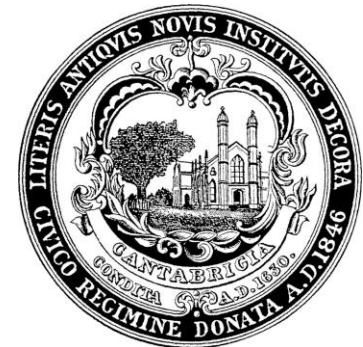


Sidewalk and Street Reconstruction of Fairmont Ave., Rockwell St., and Laurel St.

Community Meeting Presentation

Wednesday, October 27th
6:00 - 7:30 PM

THE CAMBRIDGE
DEPARTMENT
OF PUBLIC
WORKS



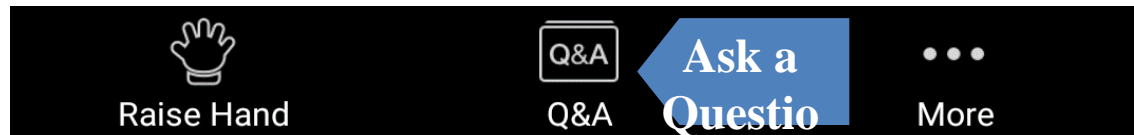
Public Comment Instructions

Use the "Raise Hand" button to signal you have a question/comment.
A staff member will then enable you to unmute yourself.

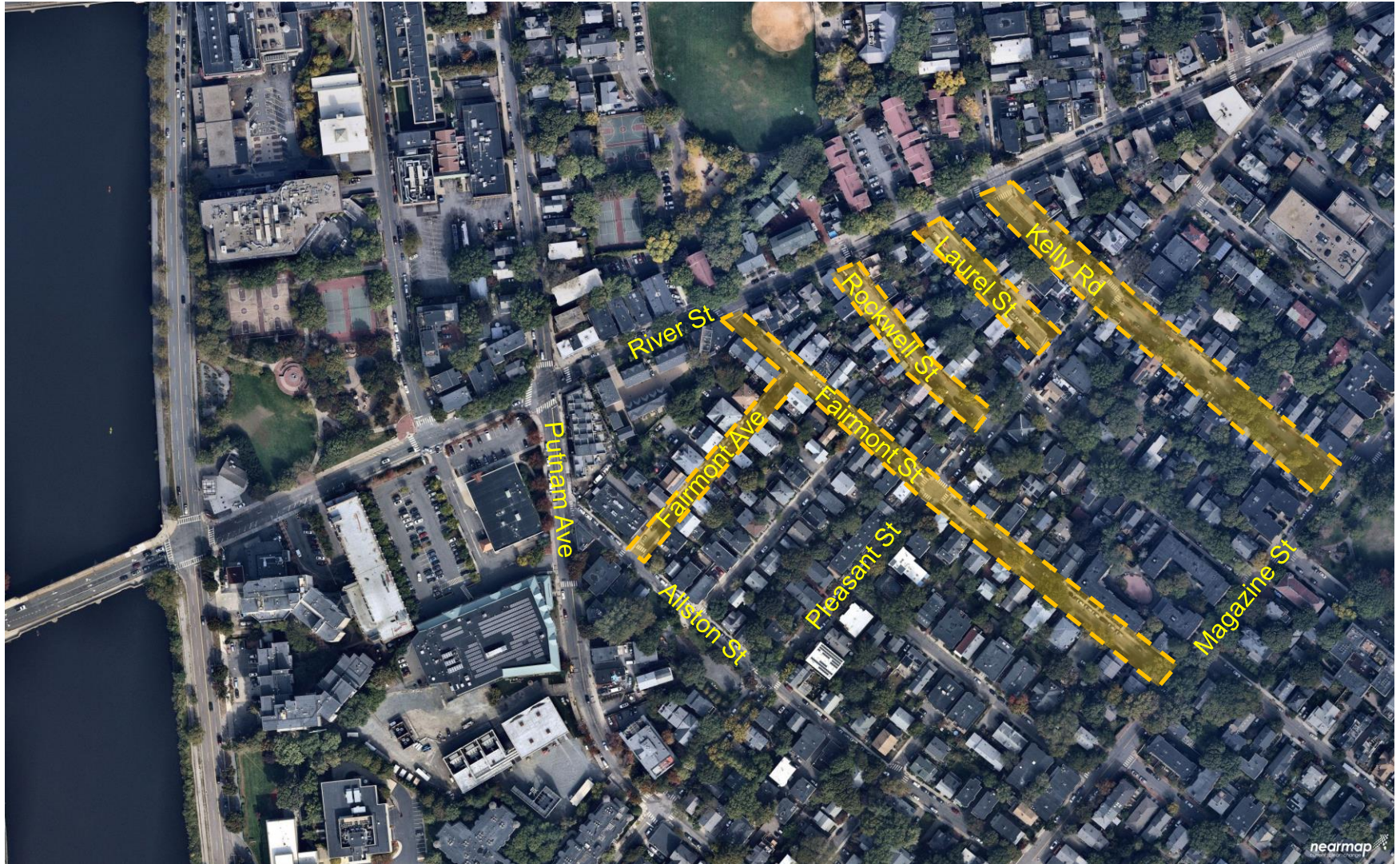
*9 to Raise Hand by phone

Questions can also be submitted using the Q&A button.

