



I-90 ALLSTON INTERCHANGE

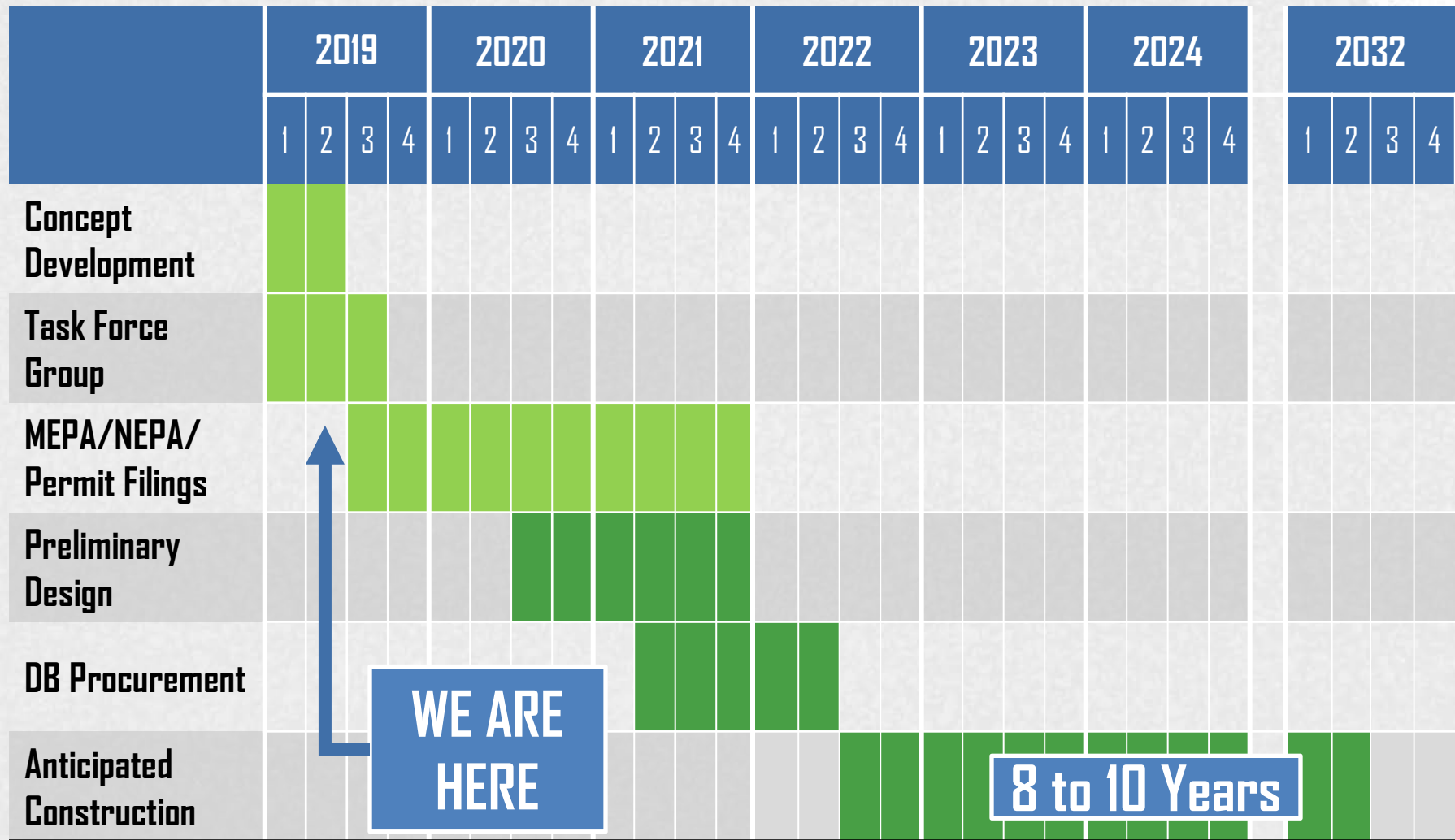
A MULTIMODAL TRANSPORTATION PROJECT

MASSDOT/FMCB JOINT MEETING
May 20, 2019 – MASSDOT BOARD ROOM

Presentation Overview

- **Project Schedule**
- **Project Status Update**
 - Progress since February
 - FHWA NEPA Actions
 - CTPS Modeling
 - West Station Flip Analysis
 - Throat Area Alternative (graphics)
 - Construction Staging Challenges
- **Upcoming Task Force Meetings**

Project Schedule



Progress since February

- Continued Advancing new Preferred Throat Alternative
 - Continued Highway At-Grade Hybrid (Soldiers Field Road over I-90 WB) Concept Design including Construction Staging
 - Developed Highway At-Grade “Modified” Hybrid (Soldier Field Road over I-90 EB) Concept Design including Construction Staging
- Continued Coordination with MBTA and Harvard University on West Station Flip
- Advancing supplemental CTPS analysis
- Conducted meetings with MWRA and BWSC on major water, sewer and drain utility conflicts associated with Hybrid and Modified Hybrid Variations of the Preferred Alternative

Progress since February – cont.

- Continued Conducting Subsurface Investigations in BPY
- Conducted February, March and April Task Force Meetings on;
 - Preliminary horizontal and vertical alignments of Hybrid and Modified Hybrid Variations of the Preferred Alternative
 - Discussion of utility conflicts associated with Hybrid and Modified Hybrid Variations of the Preferred Alternative
 - Discussion of NEPA Class of Action and regulatory process
 - Initial presentation of conceptual construction staging strategy

FHWA NEPA Actions and Update

- MassDOT submitted submitted Class of Action (COA) Letter to FHWA in March
- FHWA responded to COA Letter in May
- FHWA indicates that NEPA COA will be Environmental Impact Statement (EIS)
- Notice of Intent (NOI) anticipated in summer of 2019 formally kicking off the NEPA process
- NEPA process from NOI to Record of Decision (ROD) expected to take approximately 2 years

CTPS Modeling Update

CTPS has been working primarily in three areas:

- **Land use assumptions**
 - CTPS has been working with MassDOT, MAPC, and other stakeholders to finalize the land use assumptions for the future year no-build scenarios (year 2030 and 2040) for input into the regional travel demand model
 - CTPS is currently working with MassDOT, MAPC, and other stakeholders to develop the future build land use assumptions
- **Calibration of base year model**
 - CTPS has completed the calibration of the 2016 base year model to accurately reflect existing travel conditions for both of the highway and transit modes
- **Review of future year transportation alternatives**
 - CTPS has been reviewing the highway and transit assumptions for the build alternatives

CTPS Modeling Update

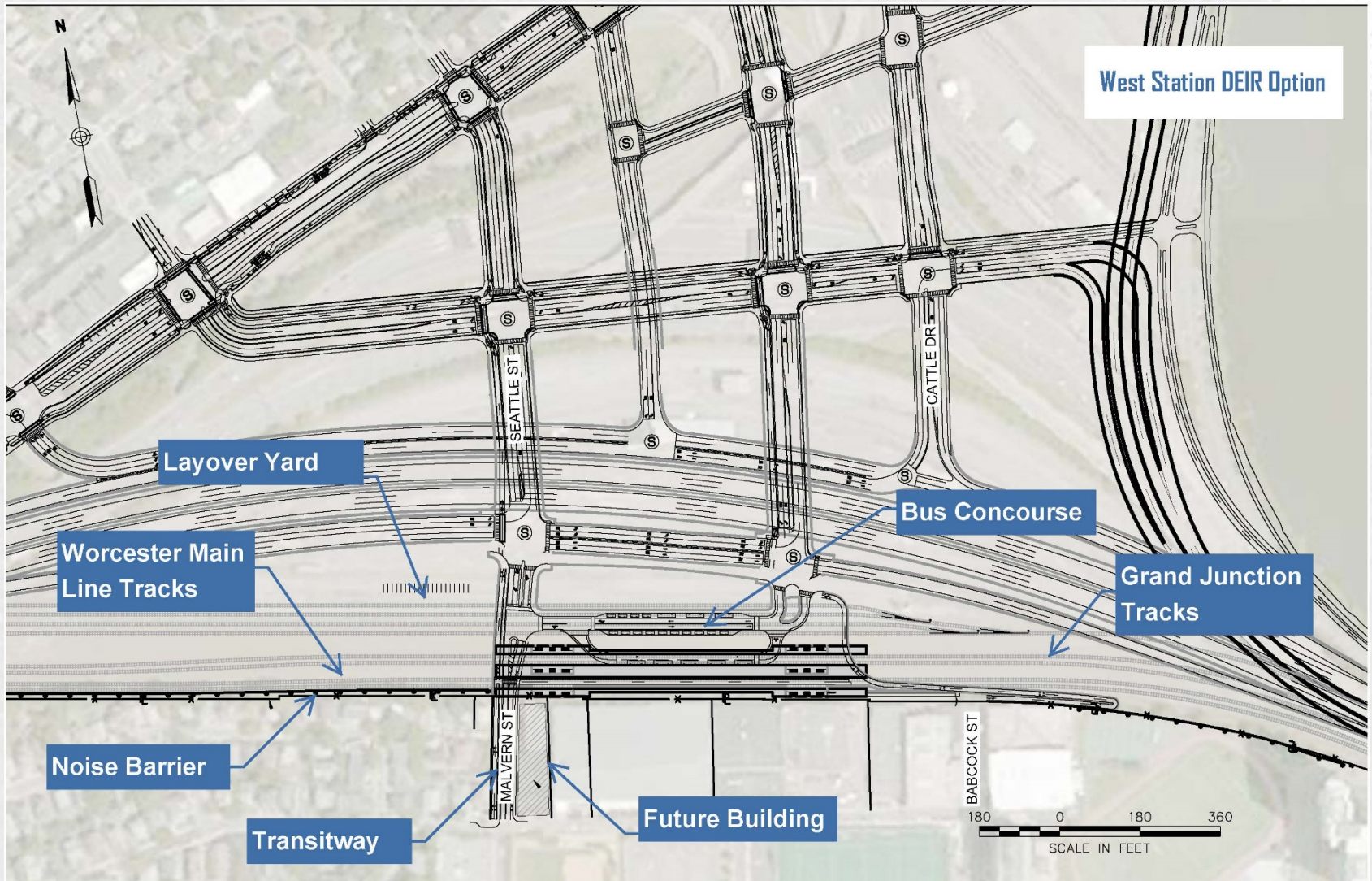
Next Steps

- Use the recently created no-build land use to develop future no-build scenarios for 2030 and 2040
- Evaluate alternatives for 2030 and 2040 once the build land use assumptions are finalized for input into the regional travel model

