



# **Massachusetts Bay Transportation Authority**

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## **MBTA Contract No. P02CN09: Systemwide Duct Bank Replacement – Phase 1**

**June 10, 2019**



## OVERVIEW

This project will provide for replacement of collapsed duct bank sections, associated manhole structures including added manholes, and related power cable. There are five locations in Boston and three locations in Brookline that will be addressed under this project and have been identified as high-priority locations.





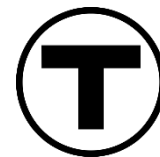


## PROJECT BENEFITS

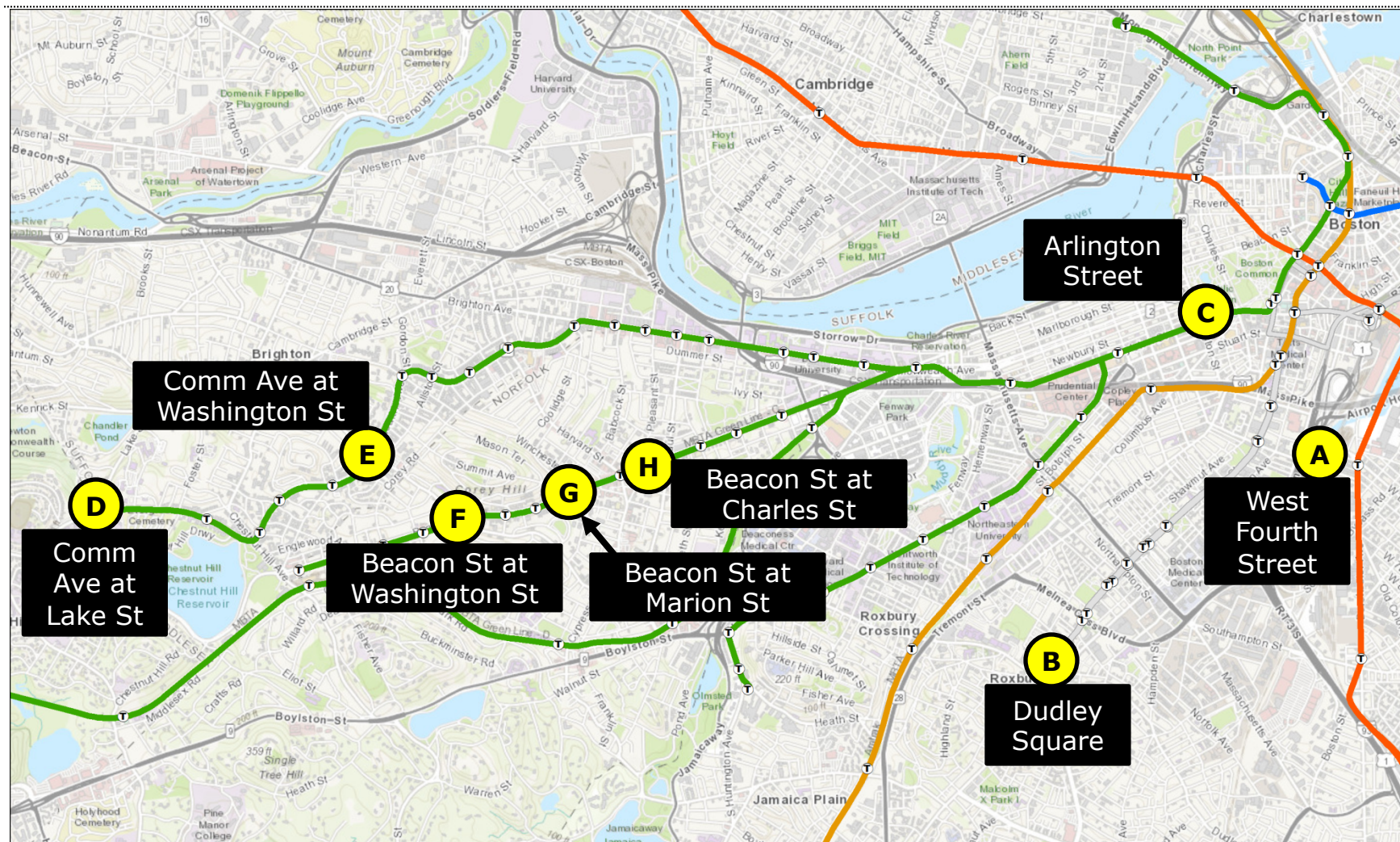
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Project Benefits include:

- Improved transit system reliability by addressing power resiliency, resulting in greater customer satisfaction.
- Addressing MBTA reliability and modernization needs through the replacement of collapsed duct banks, manhole structures, and power cables serving Red, Orange, and Green Lines and bus maintenance facilities.



## PROJECT LOCUS MAP





## CONSTRUCTION SCOPE

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This scope of work consists of the replacement of collapsed duct banks that are pathways for AC and DC power cables and includes the following:

- Excavation
- Demolition
- Placing conduits
- Encasement of conduits in concrete
- Installing precast or cast-in-place concrete manholes structures
- Rebuilding existing brick manholes structures
- Backfill as well as installing conduits under the West Fourth Street Bridge
- Installing and splicing of power cables within the manhole structures
- Surface restoration (e.g. roadway paving and sidewalk restoration)



## CONSTRUCTION PROCUREMENT

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- Project was advertised on May 3, 2019
- Engineer's Estimate is \$14,875,877
- Bid Opening was on May 29, 2019
- Five bids were received:

<b>1. Middlesex Corporation</b>	<b>\$17,866,187.29 (Low Bidder)</b>
2. Newport Construction, Inc.	\$20,187,878.29
3. Bond Bros. Inc	\$20,391,665.29
4. Barletta Heavy Division, Inc.	\$20,893,000.00
5. Albanese D&S, Inc.	\$23,773,577.29
- Bid analysis has been completed





## **REQUEST OF THE FISCAL AND MANAGEMENT CONTROL BOARD**

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Capital Delivery request that the Fiscal and Management Control Board authorize the MBTA General Manager, or his designee, to award and execute MBTA Contract No. P02CN09: Systemwide Duct Bank Replacement – Phase 1 to The Middlesex Corporation for an amount not to exceed \$17,866,187.29.



