

Beacon Street Reconstruction

November 13, 2012

City of Somerville
Mayor's Office of Strategic Planning + Community Development

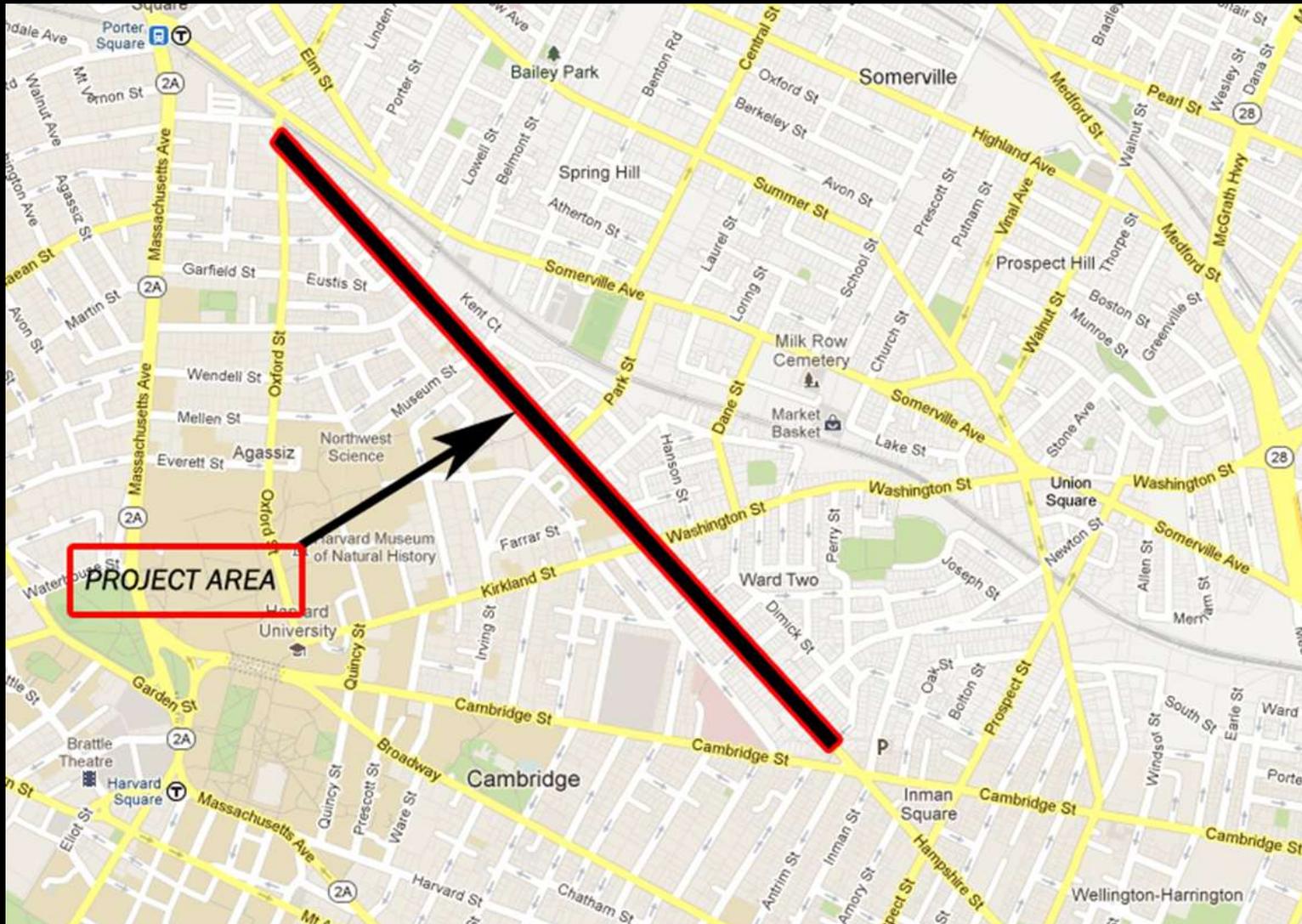


Agenda

- **Introduction and Welcome**
Alderman Maryann Heuston and City Staff
Ward 2 Alderman
- **Project Overview and History**
Presented By: Hayes Morrison
Director of Transportation + Infrastructure
- **Project Detail**
Presented By: David Giangrande
Engineer of Record
- **Question and Answer**



Project Bounds



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Project History

Project Goal:

To create a Beacon Street corridor that adequately provides for all roadway users; automobiles, bicyclists, pedestrians, and transit to the extent appropriate to the function, context, and use of the street.



Project History

Meetings:

- **2004** – Project delay due to funding
- **2007** – Project delay due to funding
- **Late 2011** – Project funding secured
- **Early 2012** – Project designer selected
- **Spring 2012** – Contract with designer initiated



Project History

Project Funding:

The Beacon Street project roadway construction will be funded with a combination of Federal (80%) and State (20%) funds.

Those funds are secured via the Boston Region MPO, who has their own roadway evaluation system based on maintenance, modernization and efficiency, livability and economic benefit, mobility, environment and climate change, environmental justice, and safety and security.



Who are the Users?

Statistics on the Corridor:

- **Automobiles** – approximately 12,000 cars per day, and approximately 900 cars per hour at peak times.
- **Bicyclist** – approximately 300 peak hour riders
 - 180 Sacramento Street
 - 193 Park Street
 - 253 Washington Street
- **Pedestrians** - do not have daily total numbers, but approximately 100-200 pedestrians per hour at peak times.
- **The MBTA** – the 83 bus runs from Inman Square to Park Street every 20 minutes at peak commuter times.