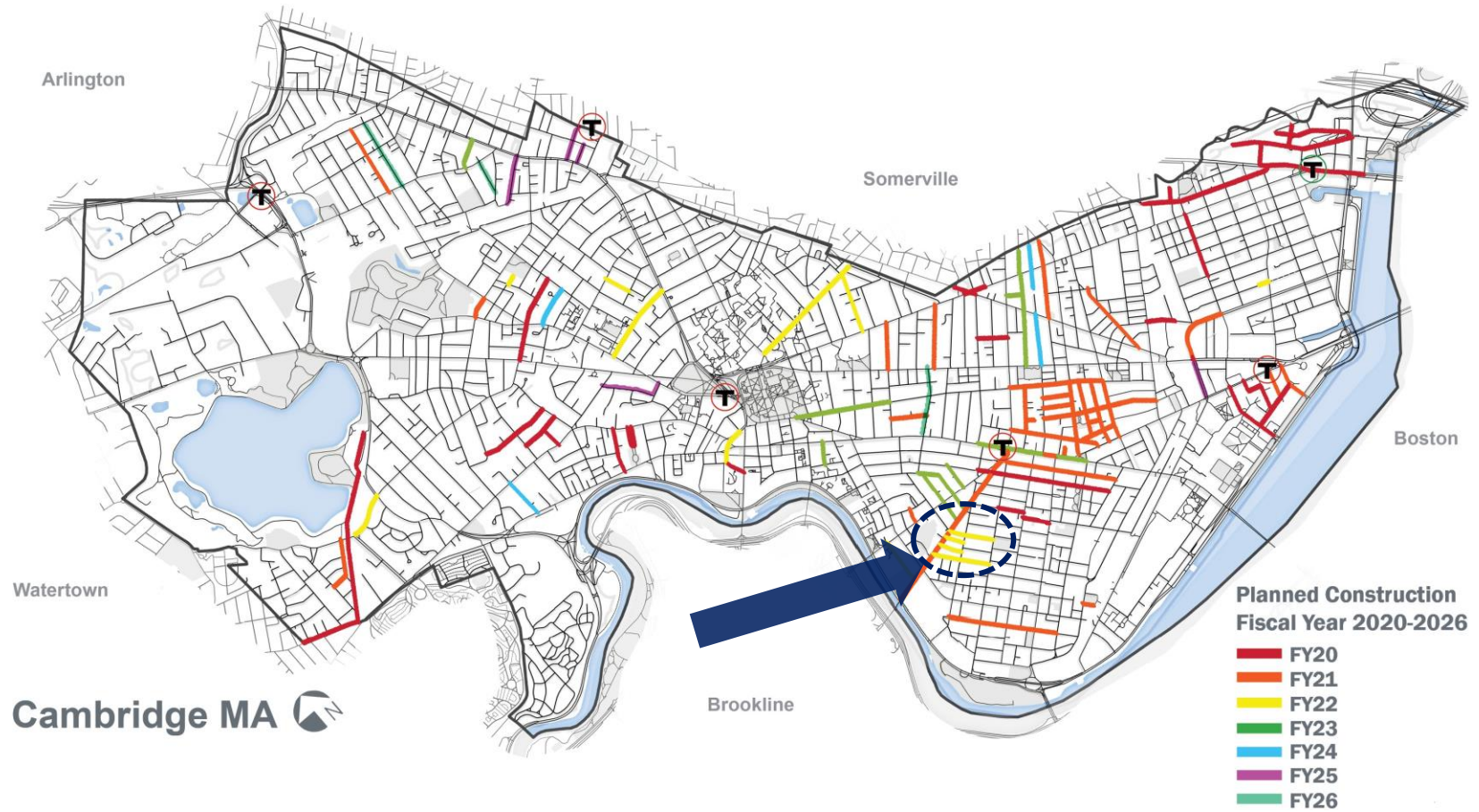
**Bottom
Panel of
Zoom
Screen**



INTRODUCTION | PROJECT LIMITS



5 YEAR PLAN | **PLANNED CONSTRUCTION**



For an interactive construction map, visit: www.cambridgema.gov/theworks/constructionmap

COORDINATION WITH RIVER STREET PROJECT



The work on these neighborhood streets will be included as part of the overall River Street Reconstruction Project. This will provide better coordination and may reduce combined project costs.

CAMBRIDGE
DEPARTMENT
OF PUBLIC
WORKS



City of Cambridge
Department of Public Works

Five Year **Sidewalk and Street** Reconstruction Plan

April 2021

PRIORITIES | SIDEWALK CONDITIONS



Each block of sidewalk received a rating between 0 (excellent) and 35 (poor) based on the following criteria (updated 2018):

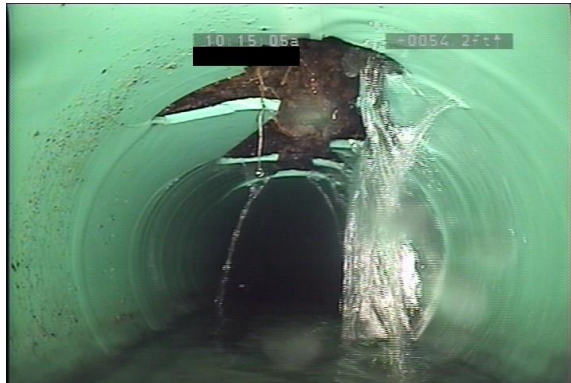
- Driveway conditions
- Cross-slope
- Trees or other obstructions
- Overall structural condition

PRIORITIES | PAVEMENT CONDITIONS



New street condition assessments are completed every three years and the plan is updated accordingly.

PRIORITIES | UNDERGROUND UTILITIES CONDITIONS



Utilities are assessed based on age of the facility, and video inspections are performed to identify general condition, and specific problems such as breaks, tree root intrusion, and improper connections

5 YEAR PLAN | SCOPE OF WORK

Our approach emphasizes **streets designed and operated for everyone**. The following elements allow pedestrians, bicyclists, motorists, and transit users of all ages and abilities to safely move along and across **Complete Streets**.



Accessibility: Ensure pedestrian ramps and sidewalks are accessible for all, and implement universal design



Vision Zero: Eliminate fatalities and serious injuries resulting from traffic crashes



Transit: Provide accessibility of bus stops and prioritization of transit, as feasible



Bicycle network: Support people of all ages and abilities to bike safely throughout the City



Street trees & green infrastructure: Reduce urban heat island and improve water quality



Infrastructure: Maintain and improve City infrastructure; coordinate with private utilities to facilitate upgrades



CITY POLICIES | COMPLETE STREETS

Complete Streets are **streets for everyone**. They are designed and operated to enable **safe access for all users**. Pedestrians, bicyclists, motorists, and public transportation (transit) users of all ages and abilities are able to safely move along and across a Complete Street. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work. They help buses to run on time and make it safe for people to walk to and from train stations.

More sidewalks and bicycle facilities are included in Complete Streets, which provides **increased accessibility for pedestrians and cyclists**.

During design and construction of Complete Streets, our goal is to communicate projects with neighborhoods, facilitate an integrated design process, minimize disruption to community life and provide reasonable access for all users during reconstruction.

CITY POLICIES | VISION ZERO

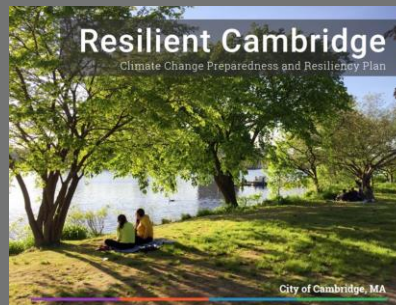
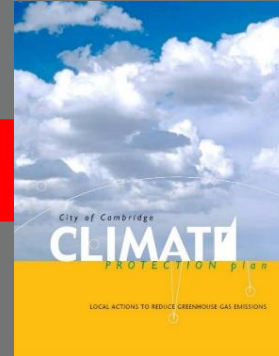
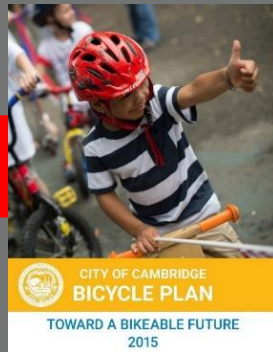
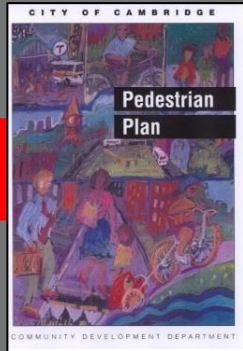
On March 21, 2016, the Cambridge City Council unanimously passed resolutions put forth by the City Manager to formally adopt Complete Streets and Vision Zero policies, showing that the City of Cambridge is committed to achieving these goals, assuring safe access for all users.

Vision Zero calls for the elimination of fatalities and serious injuries resulting from traffic crashes, and emphasizes that they can and should be prevented. The City of Cambridge is the 17th city in the U.S. to commit to a Vision Zero Policy.



OTHER GUIDING PLANS AND POLICIES

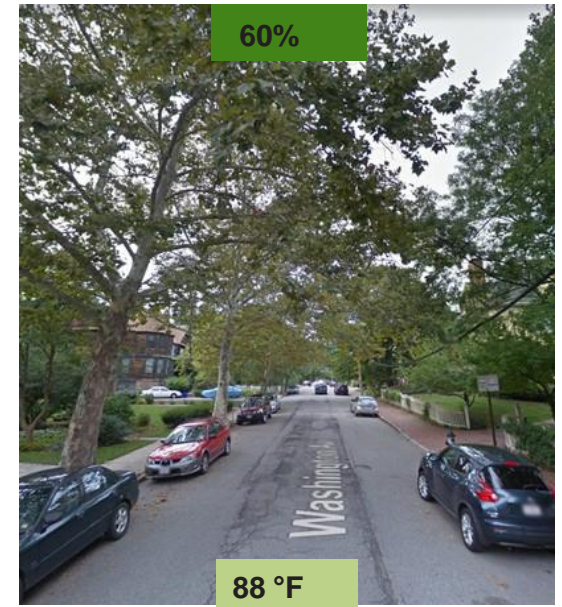
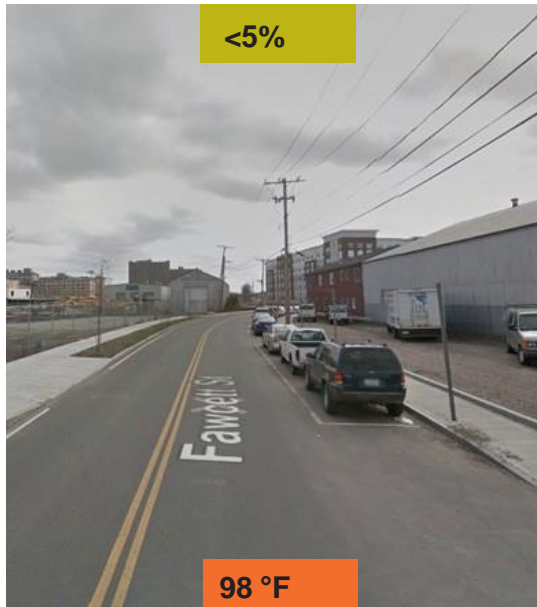
In addition to Complete Streets and Vision Zero



