



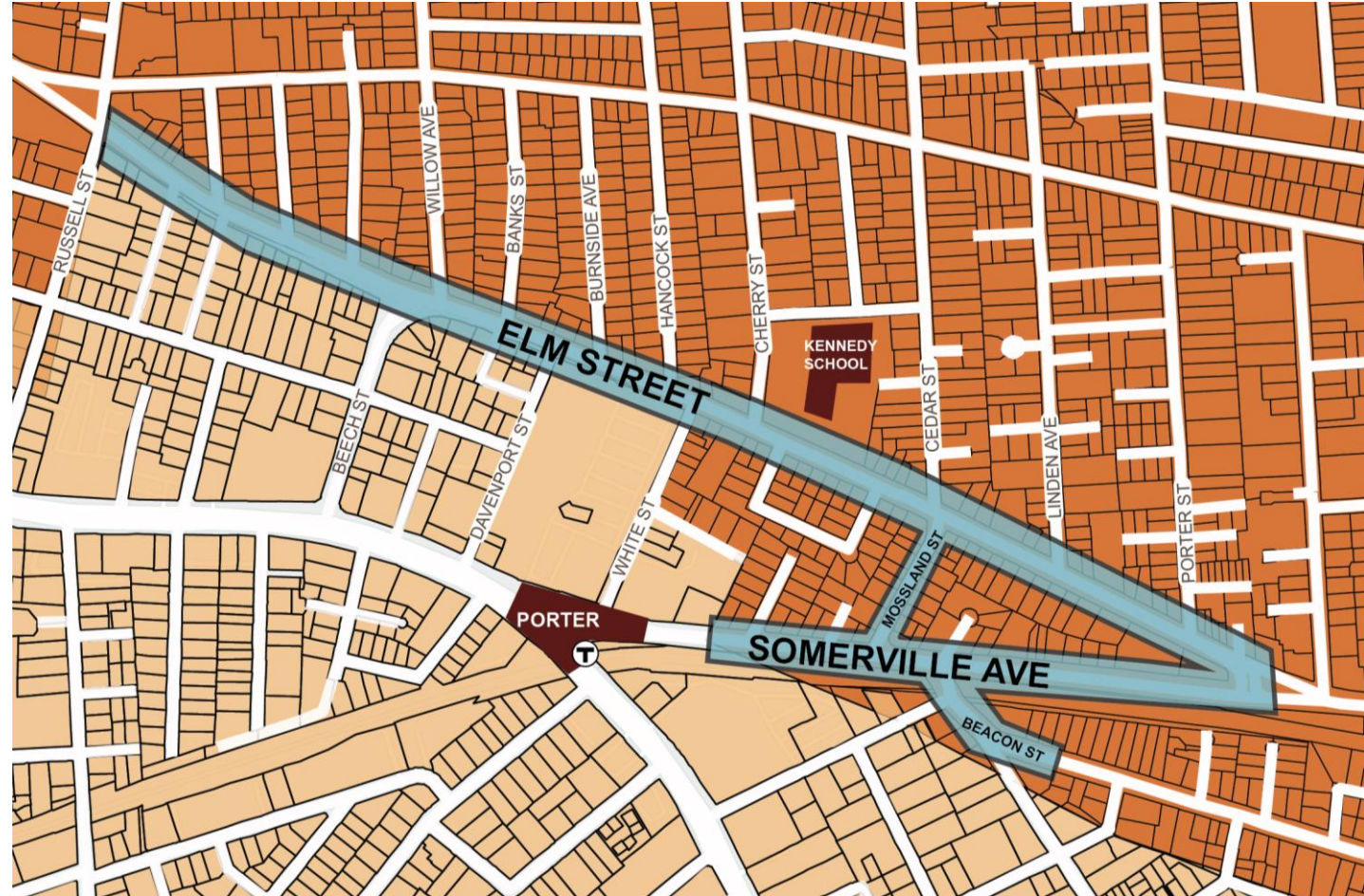
Elm-Beacon Connector

Final Presentation to the Traffic Commission

April 9, 2026
somervillema.gov/elmbeacon

Background

- Last month, we presented the Traffic Commission with an overview of the Elm-Beacon Connector project. That presentation included an explanation our design principles, a summary of the data we've analyzed to understand the potential impacts of this project, and a discussion of the community outreach we've done and how it has shaped our decision-making.
- Since then, we conducted final reviews of the plans with key city departments, the MBTA, and the City of Cambridge. The plans have been finalized based on the remaining feedback, and an illustrative version of the final design was posted to the project web page on Tuesday along with supporting documentation such as tonight's slides.
- Tonight, we're here to walk through final plans, discuss their impact on traffic and parking, and seek approval for the required regulatory changes to move this project into the implementation phase



What design elements are still planned?

- Adding protected bike lanes in both directions on Elm Street, Somerville Avenue, and Beacon Street
- Turning Mossland Street into a low-speed, low-volume neighborway by dead-ending it at Elm Street and turning it into a two-way street
- Traffic signal equipment upgrades and changes to timing and phasing to accommodate the changing traffic patterns
- Coordinating with the City of Cambridge to remove the slip lane on Beech St, creating more pedestrian space and reducing exposure to vehicles while crossing Beech St
- Installing clear corners markings at all intersections within the project area



Rendering of the proposed future condition on Beacon St at Somerville Ave

What design elements have changed?

- Added the following elements to the scope:
 - Will be installing a raised crosswalk across Elm St at Cherry St through our annual repaving program
 - Will be creating an all-way stop at the intersection of Elm St and Beech St
 - Have converted the Summer St approach to Cutter Ave from two travel lanes to a single travel lane and a parking lane
 - Have added markings and flex posts to the intersection of Craigie St and Somerville Ave
 - Will be upgrading the pedestrian push buttons and countdown timers at the intersection of Elm St, Cedar St, and Mossland St
- Removed the following elements from the scope:
 - Took out the flex posts on the centerline at most intersections to ensure that fire apparatus could make turns without hitting any posts
- Made modifications to the following elements:
 - Moved bus stop locations to better meet the MBTA's standards for spacing and suitability
 - Redesigned the Mossland St dead-end to better accommodate emergency and maintenance vehicles



