



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

MassDOT Board  
Capital Programs Committee  
6/5/2018



# 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:

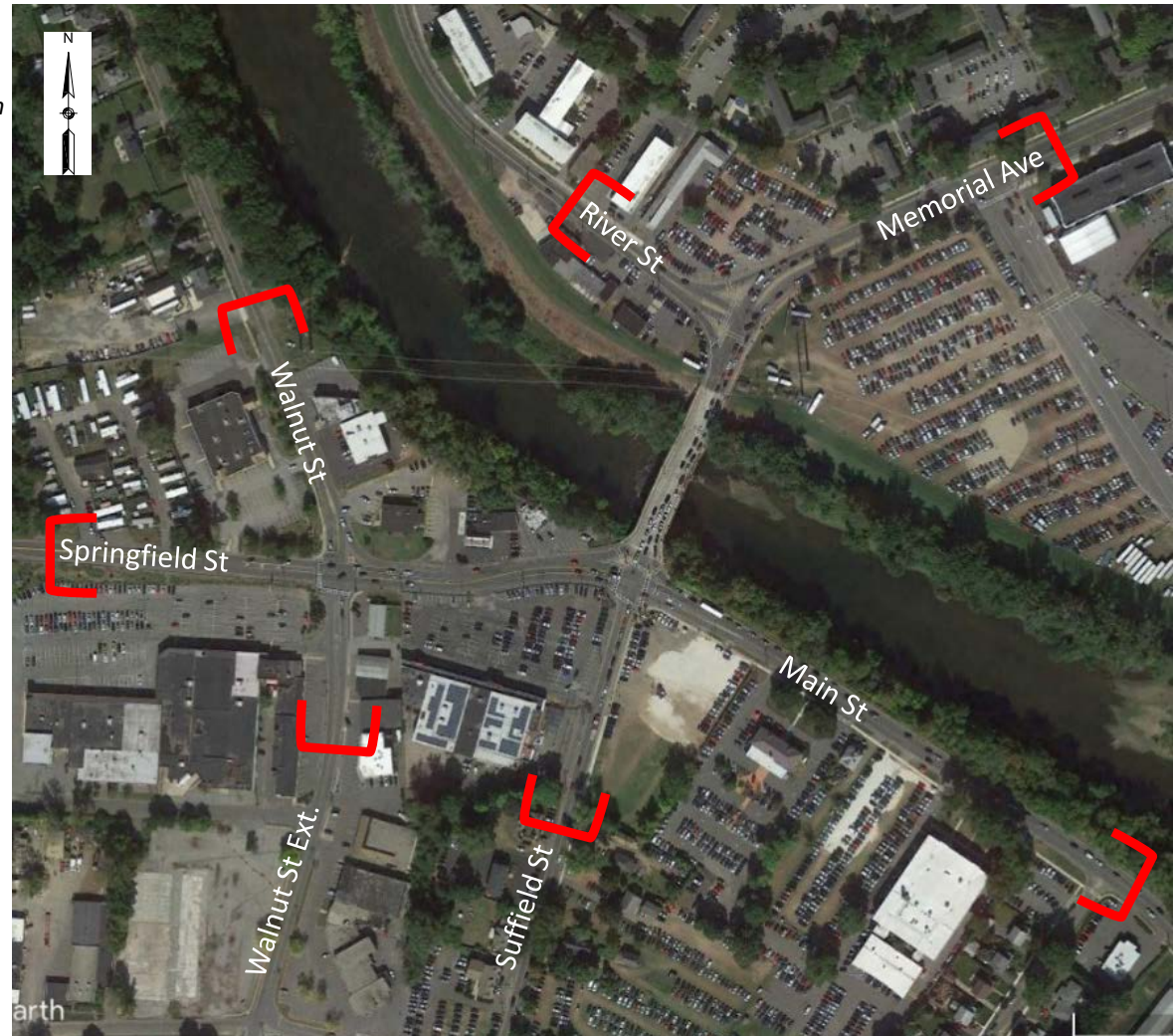
- (1) sidewalks
- (1) travel lane each direction, (1) left turn lane onto Suffield & (1) right turn lane onto Memorial

