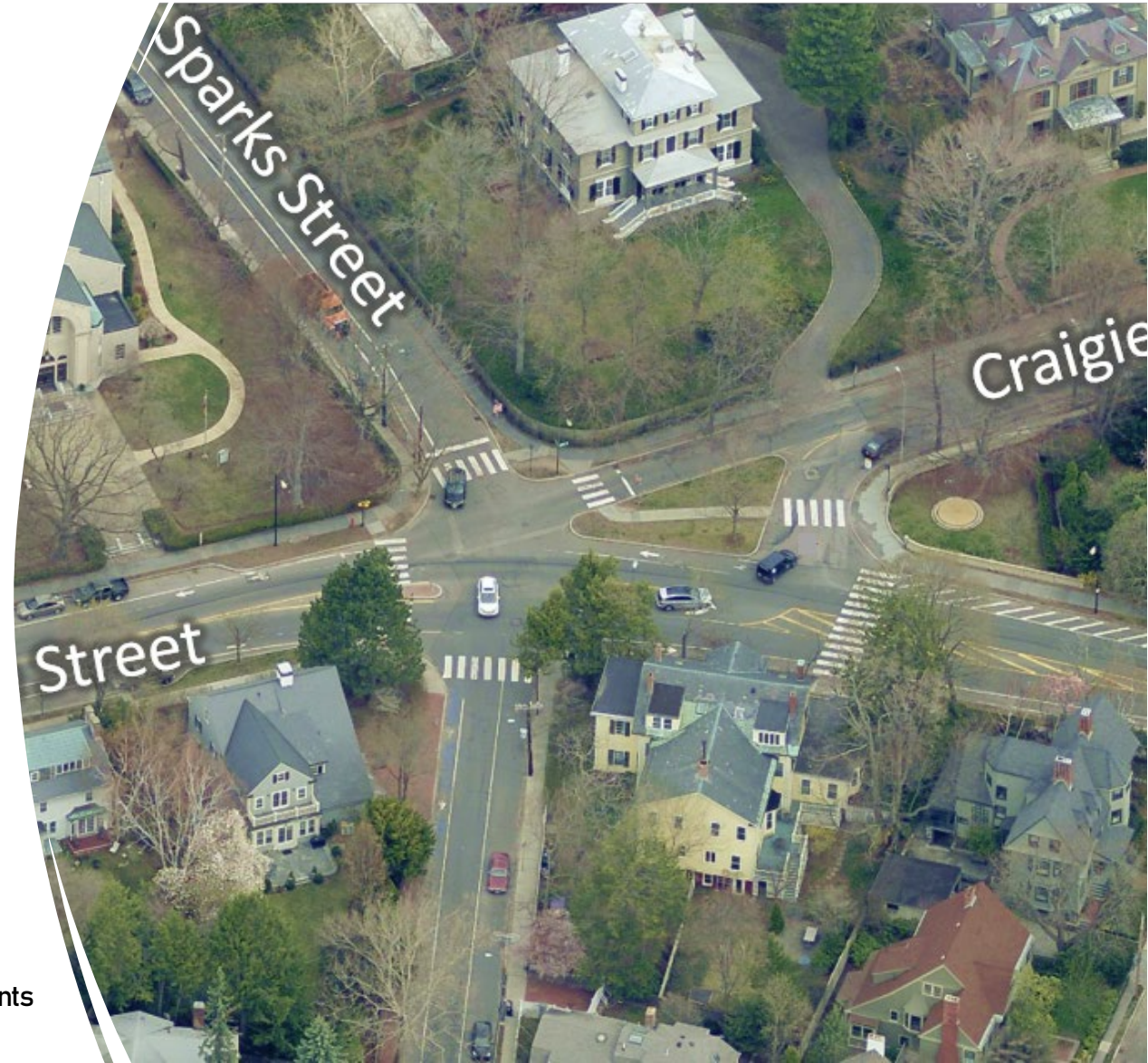


Before and After Representations of Craigie St

Long-Term Intersection Improvements

Sparks St / Craigie / Brattle St

- 2018 community meeting on long-term safety improvements
- Community preferred roundabout as *long-term* alternative
- Current project will implement *interim* improvements at this intersection
- As part of this project, we will refine design and cost estimates for the roundabout option
- Future funding for roundabout has not yet been identified



Mason St to Sparks St Design

Phase 2: Installation Planned for 2023

What We Heard

- Preference for two-way bike lanes on north side instead of one-way bike lane on either side
- Keep as much parking as possible especially between Fresh Pond Pkwy and Mt Auburn St
- Consider the needs of seniors and people with disabilities
- Improve pedestrian safety at Fresh Pond Pkwy and Brattle St
- Improve connections between separated bike lanes and side streets