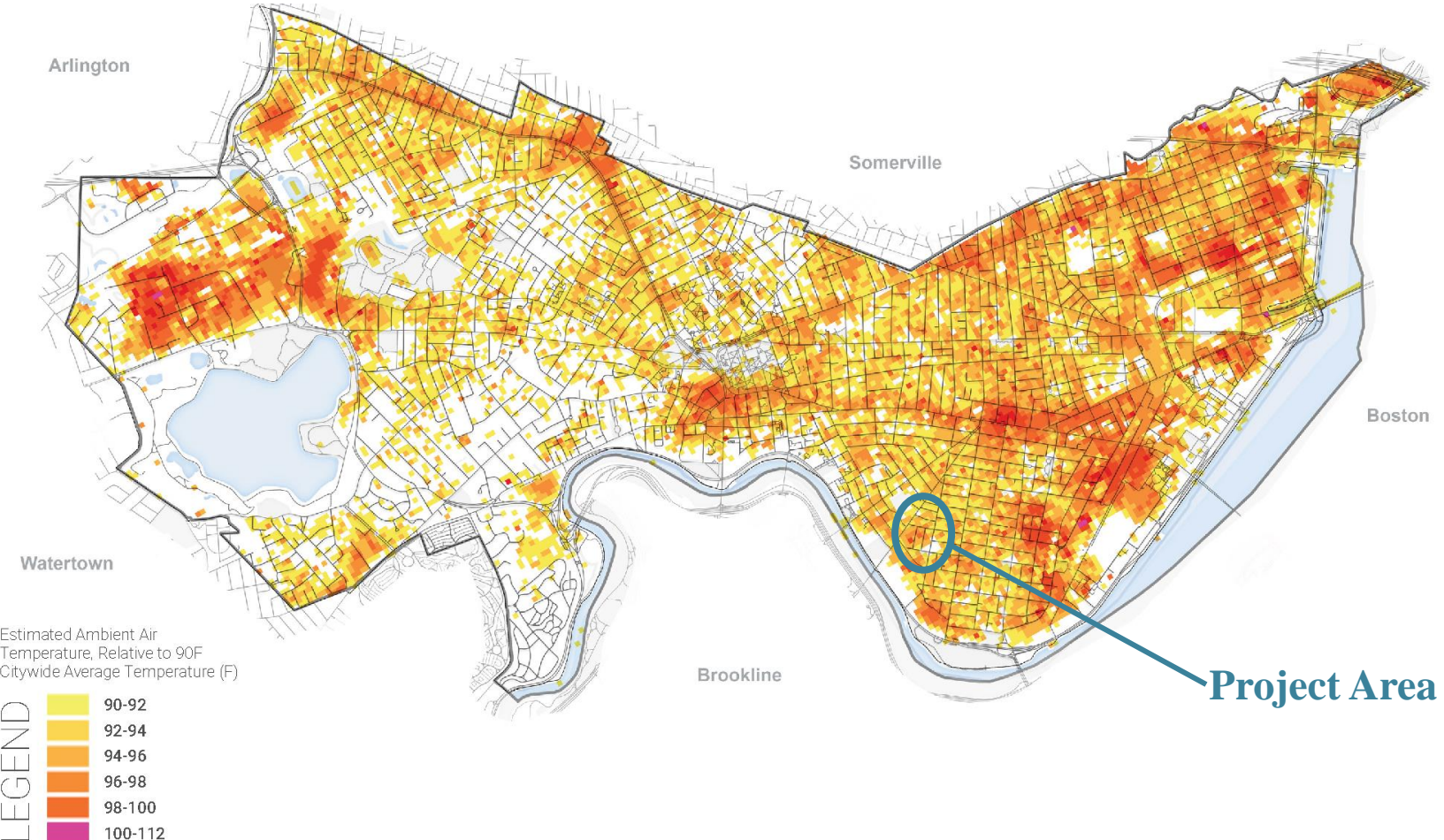
Vehicle Trip Reduction Ordinance established programs to encourage alternatives to single-occupancy vehicle travel (1992).

Cambridge Growth Policy emphasizes sustainable modes of transportation such as walking, biking and using transit and low-emission vehicles, which promote livability and help to improve air quality and reduce greenhouse gas emissions (1993/2007).

URBAN FOREST IMPACT ON TEMPERATURE



RESILIENT CAMBRIDGE – PROJECTED HEAT



SCOPE | STREET TREES

Existing Street Trees

Existing street trees will be protected during construction and the sidewalks will be carefully evaluated to ensure adequate accessible routes through the neighborhood.

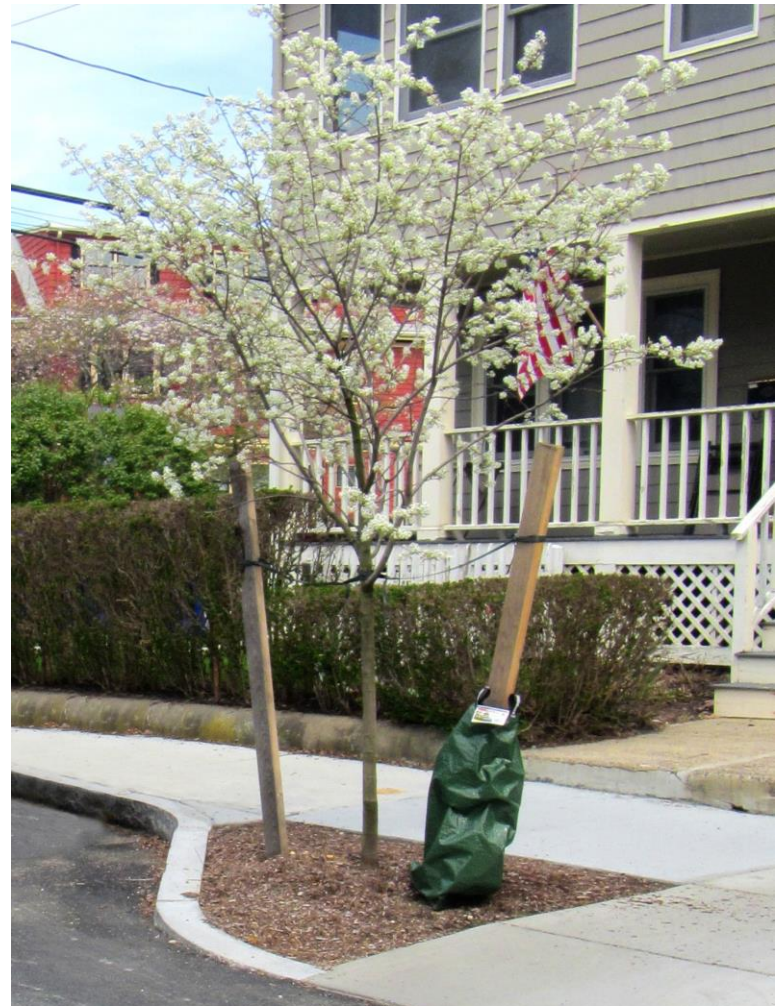
New Tree Plantings

The City Arborist will review each street and sidewalk project to determine tree planting opportunities; evaluating the location of overhead and underground utilities, proximity to intersections, site lines, building setbacks, locations of entrances, etc.

