

# BELMONT COMMUNITY PATH FEASIBILITY STUDY

Public Meeting #9 –  
Matrix/Routes/Cost/  
Funding

April 26, 2017



# AGENDA

- |                        |                 |
|------------------------|-----------------|
| 1. Introduction        | Russell Leino   |
| 2. Purpose and Process | Kathleen Fasser |
| 3. Study Advancements  | Kathleen Fasser |
| 4. Updated Scoring     | Amy Archer      |
| 5. Routes and Cost     | Amy Archer      |
| 6. Funding             | Amy Archer      |
| 7. Next Steps          | Amy Archer      |
| 8. Public Engagement   | Open Discussion |

# PURPOSE/LEVEL OF DESIGN

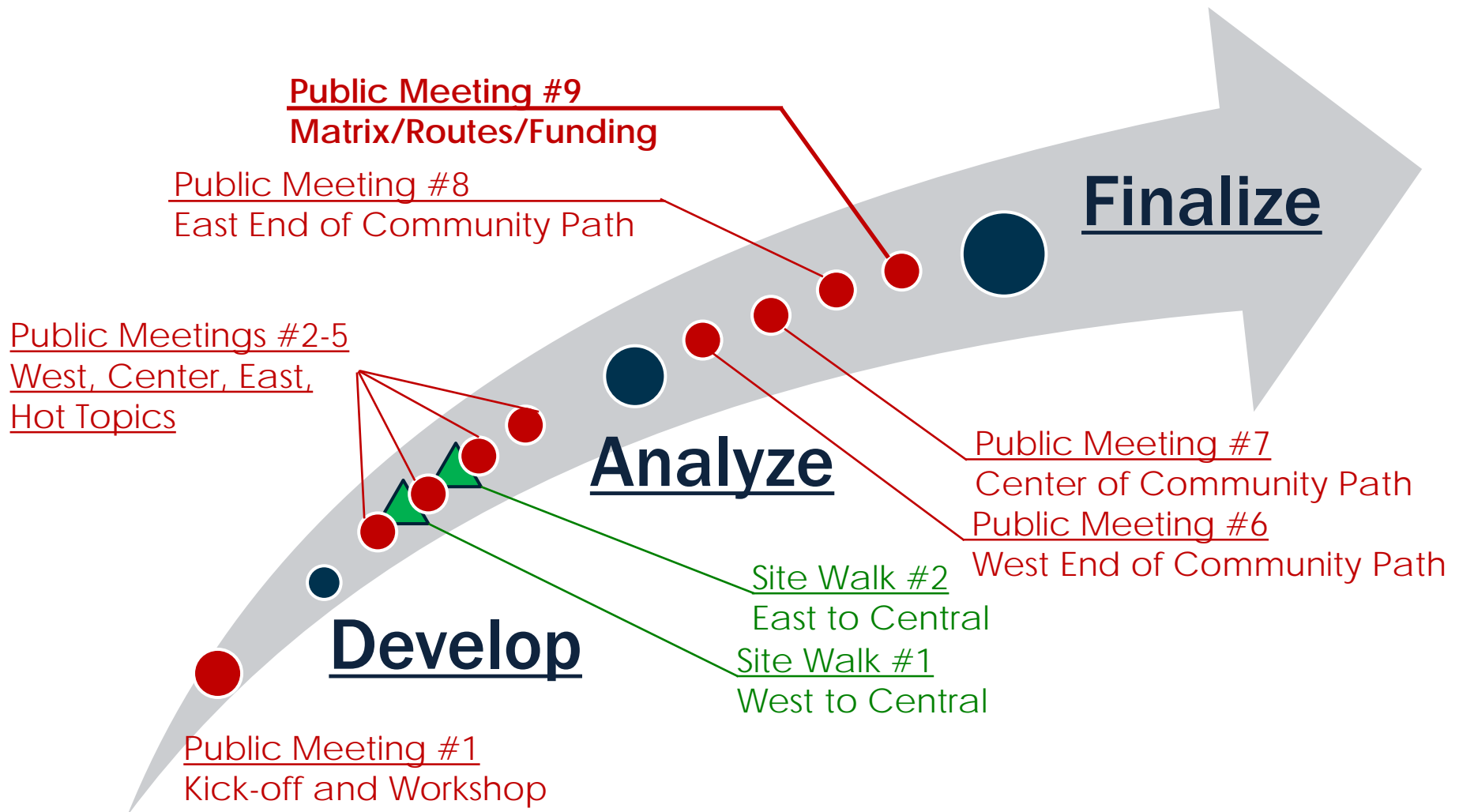
- To recommend a single route that will best serve the Town's residents AND function as a segment of the MCRT.
- Feasibility study intended to advance to conceptual design and planning cost estimate
  - Define path options
  - Quantify impacts
  - Quantify costs
  - Weight and rank alternatives



