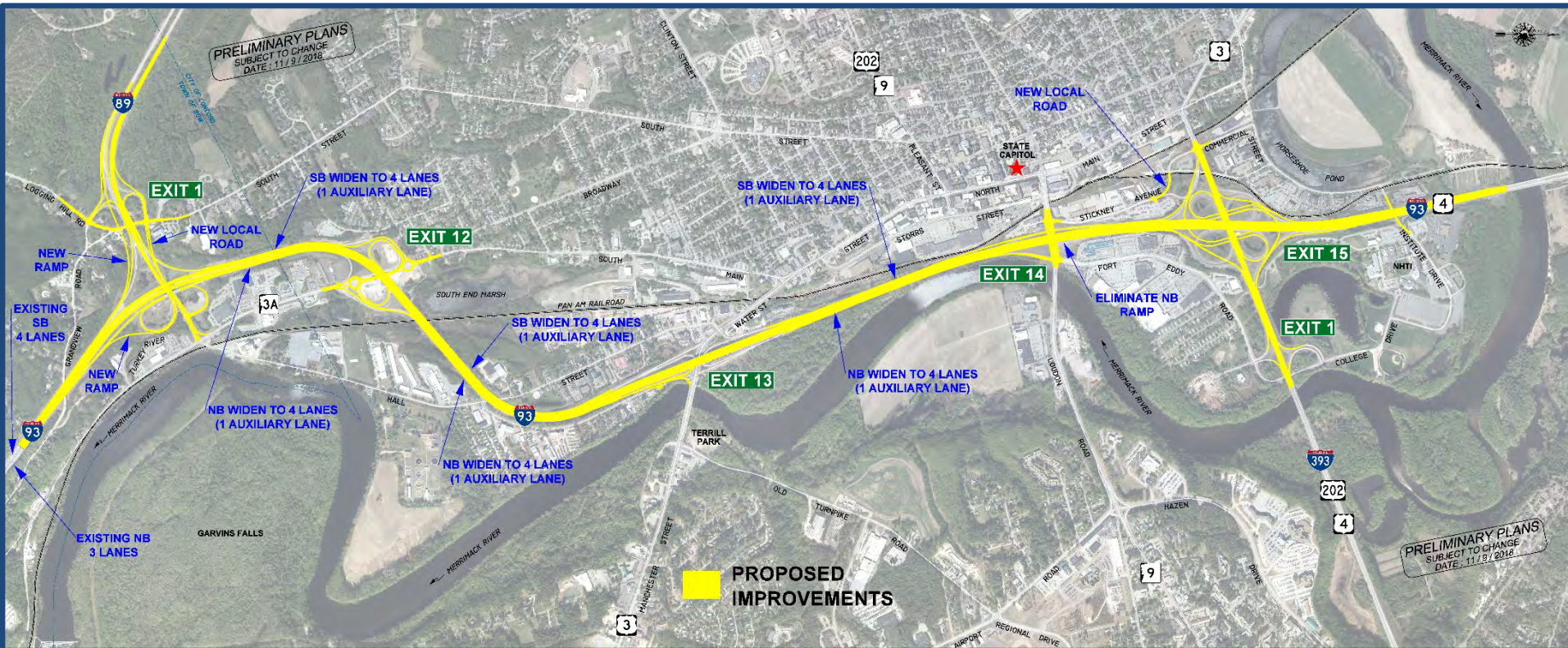


***Bow Concord I-93 Improvements
T-A000(018)
13742***

***Concord City Council
Presentation***

October 11, 2022

Proposed Project (2018)



I-89 Area Concept K

- Eliminate Weaves
- Add Access to Bow Junction

Exit 12 Area Concept F

- Eliminate Off-Ramps
- Roundabouts

Exit 13 Area Concept B

- Retain Configuration
- Widen Northbound Off-Ramp

Exit 14 Concept F2

- Retain Diamond
- Eliminate Exit 14 Northbound On-Ramp

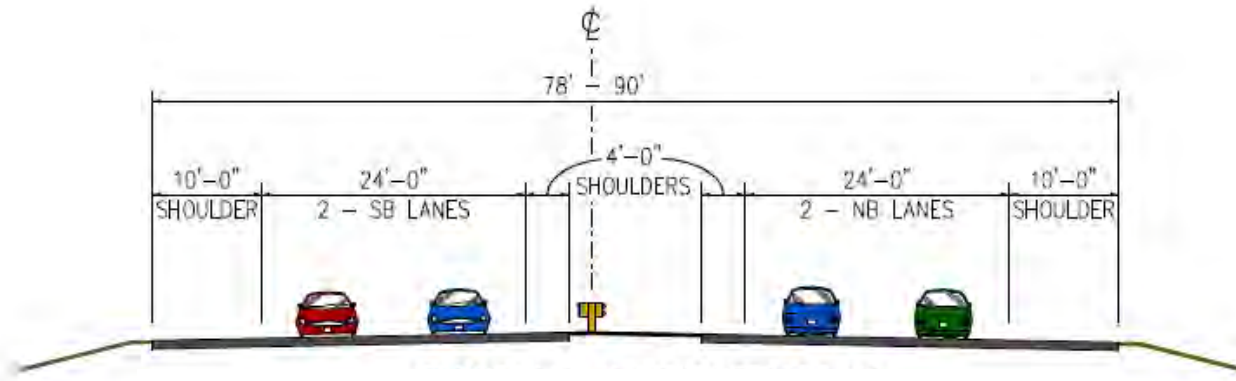
Exit 15 Concept F2

- New Cloverstack
- No Weaving at Exit 15

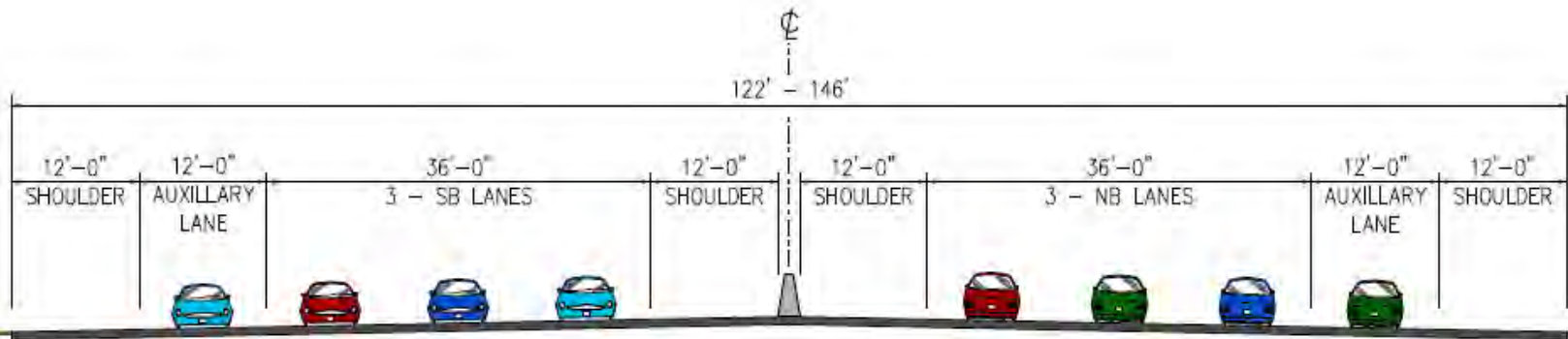
Project Purpose

The purpose of the Interstate 93 Bow-Concord project is to address the existing and future transportation needs for all users of this four-mile segment of I-93, while balancing the needs of the surrounding communities, by providing a safe and efficient transportation corridor for people, goods and services.