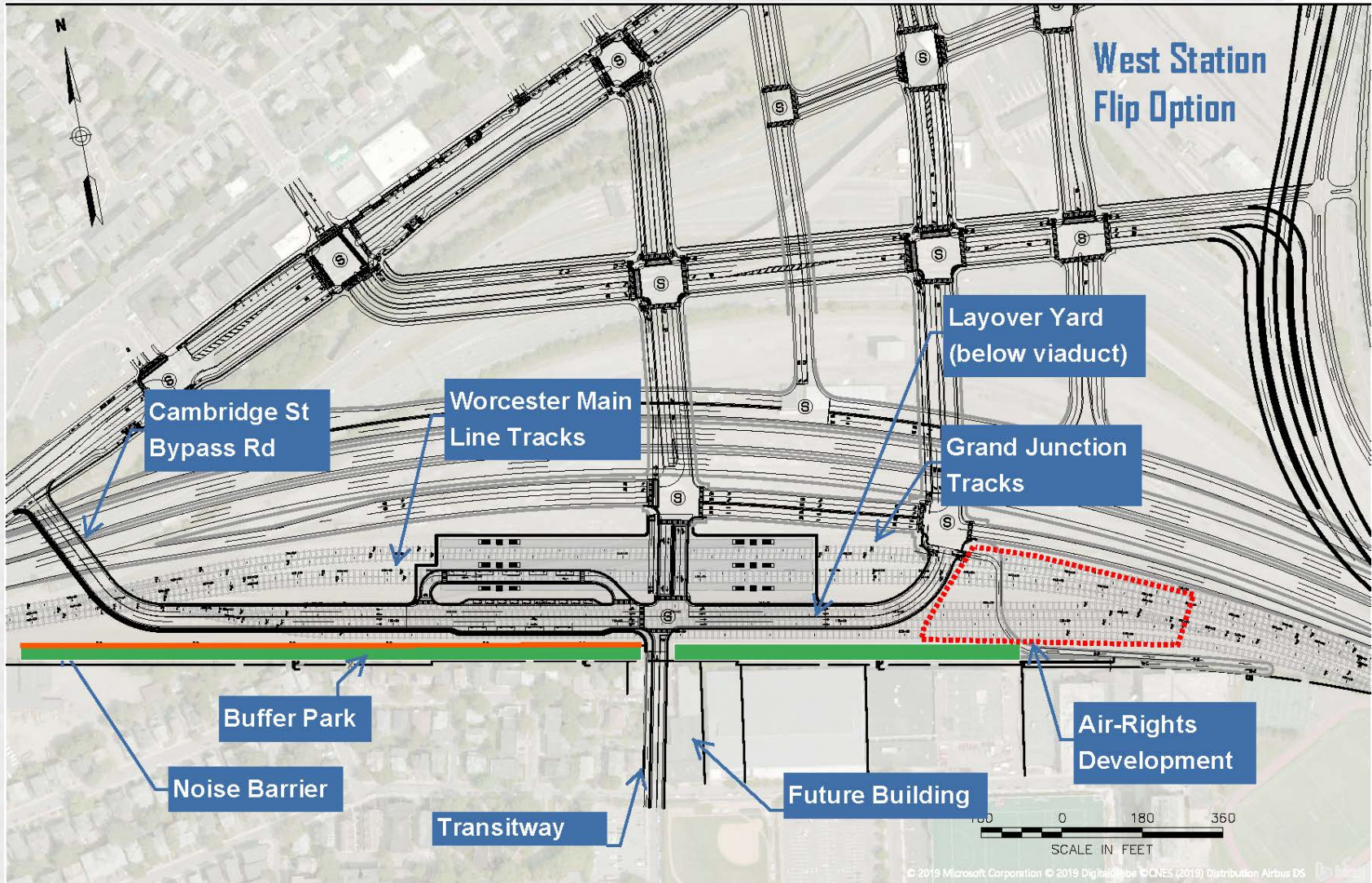
West Station Flip Analysis Update

- Harvard approached MassDOT with an alternative West Station and Beacon Park Layover Yard layout
- Harvard's alternative "Flips" West Station and the Worcester Main Line (WML) to the north, shifting the layover yard to the south, & offer suggests a buffer park in place of the WML tracks
- MassDOT & MBTA expressed several operational concerns with Flip option and refinements
- Harvard stressed its goals for a technically feasible/economically viable project
 - The IRT Throat option afforded a superior air rights opportunity utilizing the east end of Beacon Park Yard
 - Future Grand Junction passenger service envisioned as a key development need
- MassDOT and Harvard tentatively agreed to a Modified Flip to satisfy the most essential rail operations and Air Rights requirements