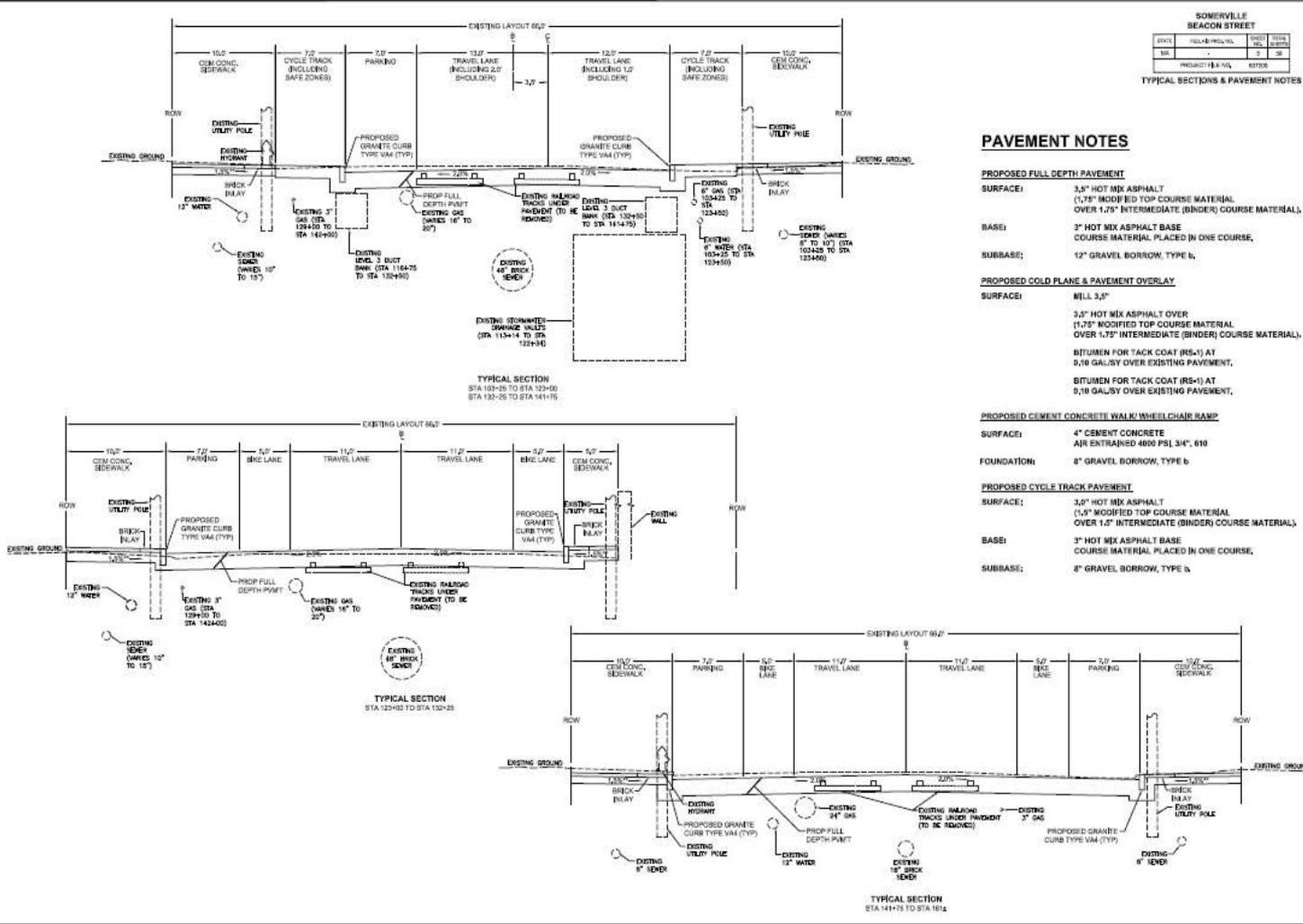
Who are the Users?

Statistics on the Corridor:

- **Automobiles** – no intersection cluster in this corridor is listed as a MassDOT top 200 intersection
- **Bicyclist** – this is the **number one** area for bicycle crashes in the Commonwealth.
- **Pedestrians** – not a top 10 pedestrian intersection cluster.
- **The MBTA** – the 83 bus is the 57th (out of 196) most used bus line with an average of 2,150 daily boardings.