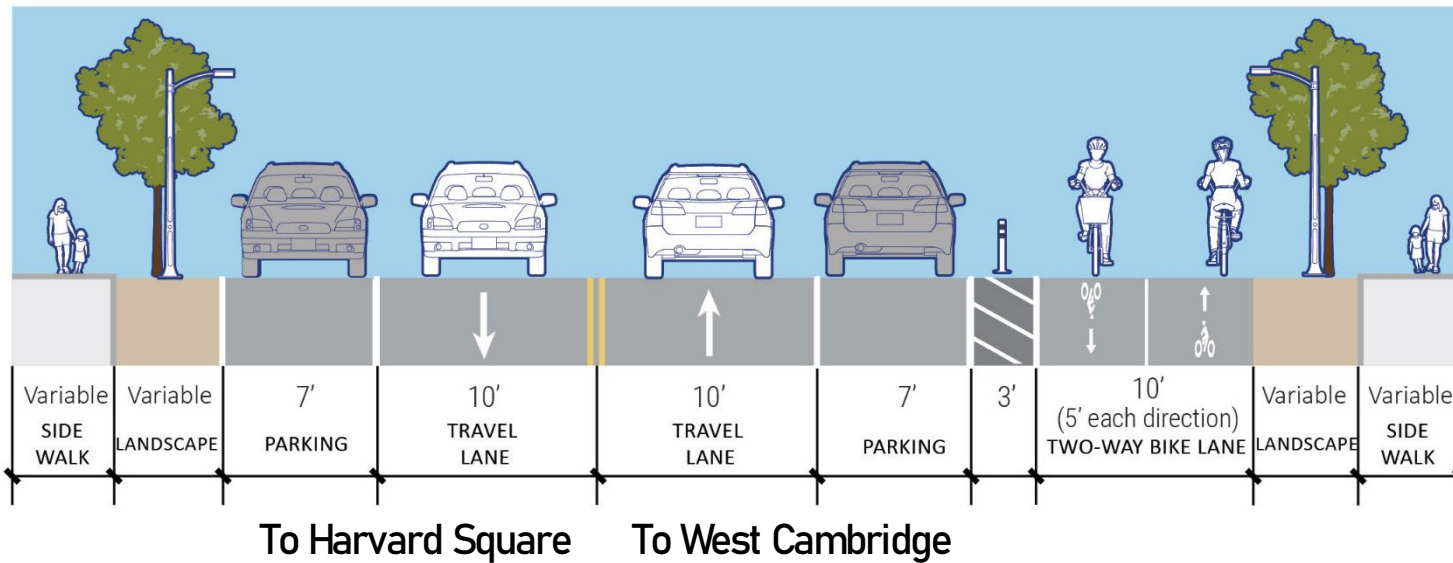


Image: Bicyclists on Brattle St

Draft Design: Two-Way Separated Bike Lane

Sparks St to Riedesel Ave

- Room for parking on both sides of the street
- Accommodates existing parking in front of Holy Trinity Armenian Church



City of Cambridge | Brattle Street Separated Bike Lanes & Intersection Safety Improvements

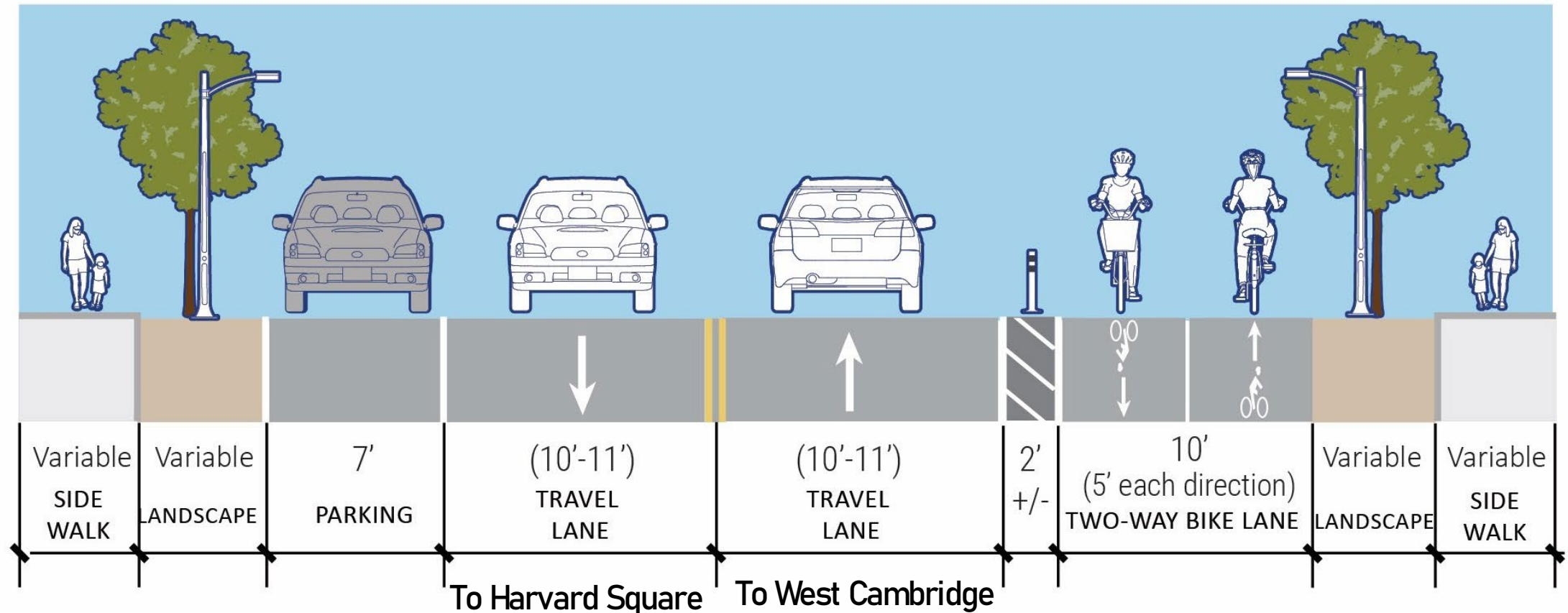


View of parking with separated bike lane in front of Holy Trinity Armenian Church