**Massachusetts Bay  
Transportation Authority**

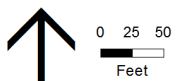
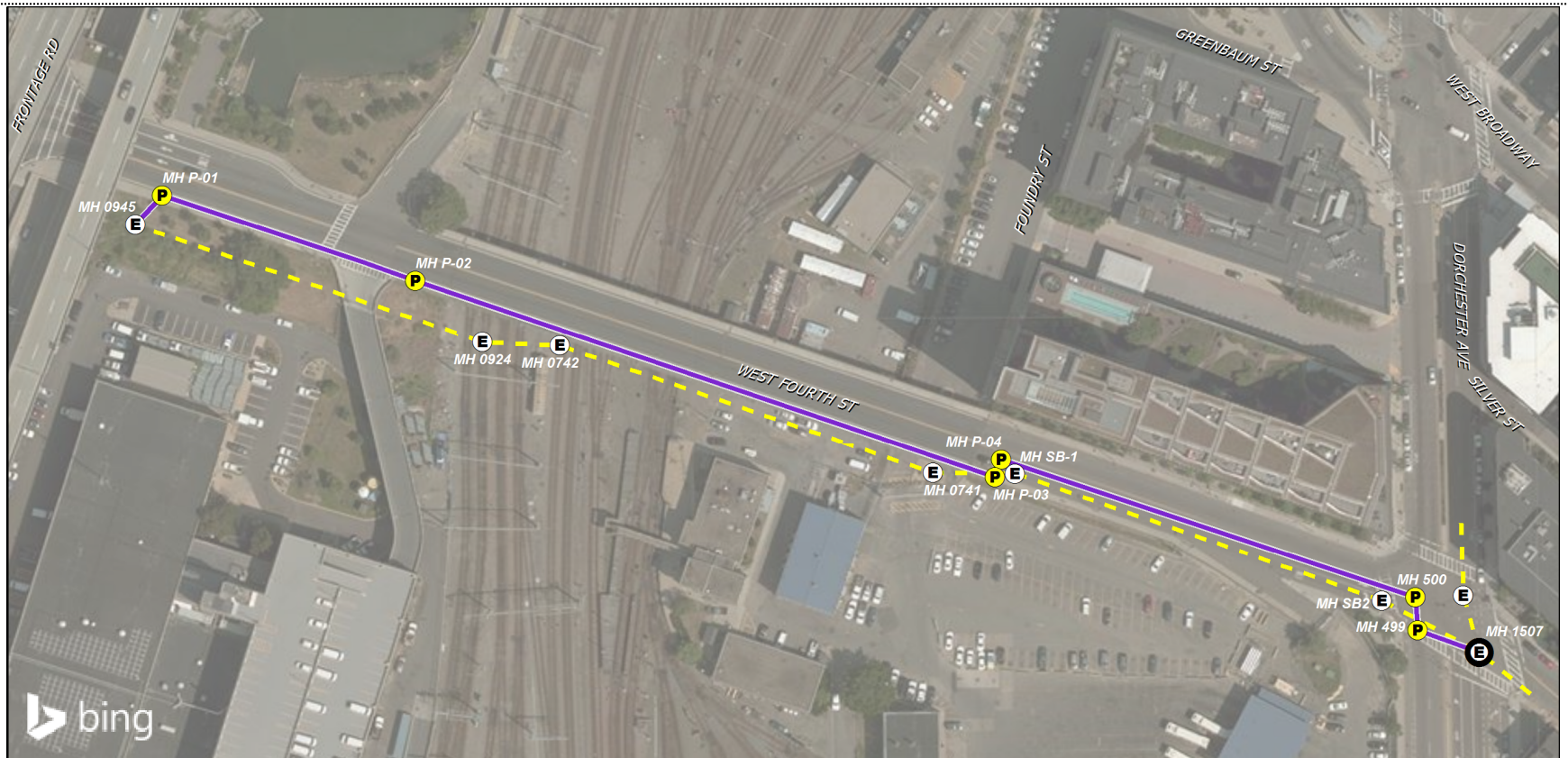
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**MBTA Contract P02CN09:  
Systemwide Duct Bank Replacement – Phase 1**