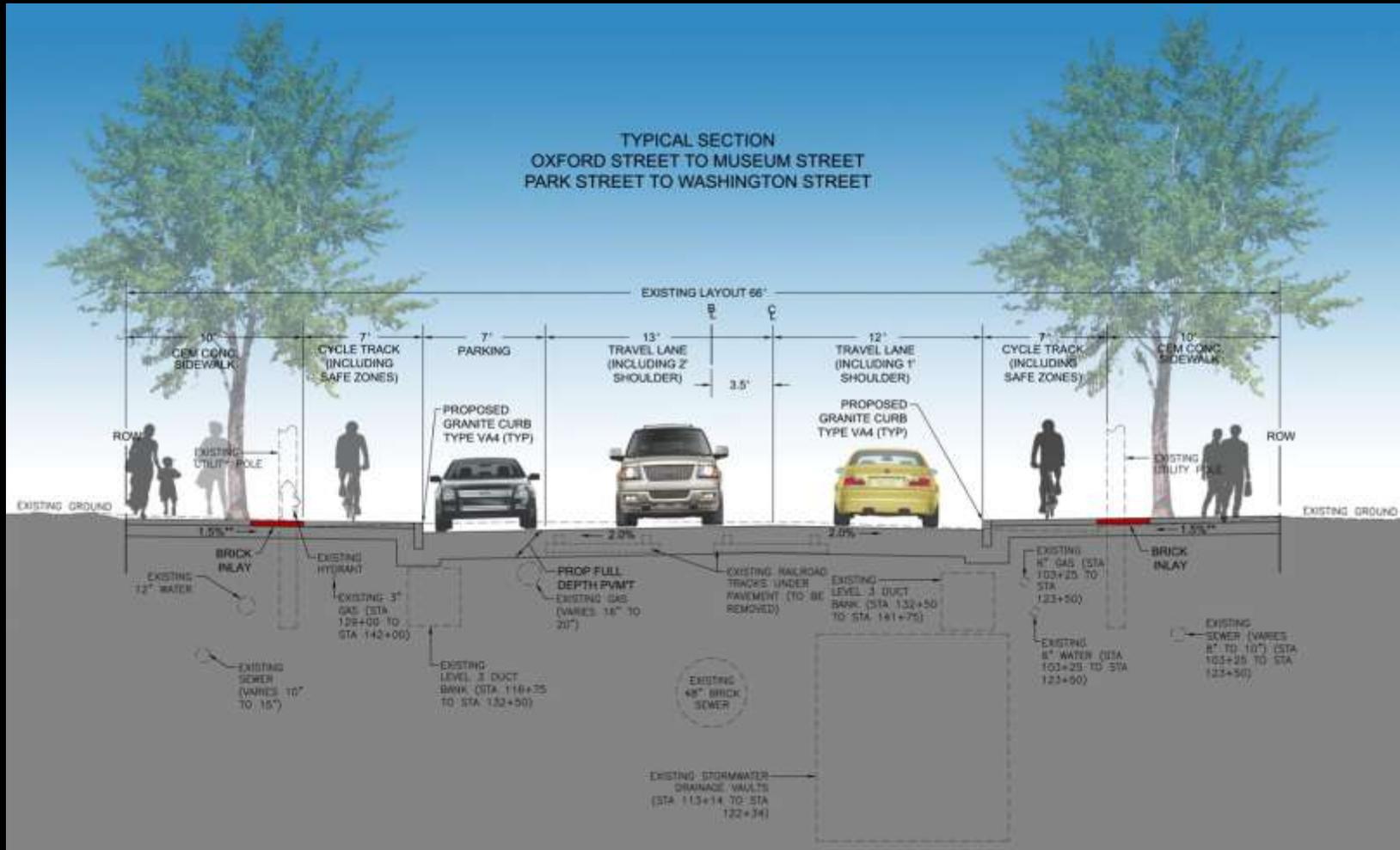
A protected bicycle facility “cycletrack”



There are significant underground utilities in the corridor, and a lot of pedestrians, the City decided not to take from the sidewalk. The next step was to investigate parking.