Draft Design: Two-Way Separated Bike Lane

Riedesel Ave to Mt Auburn St

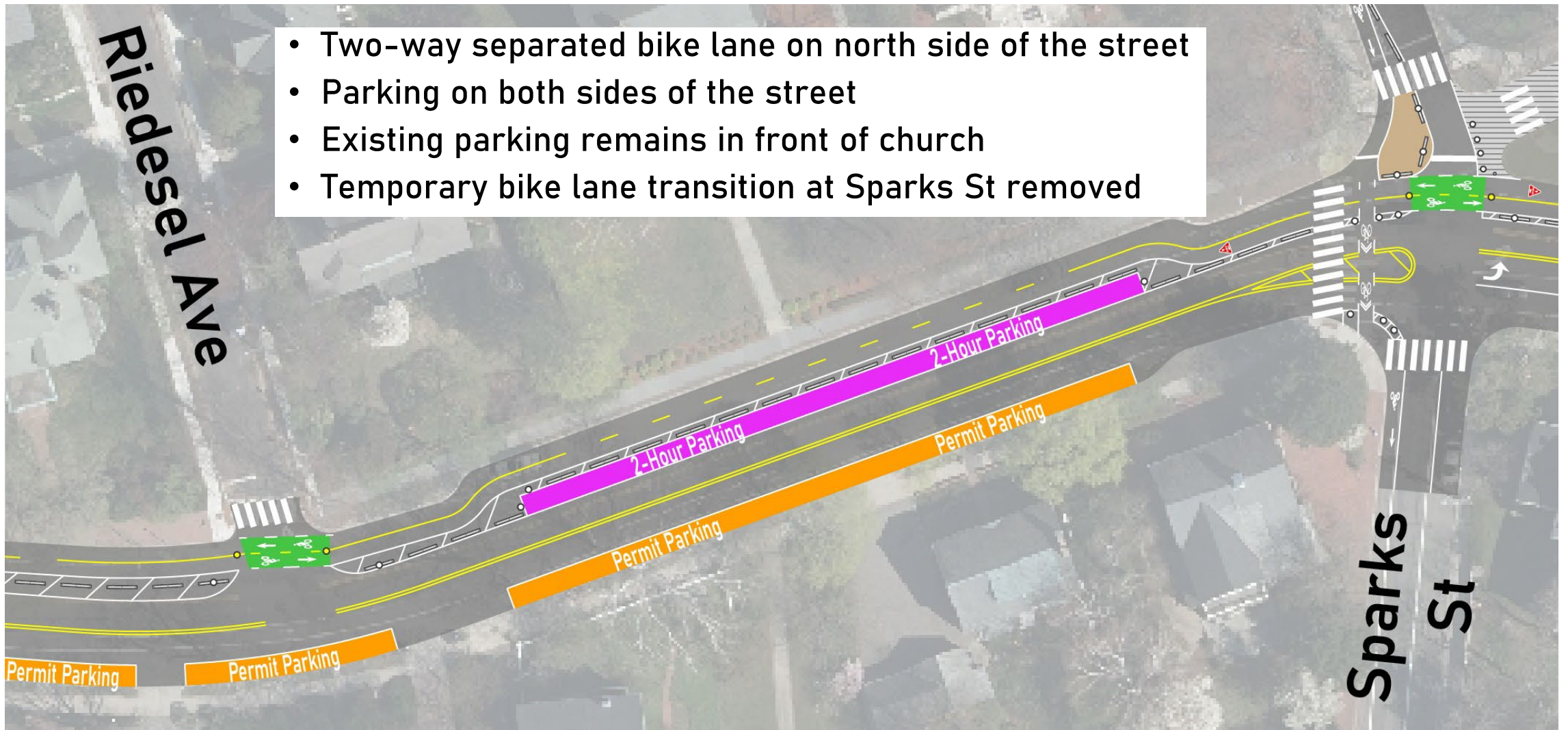
- Room for parking on one side of the street
- People biking will need to cross the road to access the south side of the street



Two-Way Separated Bike Lane

Sparks St to Riedesel Ave

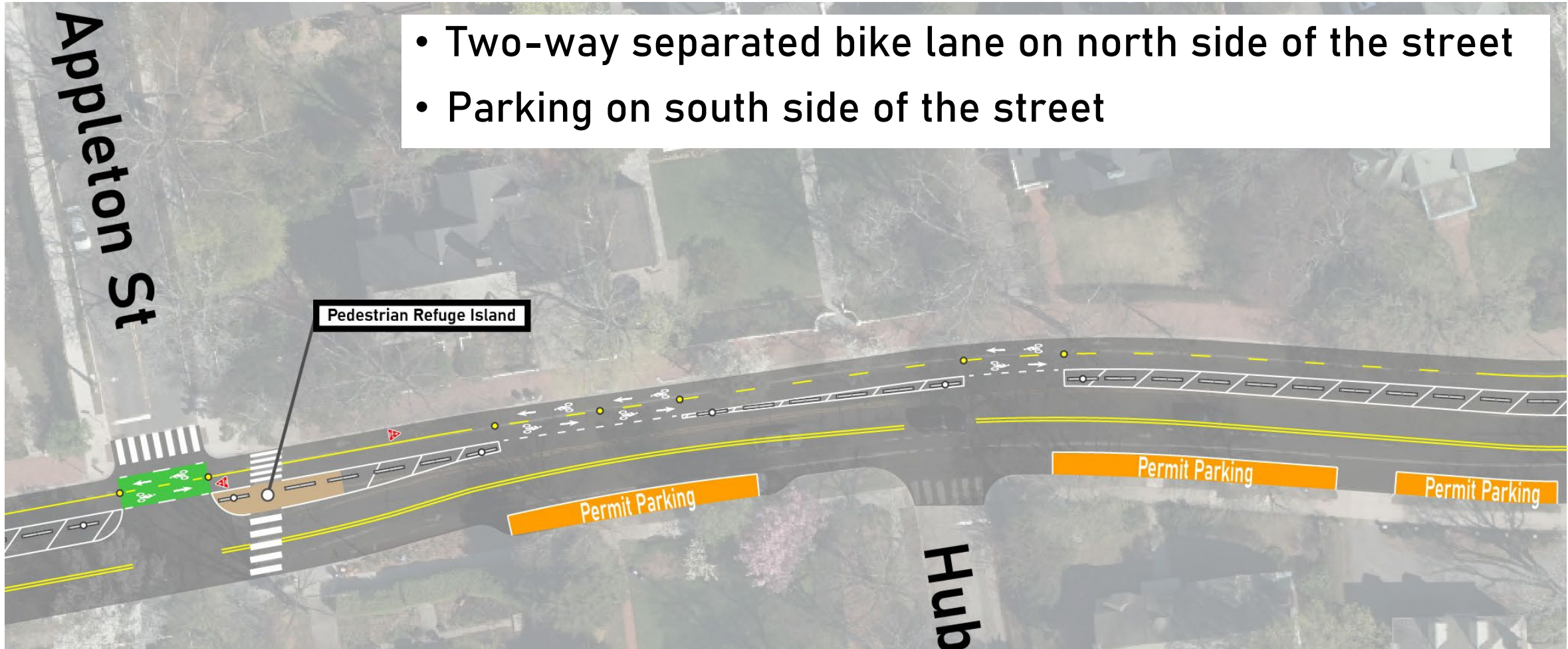
- Two-way separated bike lane on north side of the street
- Parking on both sides of the street
- Existing parking remains in front of church
- Temporary bike lane transition at Sparks St removed