- On **narrow sidewalks** (less than 8' wide), a minimum of 4' of sidewalk width will be retained adjacent to new trees.
- On **wider sidewalks** (8' wide or greater), a minimum of ½ of the overall sidewalk width will be retained for pedestrians.

Back of Sidewalk Trees

The Arborist will work with residents interested in back of sidewalk tree plantings.



GOALS

- **Protect existing** street trees during construction.
- Increase the number of street trees and maintain **accessible sidewalks**.

SIDEWALK MATERIALS



Photo Credit:
Christian Phillips Photography and Klopfer Martin Design Group

Concrete and wire-cut brick without beveled edges, placed on a smooth asphalt base, will be utilized as the sidewalk materials of choice throughout the City. **Concrete is the material most frequently used in the city (~70%) and provides a relatively inexpensive, durable, and easy-to-maintain accessible sidewalk.**

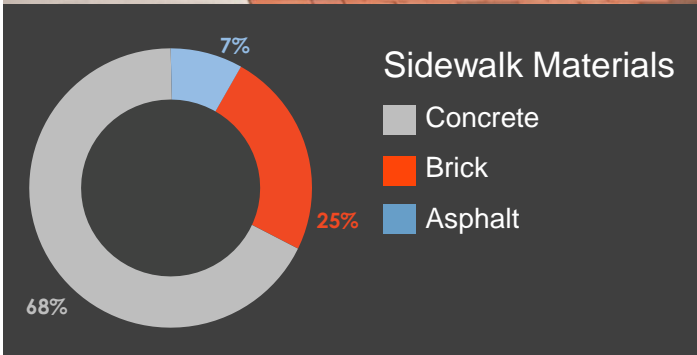
The City policy is to replace existing sidewalks with the same material at no cost to the property owner. However, during construction, property owners are contacted and may choose to change the sidewalk material. On larger projects, a more unified approach to sidewalk materials has been implemented as part of a community process.

Historic Districts

The DPW works collaboratively with the Historic Commission to ensure that sidewalk reconstruction work is appropriate and not incongruous to the district.

Standard Details

For more information, visit: www.cambridgema.gov/theworks/ourservices/engineering/Resources/standarddetails



GREEN INFRASTRUCTURE

The City is incorporating green infrastructure on projects, as conditions and space allow.

Goals

- Stormwater discharges are contributing to at least 55% of impairments to Massachusetts' assessed waters.
- Goal: **improve the water quality** of stormwater before discharging to outfalls at the Alewife Brook and Charles River.

Types of Improvements

- Porous asphalt
- Infiltrating catch basins
- Rain gardens/bio basins

Siting Evaluation

- Soil conditions
- Groundwater
- Space constraints
- Maintenance



**WHAT HAVE WE HEARD SO FAR?
(before, after, and at Meeting #1)**

INPUT TO DATE (1 of 3)


- Widen sidewalks to plant more trees.
 - Will review tonight street-by-street. Most streets already at or below minimum widths, and many sidewalks are as well. Will present ideas and trade-offs.
- Preserve existing trees.
 - All healthy trees are intended to be preserved. City arborist will review and make recommendations. Project will enhance growing conditions for many of the existing trees.
- Consider traffic calming.
 - Concepts include raised entry treatments on all streets, which slows entering vehicles and prioritizes pedestrians. A number of curb extensions are also included. Existing speeds do not appear to be excessive.

INPUT TO DATE (2 of 3)

- Consider implementing true “shared streets”.
 - Example Shared Street option has been developed for Fairmont Avenue, based on abutter interest. Could consider for other streets, especially Laurel and Rockwell.
- Address specific drainage/puddling/icing issues.
 - To be addressed during detailed design. Have heard about several areas on Fairmont Street, and at the Laurel/River Street corner.
- Address truck concerns on Laurel and Rockwell (can’t turn at Pleasant Street).
 - We have conferred with the TP&T Department (Traffic). Don’t believe problem is being caused by “cut-thru” trucks that don’t have business on these streets, so signage might not help. During construction we will include temporary signs warning not to use these streets as detours.

INPUT TO DATE (3 of 3)

- Private utility connections: What will City do/not do as part of the project?
 - Water: Replacement of lead services is normally owner responsibility, but on this project City will replace these services right to the house.
 - Sewer/Drain: City does not replace deteriorated laterals. Abutter should do this ahead of project, if needed. City contractors are not always interested in working separately with abutters.
- Consider burying overhead utilities.
 - Not part of this project. It is extremely expensive, with cost falling on the abutting customers. It is also very technically challenging on narrow streets, as each company on the pole needs its own underground conduits and house services.
- What Green Infrastructure is being considered?
 - To be looked at in more detail once basic curb lines and planting areas are set. There is relatively little space available on these streets, unless we want to look at significantly reducing parking.



**Design Concepts
For Discussion and Input**

SIDEWALKS AND ACCESSIBILITY



EXAMPLE OF CURB EXTENSION TO PROVIDE ACCESSIBLE SIDEWALK AT LARGE TREE

The City is committed to accessibility in all of our construction projects. It's not just the law, it's **the right thing to do, and supports people of all ages and abilities.**

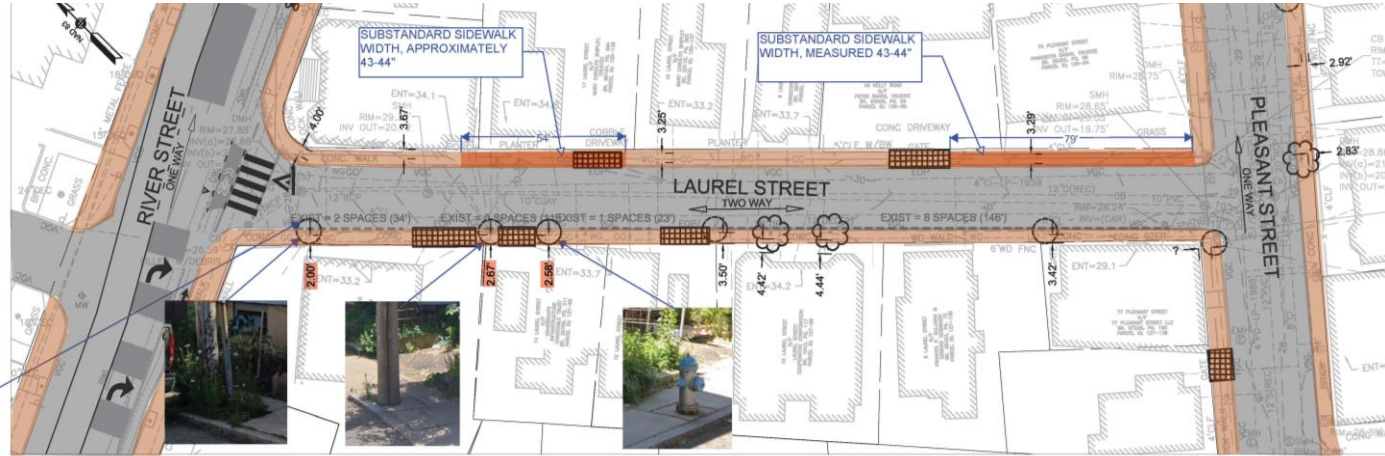
- **All** new sidewalks and pedestrian ramps will meet ADA /AAB requirements.**
- Sidewalk widths vary by the type of street. **Typically 5' sidewalk is required**, but wider sidewalks are required on busier commercial streets and arterials.
- **4' min is required at new driveways and street trees. 3' min is allowable at existing trees.**
- Sidewalks will include a **minimum 3' of sidewalk or accessible routes around existing trees.**
- The best design for pedestrian crossings, particularly on narrow side streets, may be a **raised side street treatment.**