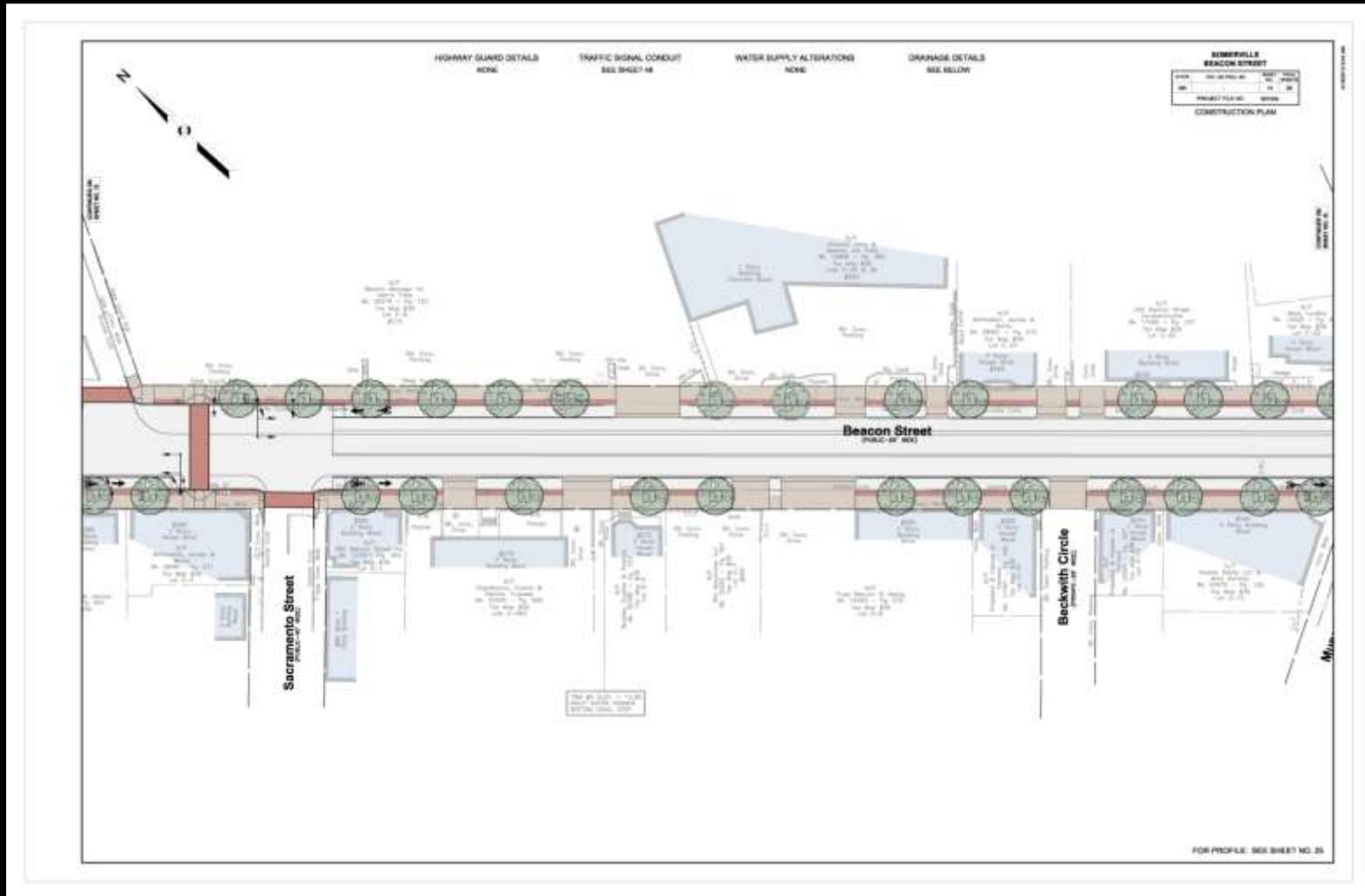
Proposed Conditions



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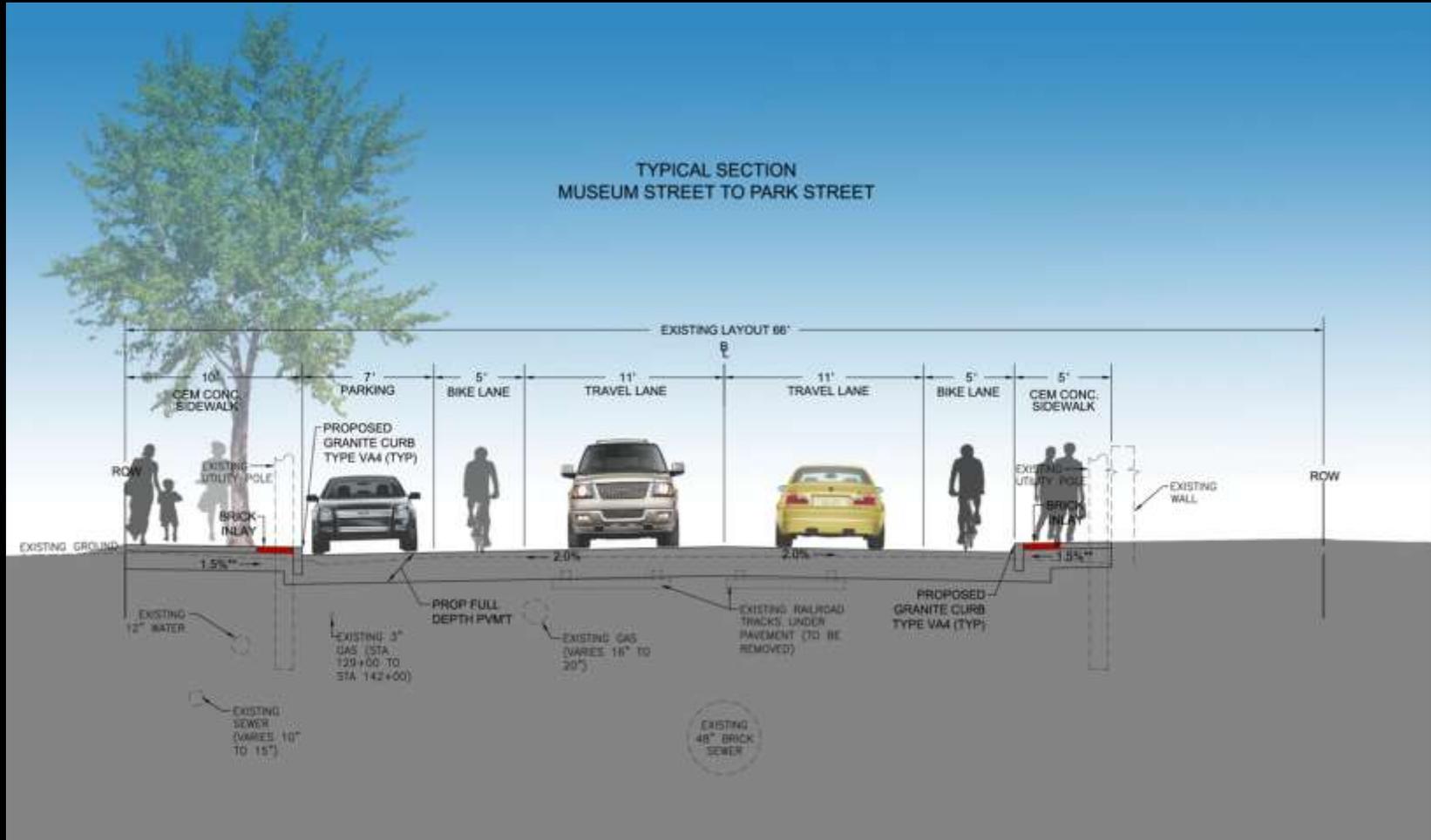
Proposed Conditions