Two-Way Separated Bike Lane

Riedesel Ave to Appleton St

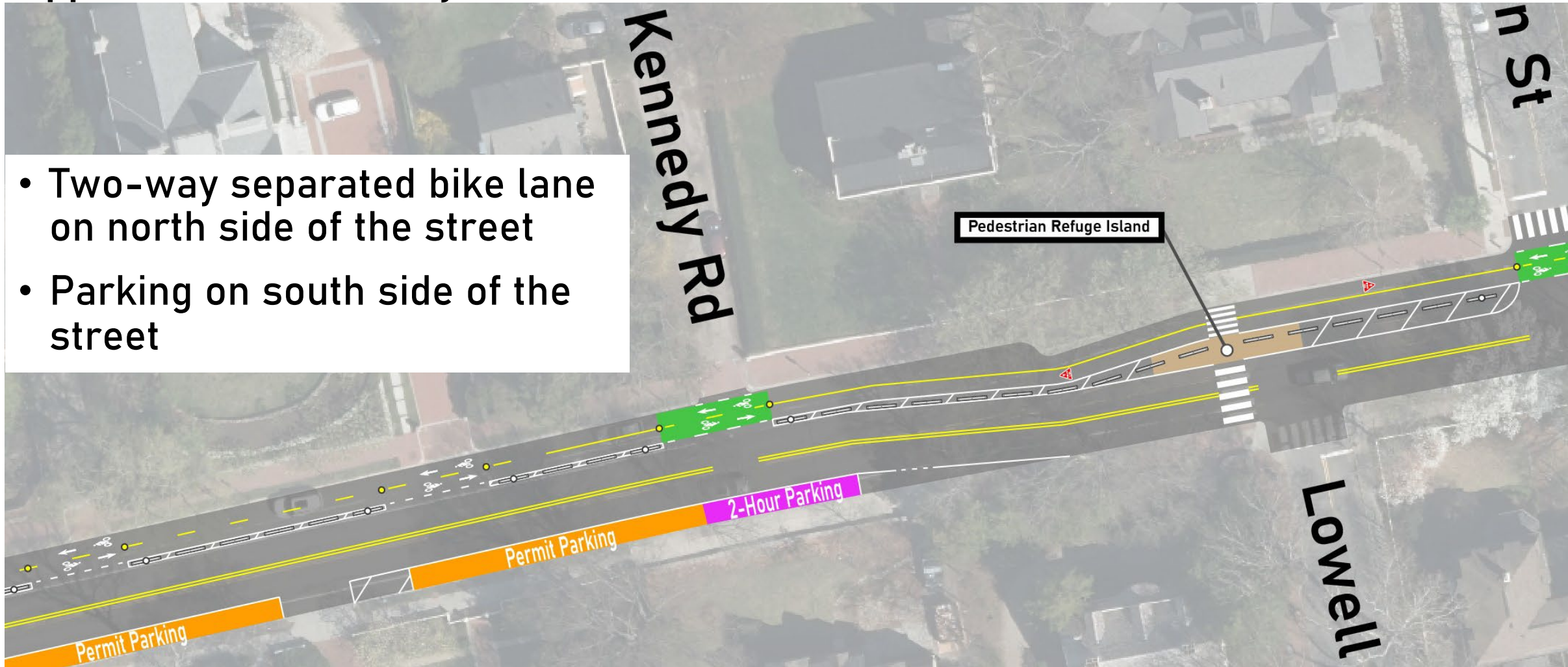
- Two-way separated bike lane on north side of the street
- Parking on south side of the street



Two-Way Separated Bike Lane

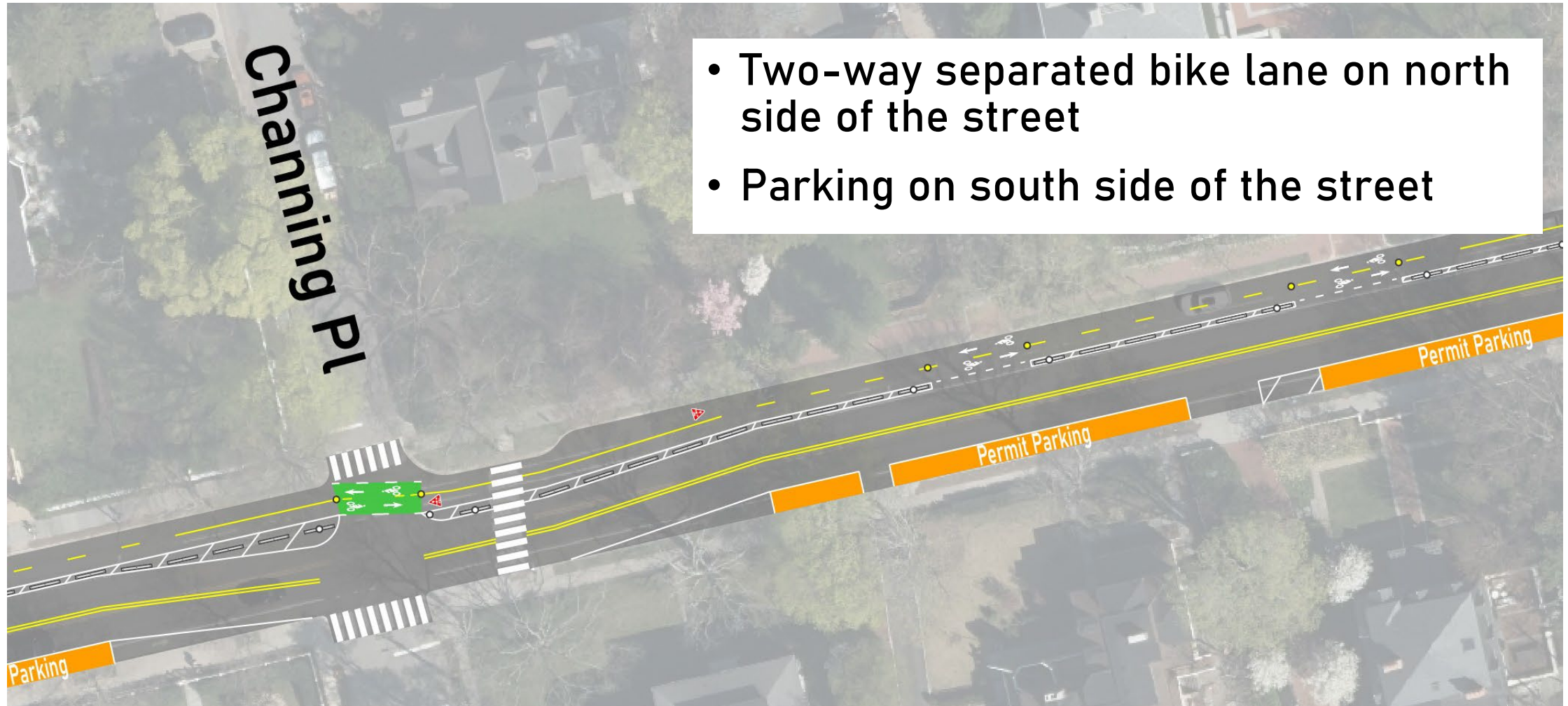
Appleton St to Kennedy Rd

- Two-way separated bike lane on north side of the street
- Parking on south side of the street