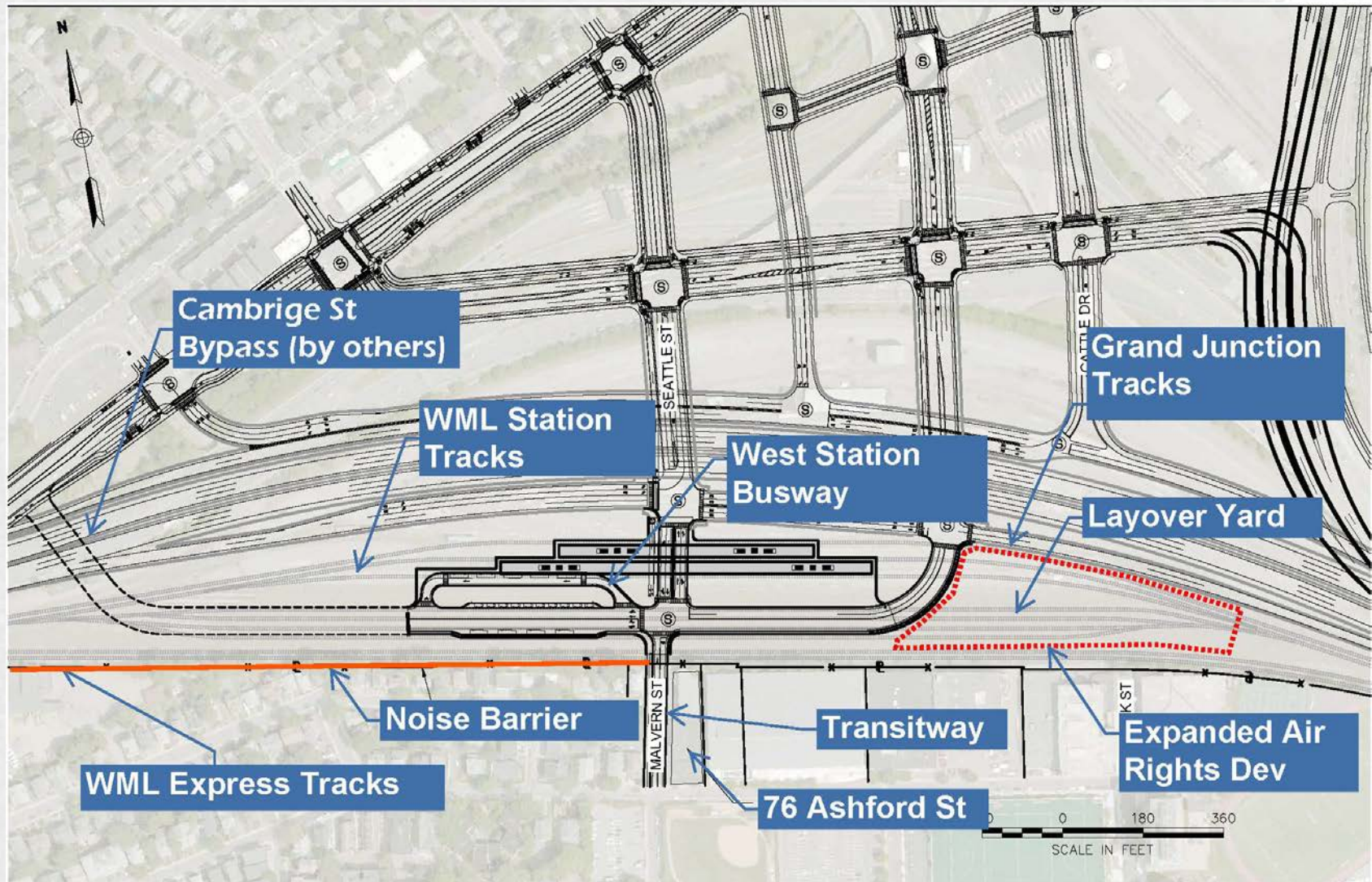
DEIR Option



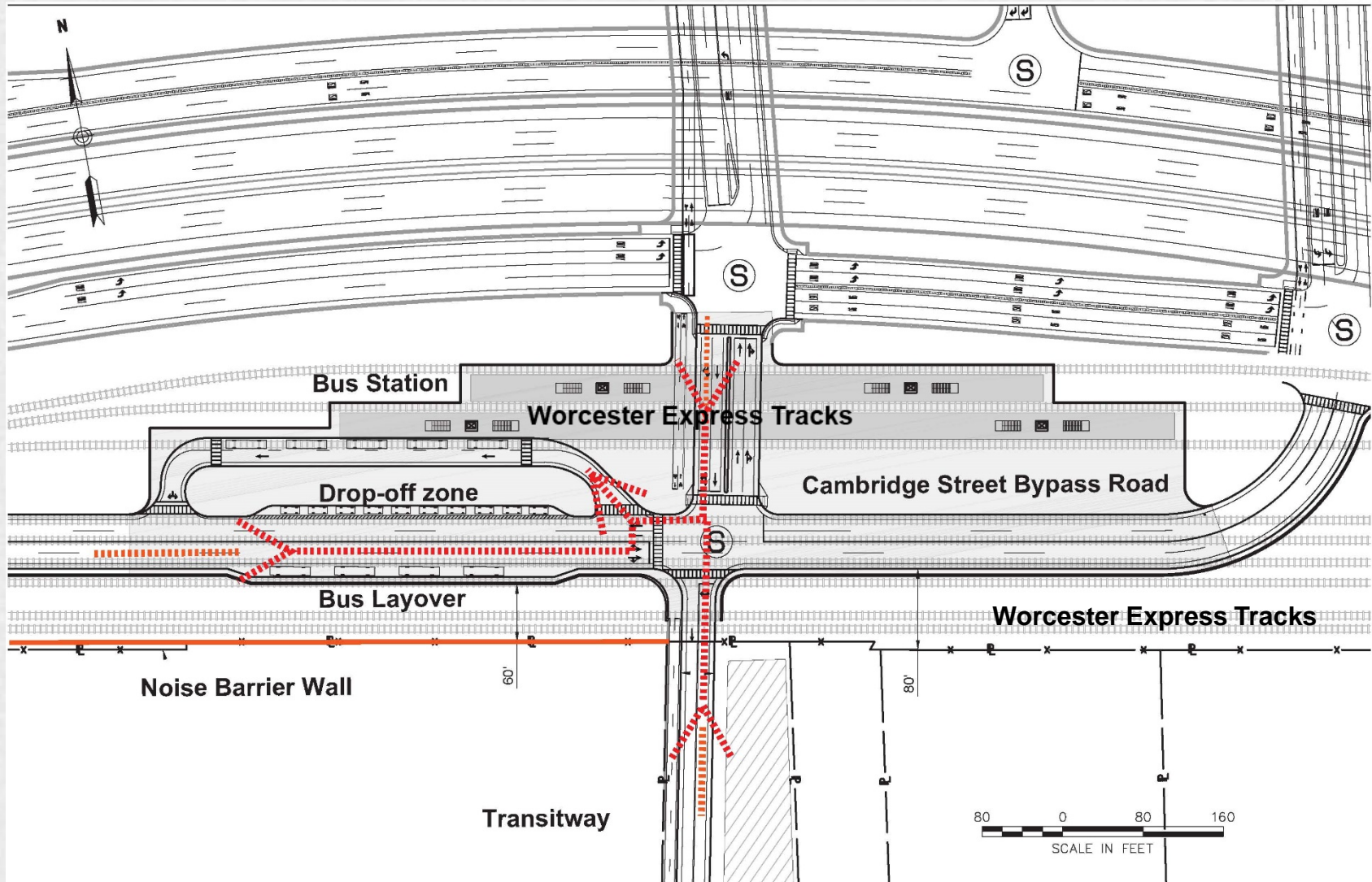