Elm Street Proposed Design

Cutter Ave to Elston St



Elm Street Proposed Design

Elston St to Davenport St



Elm Street Proposed Design

Davenport St to Holyoke Rd



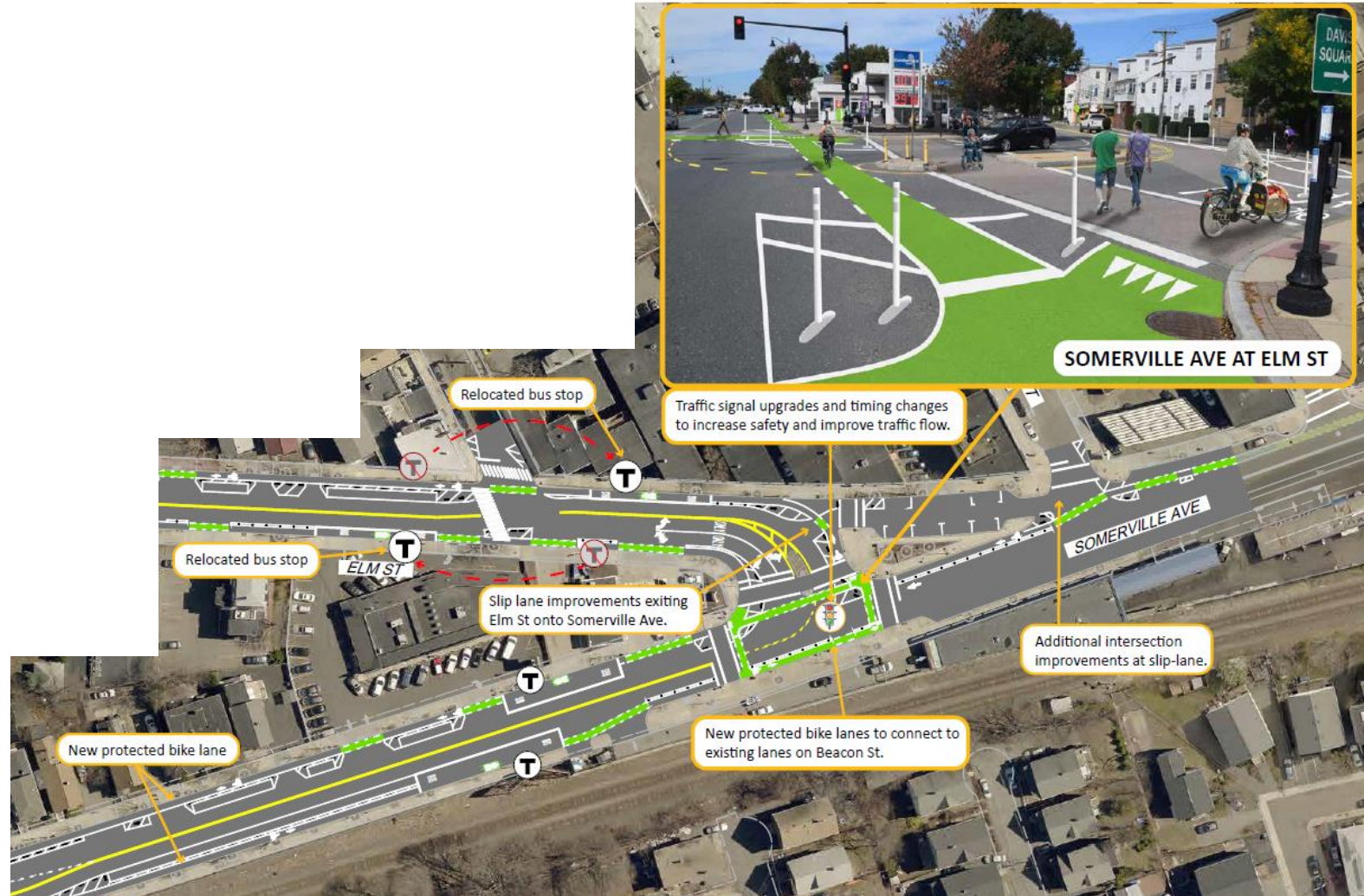
Elm Street Proposed Design

Holyoke Rd to Porter St



Wilson Square Proposed Design

Elm St south of Porter St and Somerville Ave between Craigie St and Beacon St



Somerville Ave Proposed Design

Beacon St to Acadia Pk and Beacon St north of Oxford St

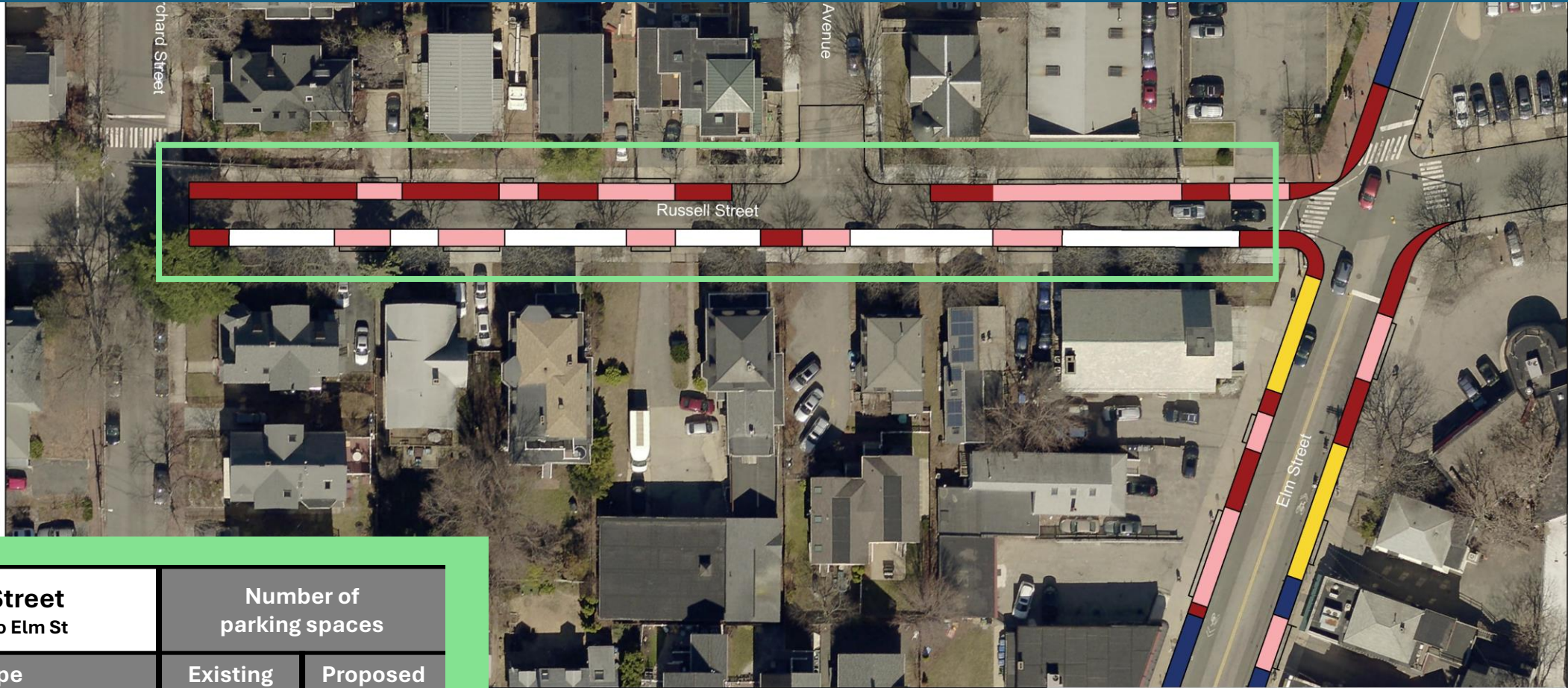


What are the requested parking changes?