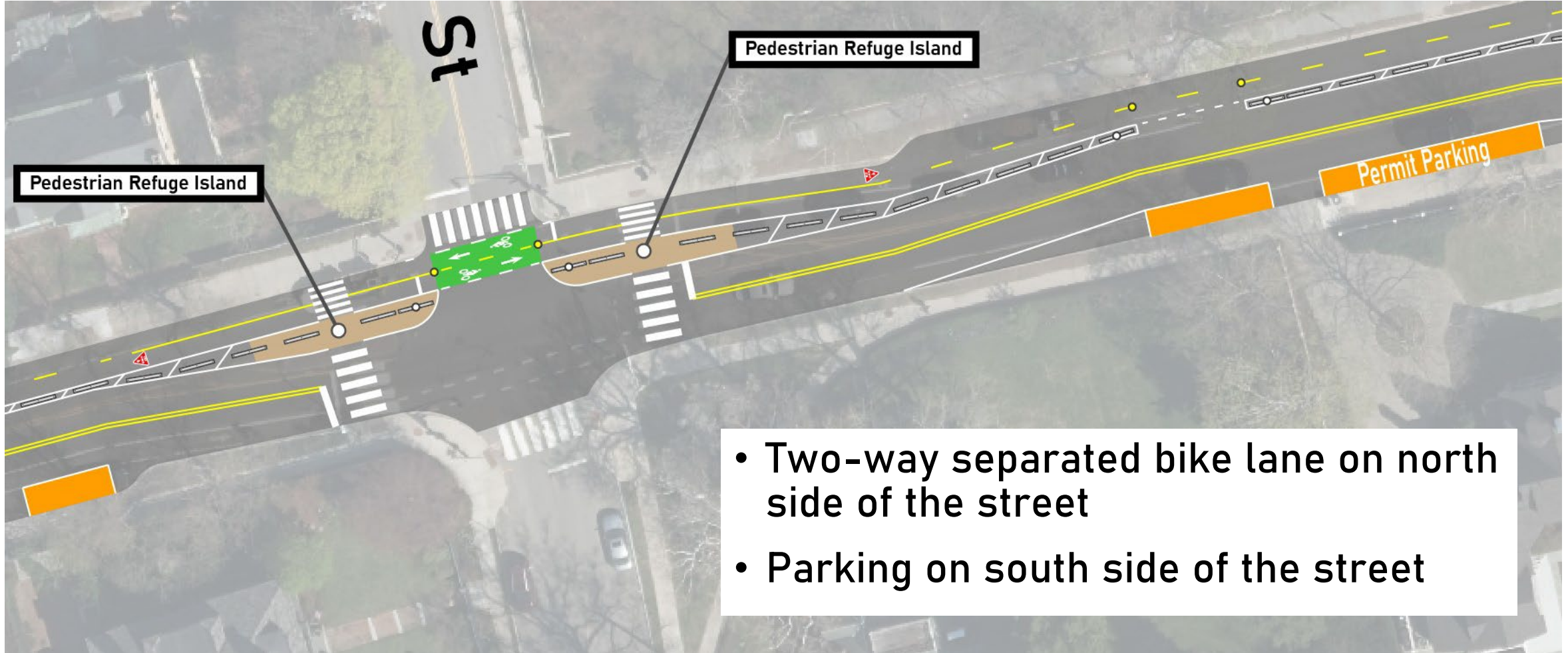
Two-Way Separated Bike Lane

Kennedy Rd to Channing Pl



Two-Way Separated Bike Lane

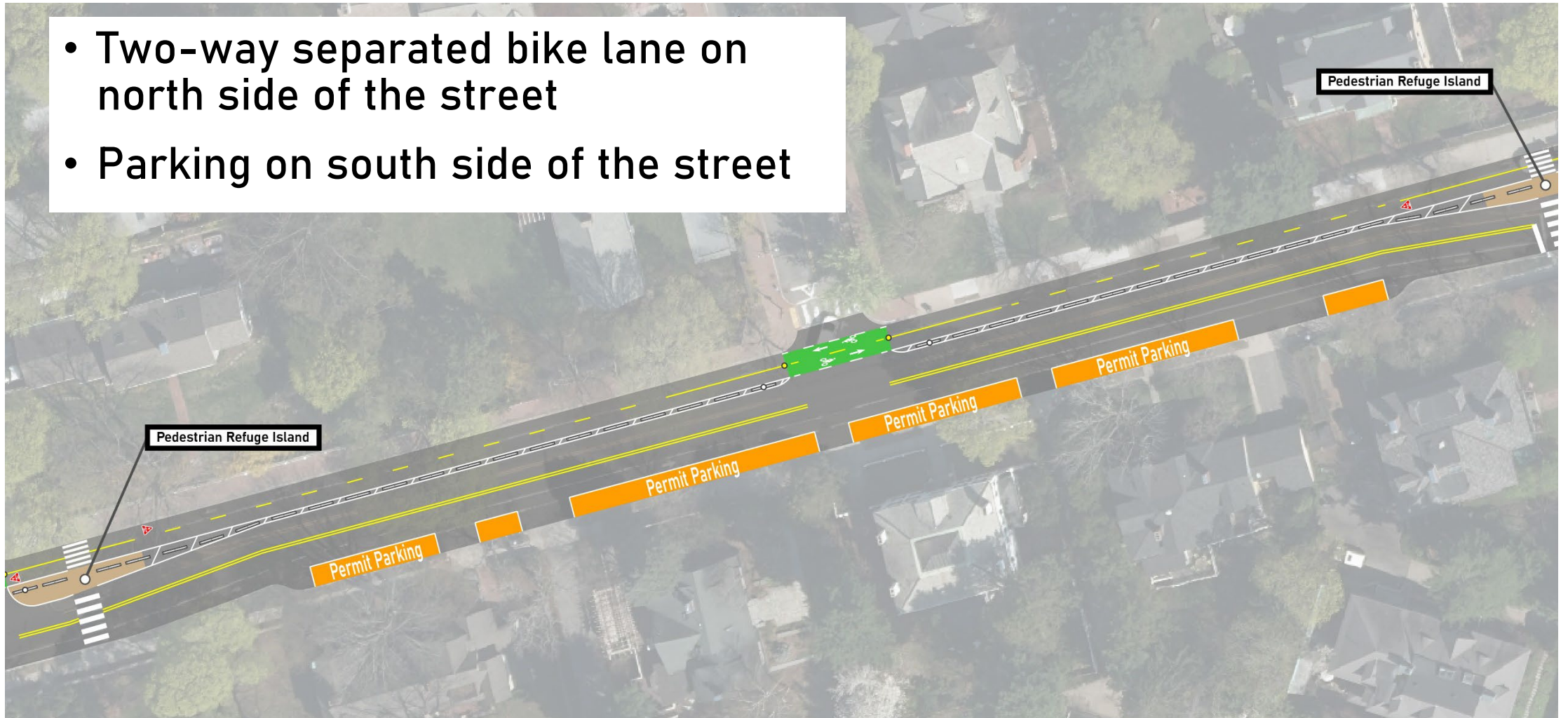
Channing Pl to Fayerweather St



