



Bridge Replacement Br. No. A-05-002=W-21-014
Springfield Street (Route 147) over Westfield River
Project File No. 605384

MassDOT Board
6/11/2018

Locus Map

Existing Traffic Features:

Springfield Street (west of Walnut St):

- (1) sidewalk
- (1) travel lane each direction, left turn only lane (from eastbound) onto Walnut

Springfield Street (b/w Walnut St & Suffield St):

- (1) sidewalk
- (1) eastbound travel lane and (1) left turn lane onto Memorial

Memorial

- (1) westbound travel lane and (1) right turn lane onto Walnut &

- (1) left turn lane onto Walnut Ext

Walnut Street/Walnut Street Extension:

- (1) sidewalk
- (1) northbound travel lane and (1) left turn lane onto Springfield
- (1) southbound travel lane and (1) left turn lane onto Springfield

Suffield Street:

- (2) sidewalks
- (1) travel lane each direction, left turn lane onto Springfield

Main Street:

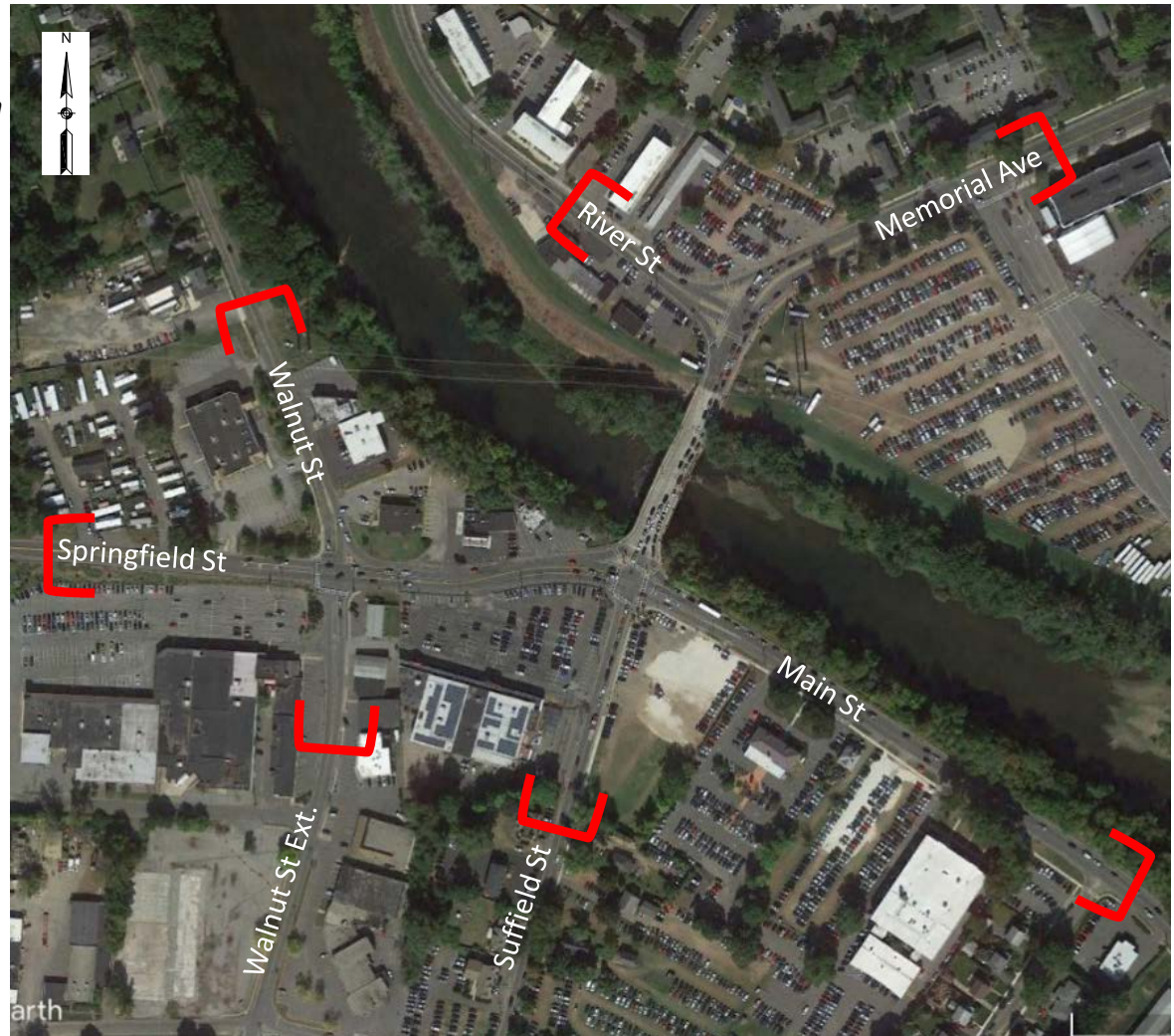
- (1) sidewalks
- (1) travel lane each direction, (1) left turn lane onto Suffield & (1) right turn lane onto Memorial