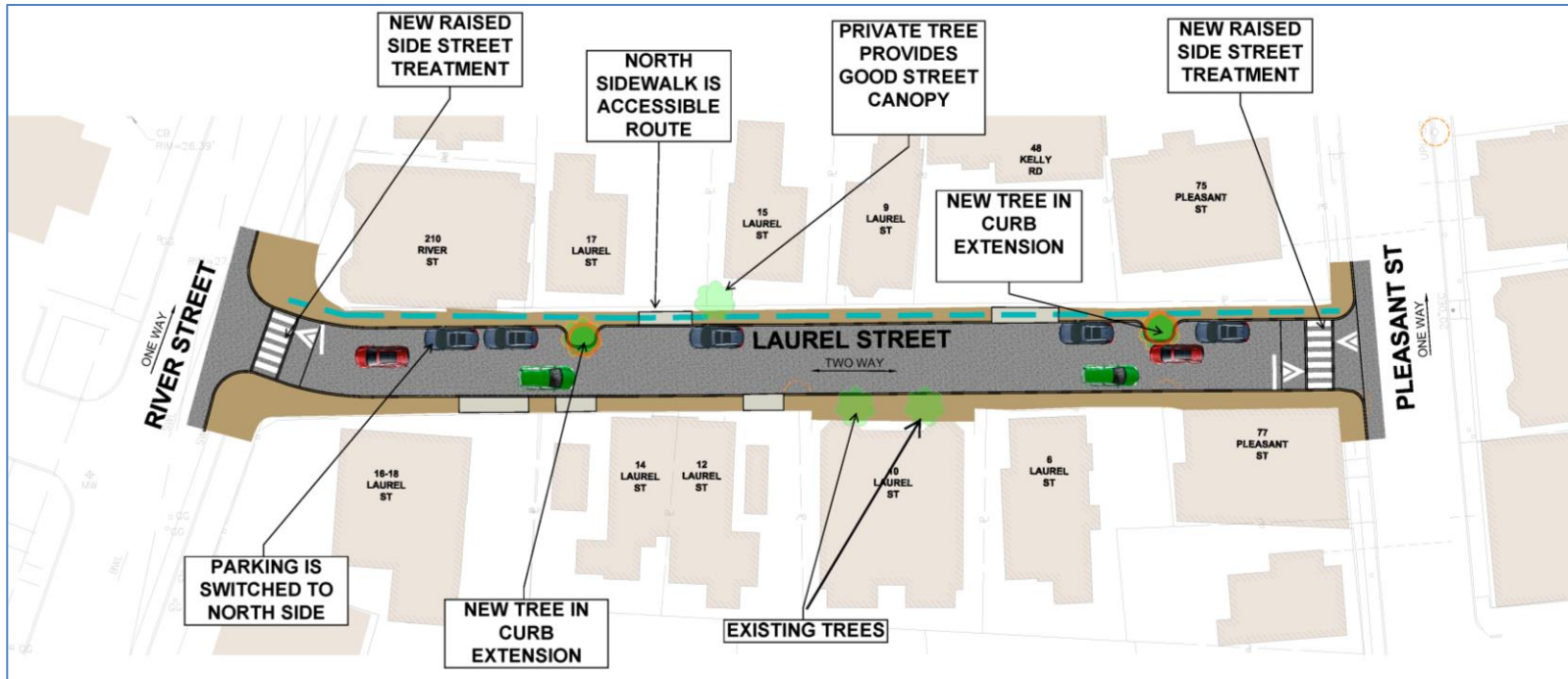
EXAMPLE OF RAISED SIDE STREET TREATMENT

****** It is not always feasible to make both sidewalks fully accessible, especially on narrow residential streets. Where only one side can be achieved, the City applies for a variance from the Massachusetts Architectural Access Board.

LAUREL STREET



Existing Conditions



Proposed Concept

LAUREL STREET

Parking Spaces

Existing: Approx. 11

Proposed: Approx. 10

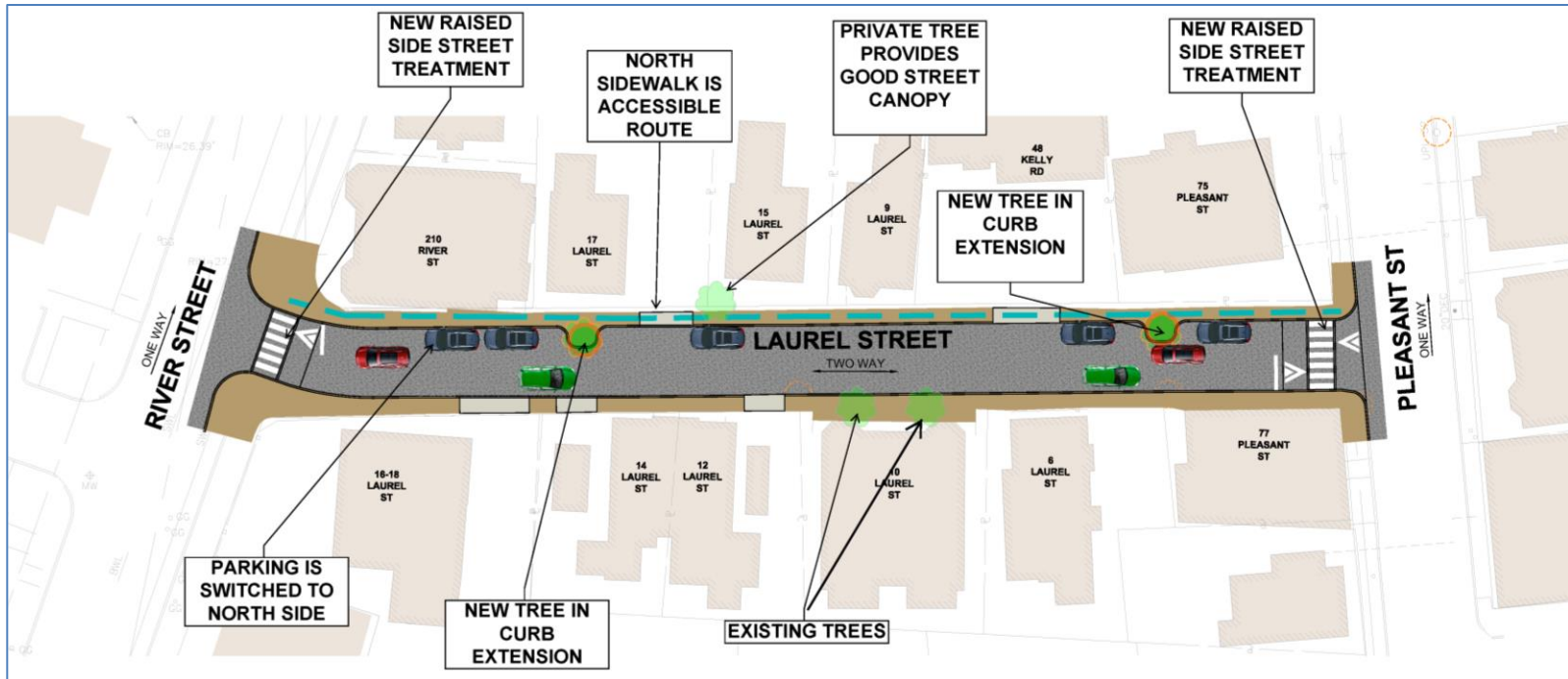
Street Trees

Existing: 2

Proposed: 4 (2 existing* + 2 new)