**APPENDIX**



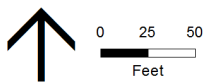
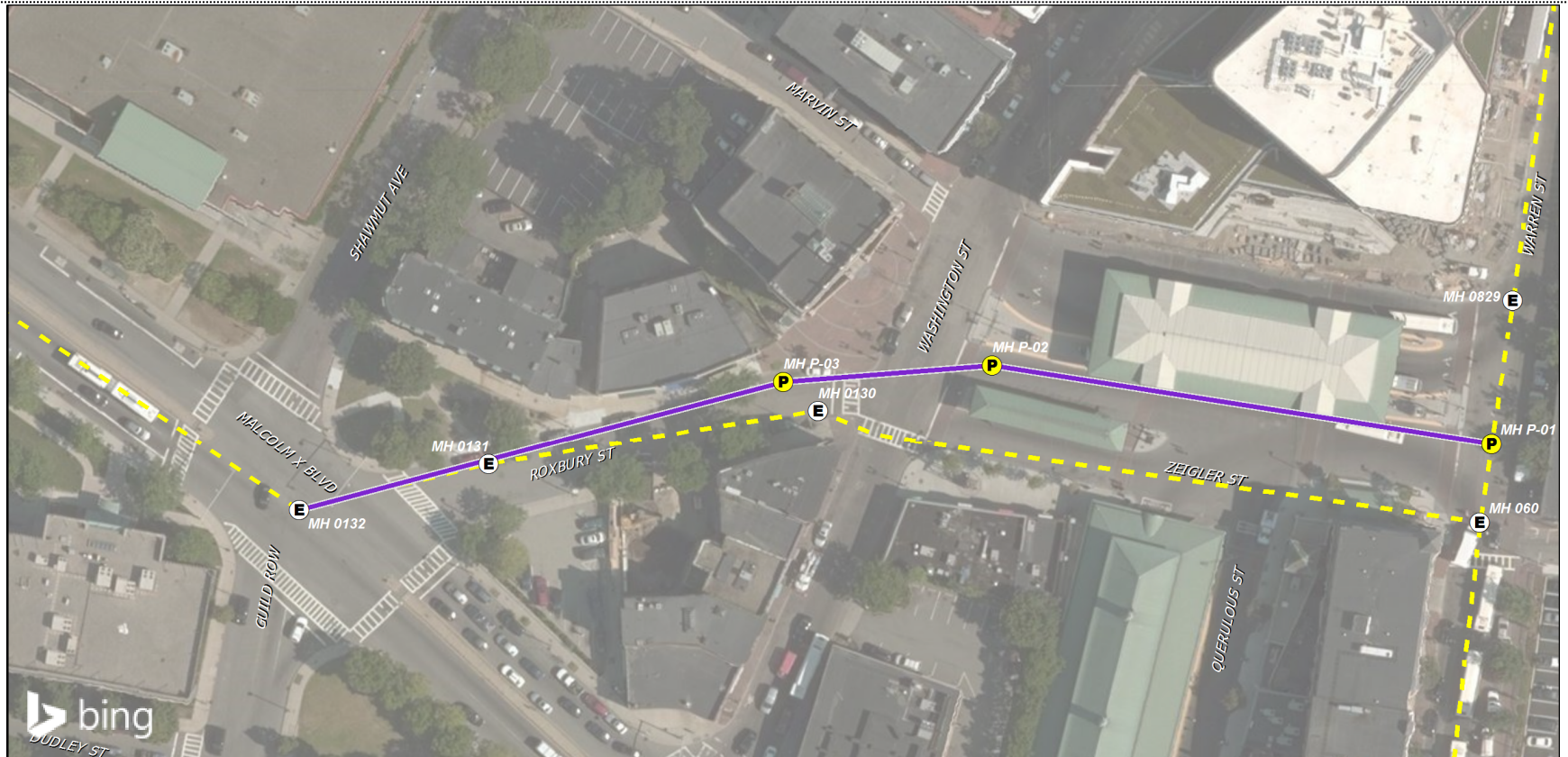
## Location A: Cabot Yard/West Fourth Street



<b>(E)</b> Enlarged	Existing Abandoned	Proposed - New Duct Bank	Existing
<b>(E)</b> Existing	<b>(P)</b> Proposed		