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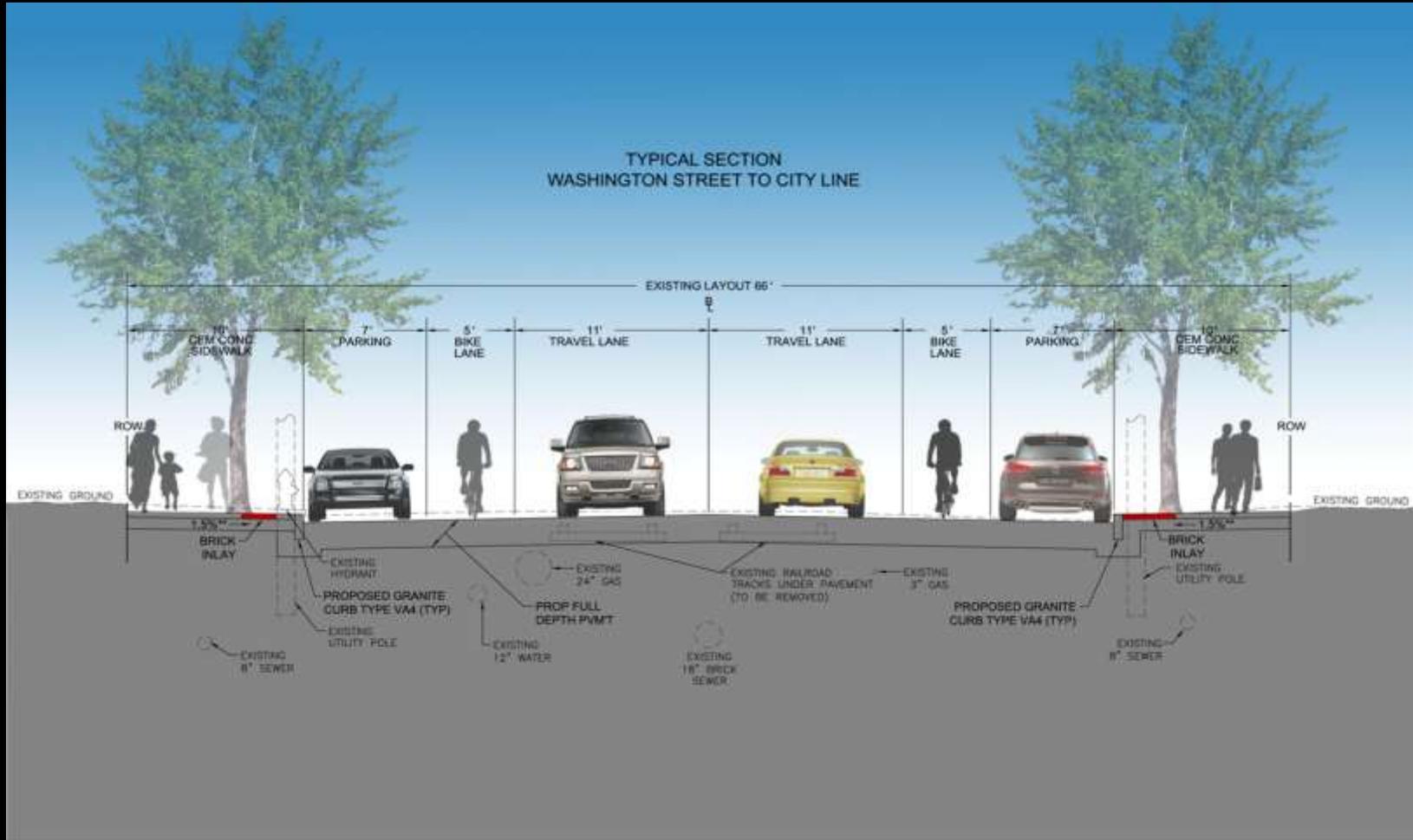
Proposed Conditions