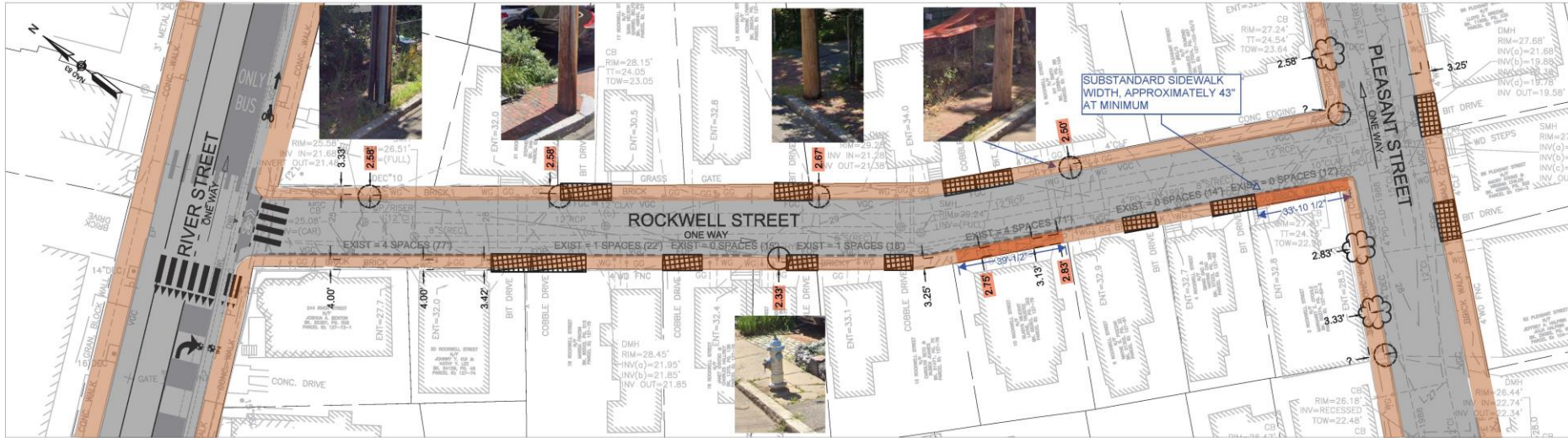
*Note: Existing trees on south sidewalk would not be replaced in future due to insufficient sidewalk width

- Requires vehicle parkers to approach from Pleasant Street; and exit to River Street
- Requires slight widening (up to 6") of sections of the north sidewalk
- Alternate plan (maintain parking and accessible route on south side) is possible; but reduces parking to 8 spaces and doesn't add new trees¹