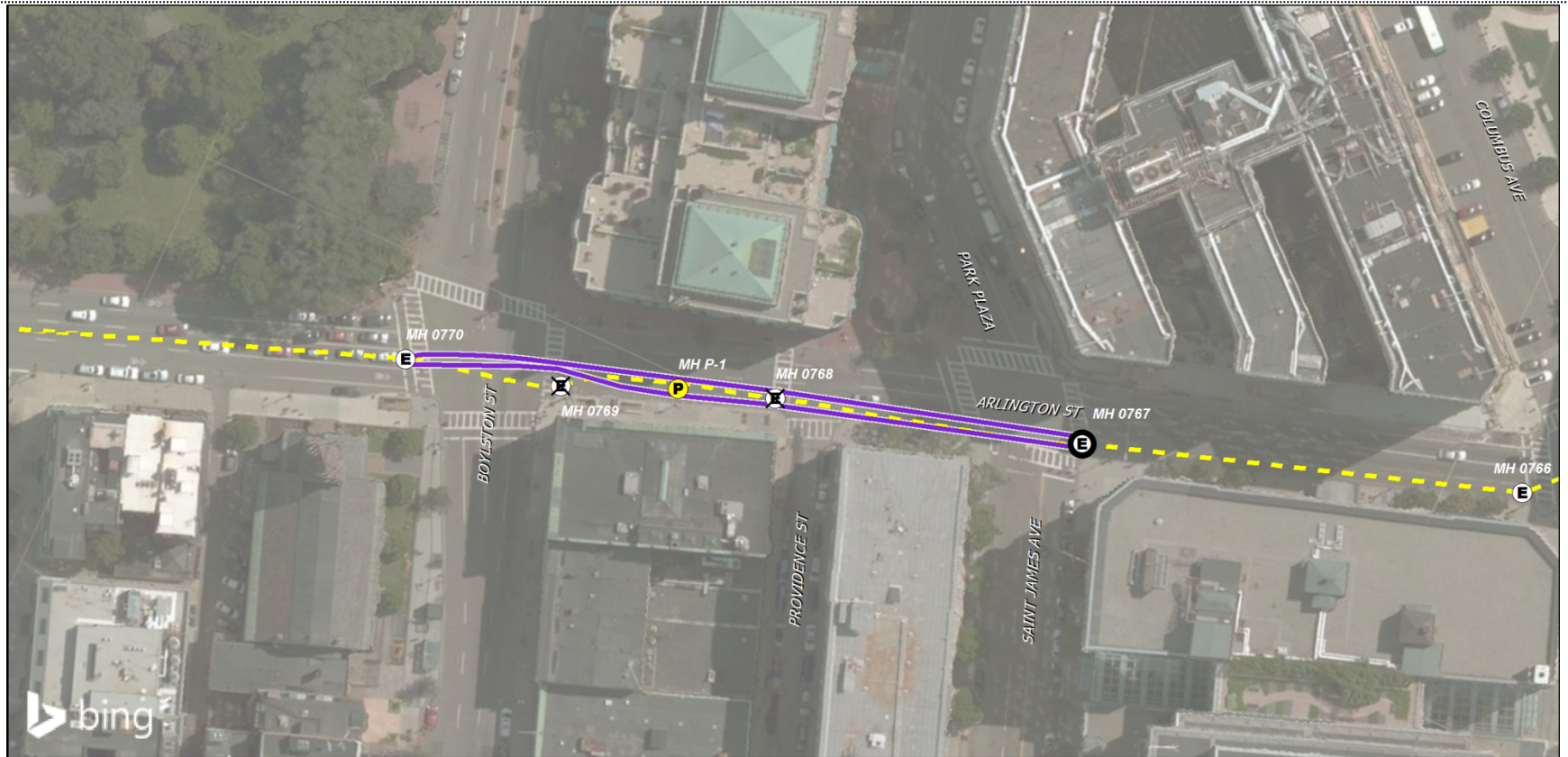
## Location B: Dudley Square Bus Station







## Location C: Arlington Street



<b>(E)</b> Enlarged	Existing Abandoned	Proposed - New Duct Bank	Existing
<b>(E)</b> Existing	<b>(P)</b> Proposed		



## Location D: Commonwealth Ave at Lake Street



0 25 50  
Feet



Enlarged



Existing



Existing Abandoned



Proposed

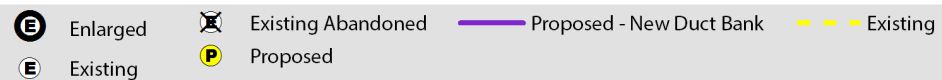
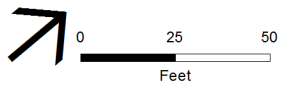
Proposed - New Duct Bank