Memorial Avenue:

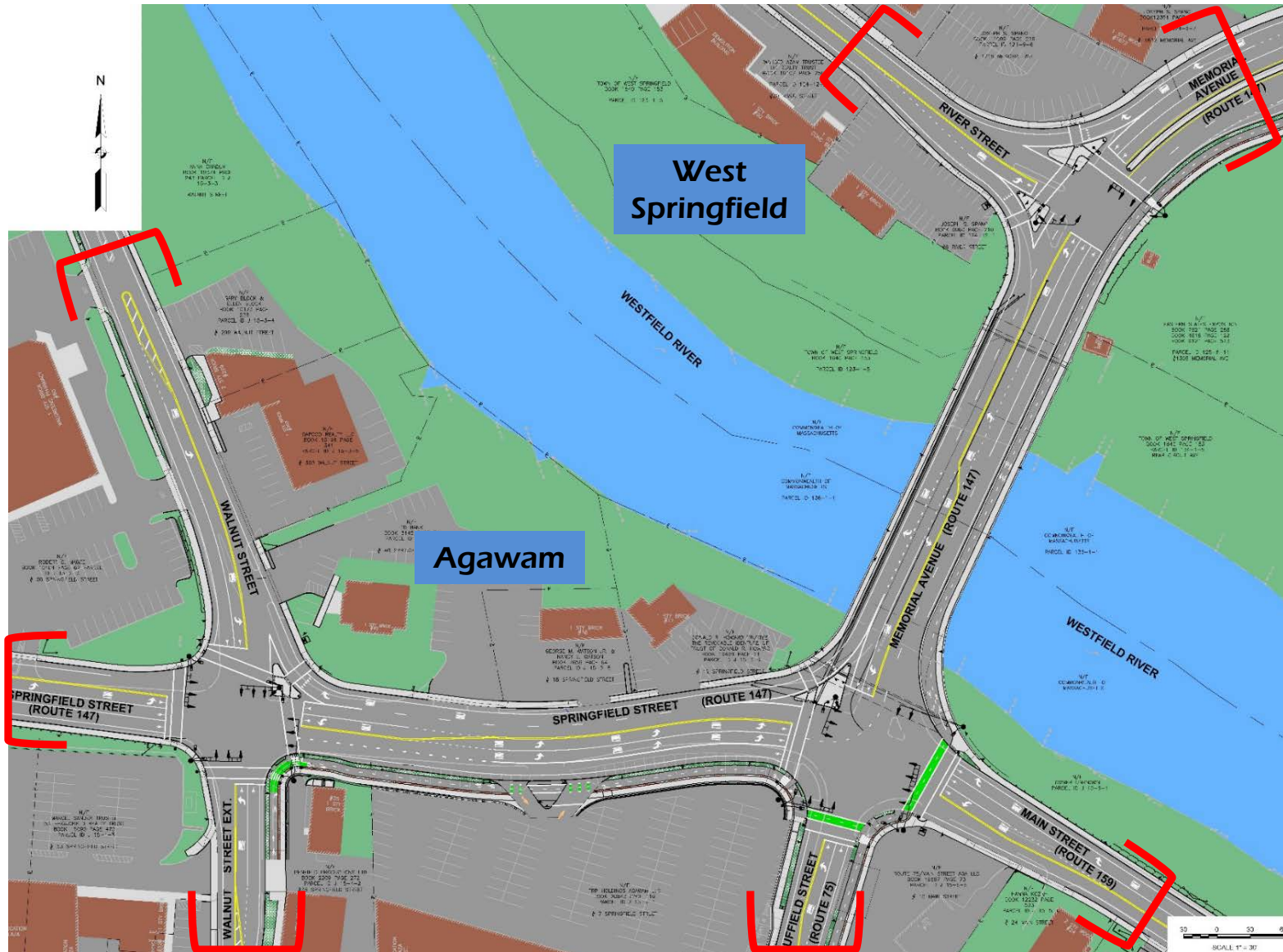
- (2) sidewalks
- (2) travel lanes each direction, (1) right turn lane (from westbound) onto Springfield