Two-Way Separated Bike Lane

Fayerweather St to Lexington Ave

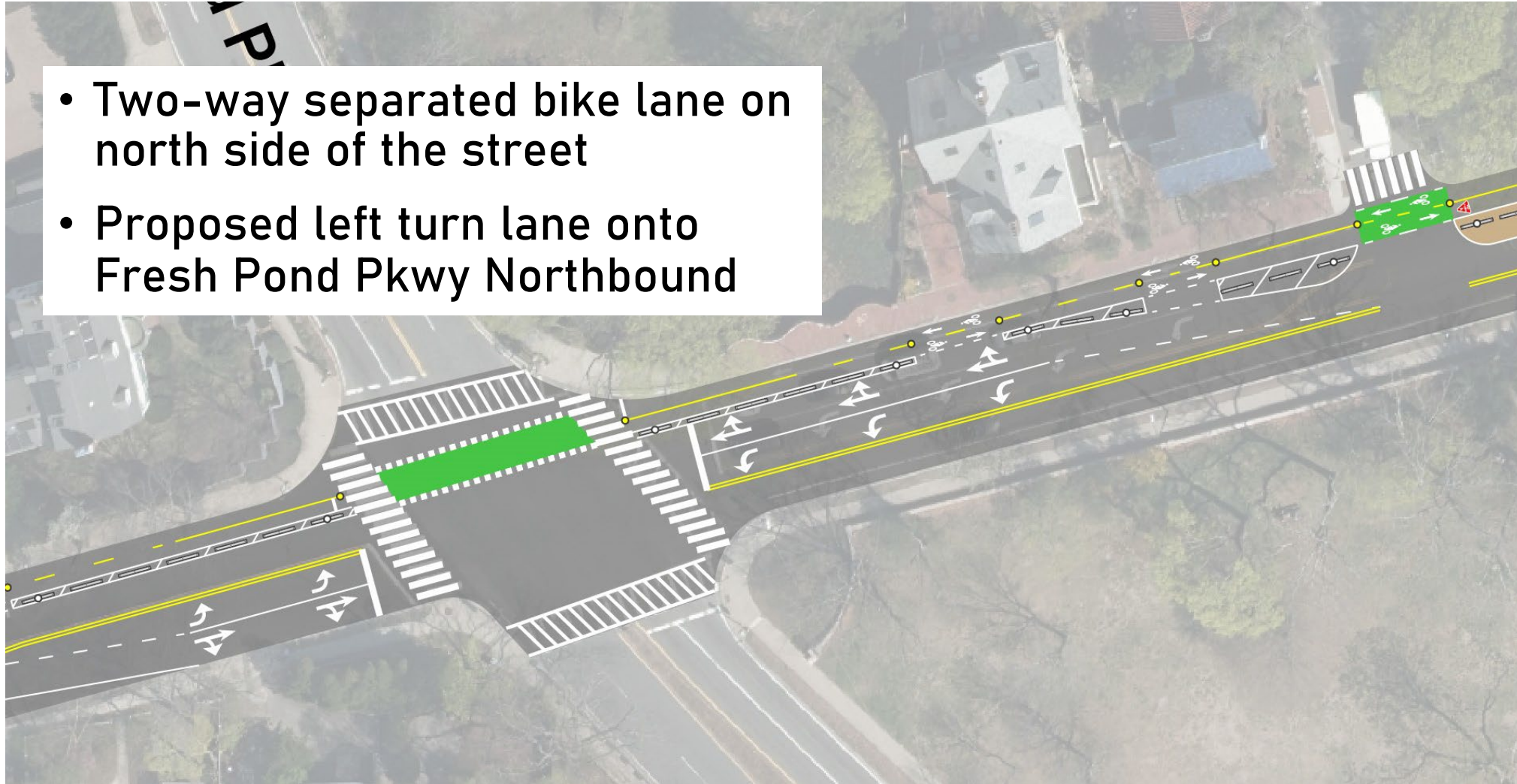
- Two-way separated bike lane on north side of the street
- Parking on south side of the street