I-93 Typical Sections

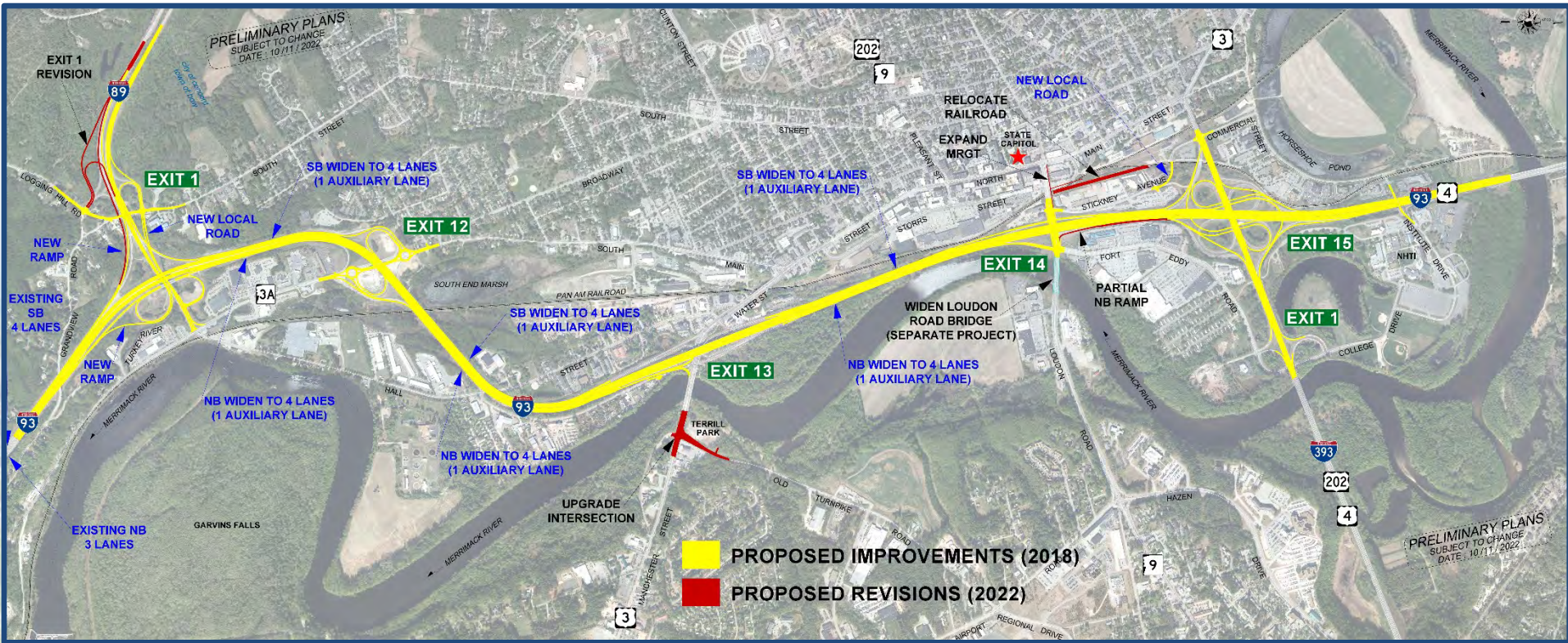


Existing Interstate 93 (4 Lanes)



Proposed Interstate 93 (6 Lanes)

Proposed Project (2022)



Proposed Project (2022)