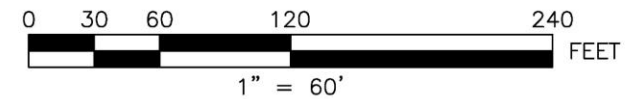
- The detailed requests for changes along each section of curb within the project area have been provided to the Traffic Commission along with these slides
- The regulations that will result from approving the requested changes will be shown on the next series of slides

Russell Street Parking Regulations

Existing - Orchard St to Elm Street

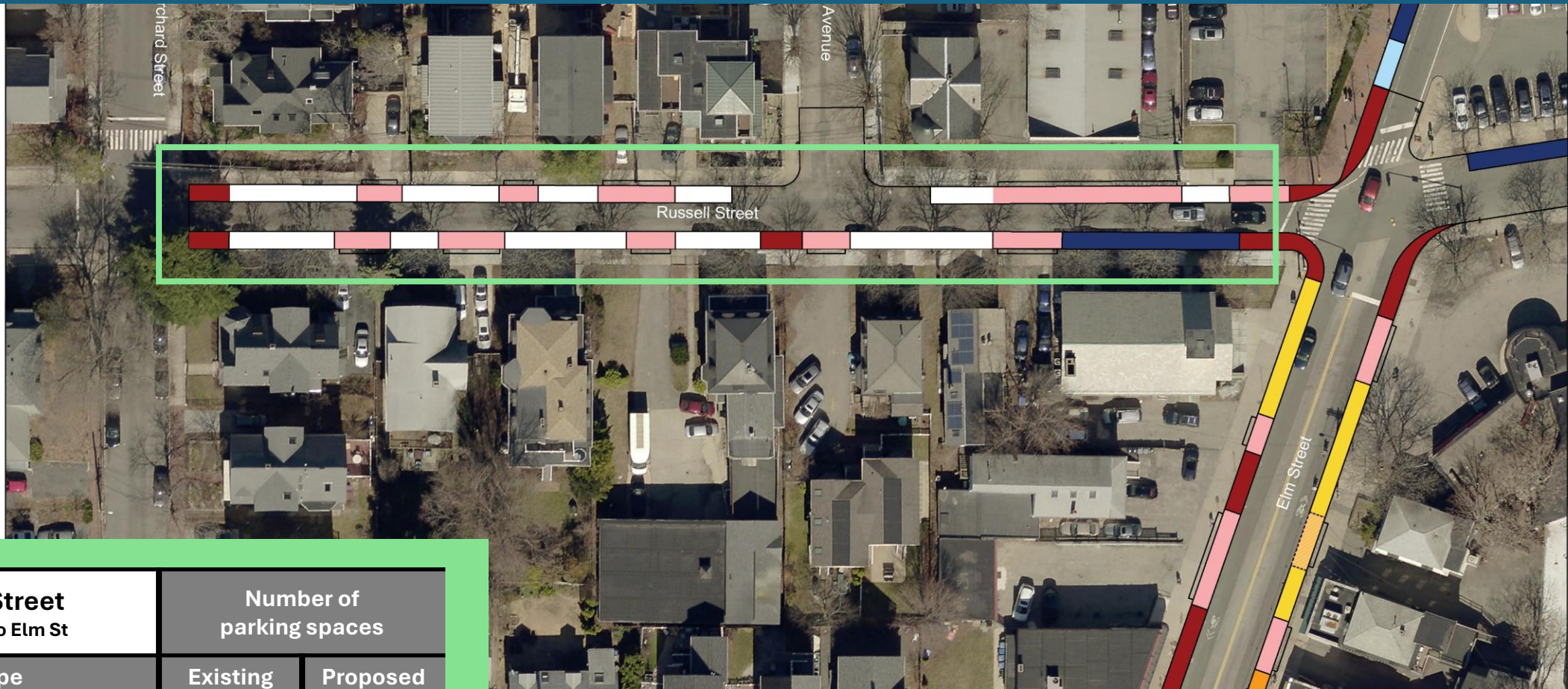


Russell Street Orchard St to Elm St		Number of parking spaces	
Parking Type	Existing	Proposed	
Metered	0		
Residential Permit Only	14		
Total	14		

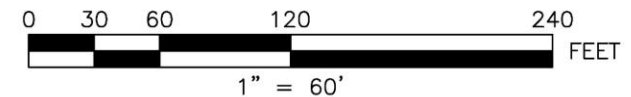


Russell Street Parking Regulations

Proposed - Orchard St to Elm Street

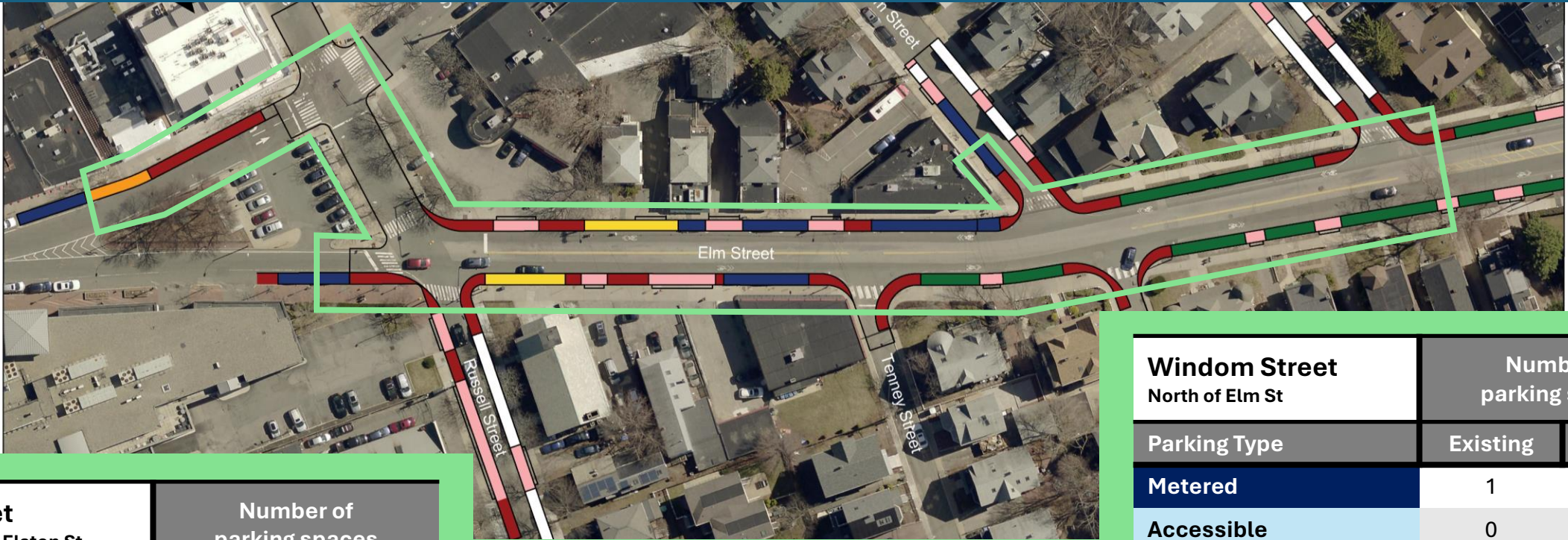


Russell Street Orchard St to Elm St		Number of parking spaces	
Parking Type	Existing	Proposed	
Metered	0	4	
Residential Permit Only	14	19	
Total	14	23	