Flip Option



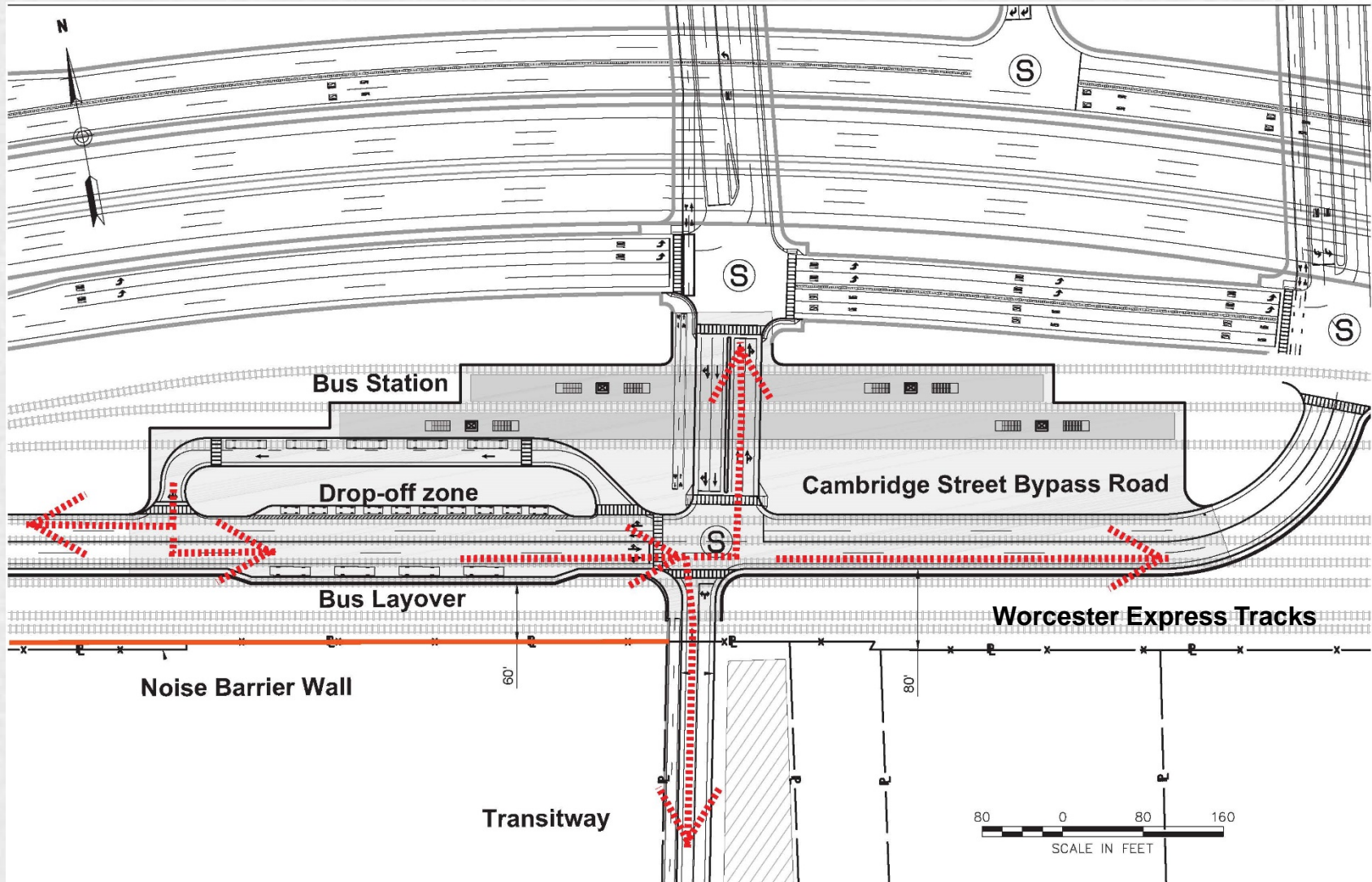
Modified Flip Option – with Cambridge St Bypass