# PUBLIC ENGAGEMENT GOALS

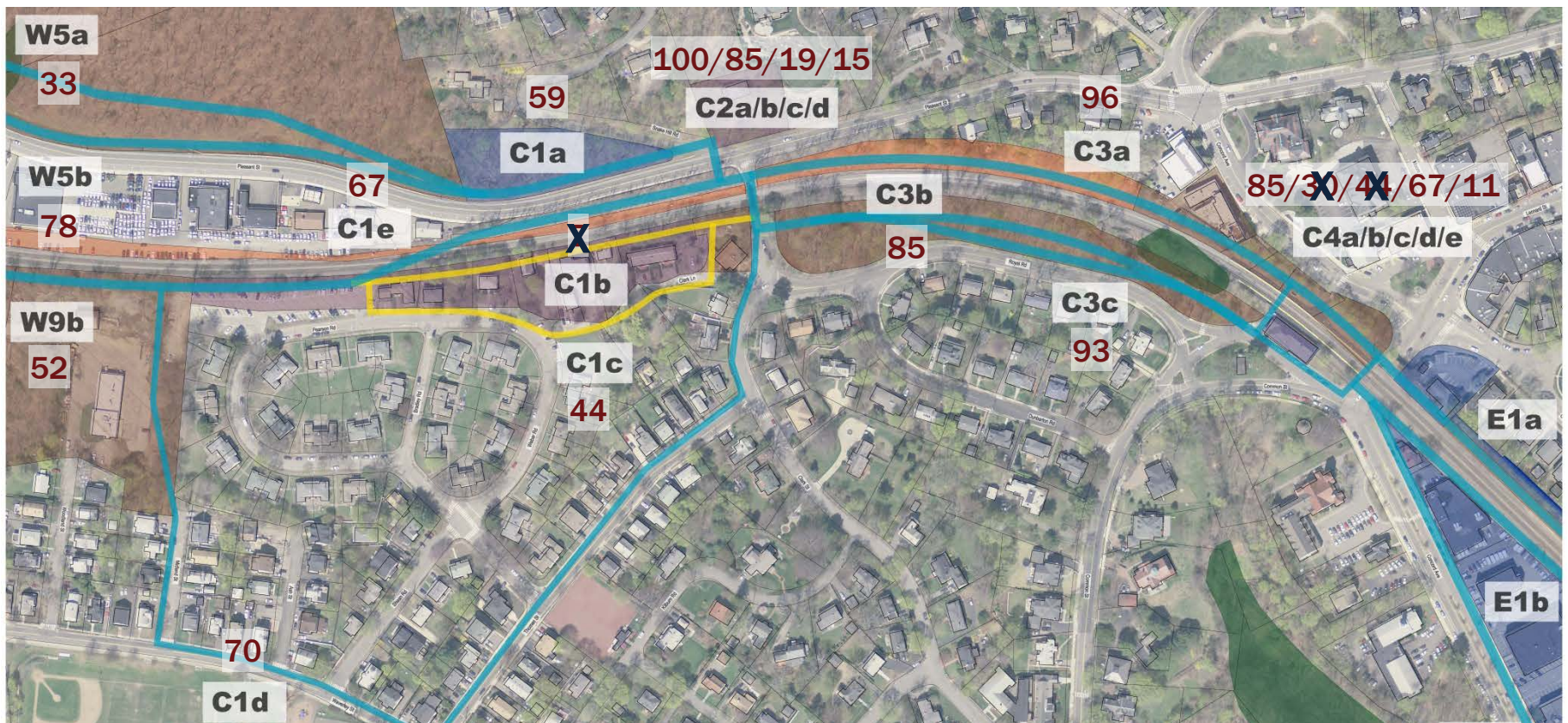
- A collaborative effort
  - Engaging and considering all stakeholders equally
  - Reflecting interests in project decisions
  - Responsibility of ALL to engage in respectful civil discourse

# PROCESS



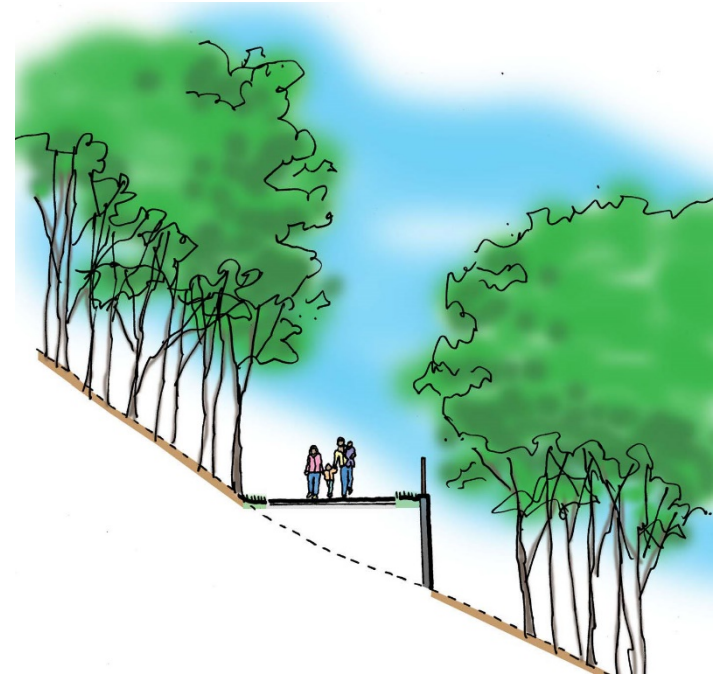
# WHERE WE LEFT OFF – MEETINGS 6 TO 8

- Presented all alternatives with costs and matrix evaluation
- Identified some alternatives as having fatal flaws
- Discussed scoring and potential adjustments to matrix