Elm Street Parking Regulations

Existing – Cutter Ave to Elston St plus Summer St, Cutter Ave, and Windom St



Elm Street Cutter Ave to Elston St	Number of parking spaces	
Parking Type	Existing	Proposed
Metered	10	
2 Hour Except by Permit	17	
Loading Zone	0	
Accessible	0	
Total	27	

Summer Street West of Cutter Ave	Number of parking spaces	
Parking Type	Existing	Proposed
Metered	0	
Loading Zone	2	
Total	2	

Windom Street North of Elm St	Number of parking spaces	
Parking Type	Existing	Proposed
Metered	1	
Accessible	0	
Total	1	

Cutter Avenue Elm St to Summer St	Number of parking spaces	
Parking Type	Existing	Proposed
Metered	0	
Total	0	

Elm Street Parking Regulations

Proposed – Cutter Ave to Elston St plus Summer St, Cutter Ave, and Windom St



Elm Street Cutter Ave to Elston St	Number of parking spaces	
Parking Type	Existing	Proposed
Metered	10	3
2 Hour Except by Permit	17	6
Loading Zone	0	2
Accessible	0	1
Total	27	12

Summer Street West of Cutter Ave	Number of parking spaces	
Parking Type	Existing	Proposed
Metered	0	2
Loading Zone	2	3
Total	2	5

Windom Street North of Elm St	Number of parking spaces	
Parking Type	Existing	Proposed
Metered	1	0
Accessible	0	1
Total	1	1

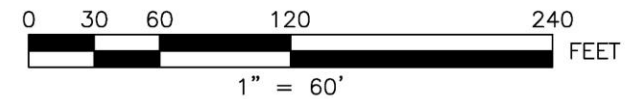
Cutter Avenue Elm St to Summer St	Number of parking spaces	
Parking Type	Existing	Proposed
Metered	0	3
Total	0	3

Elm Street Parking Regulations

Existing – Elston St to Davenport St



Elm Street Elston St to Davenport St		Number of parking spaces	
Parking Type	Existing	Proposed	
2 Hour Except by Permit	41		
Loading Zone	1		
Total	42		

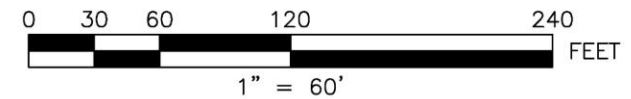


Elm Street Parking Regulations

Proposed – Elston St to Davenport St

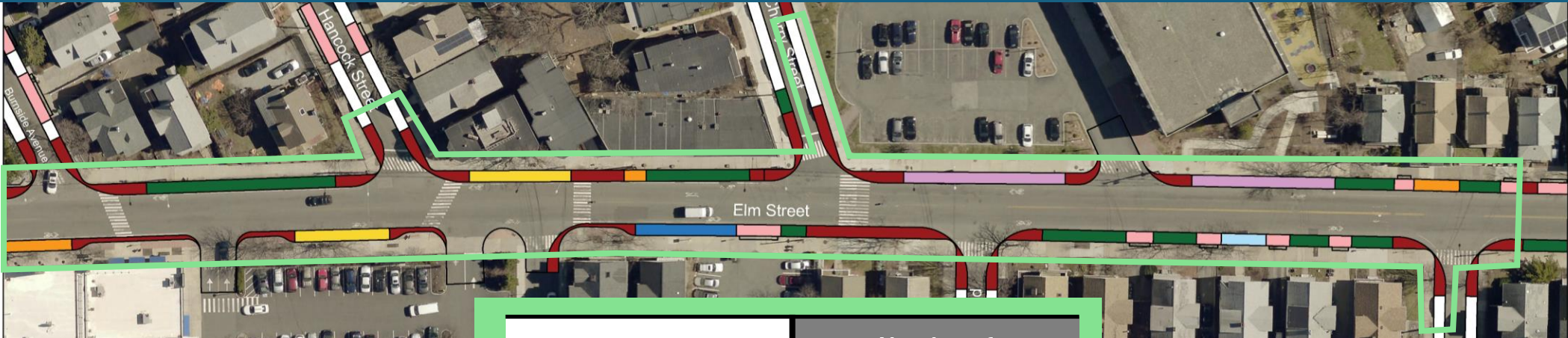


Elm Street Elston St to Davenport St		Number of parking spaces	
Parking Type	Existing	Proposed	
2 Hour Except by Permit	41	23	
Loading Zone	1	0	
Total	42	23	



Elm Street Parking Regulations

Existing – Davenport St to Holyoke Rd plus Hancock St, Cherry St, Sartwell Ave, and Holyoke Rd



Elm Street Davenport St to Holyoke Rd		Number of parking spaces	
Parking Type	Existing	Proposed	
2 Hour Except by Permit	20		
Loading Zone	6		
Pick-Up/Drop-Off	10		
Blue Bikes Station	3		
Accessible	1		
Total	40		

Holyoke Road East South of Elm St		Number of parking spaces	
Parking Type	Existing	Proposed	
Residential Permit Only	1		
Accessible	0		
Total	1		