Flip-Family: Inbound Bus Circulation



Flip-Family: Outbound Bus Circulation

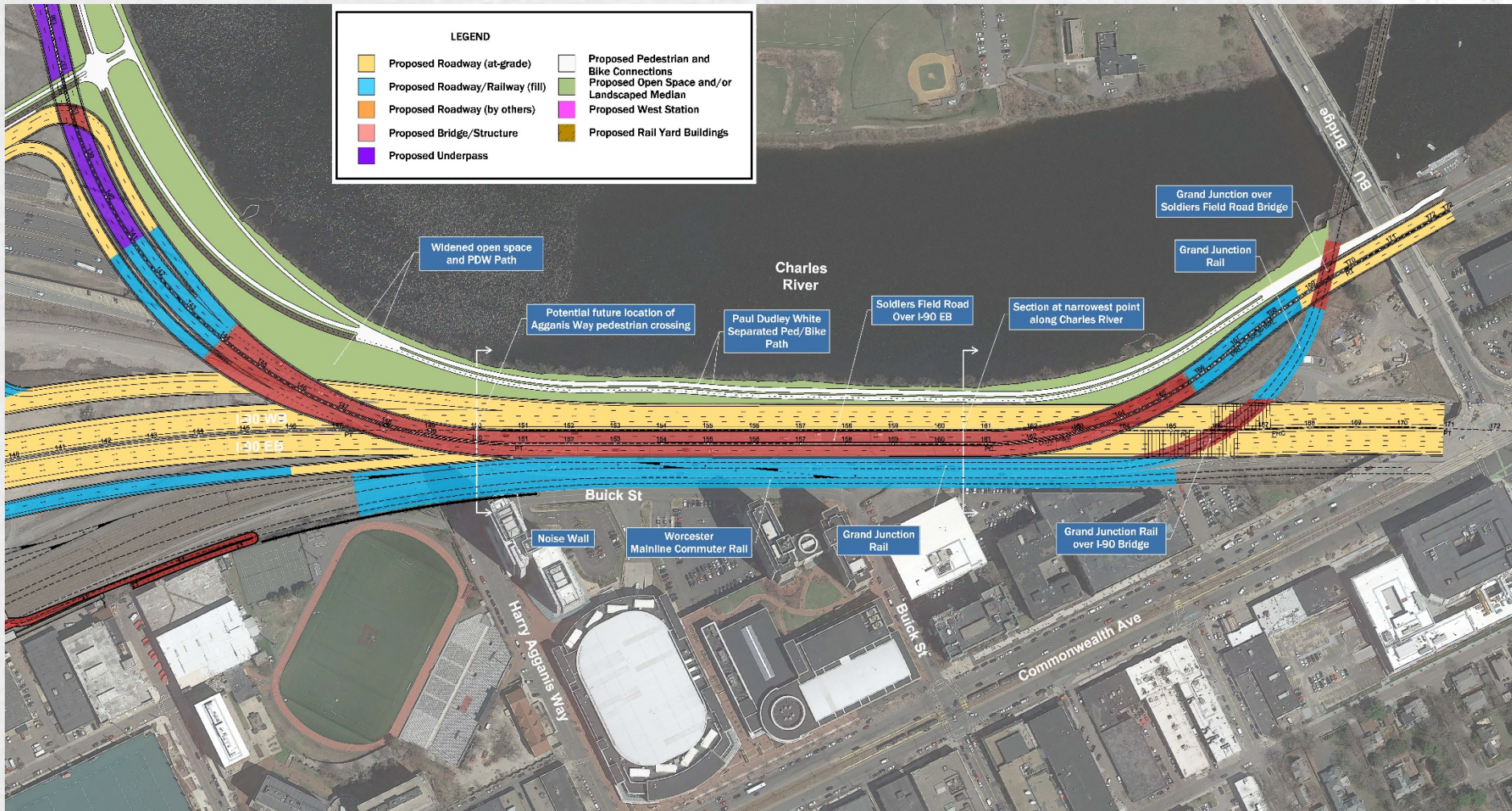


Flip Comparison

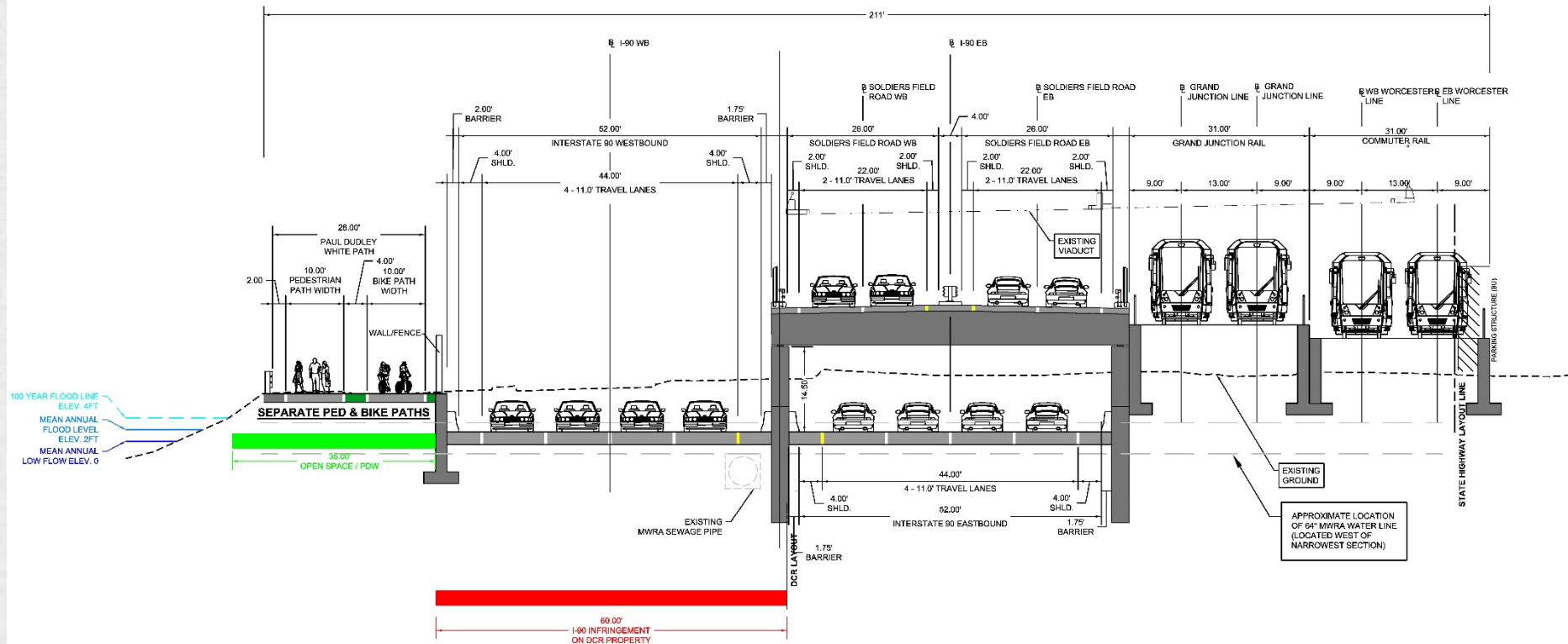


Feature	DEIR	Flip	Modified Flip
Tracks & Platforms	2 WML & 2 GJR; keeps WML alignment 3 platforms; walk-up access	2 WML & 2 GJR; alters WML alignment 3 island platforms	2+1 WML & 2 GJR maintains WML alignment 2 island platforms
WML Speed	Maintain current (79 mph through station area)	45 - 50 mph through station area	45-50 thru station 79 mph on WML
Rail Service	Favors maintaining/expanding service along WML	Favors future GJR service & directs all WML trains to station	Balances future GJR service expanding high speed & express ability along WML
Yard	4 tracks/8 layovers, access via GJR	4 tracks/8 layovers access via WML	4 tracks/8 layovers access via flip WML
Bus Access	Access from Bus Loop and Transit way	Access from Camb. St bypass w/transitway connection	Access from Cambridge St bypass w/transitway connection
Pedestrian Access	South via Malvern and Babcock; north via bus loop	South via Malvern; north via Camb. St bypass; west via path from Franklin St	South via Malvern; north via Camb. St bypass
Air Rights	Limits opportunities due to access constraints	Camb. St bypass provides access to land area east of station and yard	Camb. St bypass provides access to land area east of station and yard