Existing



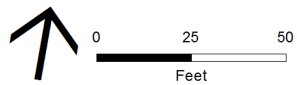
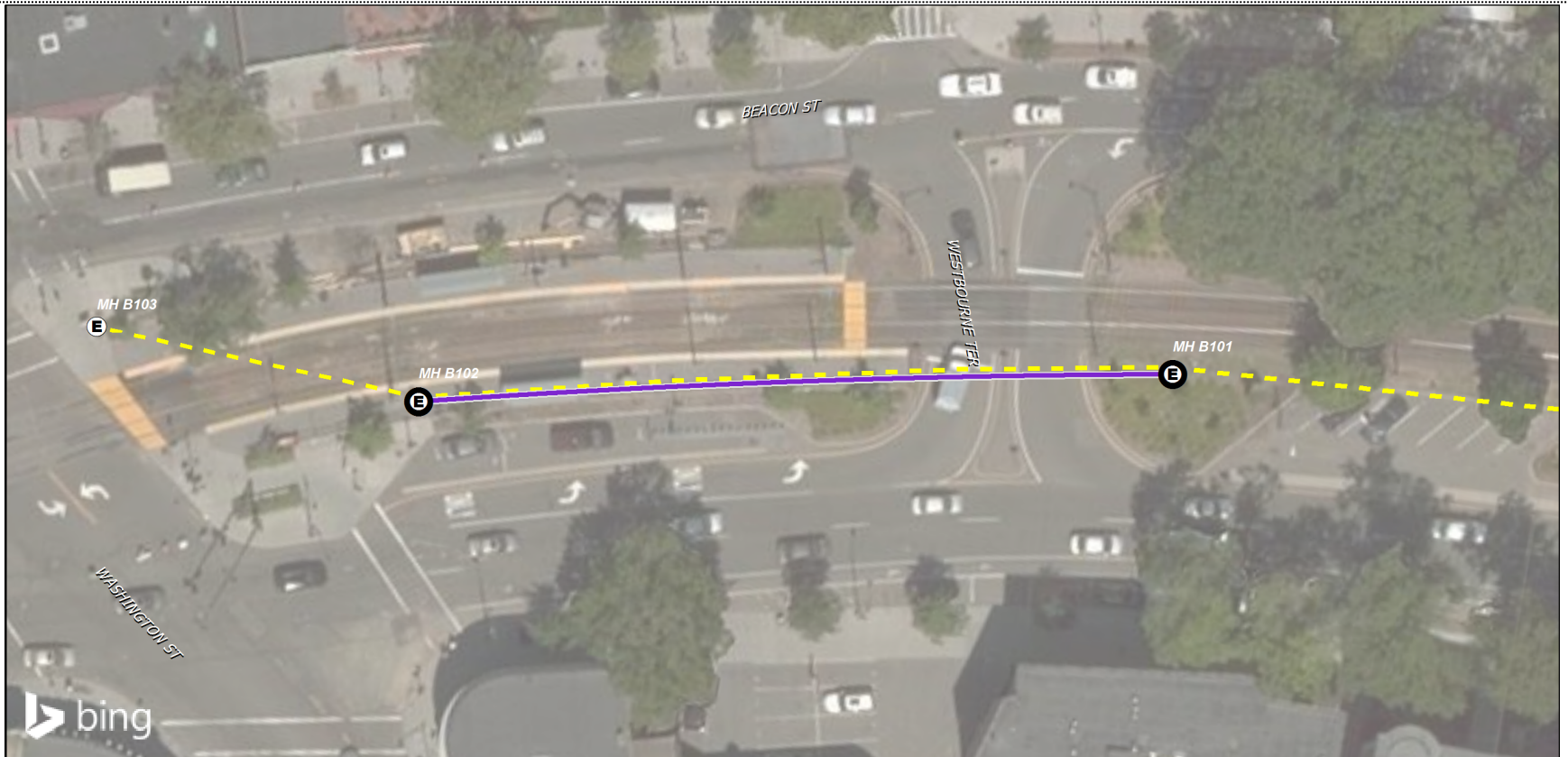