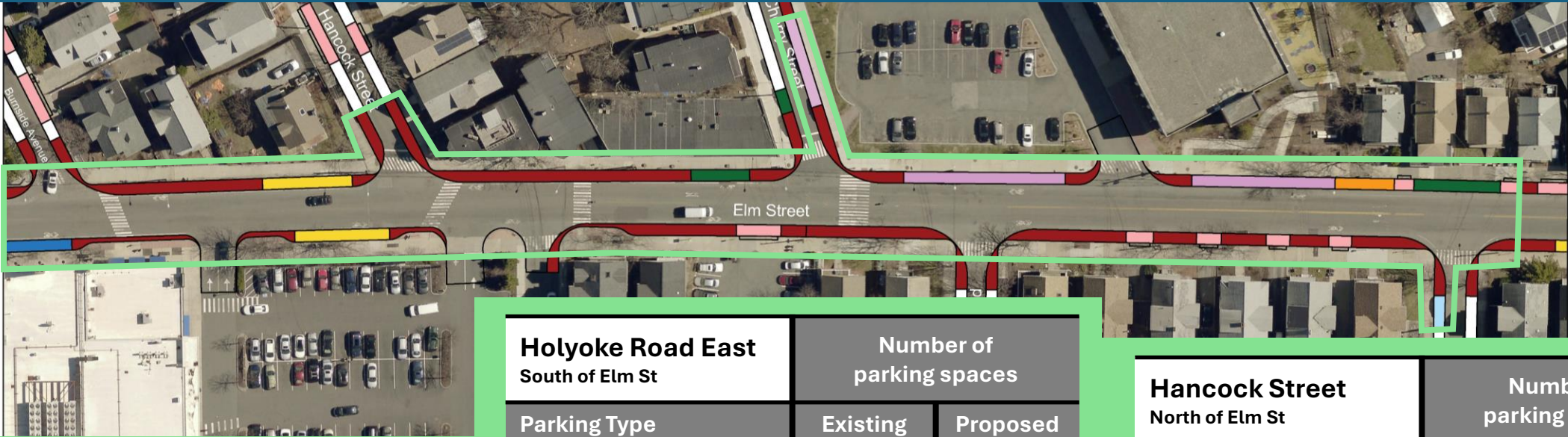
Cherry Street North of Elm St		Number of parking spaces	
Parking Type	Existing	Proposed	
Residential Permit Only	3		
Pick-Up/Drop-Off	0		
Total	3		

Hancock Street North of Elm St		Number of parking spaces	
Parking Type	Existing	Proposed	
Residential Permit Only	2		
Total	2		

Sartwell Ave East of Ashland St		Number of parking spaces	
Parking Type	Existing	Proposed	
Residential Permit Only	3		
Pick-Up/Drop-Off	0		
Total	3		

Elm Street Parking Regulations

Proposed – Davenport St to Holyoke Rd plus Hancock St, Cherry St, Sartwell Ave, and Holyoke Rd



Elm Street Davenport St to Holyoke Rd	Number of parking spaces	
Parking Type	Existing	Proposed
2 Hour Except by Permit	20	5
Loading Zone	6	2
Pick-Up/Drop-Off	10	10
Blue Bikes Station	3	3
Accessible	1	0
Total	40	20

Holyoke Road East South of Elm St	Number of parking spaces	
Parking Type	Existing	Proposed
Residential Permit Only	1	0
Accessible	0	1
Total	1	1

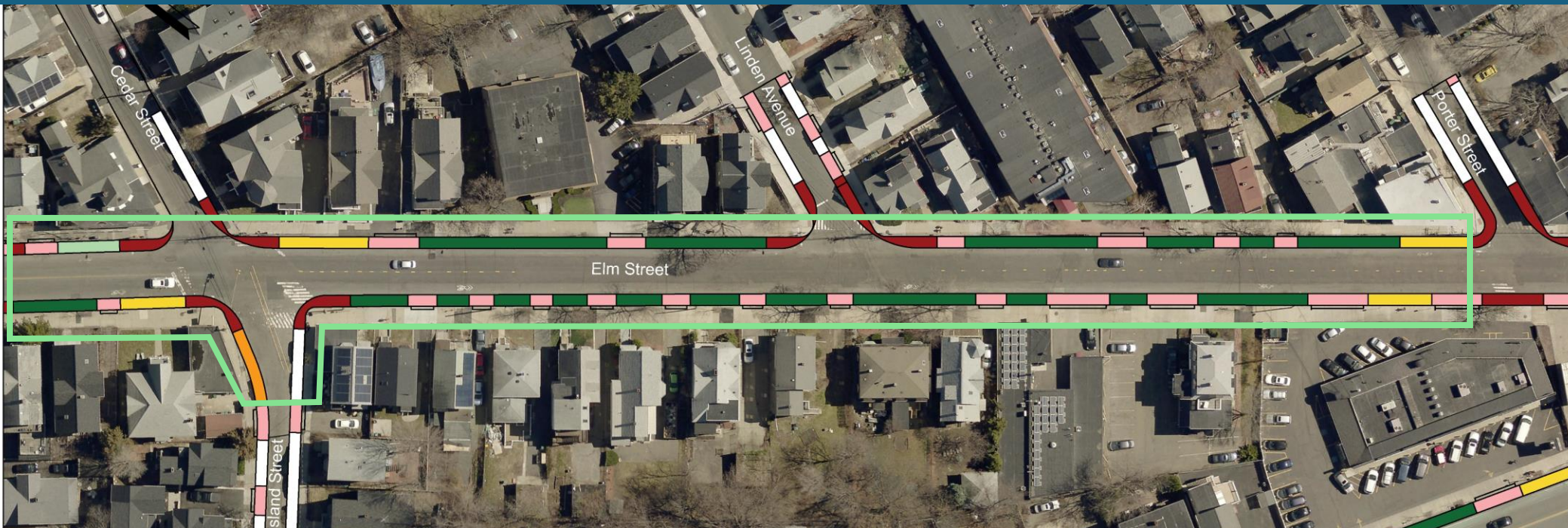
Cherry Street North of Elm St	Number of parking spaces	
Parking Type	Existing	Proposed
Residential Permit Only	3	0
Pick-Up/Drop-Off	0	3
Total	3	3

Hancock Street North of Elm St	Number of parking spaces	
Parking Type	Existing	Proposed
Residential Permit Only	2	0
Total	2	0

Sartwell Ave East of Ashland St	Number of parking spaces	
Parking Type	Existing	Proposed
Residential Permit Only	3	0
Pick-Up/Drop-Off	0	3
Total	3	3