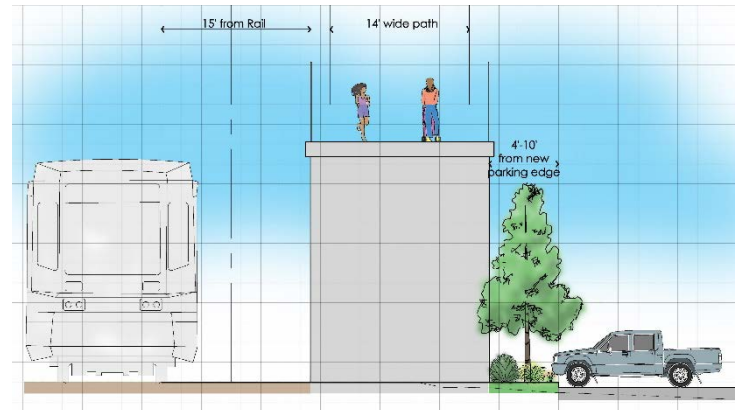
# WHAT WE HEARD– MEETINGS 6 TO 8

- Directness
- Unleashed animals
- Mature trees versus woodland
- Impact to existing lifestyle
- Drainage



# WHAT WE'VE DONE SINCE

- Meet with Town department heads and committee chairs
  - August, January and March
  - Fire/Safety:
    - Wall length and height
    - access every 300', no enclosed stretches greater than 300'
    - Water line for long stretches
    - Excessive wall heights may be deemed unsurpassable
  - Conservation Land: walls impede wildlife movement
  - BHA: open to design as shown
- MassDOT and MBTA Meetings
  - No alternative was rejected by MBTA
  - MassDOT - range of costs





# WHAT WE'VE DONE SINCE

## ■ Matrix

- Directness - User Experience
- Walls - Fire/Safety
- Wildlife movement - Environmental categories

## ■ Range of costs:

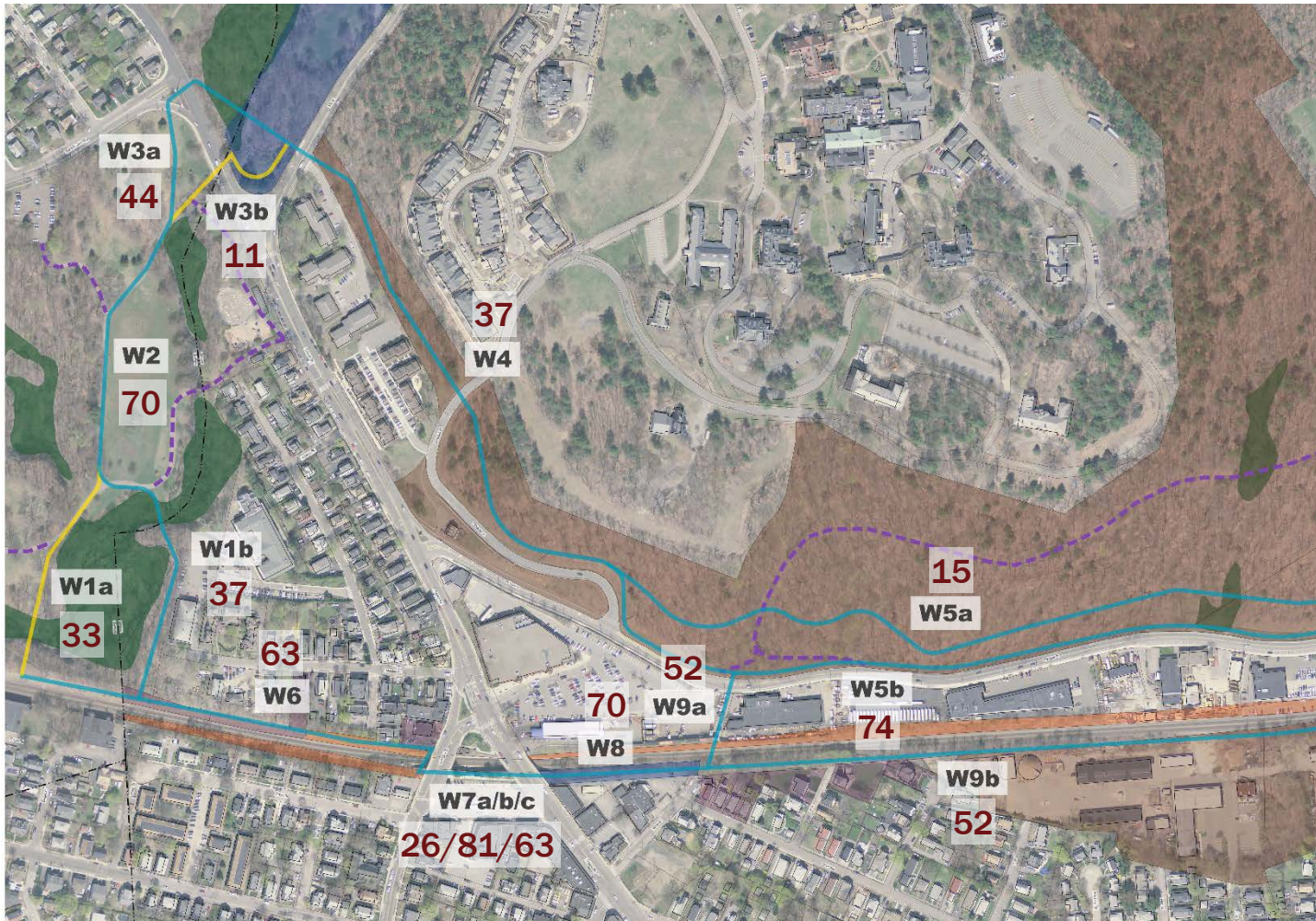
- Existing embankments versus tall walls
- Signing/wayfinding and amenities (i.e. fountains)
- Up to 25% reduction in planting