Highway At-Grade "Modified" Hybrid with Elevated SFR



Highway At-Grade "Modified" Hybrid with Elevated SFR



HYBRID - SFR STACKED OVER I-90EB
SECTION AT NARROWEST POINT ALONG CHARLES RIVER
APPROX. STA 160+50

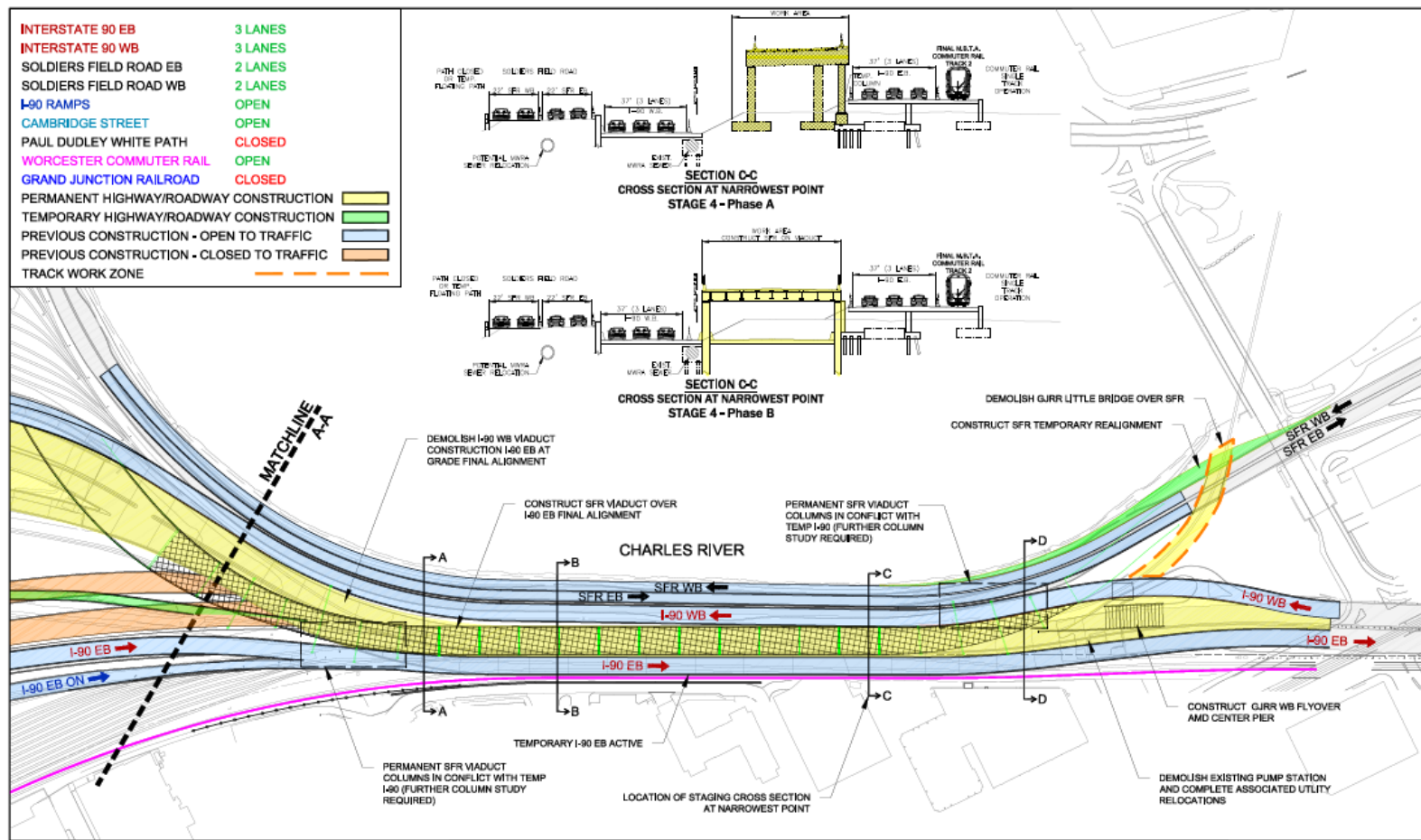
Throat Area Construction Staging Considerations

- **Maintain all modes of travel**
 - PDW Path Detour or Temporary Floating Bridge
 - 6 I-90 travel lanes 3 lanes EB/3 lanes WB
 - 4 SFR travel lanes 2 lanes EB/2 lanes WB
 - Minimize single track operations on WML Commuter Rail between Boston Landing and Commonwealth Ave. (CP 4 and CP 3)
 - Grand Junction Rail closed for majority of construction duration
 - Site investigations for temporary Commuter Rail Layover location

Throat Area Construction Staging Highlights

- Staging concepts are preliminary and several elements need further study/investigations including but not limited to:
 - Consideration of Temporary PDW Path on Floating Bridge
 - Sizing safe work zones for construction equipment and access
 - Minimize duration of 1 track Worcester Mainline services between Boston Landing and Commonwealth Ave
 - Grand Junction Bridge replacement over I-90 and SFR
 - SFR Viaduct transitions at 'throat' limits
 - Temporary I-90 alignments horizontal and vertical geometry
 - Major utility relocations and continued coordination with utility owners
 - Minimize overall construction staging durations
- Assessing extent of Temporary River Impacts to construct SFR Viaduct (SFR over WB or EB) and need to minimize disruption to I-90/SFR travel lanes and WML Commuter Rail operations

WML Single Track- Staging Concept Year 3



DRAFT

I-90 Allston Interchange Project
Draft Environmental Impact Report
EB SFR Viaduct
Conceptual Construction Stage 4