### Memorial Avenue:

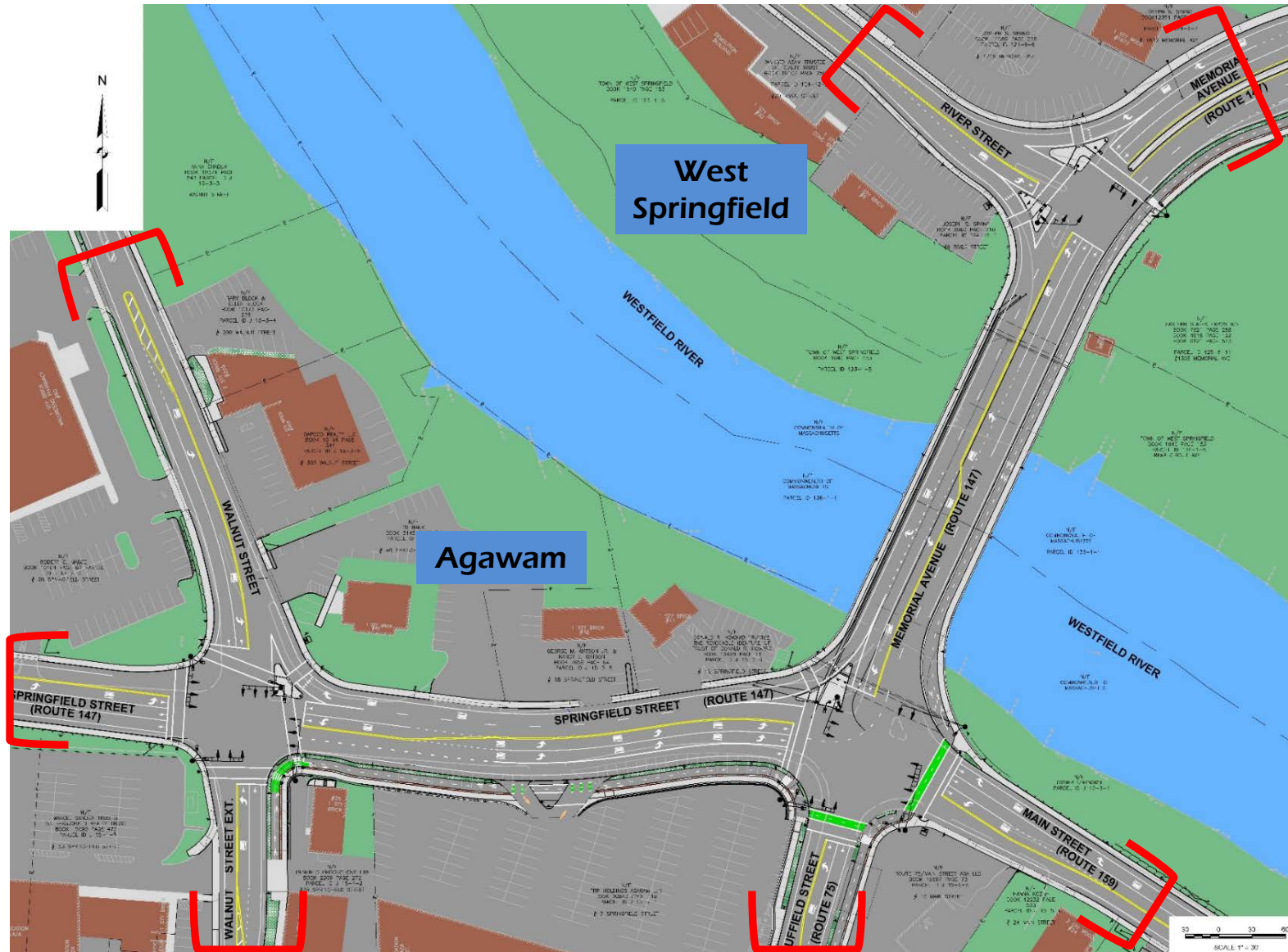
- (2) sidewalks
- (2) travel lanes each direction, (1) right turn lane (from westbound) onto Springfield