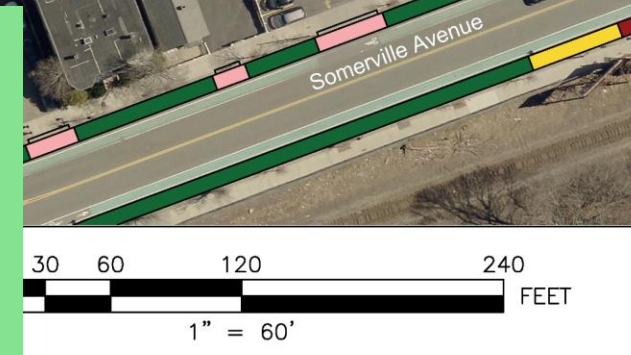
Elm Street Parking Regulations

Existing – Holyoke Rd to Porter St plus Mossland St



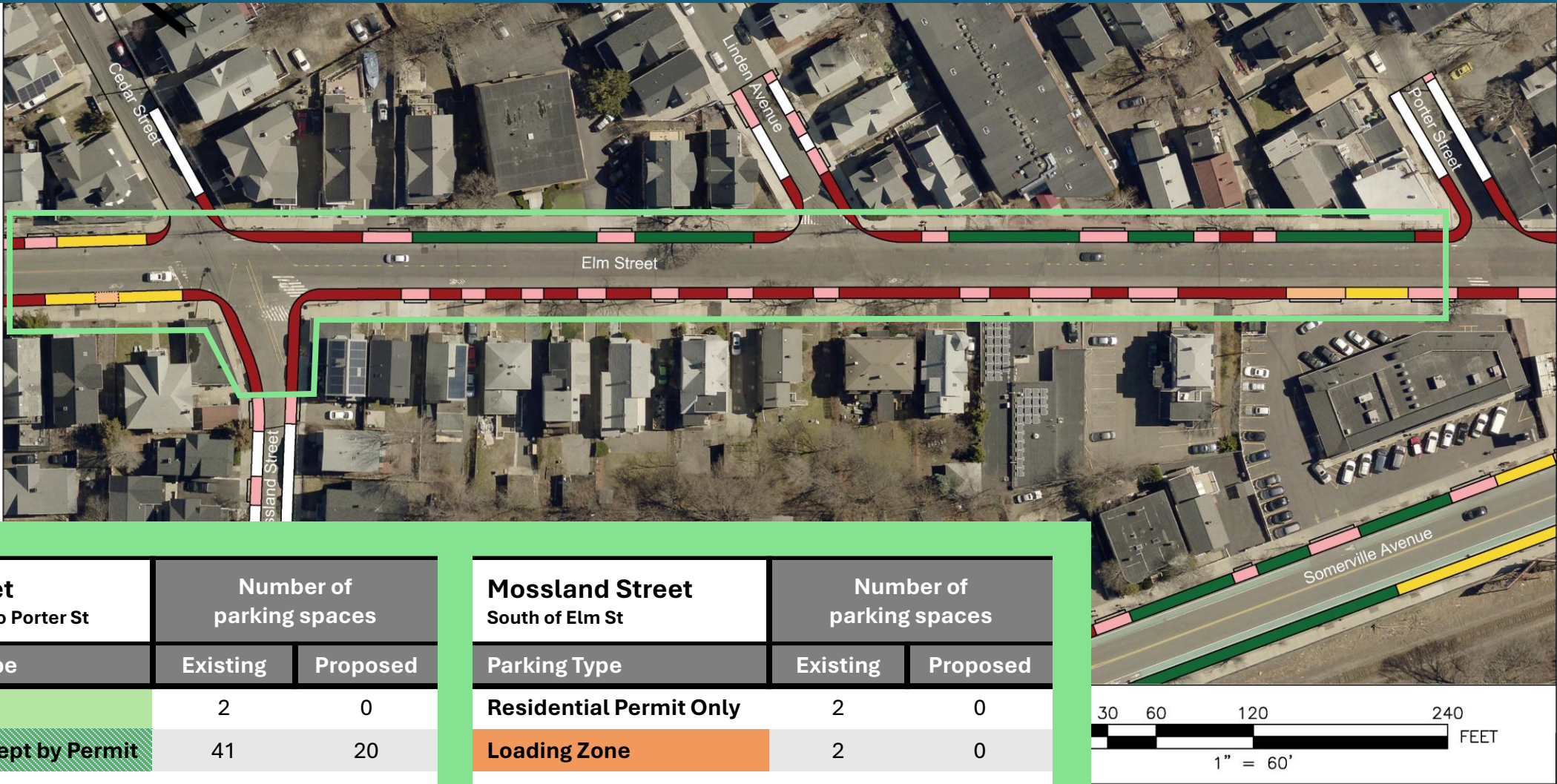
Elm Street Holyoke Rd to Porter St		Number of parking spaces	
Parking Type	Existing	Proposed	
15 Minute	2		
2 Hour Except by Permit	41		
Total	43		

Mossland Street South of Elm St		Number of parking spaces	
Parking Type	Existing	Proposed	
Residential Permit Only	2		
Loading Zone	2		
Total	4		



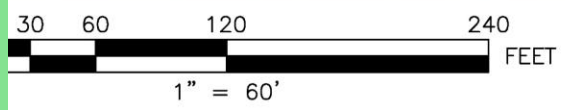
Elm Street Parking Regulations

Proposed – Holyoke Rd to Porter St plus Mossland St



Elm Street Holyoke Rd to Porter St		Number of parking spaces	
Parking Type	Existing	Proposed	
15 Minute	2	0	
2 Hour Except by Permit	41	20	
Total	43	20	

Mossland Street South of Elm St		Number of parking spaces	
Parking Type	Existing	Proposed	
Residential Permit Only	2	0	
Loading Zone	2	0	
Total	4	0	



Elm Street Parking Regulations

Existing – South of Porter St plus Craigie St and Somerville Ave west of Elm St



Elm Street South of Porter St	Number of parking spaces	
	Existing	Proposed
Parking Type		
2 Hour Except by Permit	10	
Total	10	

Somerville Avenue West of Elm St	Number of parking spaces	
	Existing	Proposed
Parking Type		
2 Hour Except by Permit	26	
Total	26	

Craigie Street North of Somerville Ave	Number of parking spaces	
	Existing	Proposed
Parking Type		
Residential Permit Only	1	
Accessible	0	
Total	1	

Elm Street Parking Regulations

Proposed – South of Porter St plus Craigie St and Somerville Ave west of Elm St



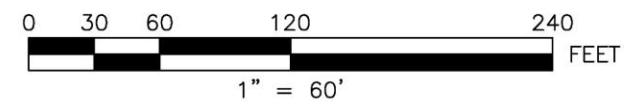
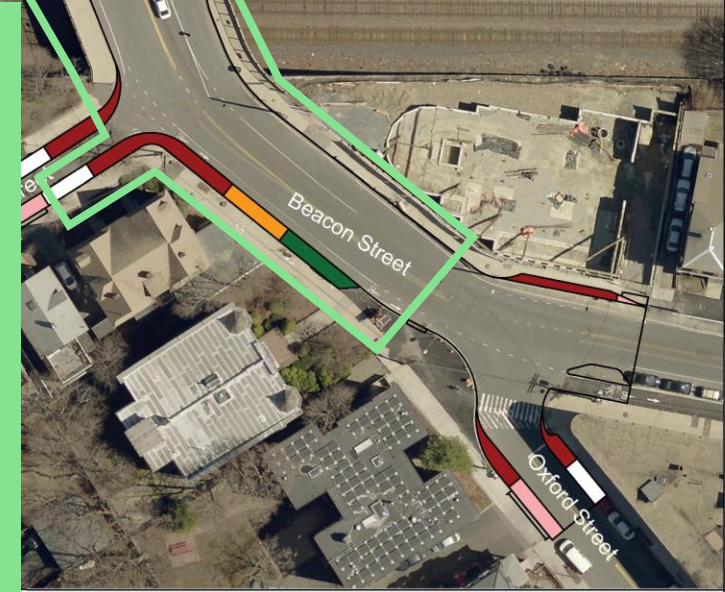
Elm Street South of Porter St	Number of parking spaces	
	Existing	Proposed
Parking Type		
2 Hour Except by Permit	10	0
Total	10	0