## ■ Assessed costs for specific elements including:

- Lighting
- Drainage
- Constructability

CRITERIA
<u>User Experience</u>
Ease of Access
Aesthetics
Comfort
Directness
Vehicular conflicts
Conflicts with pedestrian way
<u>Environmental and Cultural Impacts</u>
Wetlands
Historic resources
Mature Woodland
Wildlife
<u>Design Attributes</u>
Encroachments necessary/MOU
Fire and Safety
Potential Partnerships
Distance to residential structures
<u>Transportation</u>
Connectivity to Destinations (Resources, Amenities and Transit)
Ease of universal public accessibility
Consistency with regional plans (MCRT/Wayside Trail)
Impact on existing traffic/transportation
Rail conflicts/proximity
<u>Cost</u>
Range of Construction Costs
Operations and Maintenance Costs
Quality for Funding
Value Added

# UPDATED SCORING



# UPDATED SCORING



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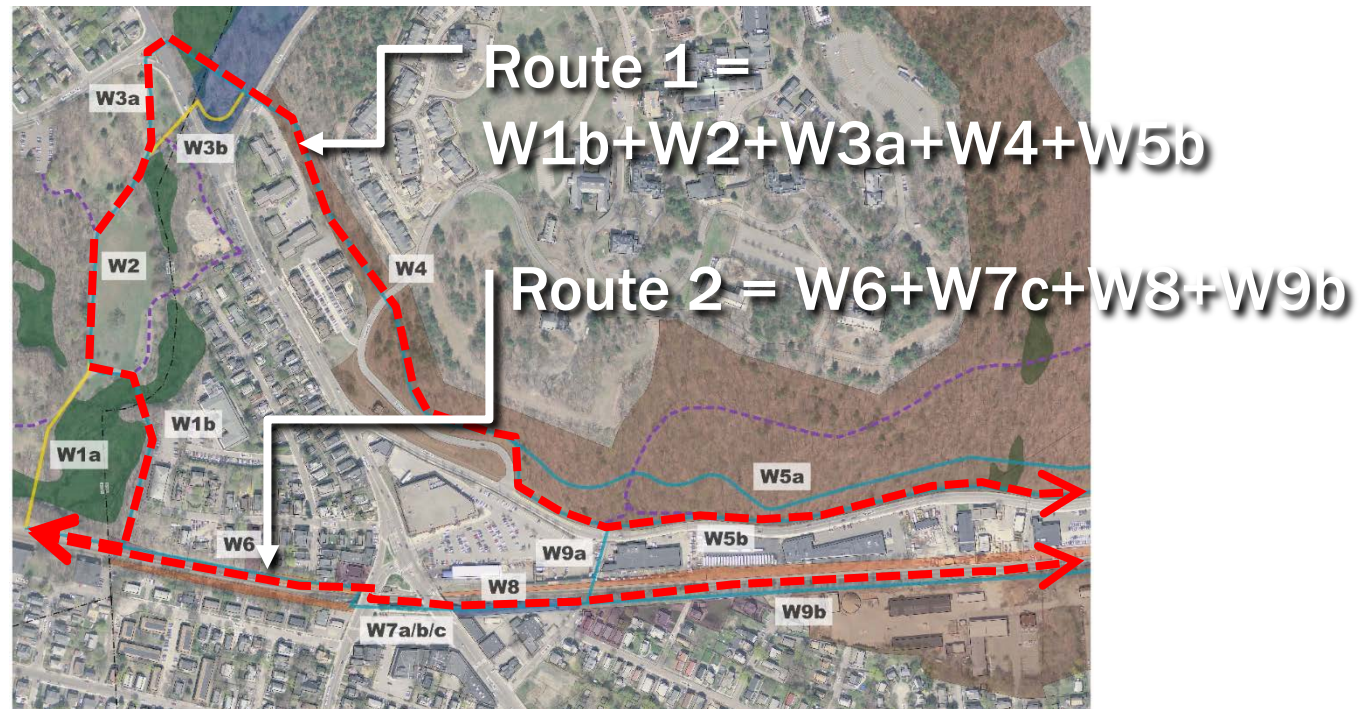


# ROUTE EVALUATION

What is a ROUTE??