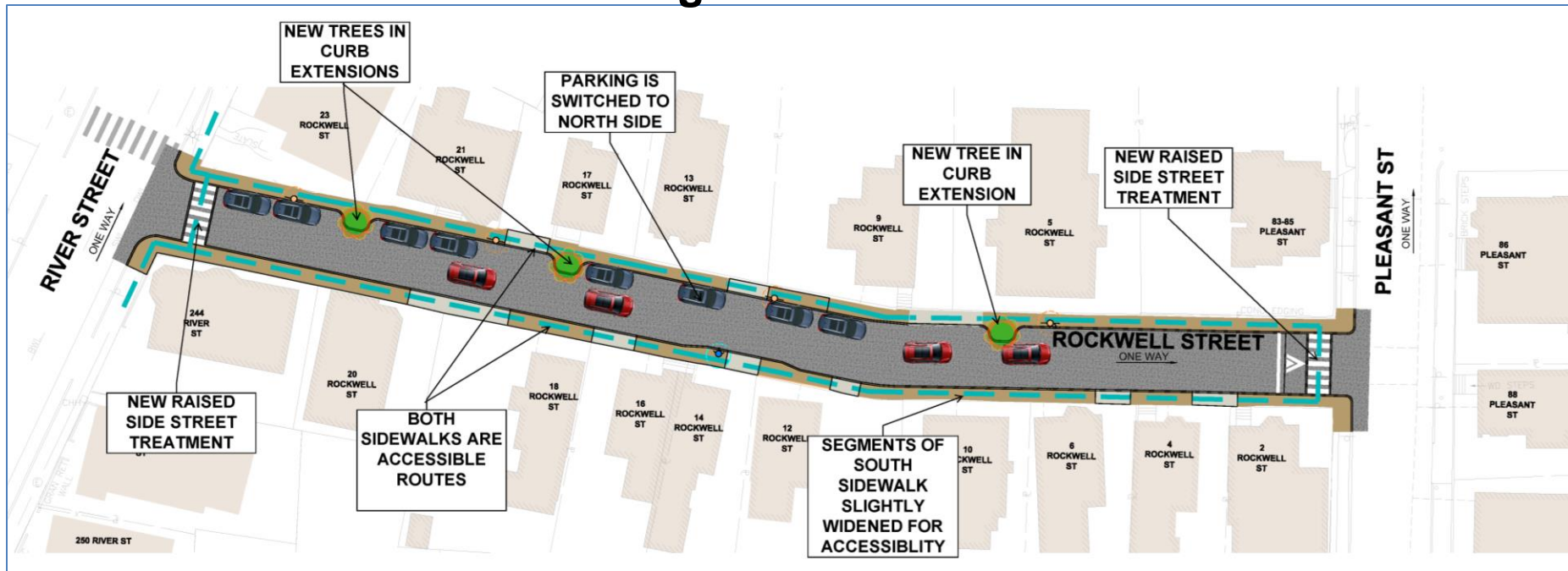


Proposed Concept

ROCKWELL STREET



Existing Conditions



Proposed Concept

ROCKWELL STREET

Parking Spaces

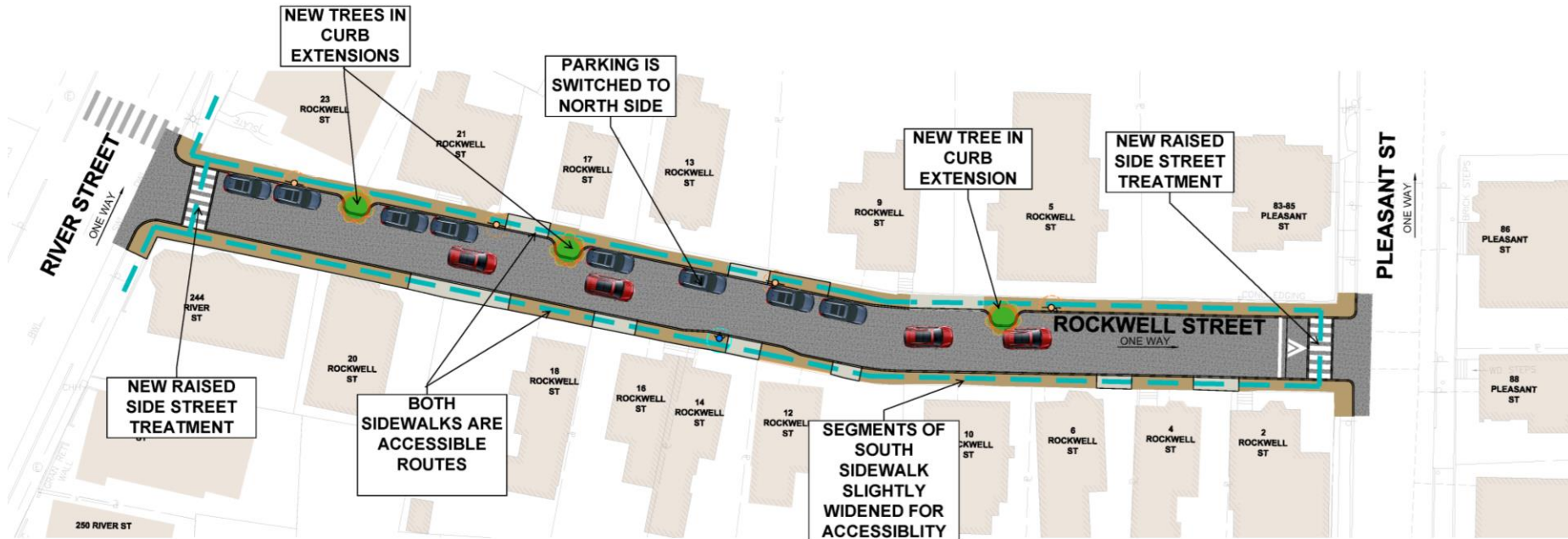
Existing: Approx. 13

Proposed: Approx. 13

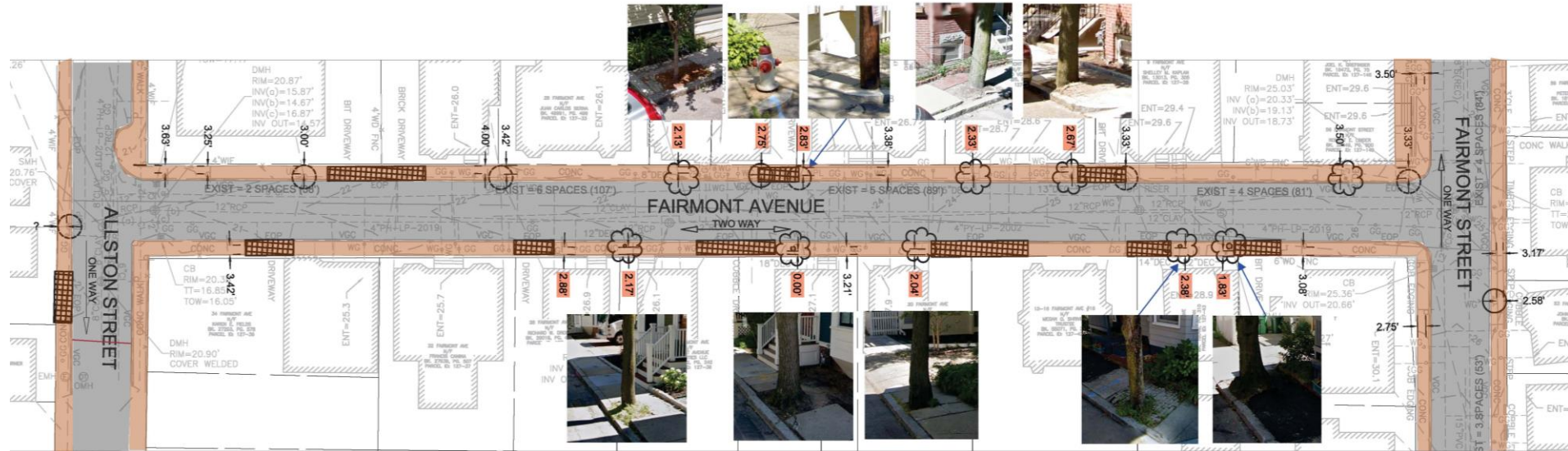
Street Trees

Existing: 0

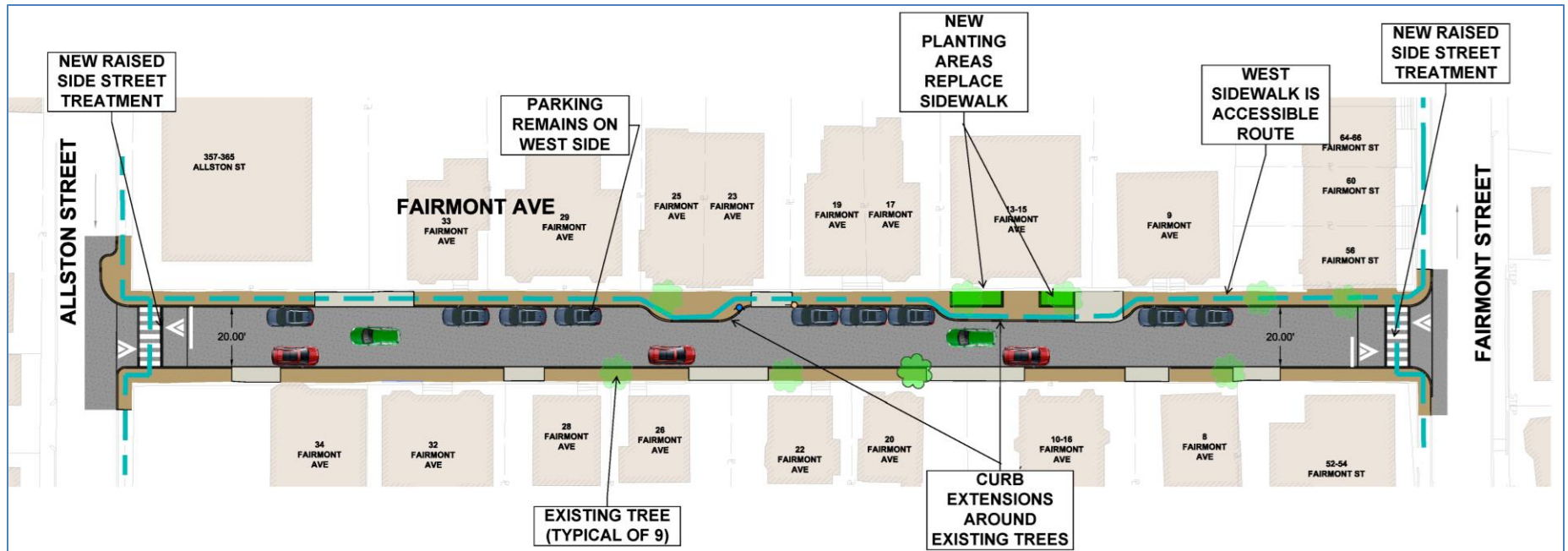
Proposed: 3 (0 existing + 3 new)



FAIRMONT AVENUE



Existing Conditions



Proposed Concept "A" (Conventional)

FAIRMONT AVENUE

Parking Spaces

Existing: Approx. 18

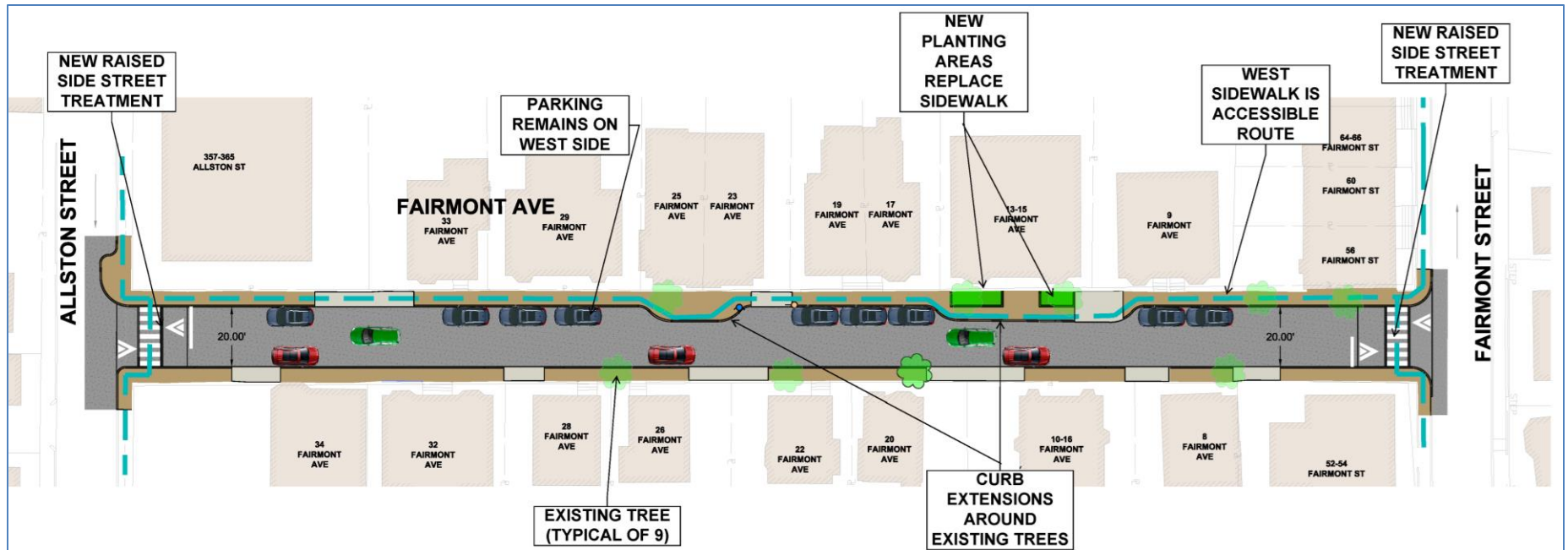
Proposed: Approx. 13

Street Trees

Existing: 9

Proposed: 9 (9 existing* + 0 new)