Somerville Avenue West of Elm St	Number of parking spaces	
	Existing	Proposed
Parking Type		
2 Hour Except by Permit	26	20
Total	26	20

Craigie Street North of Somerville Ave	Number of parking spaces	
	Existing	Proposed
Parking Type		
Residential Permit Only	1	0
Accessible	0	1
Total	1	1

Somerville Avenue Parking Regulations

Existing – City Line to Beacon St plus Mossland St, Beacon St, and Roseland St



Somerville Avenue City Line to Beacon St		Number of parking spaces	
Parking Type	Existing	Proposed	
2 Hour Except by Permit	10		
Total	10		

Mossland Street North of Somerville Ave		Number of parking spaces	
Parking Type	Existing	Proposed	
Residential Permit Only	0		
Total	0		

Beacon Street Somerville Ave to Oxford St		Number of parking spaces	
Parking Type	Existing	Proposed	
2 Hour Except by Permit	2		
Loading Zone	2		
Total	4		

Roseland Street West of Beacon St		Number of parking spaces	
Parking Type	Existing	Proposed	
Residential Permit Only	2		
Loading Zone	0		
Total	2		

Somerville Avenue Parking Regulations

Proposed – City Line to Beacon St plus Mossland St, Beacon St, and Roseland St

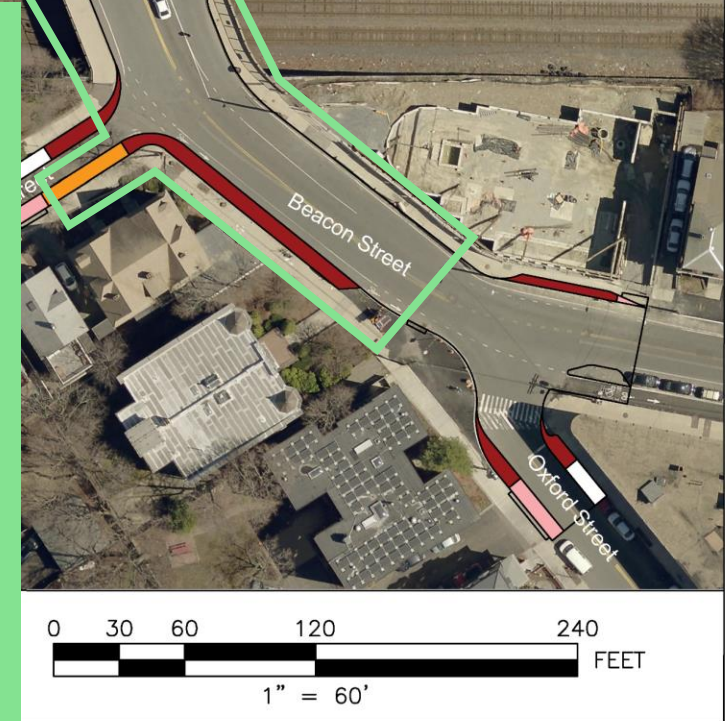


Somerville Avenue City Line to Beacon St		Number of parking spaces	
Parking Type	Existing	Proposed	
2 Hour Except by Permit	10	9	
Total	10	9	

Mossland Street North of Somerville Ave		Number of parking spaces	
Parking Type	Existing	Proposed	
Residential Permit Only	0	2	
Total	0	2	

Beacon Street Somerville Ave to Oxford St		Number of parking spaces	
Parking Type	Existing	Proposed	
2 Hour Except by Permit	2	0	
Loading Zone	2	0	
Total	4	0	

Roseland Street West of Beacon St		Number of parking spaces	
Parking Type	Existing	Proposed	
Residential Permit Only	2	0	
Loading Zone	0	2	
Total	2	2	



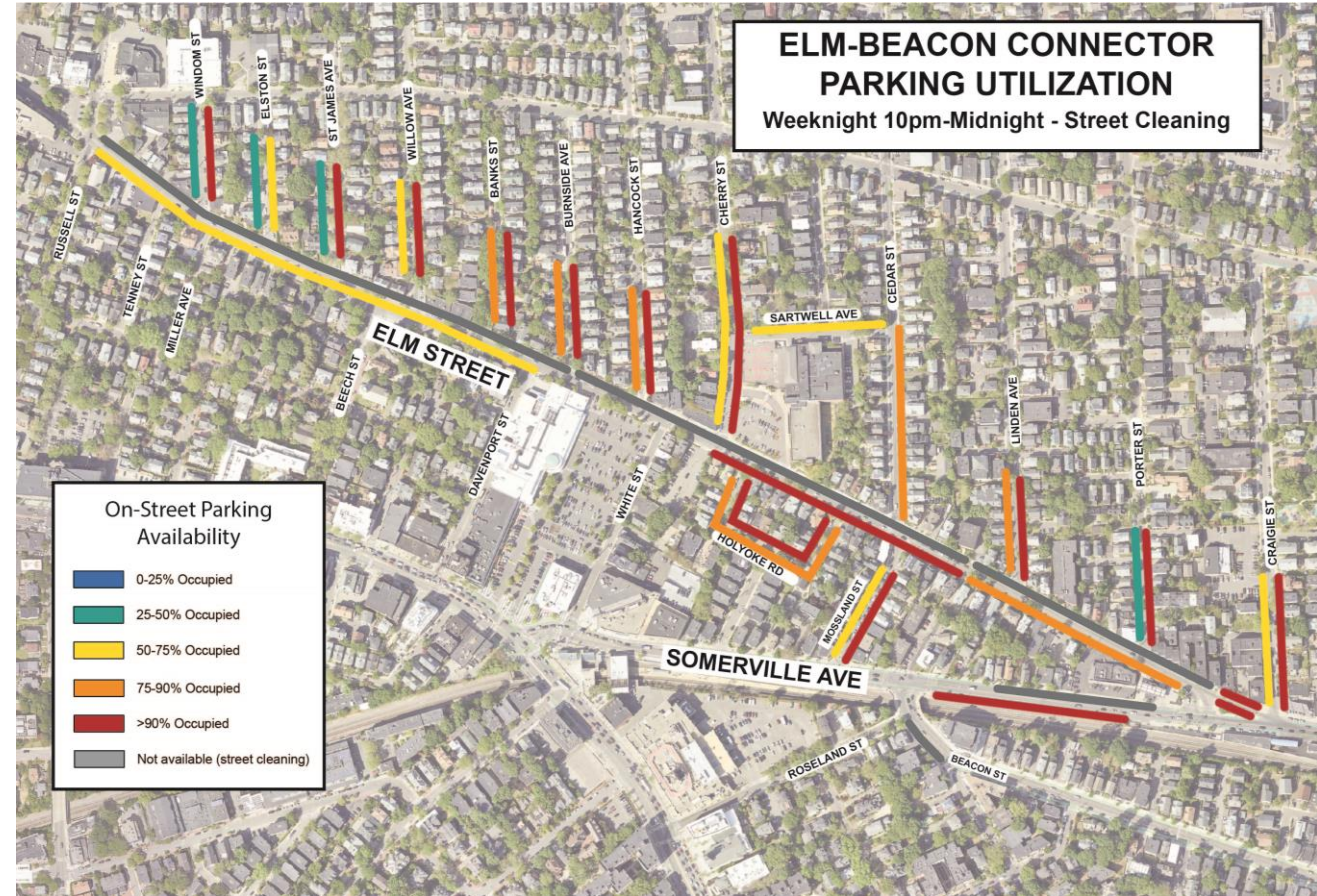
Summary of Existing and Proposed Parking Regulations