Exit 1 Revision

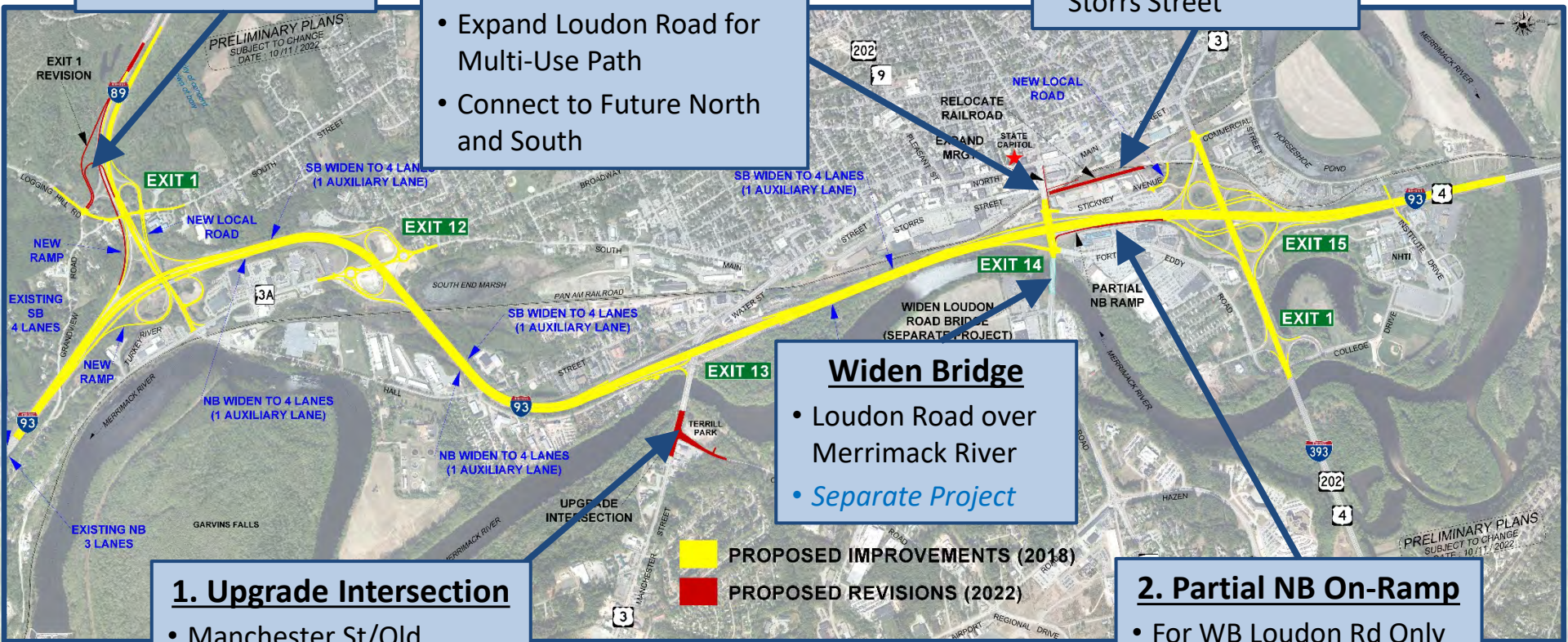
- Accommodation for future Town Road

3. Expand MRGT

- Expand Loudon Road for Multi-Use Path
- Connect to Future North and South

4. Relocate Railroad

- Enable City to Extend Storrs Street



1. Upgrade Intersection

- Manchester St/Old Turnpike Rd/Black Hill Rd

Widen Bridge

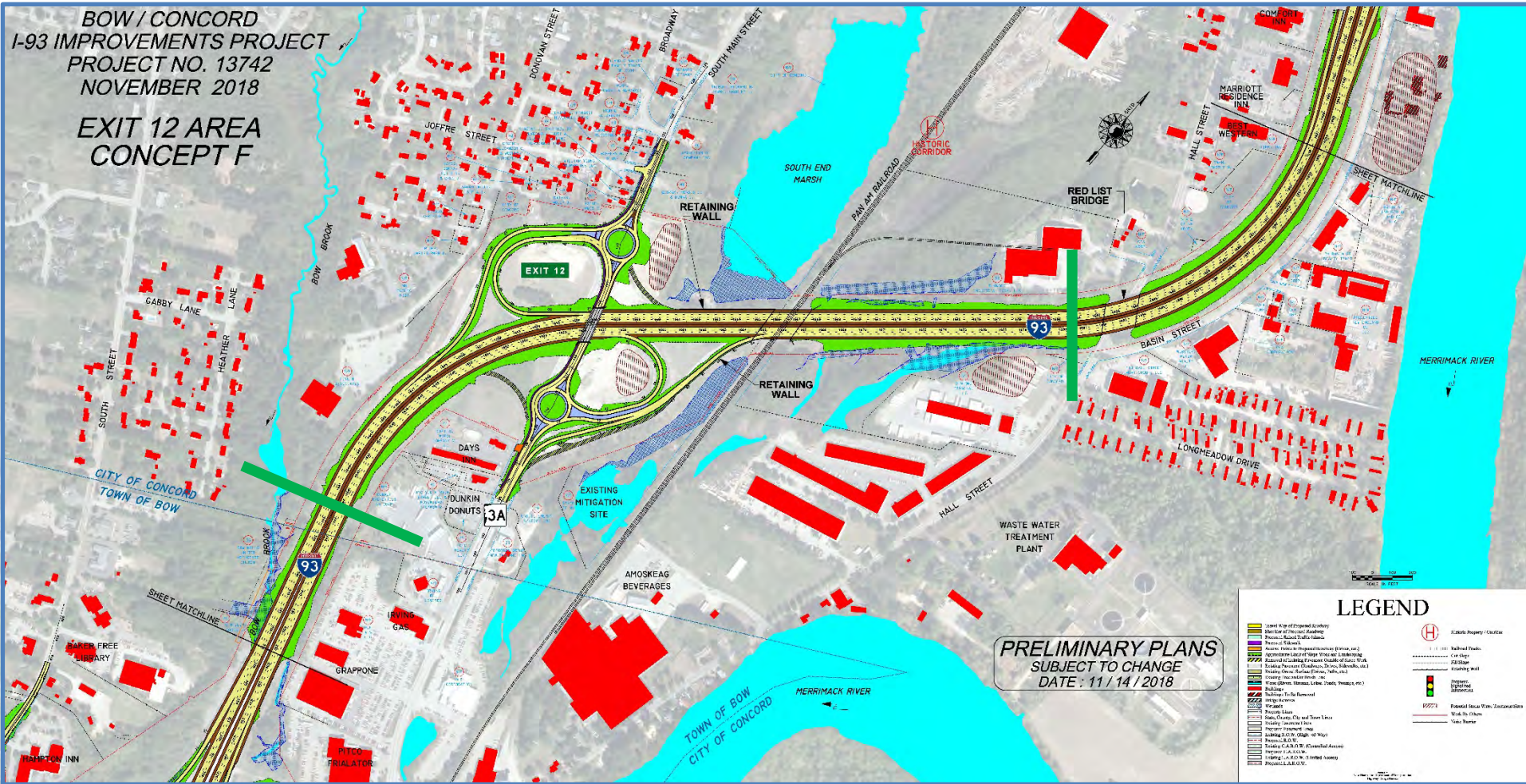
- Loudon Road over Merrimack River
- Separate Project*

2. Partial NB On-Ramp

- For WB Loudon Rd Only
- Eliminates One Signal

Exit 12 Area - Proposed

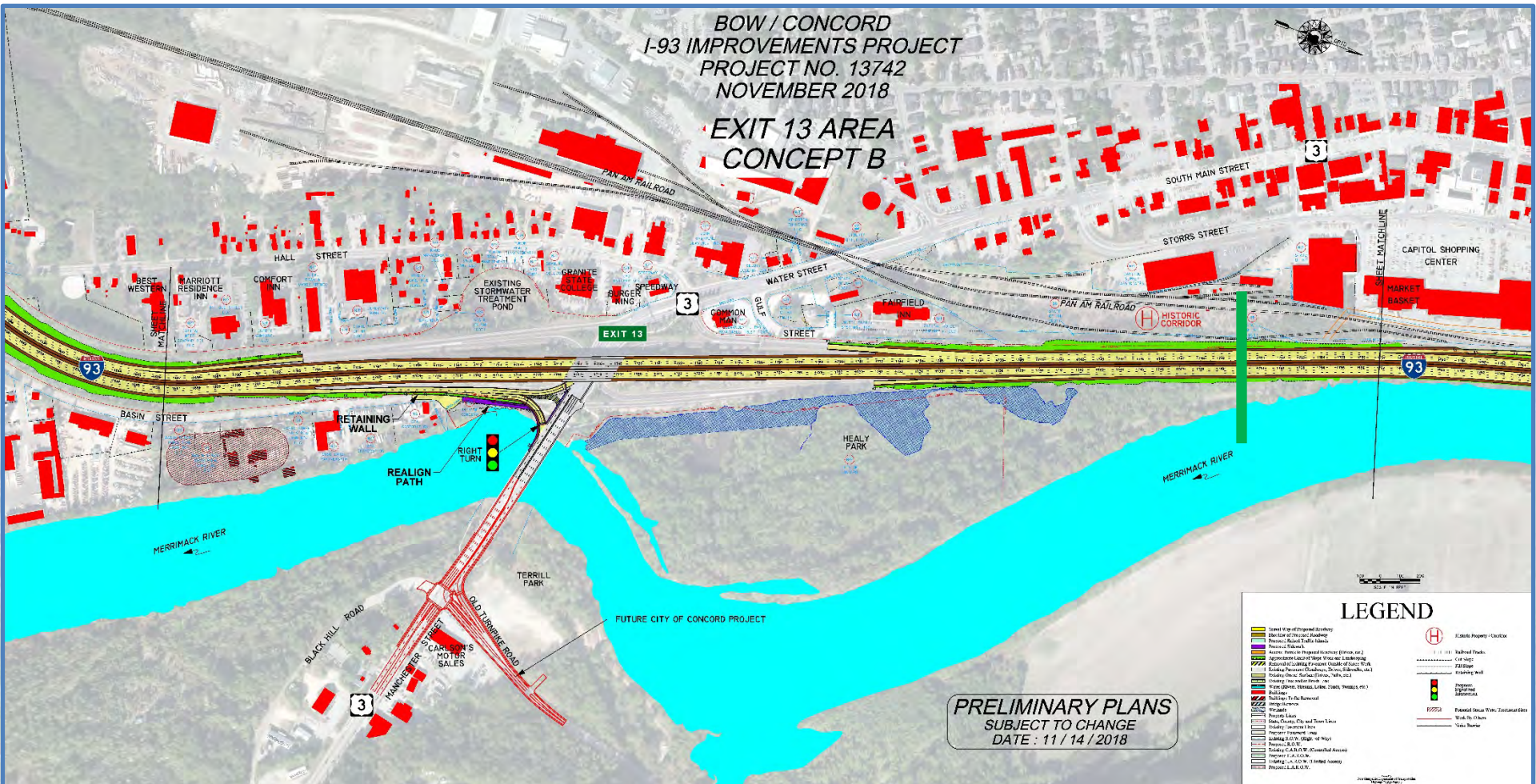
BOW / CONCORD
I-93 IMPROVEMENTS PROJECT
PROJECT NO. 13742
NOVEMBER 2018
EXIT 12 AREA
CONCEPT F