Two-Way Separated Bike Lane

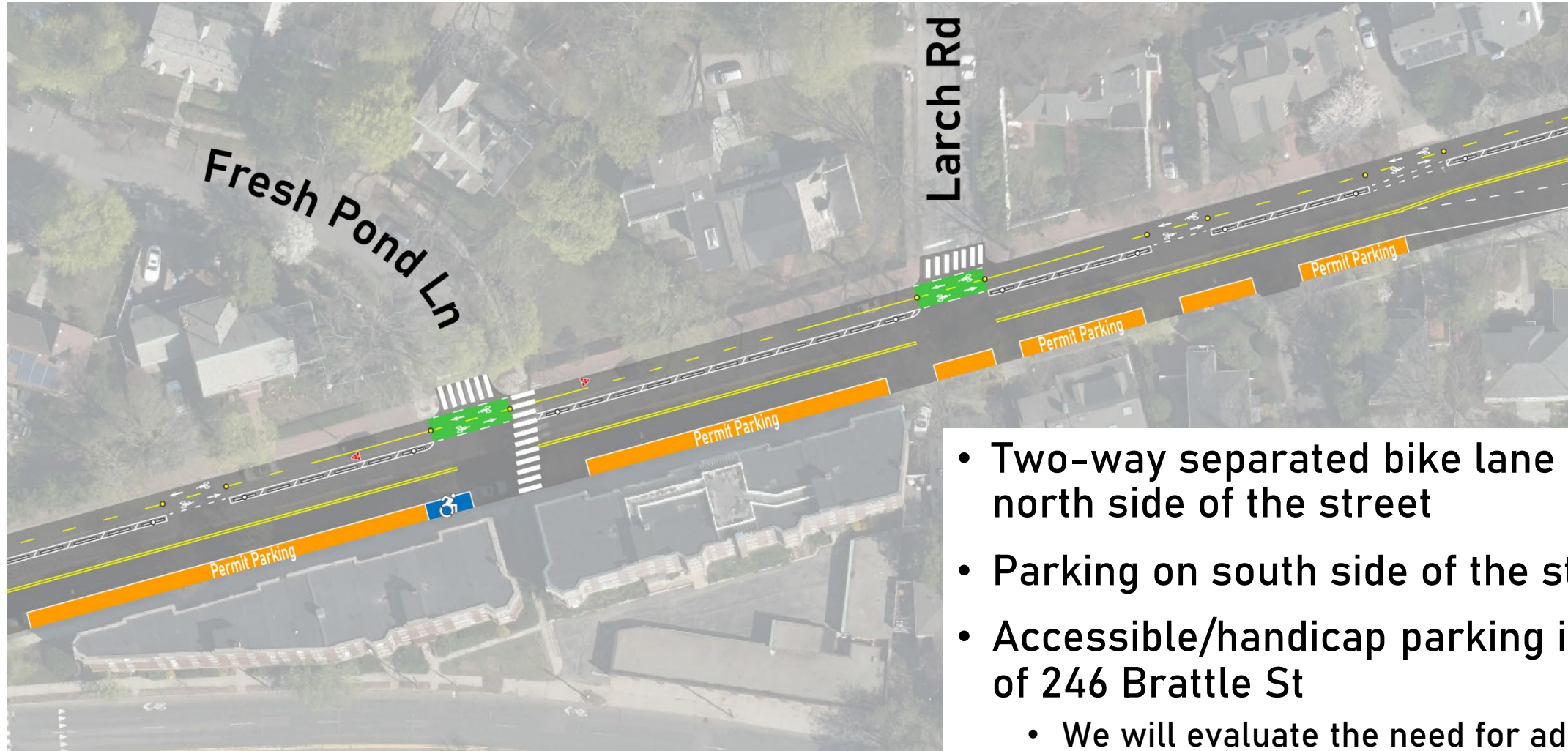
Lexington Ave to Fresh Pond Pkwy

- Two-way separated bike lane on north side of the street
- Proposed left turn lane onto Fresh Pond Pkwy Northbound



Two-Way Separated Bike Lane

Fresh Pond Pkwy to Mt Auburn St



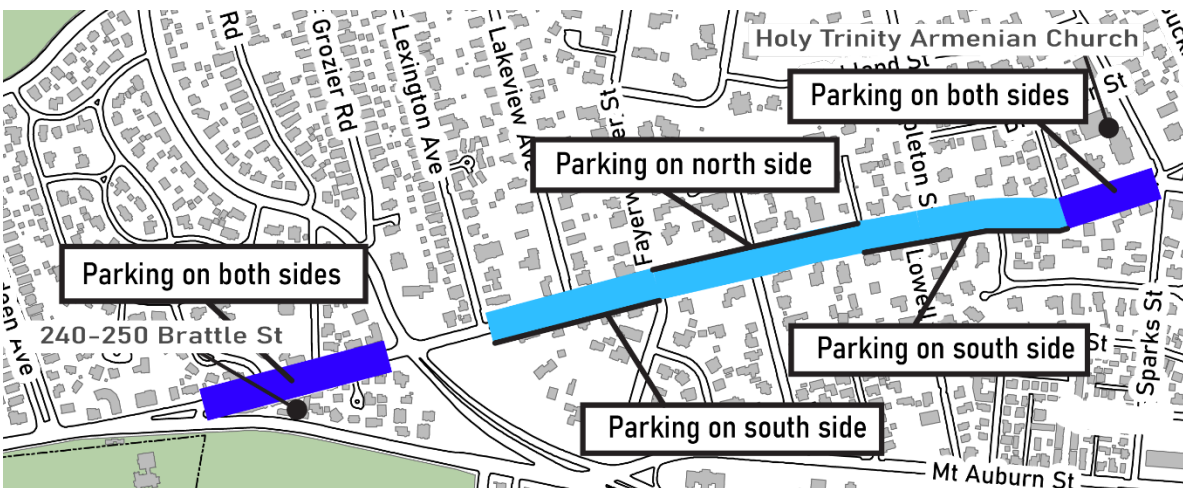
- Two-way separated bike lane on north side of the street
- Parking on south side of the street
- Accessible/handicap parking in front of 246 Brattle St
 - We will evaluate the need for additional accessible spaces

Parking Summary

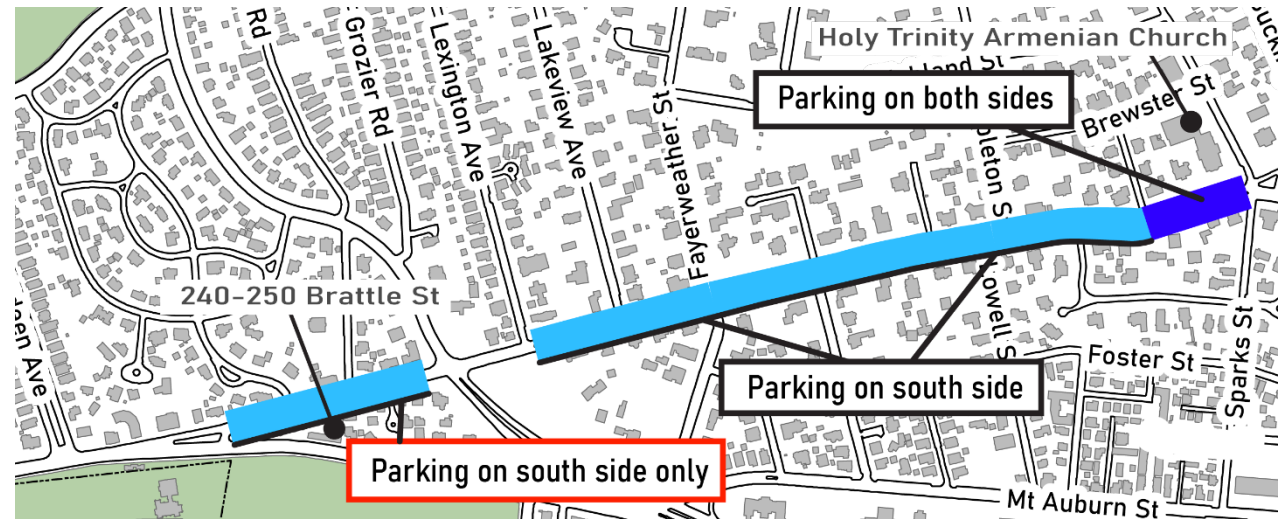
South Side Parking vs North Side Parking