- The net change in the number of parking spaces by street is as follows:
 - Elm St: Loss of 81 spaces
 - Somerville Ave: Loss of 7 spaces
 - Beacon St: Loss of 4 spaces
 - Mossland St: Loss of 2 spaces
 - Hancock: Loss of 2 spaces
 - Summer St: Addition of 3 spaces
 - Cutter Ave: Addition of 3 spaces
 - Russell St: Addition of 9 spaces
- Across the project area, the total change in parking is a loss of 81 spaces.
- The total change in each type of parking regulation can be seen in the table to the right

Full Project Area	Number of parking spaces	
	Existing	Proposed
Metered	11	12
15 Minute	2	0
2 Hour Except by Permit	169	83
Loading Zone	13	9
Pick-Up/Drop-Off	10	16
Residential Permit Only	26	21
Accessible	1	4
Blue Bikes Station	3	3
Total	235	148

Parking Analysis

- We conducted a parking study in the fall of 2024 that looked at on-street utilization within the project area and on the first 300 feet of each side street (excluding Cambridge-owned streets), and found the following availability at various times of day:
 - Overnight on a weekday: **188 spaces** were open in the study area
 - Overnight on a weekday with a street sweeping restriction on the north side of Elm Street: **109 spaces** were open in the study area
 - Midday on a weekday: **201 spaces** were open in the study area
- Even with the loss of one side of parking on Elm Street, our observations indicate that there will be still be enough parking availability when the project is complete to accommodate parking demand throughout a typical day. This holds true even with the parking reduction that is planned for the Kennedy School parking lot to accommodate the expanded playground



Map showing parking occupancy rates during a weeknight with street cleaning restrictions. There were 22 open parking spaces on Elm Street and 109 across the full study area when this count was collected.

Bus Stop Regulation Requests

- As part of the curb regulation changes, we are also requesting changes to a number of bus stops within the project area:
 - Requesting to change the location of:
 - The westbound Elm St stop at Hancock St from the near side to the far side of the intersection
 - The westbound Elm St stop at Cedar St from the near side to the far side of the intersection
 - The westbound Elm St stop at Porter St from the far side to the near side of the intersection
 - The eastbound Elm St stop at Porter St by moving it approximately 100 ft west
 - Requesting to increase the length of:
 - The eastbound Elm St stop at Russell St by 10 feet
 - The eastbound Elm St stop at Beech St by 65 feet
 - The eastbound Elm St stop at Mossland St by 30 feet
 - The westbound Elm St stop at St James Ave by 45 feet
 - The westbound Elm St stop at Cutter Ave by 40 feet
 - The eastbound Somerville Ave stop opposite Beacon Ter by 60 feet
 - The eastbound Somerville Ave stop at Elm St by 70 feet
 - The westbound Somerville Ave stop at Elm St by 25 feet
 - The westbound Somerville Ave stop at Beacon Ter by 10 feet

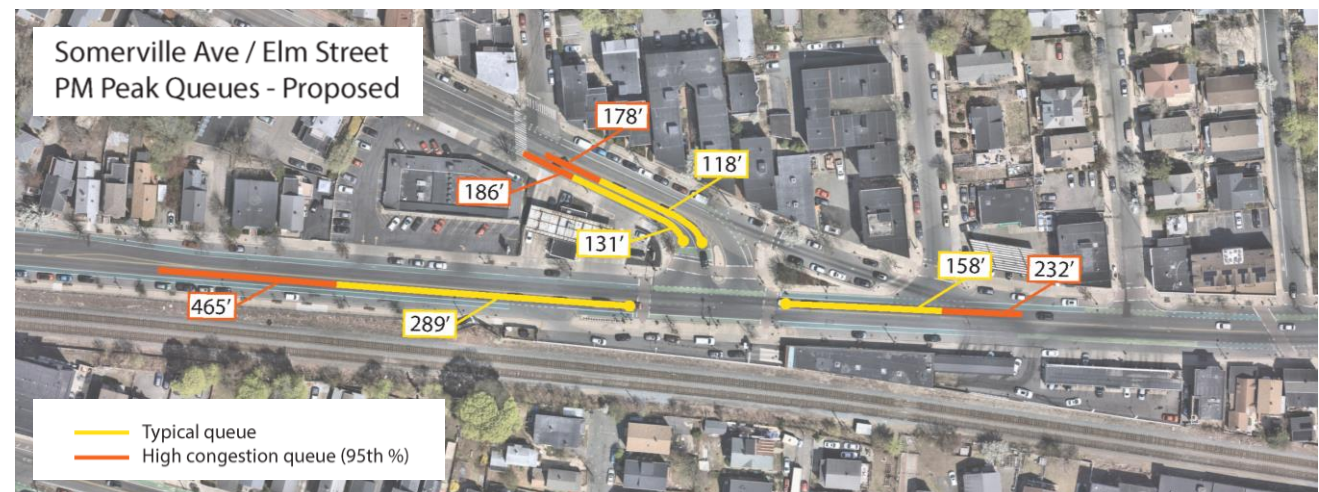
Traffic Regulation Requests

- Request to convert Mossland St from one-way to two-way operation for all modes.
- Request to restrict the following turns for motor vehicles:
 - Right from Elm St eastbound onto Mossland St southbound
 - Thru movement from Cedar St southbound onto Mossland St
 - Left from Elm St westbound onto Mossland St southbound
 - Left from Elm St eastbound onto Cutter Ave northbound
 - Right from Somerville Ave westbound onto Elm St northbound
- Request to restrict right turns on red for:
 - Elm St southbound at Somerville Ave
 - Somerville Ave eastbound at Beacon St
 - Mossland St southbound at Somerville Ave
 - Somerville Ave westbound at Mossland St
- Request to make the intersection of Elm St at Beech St stop-controlled on all approaches.



Traffic Analysis

- We have completed an extensive traffic analysis of the Mossland St change and have based our signals proposal on accommodating a similar level of delay for all users as exists today
- We have developed traffic queue diagrams, an example of which is shown on the right, to illustrate the anticipated change in the existing versus future condition



Thank You!