PRELIMINARY PLANS
SUBJECT TO CHANGE
DATE : 11 / 14 / 2018

LEGEND	
	Level 1 (Proposed Roadway)
	Level 2 (Proposed Roadway)
	Level 3 (Proposed Roadway)
	Level 4 (Proposed Roadway)
	Level 5 (Proposed Roadway)
	Level 6 (Proposed Roadway)
	Level 7 (Proposed Roadway)
	Level 8 (Proposed Roadway)
	Level 9 (Proposed Roadway)
	Level 10 (Proposed Roadway)
	Level 11 (Proposed Roadway)
	Level 12 (Proposed Roadway)
	Level 13 (Proposed Roadway)
	Level 14 (Proposed Roadway)
	Level 15 (Proposed Roadway)
	Level 16 (Proposed Roadway)
	Level 17 (Proposed Roadway)
	Level 18 (Proposed Roadway)
	Level 19 (Proposed Roadway)
	Level 20 (Proposed Roadway)
	Level 21 (Proposed Roadway)
	Level 22 (Proposed Roadway)
	Level 23 (Proposed Roadway)
	Level 24 (Proposed Roadway)
	Level 25 (Proposed Roadway)
	Level 26 (Proposed Roadway)
	Level 27 (Proposed Roadway)
	Level 28 (Proposed Roadway)
	Level 29 (Proposed Roadway)
	Level 30 (Proposed Roadway)
	Level 31 (Proposed Roadway)
	Level 32 (Proposed Roadway)
	Level 33 (Proposed Roadway)
	Level 34 (Proposed Roadway)
	Level 35 (Proposed Roadway)
	Level 36 (Proposed Roadway)
	Level 37 (Proposed Roadway)
	Level 38 (Proposed Roadway)
	Level 39 (Proposed Roadway)
	Level 40 (Proposed Roadway)
	Level 41 (Proposed Roadway)
	Level 42 (Proposed Roadway)
	Level 43 (Proposed Roadway)
	Level 44 (Proposed Roadway)
	Level 45 (Proposed Roadway)
	Level 46 (Proposed Roadway)
	Level 47 (Proposed Roadway)
	Level 48 (Proposed Roadway)
	Level 49 (Proposed Roadway)
	Level 50 (Proposed Roadway)
	Level 51 (Proposed Roadway)
	Level 52 (Proposed Roadway)
	Level 53 (Proposed Roadway)
	Level 54 (Proposed Roadway)
	Level 55 (Proposed Roadway)
	Level 56 (Proposed Roadway)
	Level 57 (Proposed Roadway)
	Level 58 (Proposed Roadway)
	Level 59 (Proposed Roadway)
	Level 60 (Proposed Roadway)
	Level 61 (Proposed Roadway)
	Level 62 (Proposed Roadway)
	Level 63 (Proposed Roadway)
	Level 64 (Proposed Roadway)
	Level 65 (Proposed Roadway)
	Level 66 (Proposed Roadway)
	Level 67 (Proposed Roadway)
	Level 68 (Proposed Roadway)
	Level 69 (Proposed Roadway)
	Level 70 (Proposed Roadway)
	Level 71 (Proposed Roadway)
	Level 72 (Proposed Roadway)
	Level 73 (Proposed Roadway)
	Level 74 (Proposed Roadway)
	Level 75 (Proposed Roadway)
	Level 76 (Proposed Roadway)
	Level 77 (Proposed Roadway)
	Level 78 (Proposed Roadway)
	Level 79 (Proposed Roadway)
	Level 80 (Proposed Roadway)
	Level 81 (Proposed Roadway)
	Level 82 (Proposed Roadway)
	Level 83 (Proposed Roadway)
	Level 84 (Proposed Roadway)
	Level 85 (Proposed Roadway)
	Level 86 (Proposed Roadway)
	Level 87 (Proposed Roadway)
	Level 88 (Proposed Roadway)
	Level 89 (Proposed Roadway)
	Level 90 (Proposed Roadway)
	Level 91 (Proposed Roadway)
	Level 92 (Proposed Roadway)
	Level 93 (Proposed Roadway)
	Level 94 (Proposed Roadway)
	Level 95 (Proposed Roadway)
	Level 96 (Proposed Roadway)
	Level 97 (Proposed Roadway)
	Level 98 (Proposed Roadway)
	Level 99 (Proposed Roadway)
	Level 100 (Proposed Roadway)
	Level 101 (Proposed Roadway)
	Level 102 (Proposed Roadway)
	Level 103 (Proposed Roadway)
	Level 104 (Proposed Roadway)
	Level 105 (Proposed Roadway)
	Level 106 (Proposed Roadway)
	Level 107 (Proposed Roadway)
	Level 108 (Proposed Roadway)
	Level 109 (Proposed Roadway)
	Level 110 (Proposed Roadway)
	Level 111 (Proposed Roadway)
	Level 112 (Proposed Roadway)
	Level 113 (Proposed Roadway)
	Level 114 (Proposed Roadway)
	Level 115 (Proposed Roadway)
	Level 116 (Proposed Roadway)
	Level 117 (Proposed Roadway)
	Level 118 (Proposed Roadway)
	Level 119 (Proposed Roadway)
	Level 120 (Proposed Roadway)
	Level 121 (Proposed Roadway)
	Level 122 (Proposed Roadway)
	Level 123 (Proposed Roadway)
	Level 124 (Proposed Roadway)
	Level 125 (Proposed Roadway)
	Level 126 (Proposed Roadway)
	Level 127 (Proposed Roadway)
	Level 128 (Proposed Roadway)
	Level 129 (Proposed Roadway)
	Level 130 (Proposed Roadway)
	Level 131 (Proposed Roadway)
	Level 132 (Proposed Roadway)
	Level 133 (Proposed Roadway)
	Level 134 (Proposed Roadway)
	Level 135 (Proposed Roadway)
	Level 136 (Proposed Roadway)
	Level 137 (Proposed Roadway)
	Level 138 (Proposed Roadway)
	Level 139 (Proposed Roadway)
	Level 140 (Proposed Roadway)
	Level 141 (Proposed Roadway)
	Level 142 (Proposed Roadway)
	Level 143 (Proposed Roadway)
	Level 144 (Proposed Roadway)
	Level 145 (Proposed Roadway)
	Level 146 (Proposed Roadway)
	Level 147 (Proposed Roadway)
	Level 148 (Proposed Roadway)
	Level 149 (Proposed Roadway)
	Level 150 (Proposed Roadway)
	Level 151 (Proposed Roadway)
	Level 152 (Proposed Roadway)
	Level 153 (Proposed Roadway)
	Level 154 (Proposed Roadway)
	Level 155 (Proposed Roadway)
	Level 156 (Proposed Roadway)
	Level 157 (Proposed Roadway)
	Level 158 (Proposed Roadway)
	Level 159 (Proposed Roadway)
	Level 160 (Proposed Roadway)
	Level 161 (Proposed Roadway)
	Level 162 (Proposed Roadway)
	Level 163 (Proposed Roadway)
	Level 164 (Proposed Roadway)
	Level 165 (Proposed Roadway)
	Level 166 (Proposed Roadway)
	Level 167 (Proposed Roadway)
	Level 168 (Proposed Roadway)
	Level 169 (Proposed Roadway)
	Level 170 (Proposed Roadway)
	Level 171 (Proposed Roadway)
	Level 172 (Proposed Roadway)
	Level 173 (Proposed Roadway)
	Level 174 (Proposed Roadway)
	Level 175 (Proposed Roadway)
	Level 176 (Proposed Roadway)
	Level 177 (Proposed Roadway)
	Level 178 (Proposed Roadway)
	Level 179 (Proposed Roadway)
	Level 180 (Proposed Roadway)
	Level 181 (Proposed Roadway)
	Level 182 (Proposed Roadway)
	Level 183 (Proposed Roadway)
	Level 184 (Proposed Roadway)
	Level 185 (Proposed Roadway)
	Level 186 (Proposed Roadway)
	Level 187 (Proposed Roadway)
	Level 188 (Proposed Roadway)
	Level 189 (Proposed Roadway)
	Level 190 (Proposed Roadway)
	Level 191 (Proposed Roadway)
	Level 192 (Proposed Roadway)
	Level 193 (Proposed Roadway)
	Level 194 (Proposed Roadway)
	Level 195 (Proposed Roadway)
	Level 196 (Proposed Roadway)
	Level 197 (Proposed Roadway)
	Level 198 (Proposed Roadway)
	Level 199 (Proposed Roadway)
	Level 200 (Proposed Roadway)