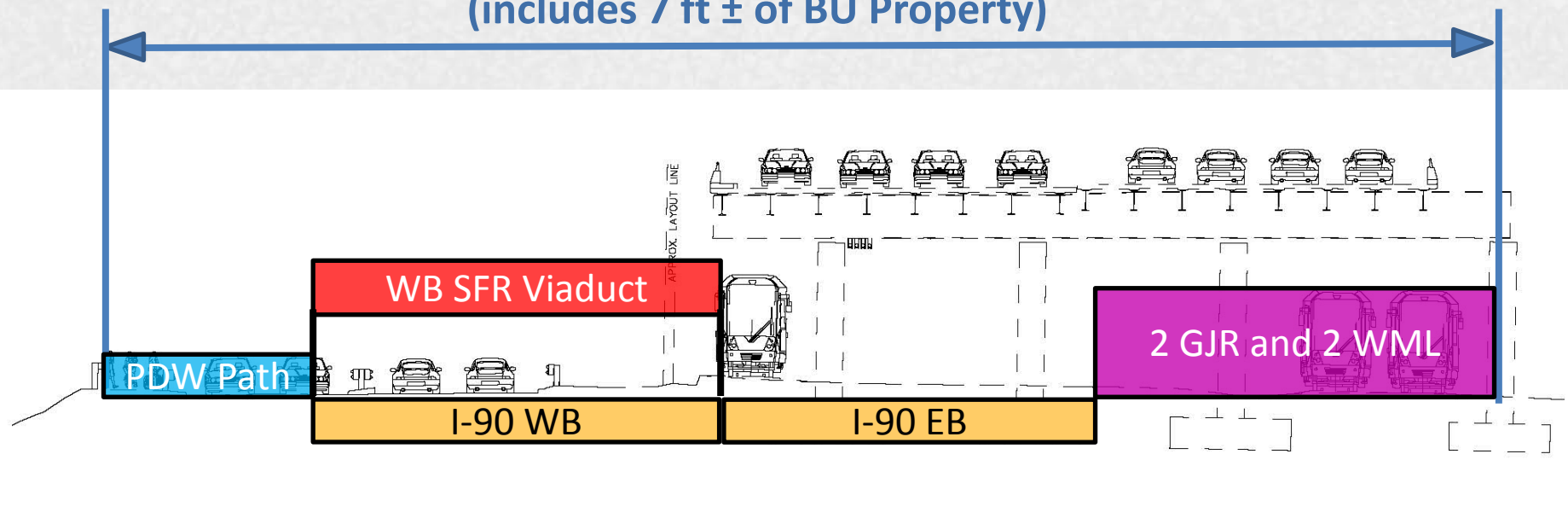
FIGURE 15

WML Single Track – Staging Concept

- Worcester Commuter Rail line will remain double-tracked between Worcester and Boston Landing Station, and between Commonwealth Ave and South Station.
 - Boston Landing Station may operate on both tracks
- During a portion of the construction of the Allston I-90 project, an approximately 1 mile segment of the line must be single-tracked between Boston Landing Station and Commonwealth Ave.
- While construction is not expected to start until 2022, MassDOT Highway Division and the MBTA are working now to evaluate opportunities to reduce the time required for single-tracking and reduce the impacts on this segment
 - Rail crossovers provided at these locations will minimize customer impacts

WB SFR Viaduct - Final Condition

211 ft +/- Overall Final Dimension at
Narrowest Location
(includes 7 ft ± of BU Property)



Legend

	Temp I-90/SFR		Final I-90
	Temp/Final WML/GJ		Final SFR Viaduct

3-D Visualizations – SFR over I-90 WB



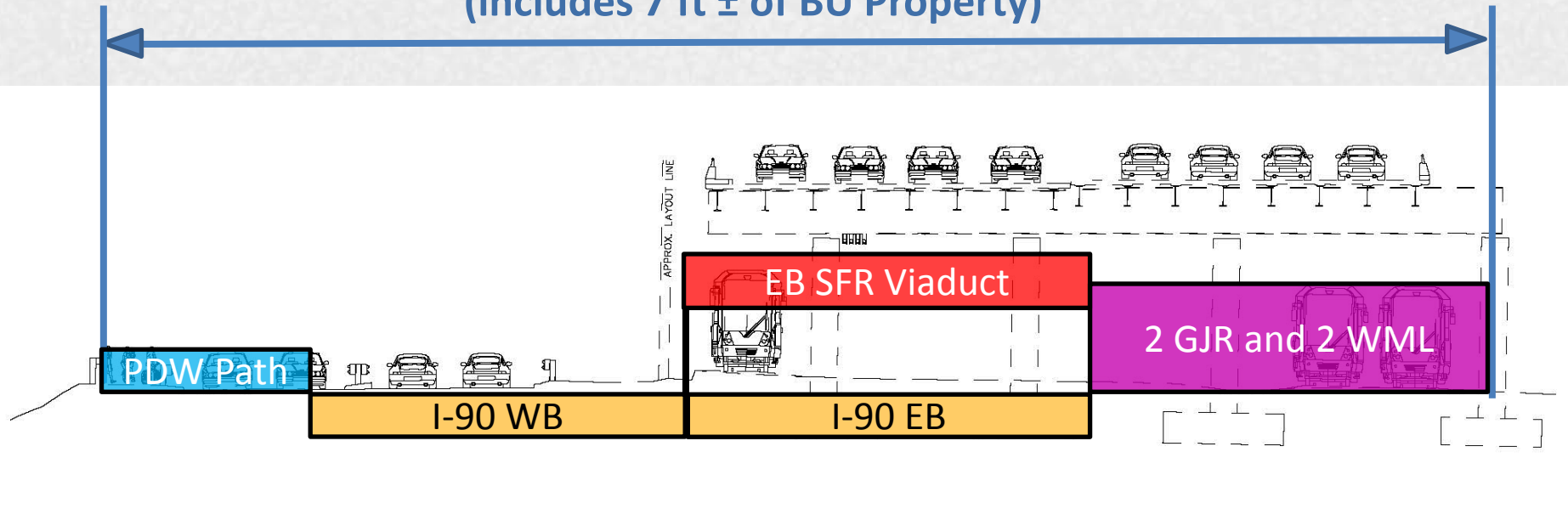
3-D Visualization – SFR over I-90 WB



EB SFR Viaduct - Final Condition



211 ft +/- Overall Final Dimension at
Narrowest Location
(includes 7 ft ± of BU Property)



Legend

	Temp I-90/SFR		Final I-90
	Temp/Final WML/GJ		Final SFR Viaduct

3D Visualizations- SFR over I-90 EB



3-D Visualization – SFR over I-90 EB



Upcoming Task Force Meetings

May 23

- Continued Conceptual Construction Staging Strategy, Environmental Permitting, including MEPA/NEPA, 106, 4f, WPA Presentation of virtual 3D final build graphics

June 20

- Progress update on CTPS Travel Demand Model
- Update on West Station 'Flip' collaboration efforts

July 18, August 14, September 12 and October 9

- Meeting agendas to follow