*Note: Existing trees on east sidewalk would not be replaced in future due to insufficient sidewalk width



Proposed Concept "A" (Conventional)

FAIRMONT AVENUE



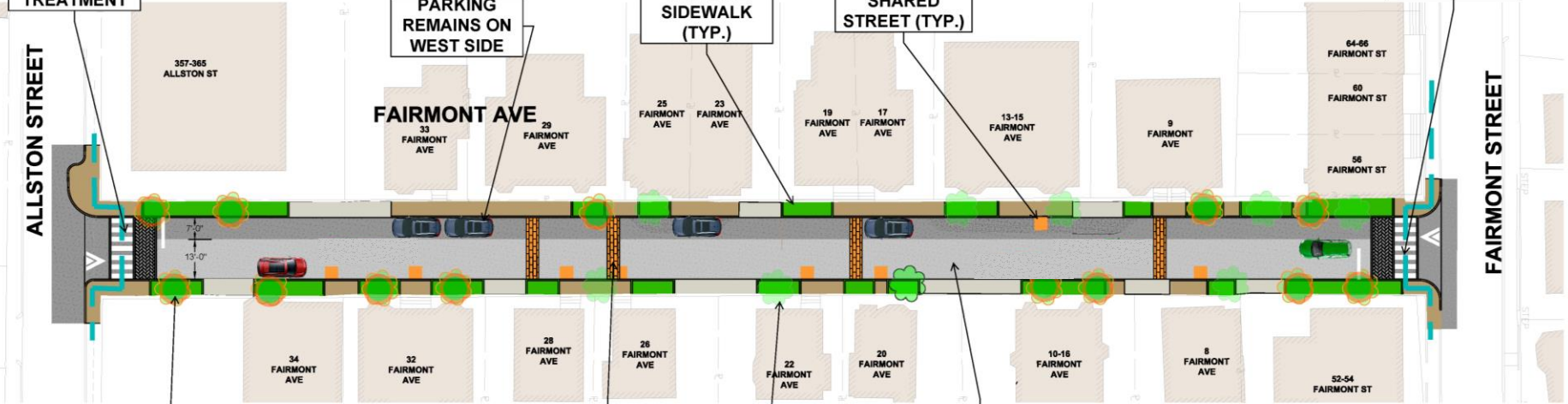
NEW RAISED SIDE STREET TREATMENT

PARKING REMAINS ON WEST SIDE

NEW PLANTING AREAS REPLACE SIDEWALK (TYP.)

LEVEL CONNECTION FROM SIDEWALK TO SHARED STREET (TYP.)

NEW RAISED SIDE STREET TREATMENT



NEW TREE (TYP.)

POTENTIAL PAVEMENT TREATMENT / VISUAL CUE

EXISTING TREE (TYPICAL OF 9)

ACCESSIBLE PEDESTRIAN ROUTE IS IN SHARED SPACE



Proposed Concept "B" (Shared Street)
(example shared street photos are from Longfellow Road)

FAIRMONT AVENUE

Parking Spaces

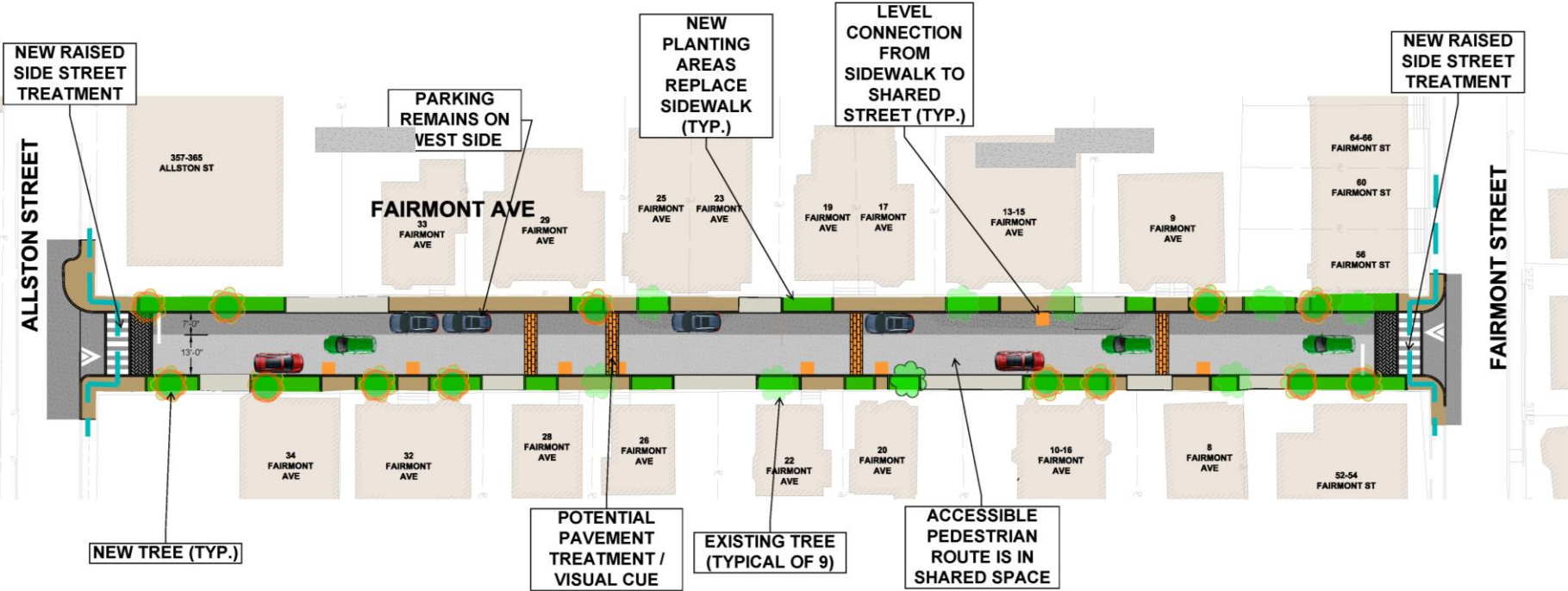
Existing: Approx. 18

Proposed: Approx. 14


Street Trees

Existing: 9

Proposed: 22 (9 existing + 13 new)



Proposed Concept "B" (Shared Street)

A large, horizontally-oriented yellow oval with a soft gradient, centered on a white background. The text "NEXT STEPS" is centered within the oval.

NEXT STEPS

NEXT STEPS

- Listen to neighborhood feedback
 - Give us your comments/questions tonight or via email.
- Advance final design of surface elements.
 - All street and sidewalk surfaces will be reconstructed.
 - We will work with abutters on selecting sidewalk materials
- Advance final design of subsurface utilities
 - Eversource gas work has been completed
 - Water mains in Fairmont Ave, Fairmont St, and Kelly Road will be replaced
 - New catch basins will be installed in all streets
 - Fairmont Avenue storm drain will be replaced
 - Storm drains in other streets will be largely rehabilitated (lined) using “trenchless” methods
- Pre-construction meeting with neighbors
 - Review final details of the design and rough schedule
- Ongoing communications during construction

CONSTRUCTION

The City is committed to working with residents and businesses throughout the construction process.

Construction Coordination

- Project Manager and Community Relations Manager assigned to every project.
- Manage contractor and coordinate construction activities and community notifications.
- Standard Work Hours: Mon – Fri 7 am – 4 pm
- Maintain safe and effective traffic management plans to assist pedestrians, cyclists, drivers and buses travelling through project area.



HOW TO STAY INVOLVED

Send us your questions and comments:

kriley@cambridgema.gov

Receive project updates:

www.cambridgema.gov/departments/publicworks/cityprojects



DISCUSSION