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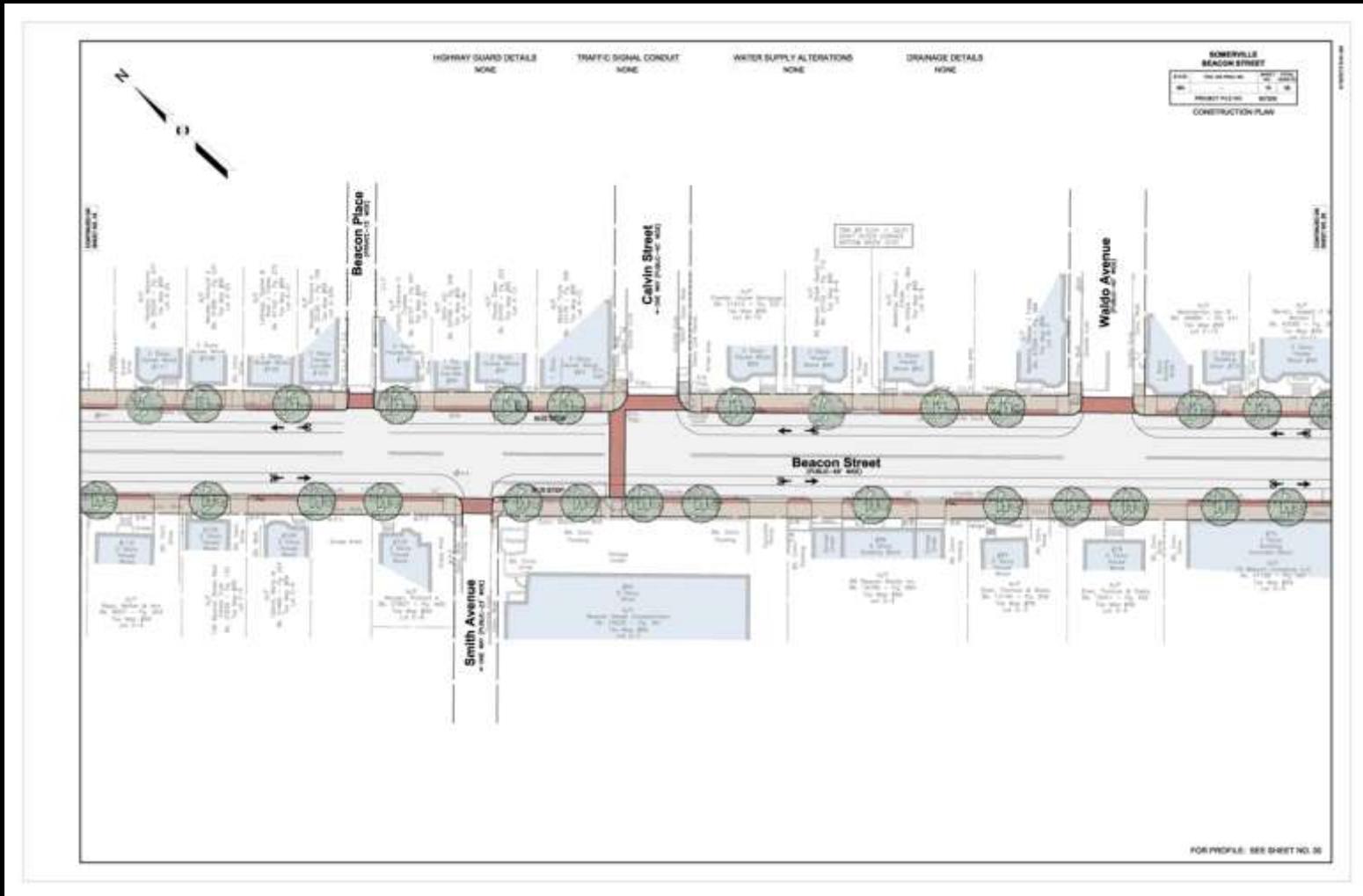
Proposed Conditions



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Proposed Conditions



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Parking Study

- A parking study was undertaken to determine the current available parking spaces along Beacon Street, assess the occupancy rate of the spaces, the typical duration of cars parked along Beacon Street and the turnover of the parking spaces in order to compare the existing parking demand to the proposed parking in the Beacon Street Roadway and Streetscape Improvements Project
- Parking Study completed in July 2012



Parking Study

Methodology

- Beacon Street was divided into two zones: Zone 1 to the North and Zone 2 to the South
- Parking counts were taken during a typical non-holiday weekday and weekend day
- Parking counts were taken throughout each day. Early morning, Midday and Evening counts were taken
- License plate numbers recorded (to protect the privacy of the residents) and used to calculate the occupancy rate, average duration of parking space occupation and parking space turnover.