- combination of high-ranking alternative alignments for the full length of the Study Area  
**WITH NO FATAL FLAWS**

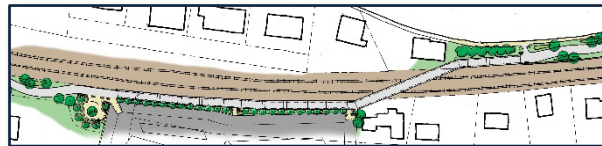
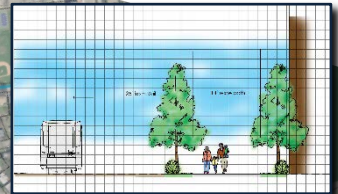
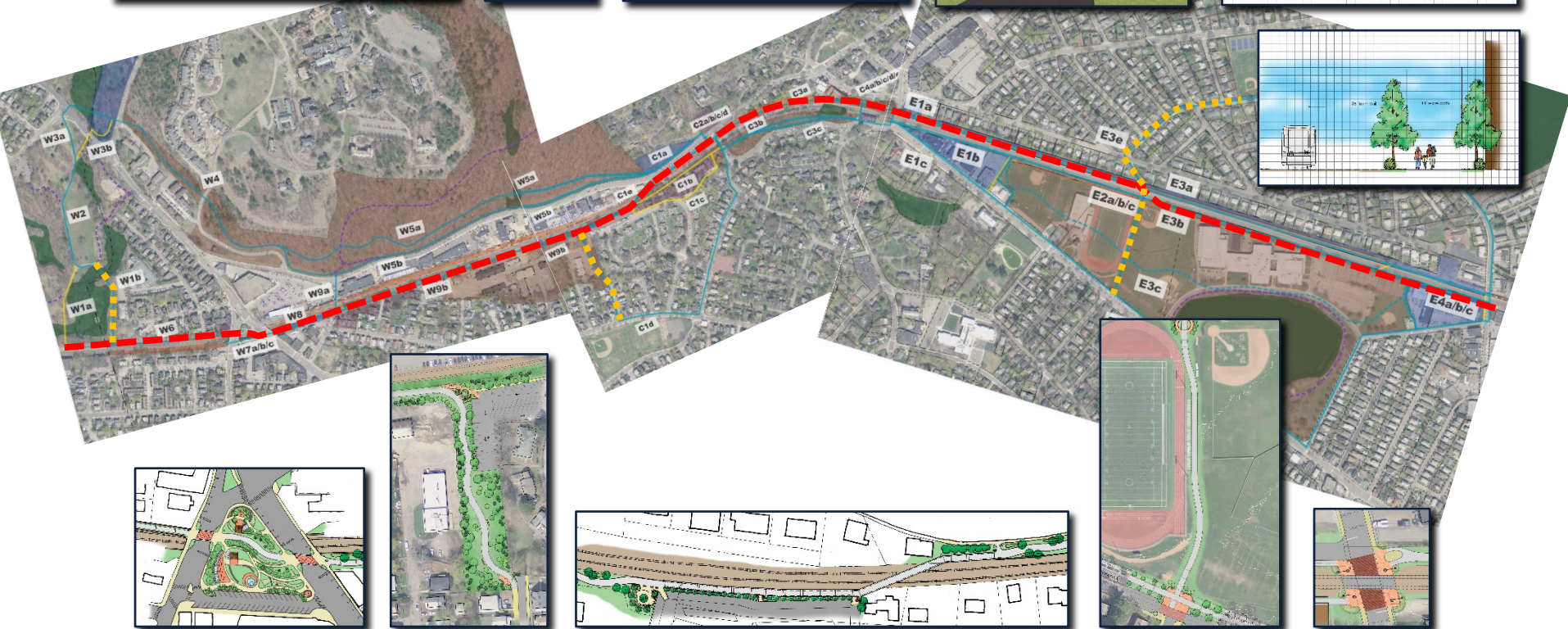
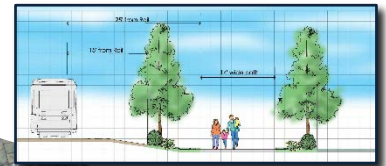
EXAMPLES