Exit 13 Area - Proposed



1. Manchester Street / Old Turnpike Road / Black Hill Road

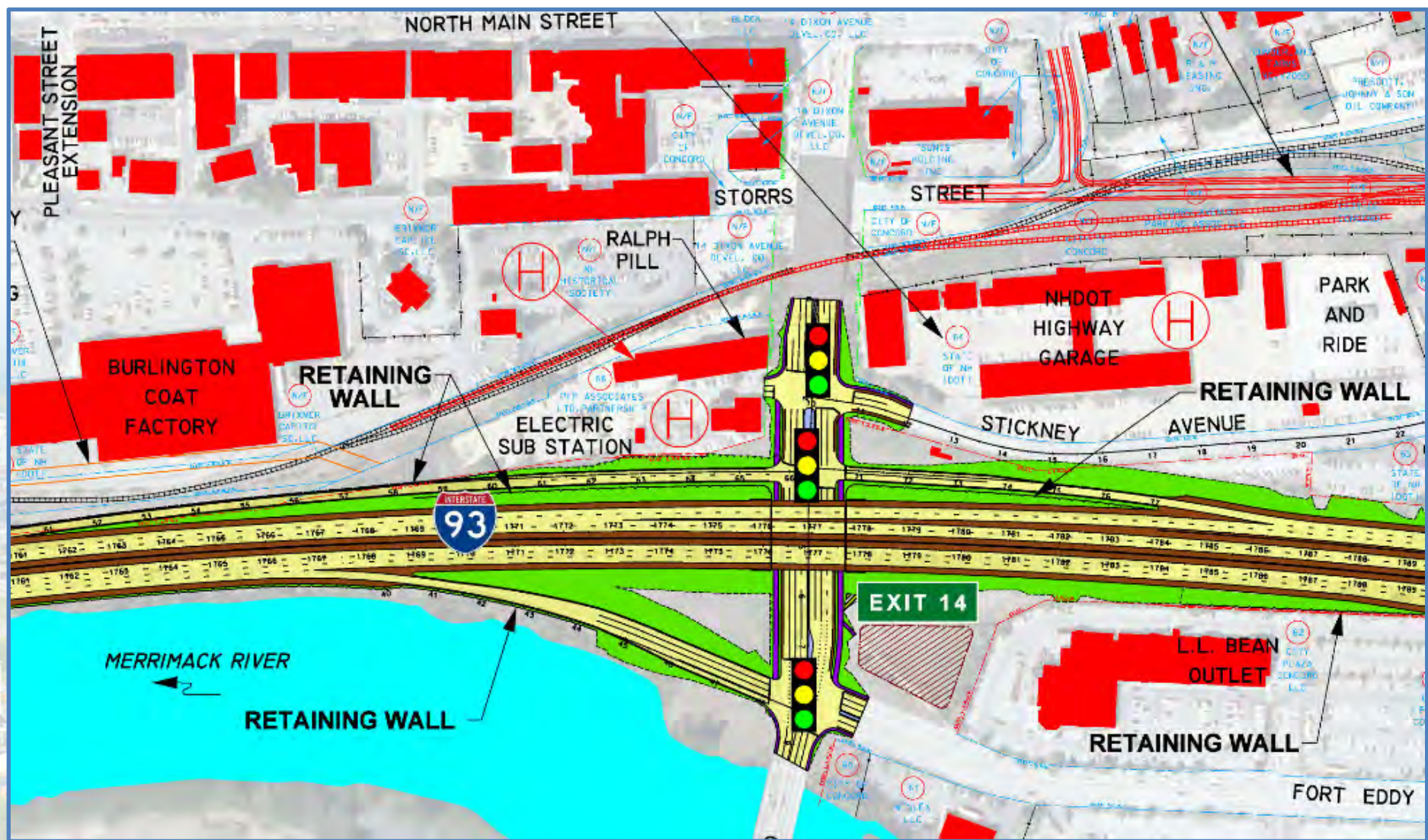
- Dual Lefts for SB Manchester St to EB Old Turnpike Road
- Dual Rights for WB Old Turnpike to NB Manchester St
- Upgraded Signal Equipment
- No Bridge Widening
- Accommodate Terrill Park Plans
- Additional Project Cost Approx. \$5.0M