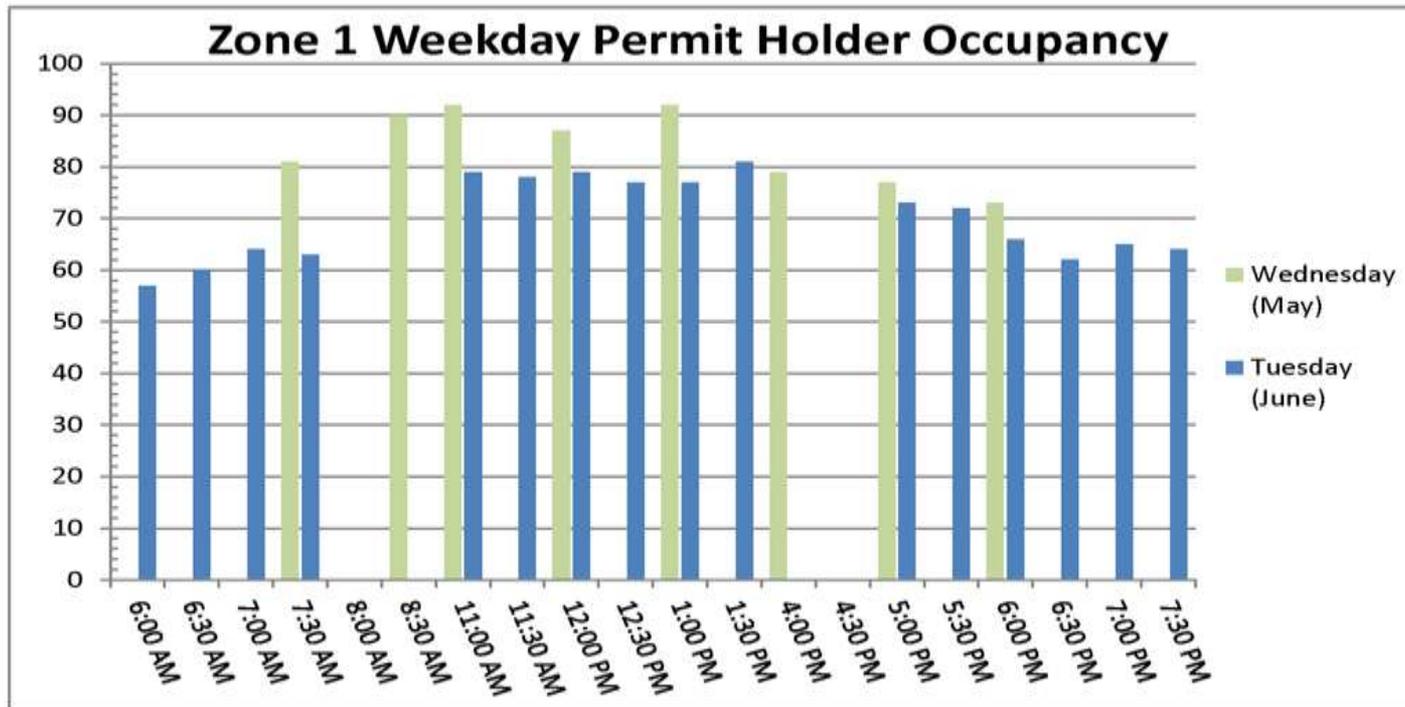
Parking Study

Findings:

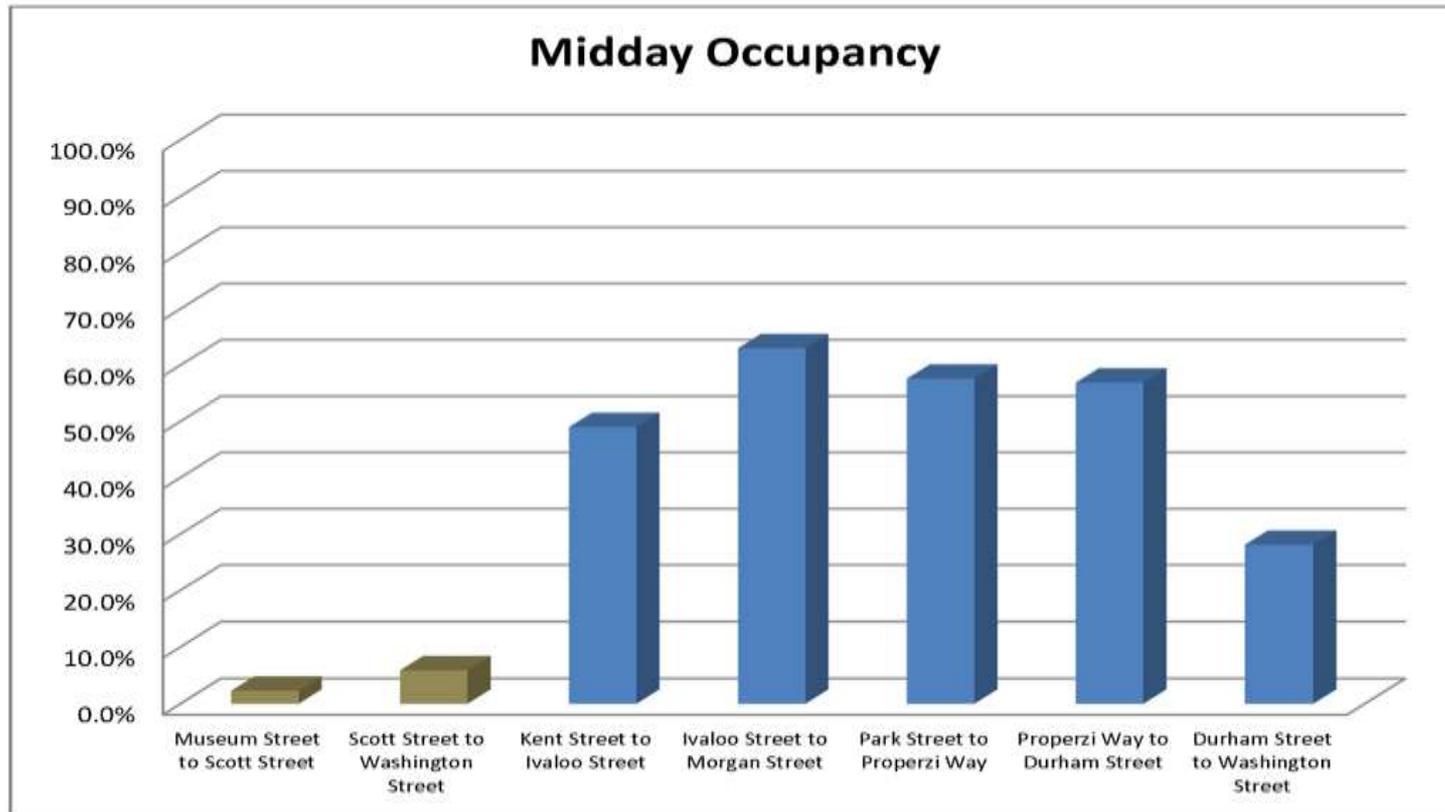
- Parking permits within Somerville, allow the holder to park anywhere within Somerville for an unlimited amount of time
- During the day, most parking spaces along Beacon Street are used for long term parking and not by residents or businesses
- There is excess parking with regards to Beacon Street overnight resident parking demand
- There is a 10-15% increase in midday parking when college is in session vs. when college is not in session



Parking Study



Parking Study



Project History

Information:

- **August 22** - invitation sent to business owners by City for meeting regarding Beacon St.
- **Sept 10** – business owners meeting
- **Sept 18** – community meeting
- **October 15** – community meeting
- **Nov 13** – community meeting



Questions from Past Presentations

Question: Why take parking?

Answer: The evaluation of all users in the corridor and the request for safety measures/traffic calming. Almost all questions at the first two meetings and many questions from the historic meetings touched on the need to slow traffic down and increase safety for all users. A cycletrack helps with both of those goals.