# ROUTE - SAMPLE 1

W6, W7b, W8, W9b, C1e, C2a, C3a, C4a, E1a, E2a, E3b, E4a = 76 Average Score

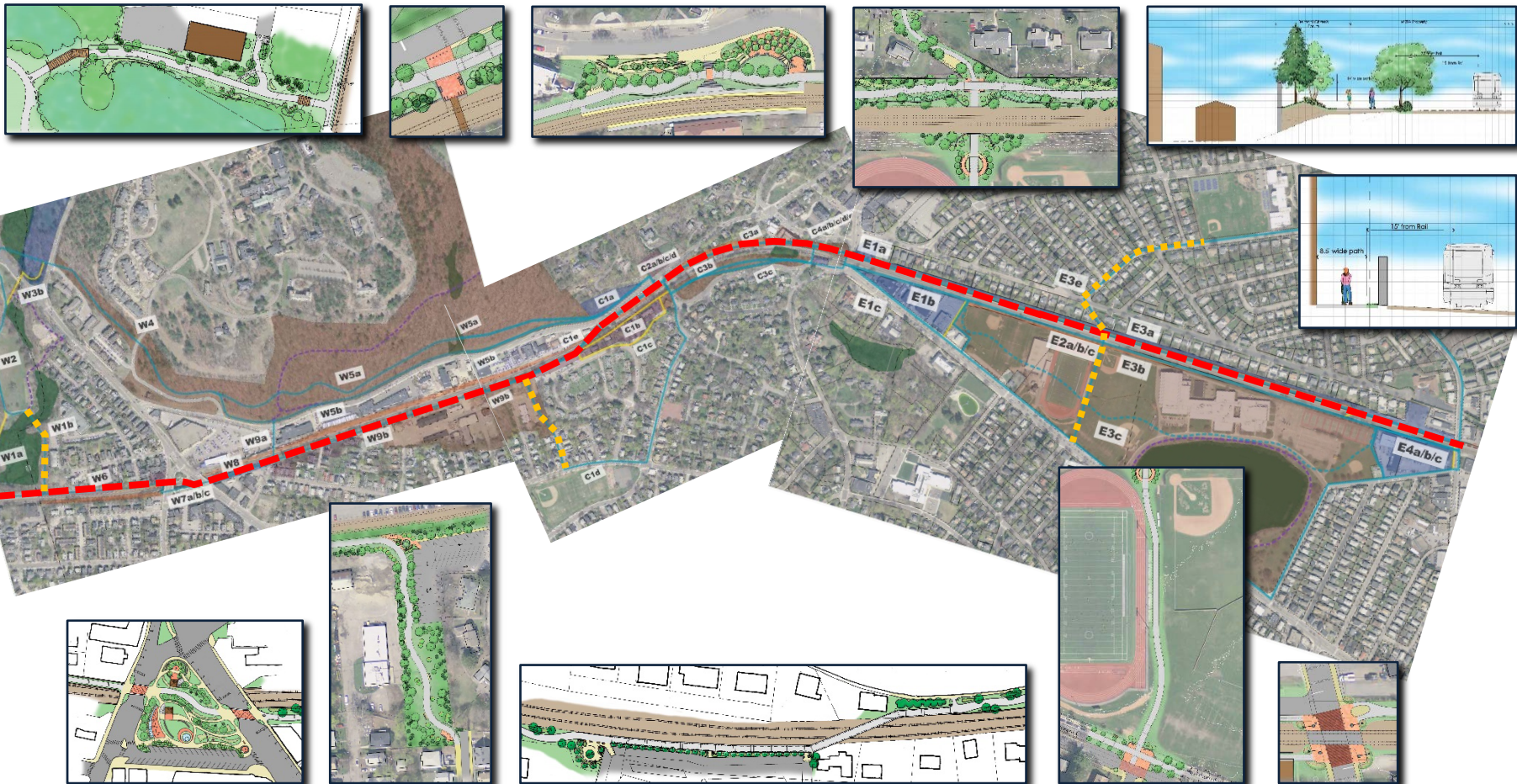
**\$27.9 Million**



# ROUTE - SAMPLE 2

W6, W7b, W8, W9b, C1e, C2a, C3a, C4a, E1a, E2a, E3a, E4a = 75 Average Score

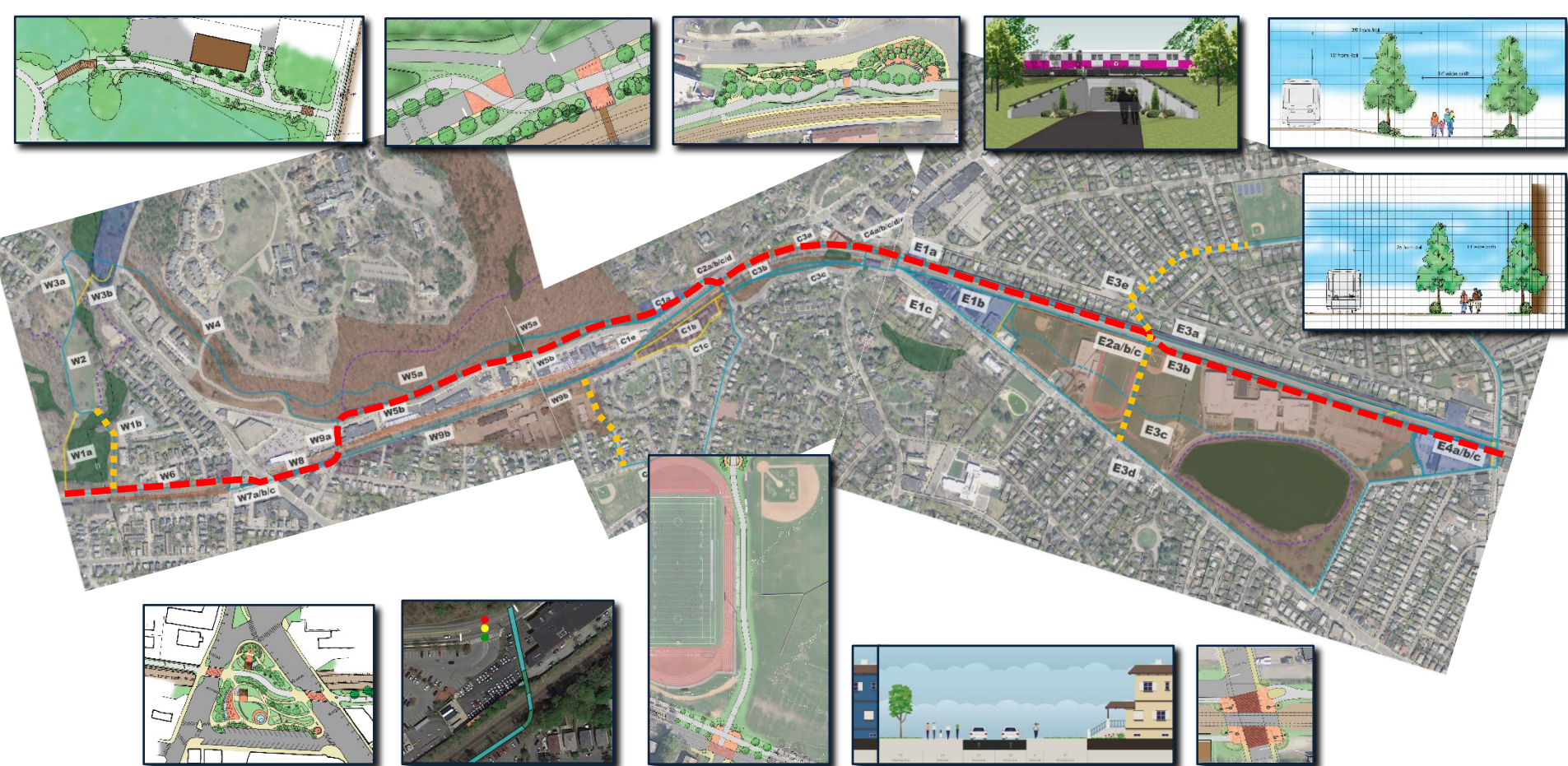
**\$31.8 Million**



# ROUTE - SAMPLE 3

W6, W7b, W8, W9a, C1a, C2a, C3a, C4a, E1a, E2a, E3b, E4a = 75 Average Score

**\$25.1 Million**



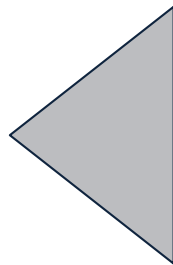