River Street:

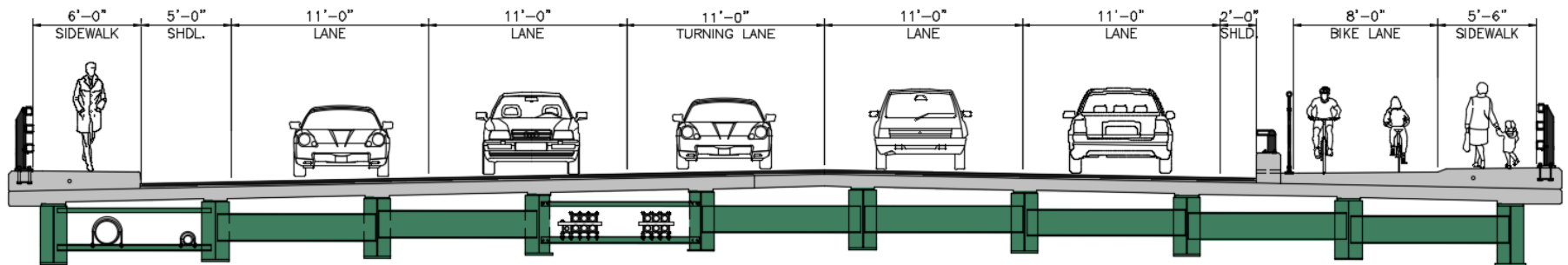
- (1) sidewalk
- (1) travel lane each direction



Proposed Project Plan



Proposed Cross Section



Bridge Cross Section

Proposed Improvements

Complete Streets Improvements

- ❖ Separated 2-Way Bike Lanes & Sidewalk throughout most of the project
- ❖ Separated 2-Way Bike Lane & Sidewalk extend to the Doering Middle School
- ❖ Separated 2-Way Bike Lane & Sidewalk extend across the Bridge to the Big E
- ❖ 2 Designated Bike Crossings provided at the Route 147/75/159 Intersection
- ❖ New Sidewalks added in several locations where currently non-existing