Questions from Past Presentations

Question: Will taking parking be bad for/hurt my business?

Answer: There is recent analysis from communities that indicate that investment in cycling infrastructure is good for business. I invite you to read;

- Measuring the Street (NYC DOT)

<http://www.nyc.gov/html/dot/downloads/pdf/2012-10-measuring-the-street.pdf>

- Or Oregon's "Examining Costumer Behavior and Travel Choices"

<http://www.otrec.us/project/411>

- Or this analysis from Montreal about the effects of reallocation of parking for bicycle infrastructure.

http://www.cleanairpartnership.org/files/BikeLanes_Parking_Business_BloorWestVillage.pdf

The City of Somerville takes all of this information into account when we move forward with any infrastructure investment.

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Questions from Past Presentations

Question: Why take parking on the south side of the road?

Answer: There are less parking spaces on the south side of the road. Also, utilization on the south side of the road is less.



Questions from Past Presentations

Question: Traffic is moving too fast on Beacon Street, what is this project doing for that?

Answer: There are a number of ways to calm traffic and slow people down. This is referred to as “visual friction”. Reducing the lane widths, using “bumpouts”, changes in pavement are all examples. A cycletrack also increases the visual friction on a roadway and will also act as a traffic calming element.



Questions from Past Presentations

Question: What improvements will you be making to the signals (how will you increase safety and traffic flow for all users?)

Answer: All major intersections will be upgraded with new signals as part of this project. These signals will be timed for length of the corridor to improve traffic flow. Also, the signals will be pedestrian actuated and where needed have a bicycle phase (or a separate bicycle signal).



Questions from Past Presentations

Question: What other utilities are part of this project?

Answer: Prior to the roadway construction, water and sewer pipes will be repaired. The City is using a "trenchless" method, where pipes are given a new "structural lining," which involves injecting a coating into the pipes that lines the old pipe, hardens, and effectively creates a new pipe within the old pipe.



Questions from Past Presentations

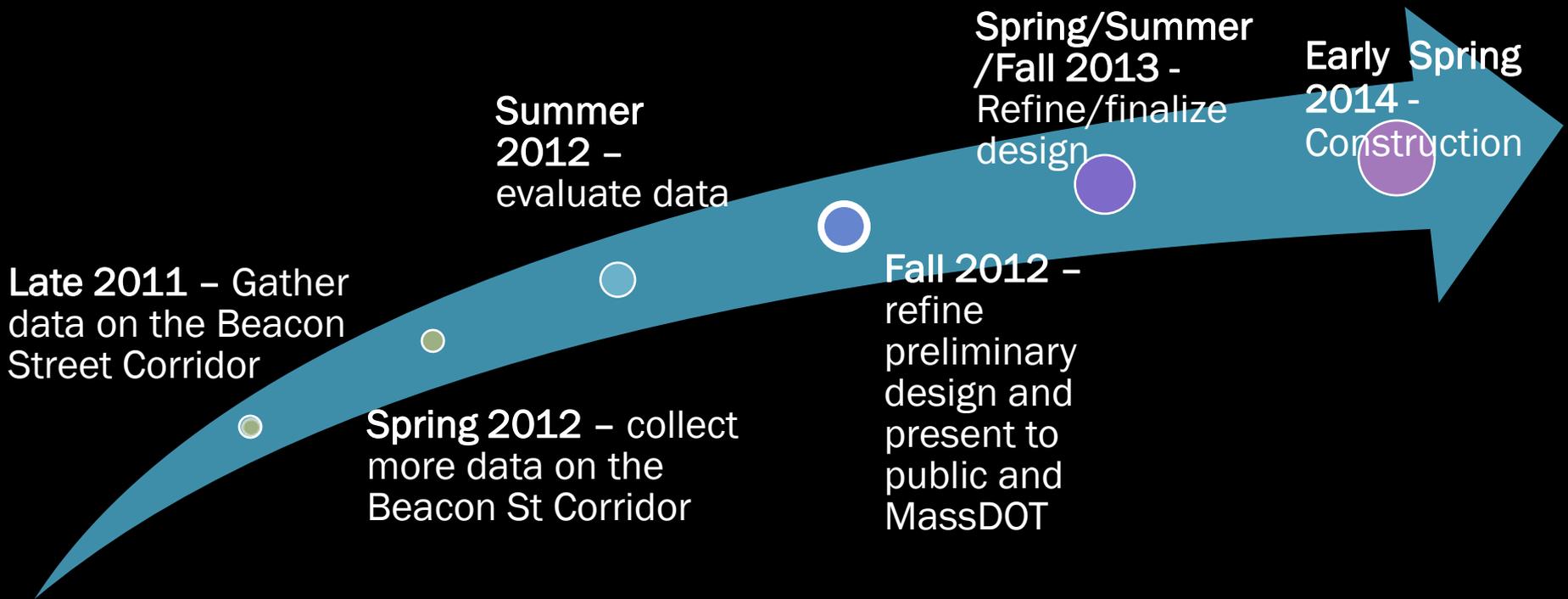
Question: There need to be more crosswalks between Oxford and Park Street, will this project address that?

Answer: We are currently working on the design of this project, but all crosswalks at the signalized intersections will be improved. We will also look at where mid-block crosswalks would be appropriate.



Project History

Project Process



Questions?

Please contact Hayes Morrison – Director
of Transportation and Infrastructure with
your questions:

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