### River Street:

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

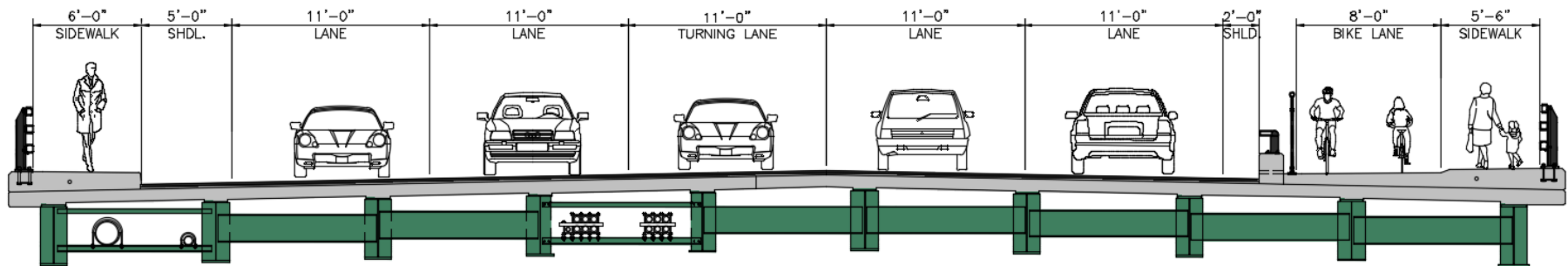


## Proposed Project Plan





# 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

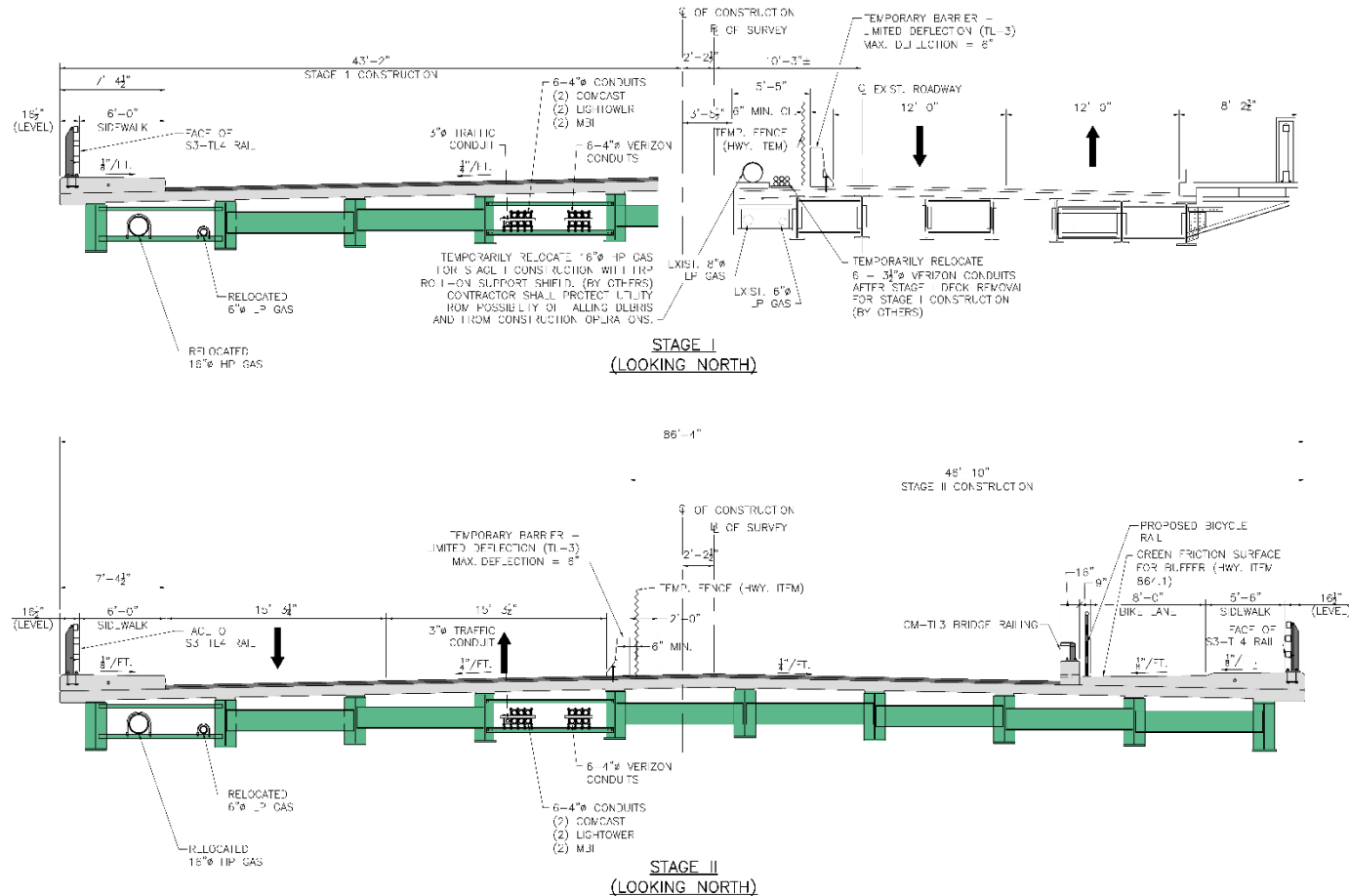
## Traffic Signal, Roadway & Safety Improvements