# COST BREAKDOWN

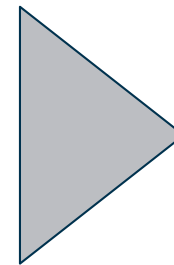
## BELMONT COMMUNUNITY PATH

PATH	\$15.4 M
<u>PLUS CROSSINGS</u>	<u>\$12.5 M</u>
TOTAL	\$27.9 M

**DISTRICT 4**  
**\$3 M/MILE**



**BELMONT  
PATH**  
**\$13.5M/MILE**

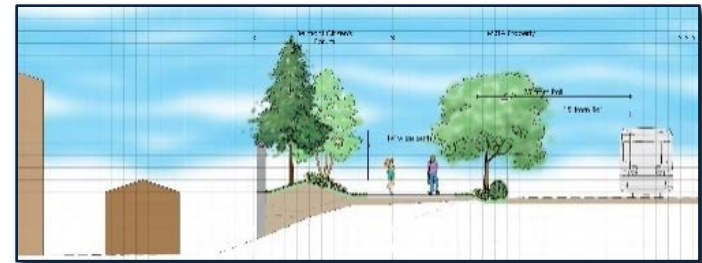


**DISTRICT 6**  
**\$20 M/MILE**

# COST RANGE

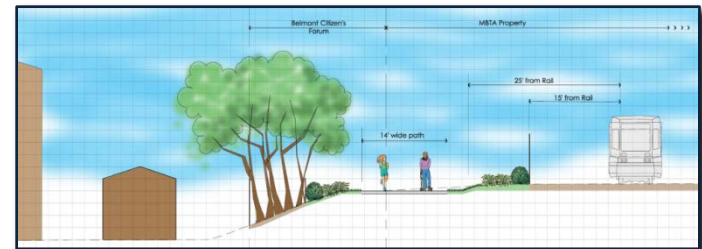
## HIGHEST OPTION

PATH	\$15.4 M
PLUS CROSSINGS	\$12.5 M
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TOTAL	\$27.9 M