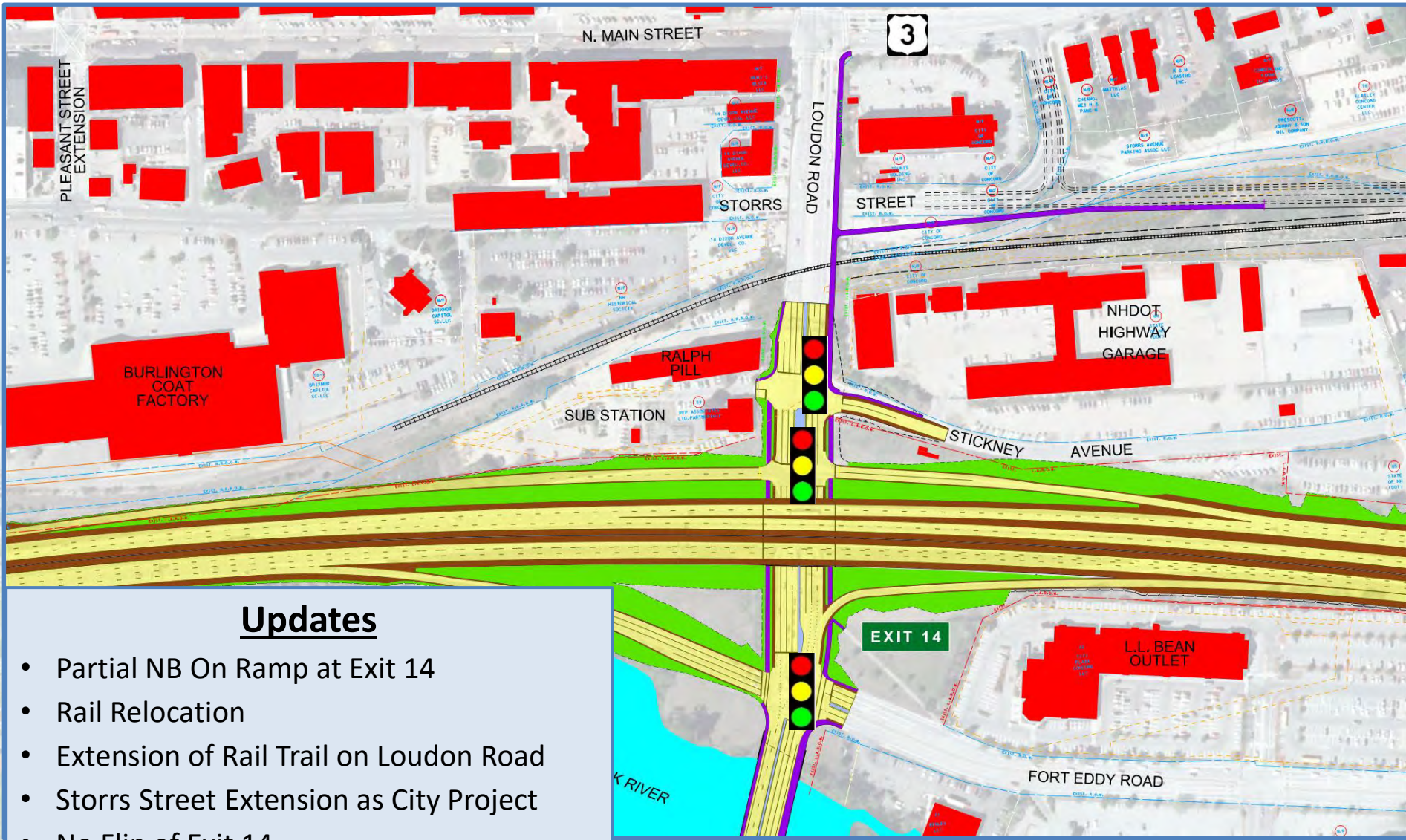
Exit 15 Proposed



Exit 14 – Proposed 2018



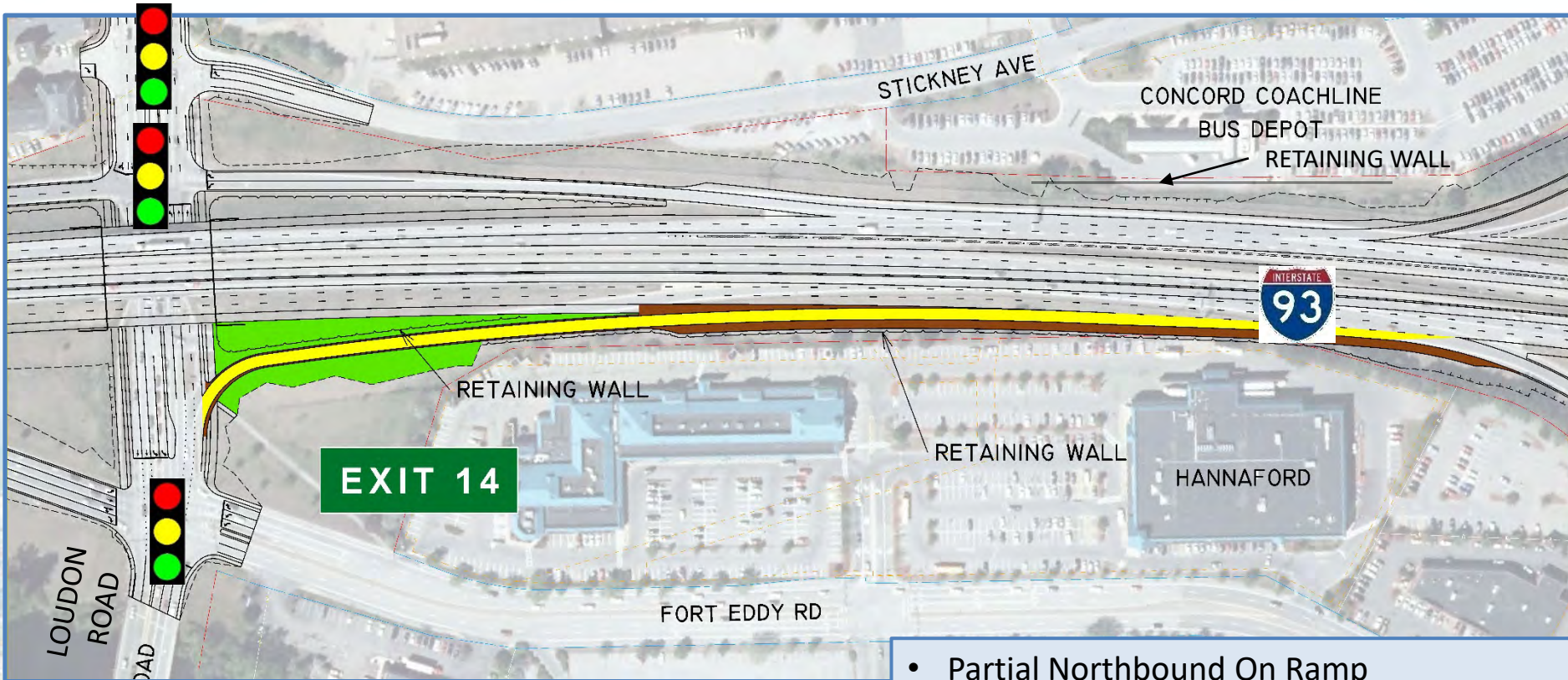
Exit 14 (2022)