- ❖ 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

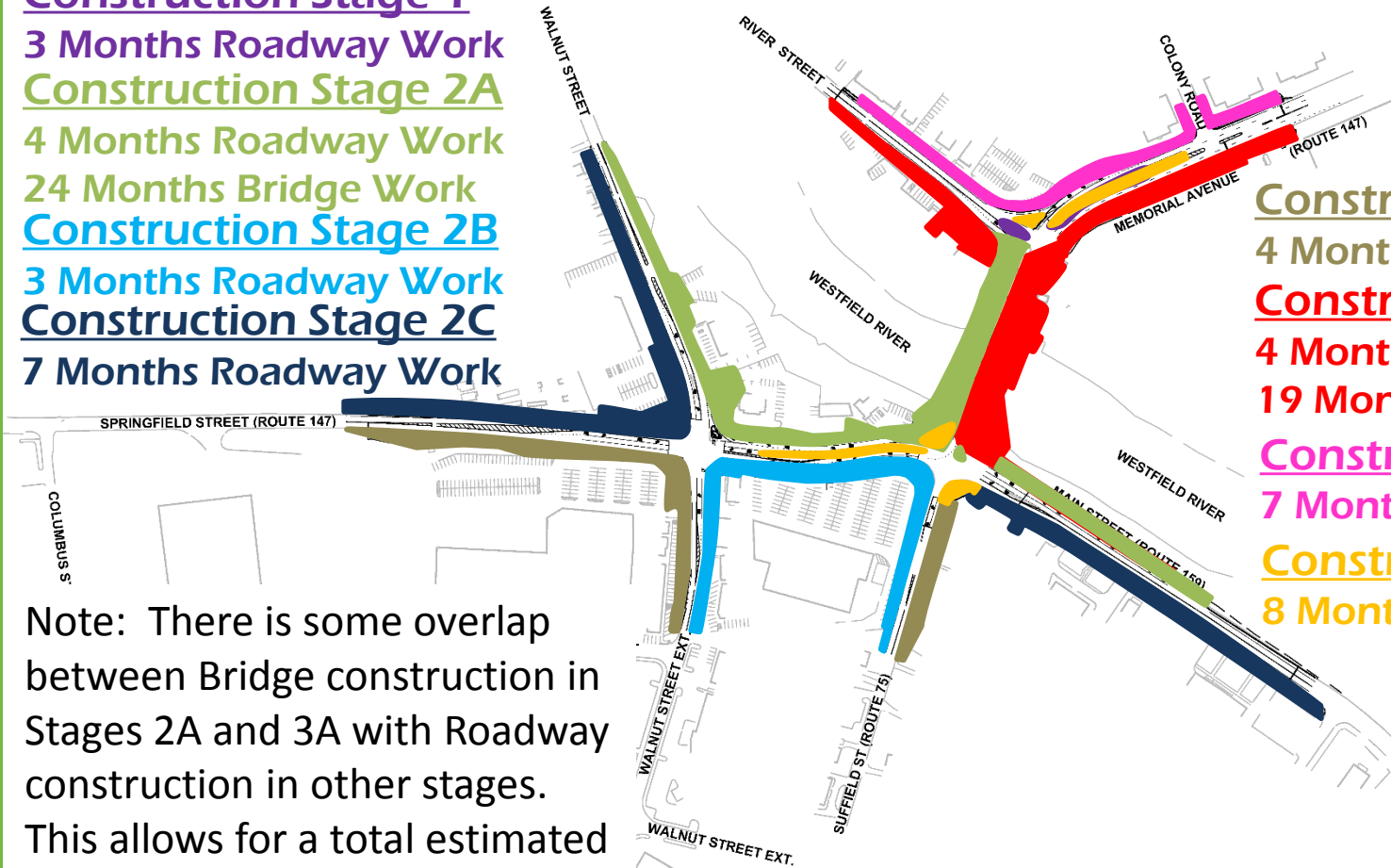
24 Months Bridge Work

## 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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