- Parking will remain on both sides of the street between Sparks St and Riedesel Ave (In front of Holy Trinity Armenian Church)
- Between Lowell St and Fayerweather St, parking flips to the south side of the street
 - This maintains a similar number of spaces in this section
- Parking on the north side of the street is removed between Fresh Pond Pkwy and Mt Auburn St
 - This will reduce the number of spaces in this section

Existing Parking



Proposed Parking



Parking Summary - Continued

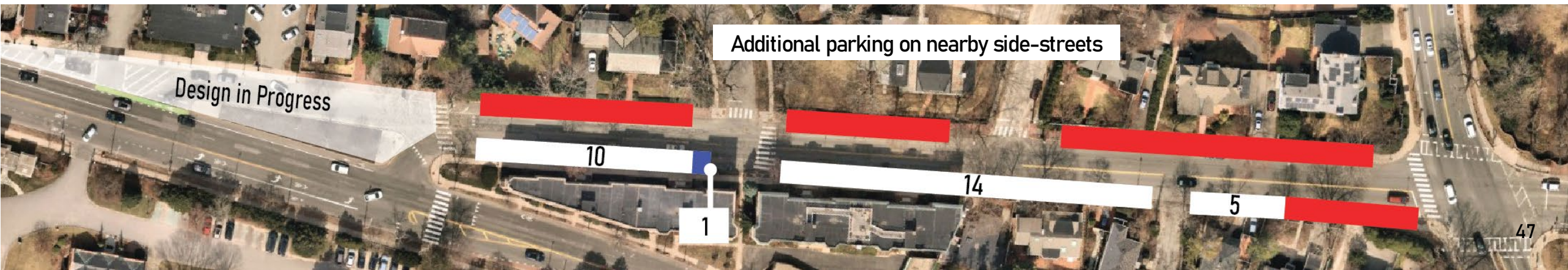
Between Fresh Pond Pkwy and Mt Auburn St

- Parking on the north side of the street is removed between Fresh Pond Pkwy and Mt Auburn St

Existing Parking



Proposed Parking

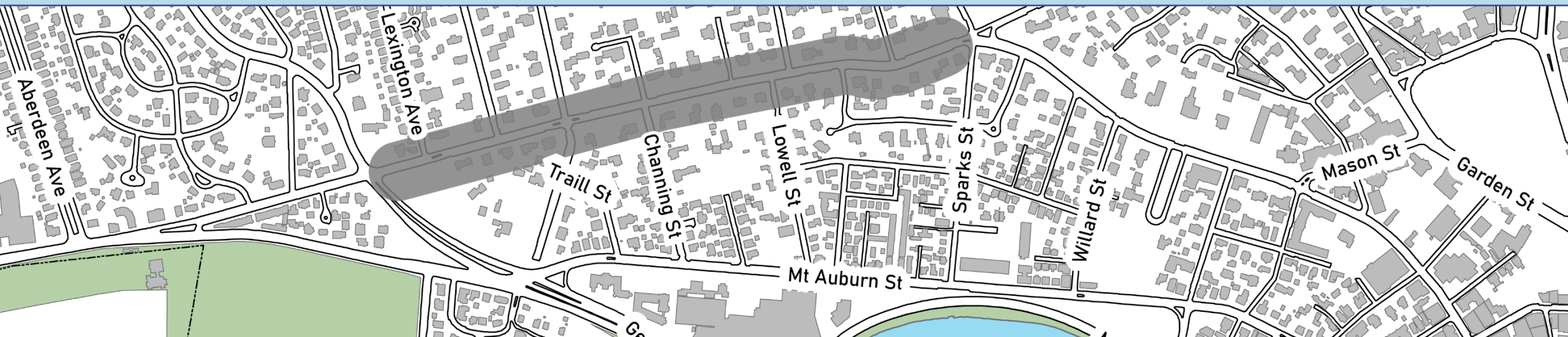


Schedule / Next Steps

Gas Main Replacement

- Eversource is currently replacing the gas main on Brattle Street between Sparks St and Fresh Pond Pkwy
- We will begin safety improvements between Spark St and Mt. Auburn St after gas main replacement is complete in 2023

Limits of gas line replacement



Project Schedule

Tonight: Community Meeting #3

- Final review of plans for Phase 1: Mason St to Sparks St
- Initial review of plans for Phase 2: Sparks St to Mount Auburn St

August 4: Cambridge Historical Commission Review

August 8: In-Person Drop-In Session

- **Location:** Buckingham, Browne & Nichols Lower School Lawn
- **Address:** 19 Craigie St
- **Time:** 5 p.m. to 7 p.m.

Late Summer/Fall 2022: Install Phase 1

- Install Mason Street to Sparks Street

Fall 2022: Community Meeting #4

- Ongoing community engagement on Phase 2: Sparks St to Mount Auburn St

Spring/Summer 2023: Install Phase 2

- Install Sparks Street to Mount Auburn Street

Questions + Feedback

Questions + Feedback

- Which planned improvements are most important?
- What could make this project better?
- What do you want to know more about?

www.cambridgema.gov/BrattleStSafety



Contact Information

Andreas Wolfe
Street Design Project Manager
617-349-9162
awolfe@cambridgema.gov

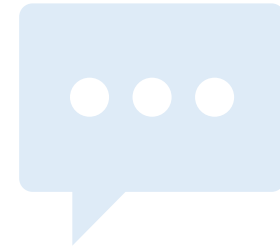
Contact Information

Brooke McKenna
Assistant Director for Street Management
617-349-4723
bmckenna@cambridgema.gov

Questions + Feedback

- We will take comments in the order hands are raised
 - If calling in, dial *9 to raise your hand / *6 to unmute
- Additional questions can be asked using the Q+A function
- Approximately every 15 minutes, we will provide answers to questions
- The meeting is scheduled to end at 8:00 p.m.

www.cambridgema.gov/BrattleStSafety



Contact Information

Andreas Wolfe
Street Design Project Manager
617-349-9162
awolfe@cambridgema.gov

Contact Information

Brooke McKenna
Assistant Director for Street Management
617-349-4723
bmckenna@cambridgema.gov