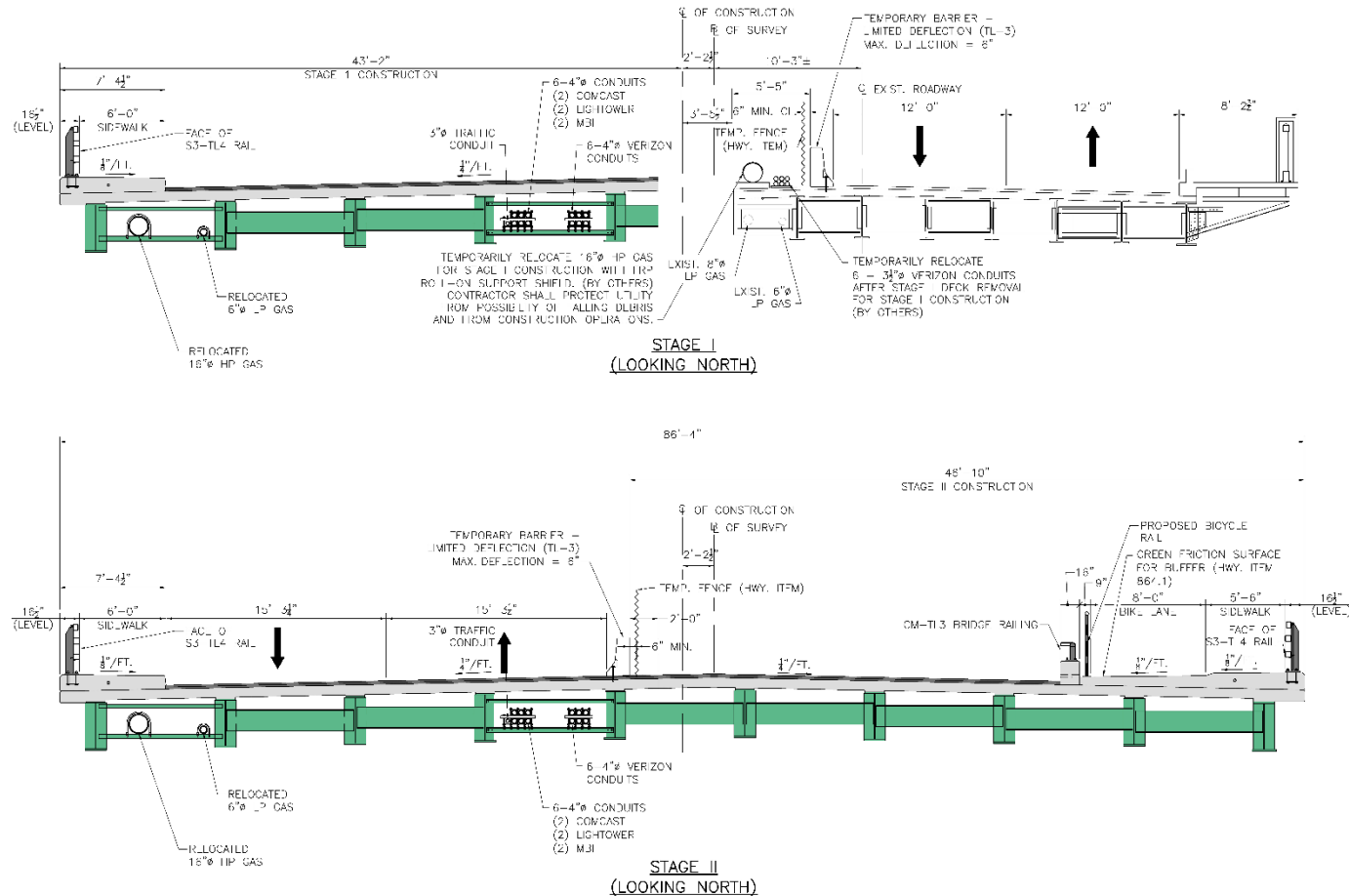
Traffic Signal, Roadway & Safety Improvements

- ❖ Three (3) Traffic Control Signal Intersections to be Widened & Reconstructed
- ❖ New Traffic Signal Interconnection System to Synchronize all 3 Intersections
- ❖ Box Widening Throughout Project Limits Providing Added Turn-Lanes at Signals
- ❖ Drainage System Modifications with Deep Sump Catch Basins for Water Quality

Bridge Improvements

- ❖ Replaces Existing Structurally Deficient Bridge
- ❖ Adds Turning Lane at Intersections on Both Ends of Bridge
- ❖ Adds Separated (and crash protected) 2-Way Bike Lane on East Side of Bridge
- ❖ Adds vehicle storage on both sides of the bridge to ease traffic congestion