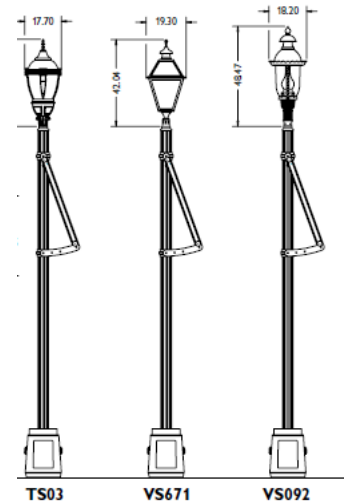
## LOWEST RECOMMENDED

PATH	\$10.6 M
PLUS CROSSINGS	\$12.0 M
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TOTAL	\$22.6 M



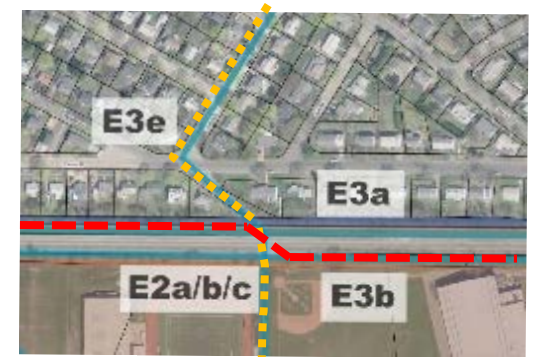
# COST RANGE – EXTRAS

- Difference in cost range = \$5+ Mil
- Could use to construct spurs and/or lighting
  - W1b: Connect to Beaver Brook - \$0.73 M
  - C1d: Connect to Town Field - \$0.79 M
  - E2c: Connect to Concord Avenue - \$0.44 M
  - E3e: Connect to Winnbrook Elementary - \$0.77 M
- Lighting: Solar - \$0.72 M
- Lighting: Wired - \$0.94 M

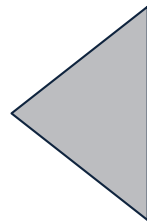


# FUNDING

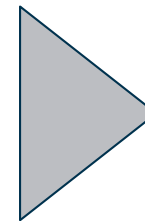
- Input from MassDOT Planning and Bike/Ped
  - Relatively high costs (compared to D4)
  - More Likely to qualify for Funding if...
    - Direct route
    - Support from local officials and MPO
  - Underpass seems to serve the HS unless path itself crosses at this location



DISTRICT 4  
\$3 M/MILE



BELMONT  
PATH  
\$13.5M/MILE



DISTRICT 6  
\$20 M/MILE

- Input from MBTA and MassDOT ROW
  - Agreement with route along rail

# FUNDING

- Scheduling meeting with MAPC/MPO
- Suggestions:
  - Seek total amount
  - Prepare for Phasing
  - Consider allocating to other projects (HS-MSBA)
  - Indicate priority for Town

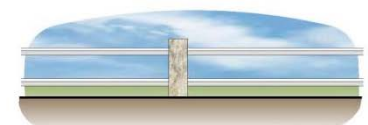
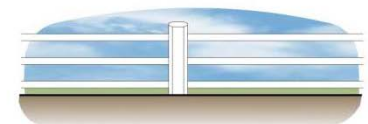
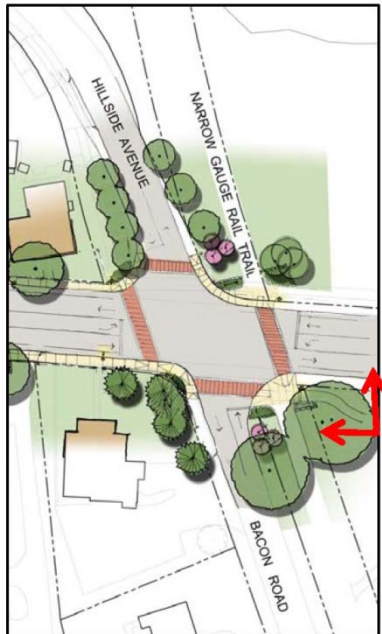


# WHAT'S NEXT?

- **Meeting 10: Feasibility Study Recommendation – Early June**
- **Study Recommendation Reviewed by BOS – Summer 2017**
  
- **Town Pursue Funding for Preliminary/Final Design – Fall 2017**
- **Town Issue RFP for Design and Select Consultant – Winter 2017**
- **Preliminary/Final Design with State Agency Review – 2018 & 2019**
  
- **Town Procure Funding/Property for Construction Phase – 2019**
- **Construction of Belmont Community Path – 2020 & 2021**

# PUBLIC PROCESS – DESIGN PHASE

- Renderings to show perspective
- Array of alternatives and treatments within specific areas



# PUBLIC PROCESS – DESIGN PHASE

- Smaller focus groups
- Opportunities for abutter input





# DISCUSSION

**Time to provide any input that should still be considered before finalization of an official recommendation.**

<http://www.belmont-ma.gov/community-path-implementation-advisory-committee-cpiac/pages/community-path-feasibility-study>

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