## Location E: Commonwealth Ave at Washington Street





## Location F: Beacon Street at Washington Street

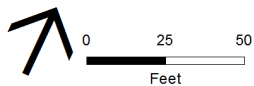
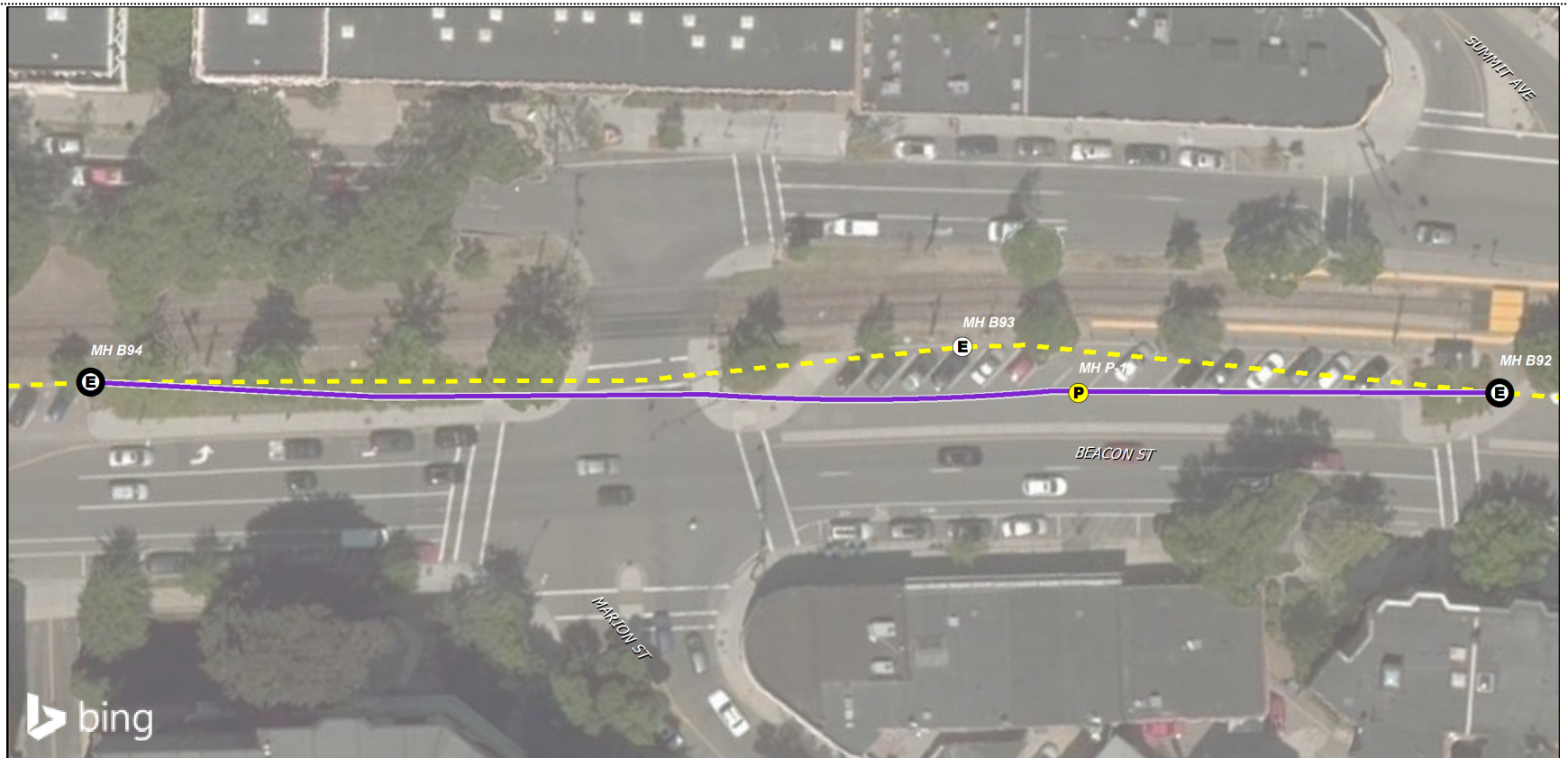


	Enlarged		Existing Abandoned		Proposed - New Duct Bank		Existing
	Existing		Proposed				