Updates

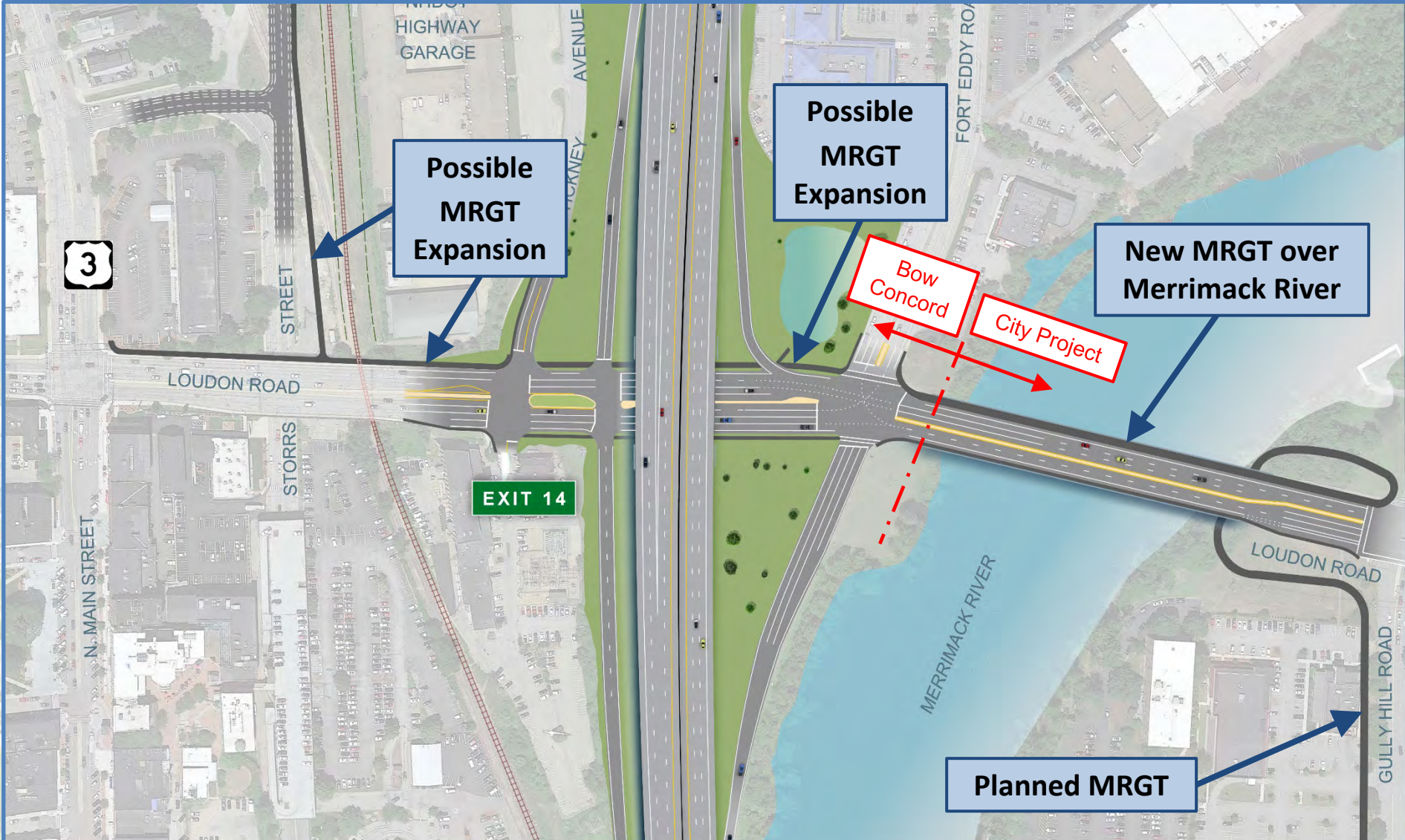
- Partial NB On Ramp at Exit 14
- Rail Relocation
- Extension of Rail Trail on Loudon Road
- Storrs Street Extension as City Project
- No Flip of Exit 14

2. Partial NB On Ramp at Exit 14

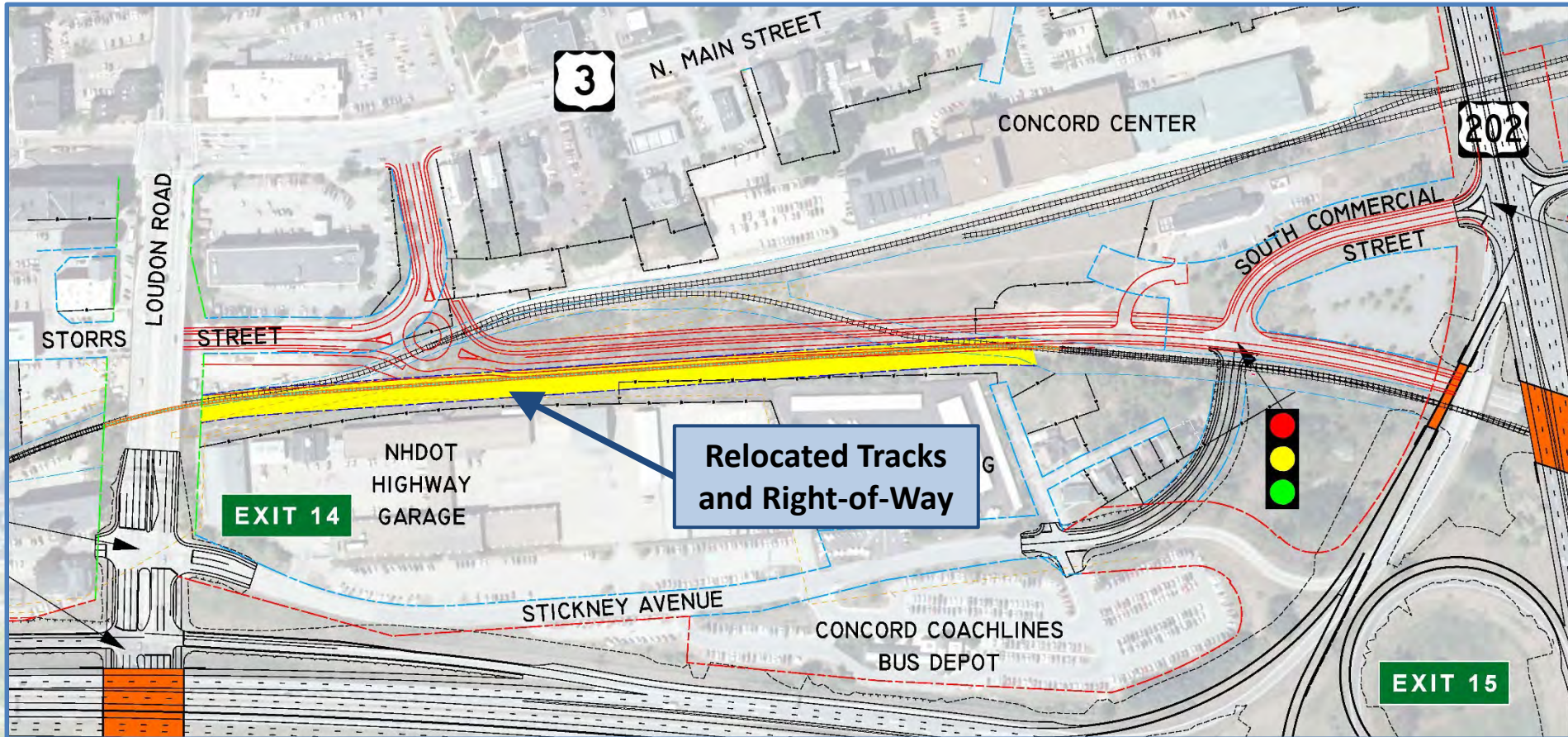


- Partial Northbound On Ramp
- WB Loudon Road To NB I-93
- No EB Loudon Road to NB I-93
- Retains NB Weave between Exits 14 & 15
 - Weave LOS B/C
 - Short Weaving Length
- Additional Project Cost Approx. \$4.0M