Construction Staging



Bridge Construction Staging

Construction Staging

Construction Stage 1

3 Months Roadway Work

Construction Stage 2A

4 Months Roadway Work

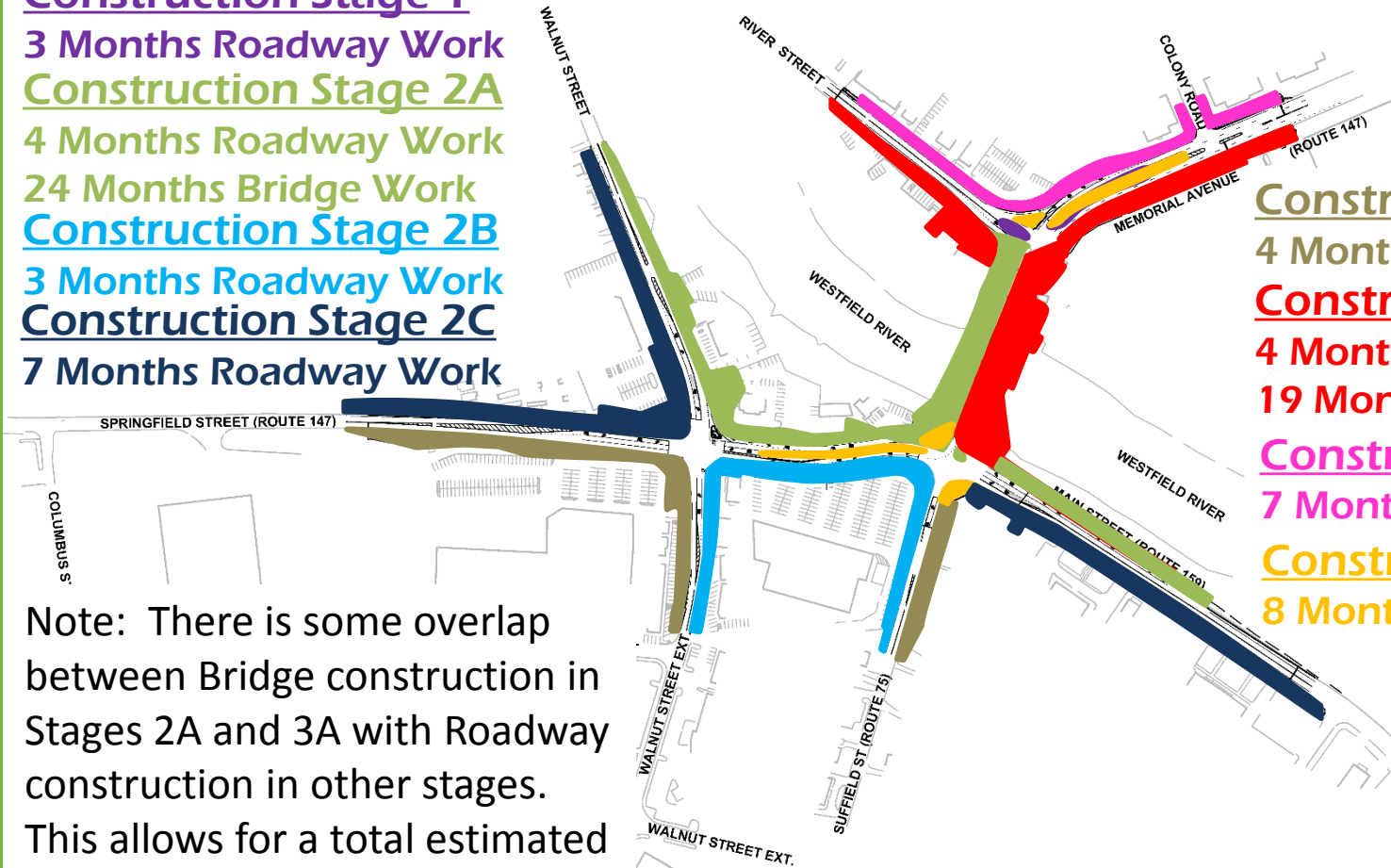
24 Months Bridge Work

Construction Stage 2B

3 Months Roadway Work

Construction Stage 2C

7 Months Roadway Work



Construction Stage 2D

4 Months Roadway Work

Construction Stage 3A

4 Months Roadway Work

19 Months Bridge Work

Construction Stage 3B

7 Months Roadway Work

Construction Stage 4

8 Month Roadway Work

Note: There is some overlap between Bridge construction in Stages 2A and 3A with Roadway construction in other stages. This allows for a total estimated construction time of 47 months.

Bid/Estimate Comparison

Bids Opened on 5/22/2018

Engineering/Contract or	Estimate/Bid	Difference from Estimate (%)
Office Estimate	\$28,620,405	-
Northern Construction	\$21,475,105	-25.0%
ET&L	\$23,642,102	-17.4%
Mohawk	\$27,229,472	-4.9%
J F White Contracting Co.	\$27,347,349	-4.4%
Average Bid	\$24,923,507	-12.9%

Project Value

Contract was awarded to Northern Construction, the low bidder.

CIP Amount = \$30.9 million

Project Amount = \$25.6 million

NOTE: Amounts include bid price, contingencies, traffic police, trainees, etc. and escalated to mid-point of construction.



Thank You
Q&A

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MassDOT Board
Capital Programs Committee
6/5/2018