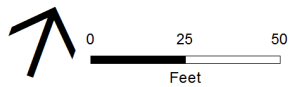
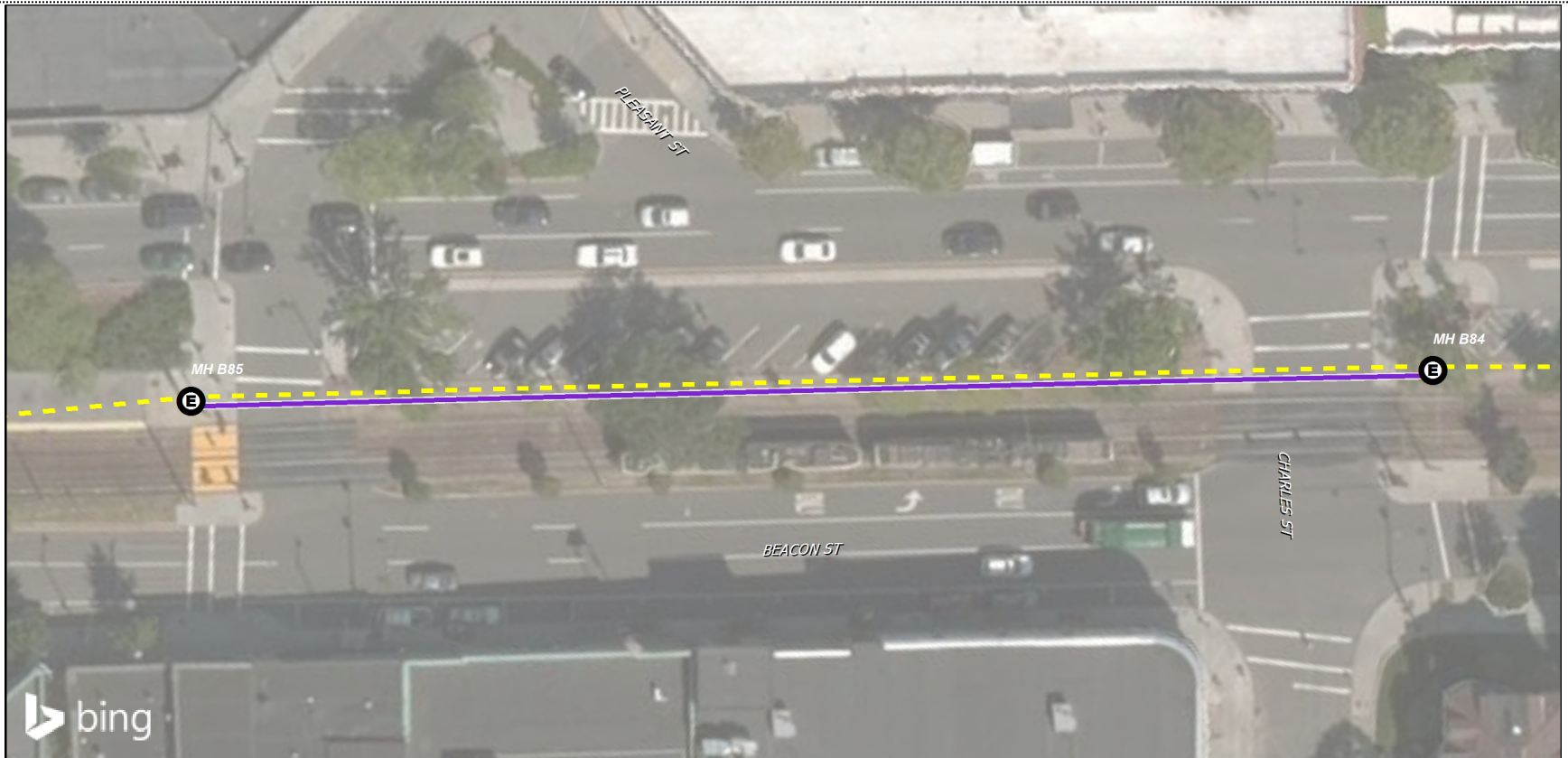
## Location G: Beacon Street at Marion Street









Enlarged	Existing Abandoned	Proposed - New Duct Bank	Existing
Existing	Proposed		



## Location H: Beacon Street at Charles Street



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|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
|  Enlarged |  Existing Abandoned |  Proposed - New Duct Bank |  Existing |
|  Existing |  Proposed           |                                                                                                                |                                                                                                |