3. Expand the Merrimack River Greenway Trail (MRGT) Widened Loudon Road Bridge over Merrimack River

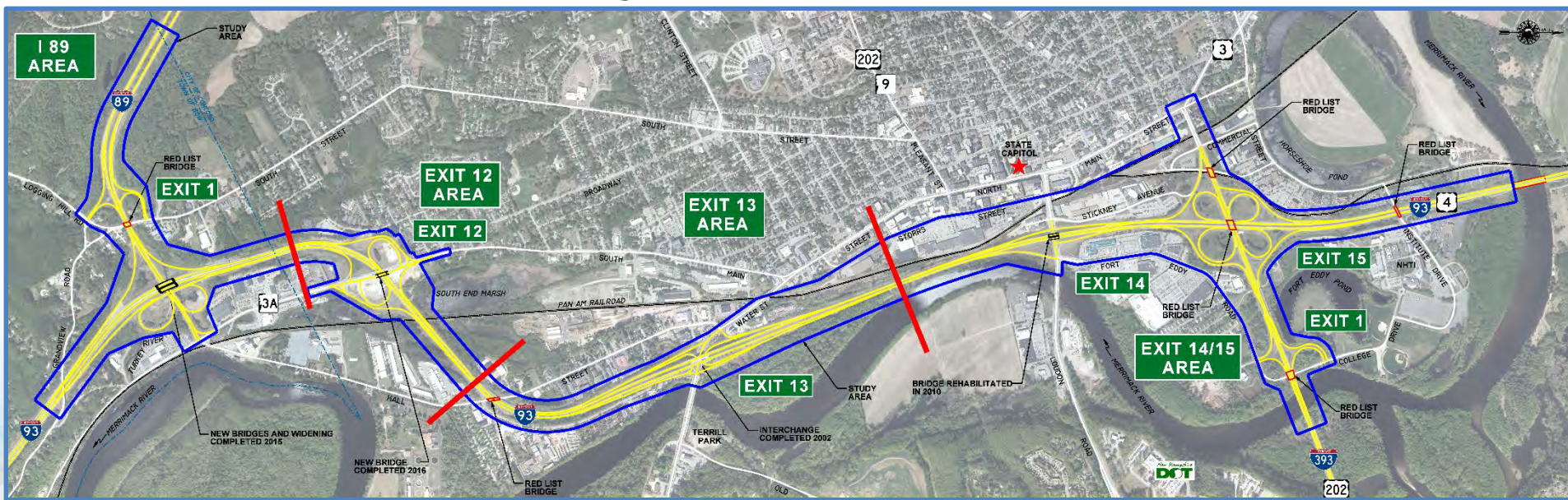


4. Railroad Track Re-alignment



- Relocate Active State Freight Tracks
- Enables Storrs Street Extension
- Property Transfers Required

Project Benefits



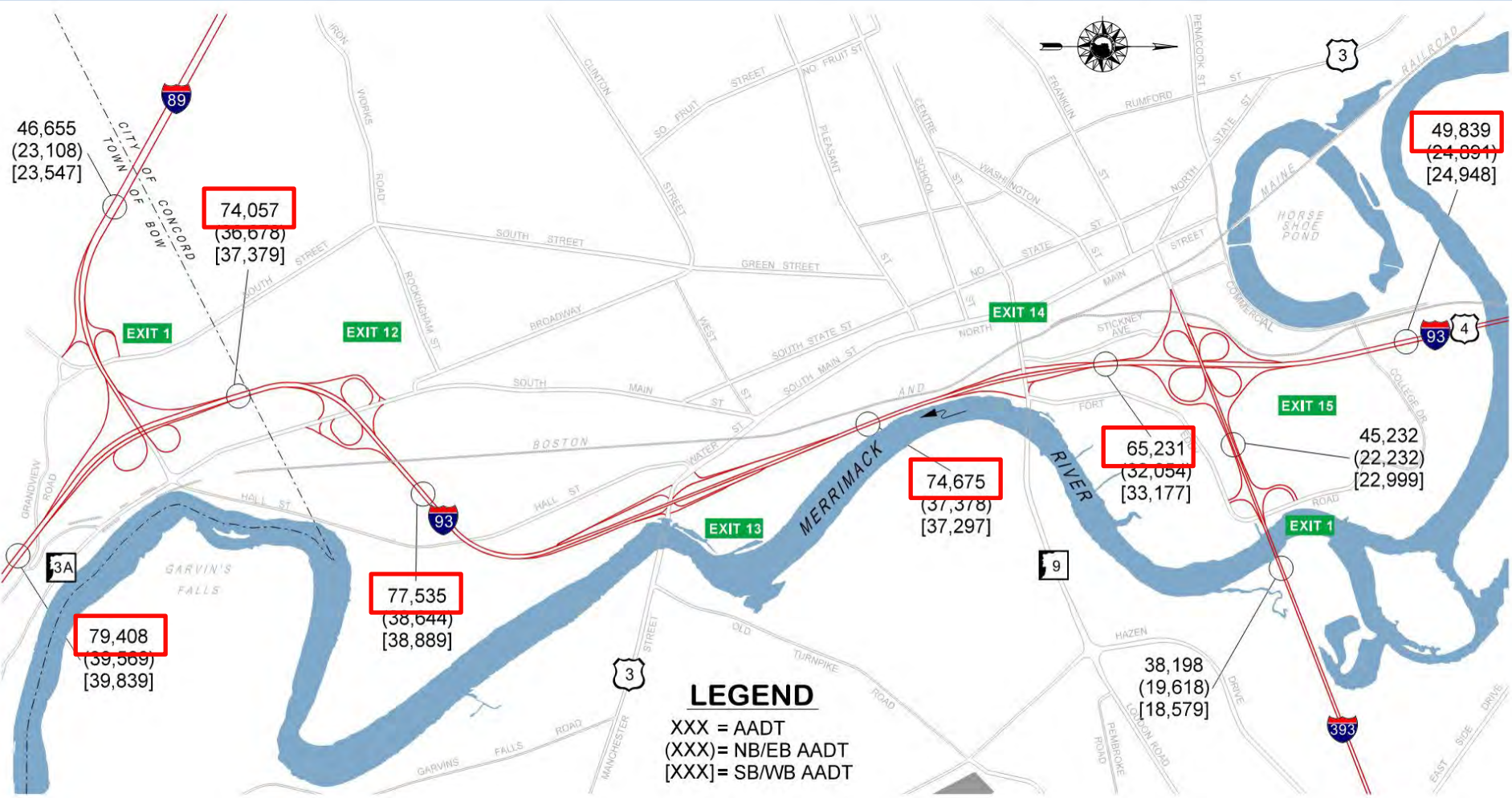
Safety Goals

- Red List Bridges (5)
- Crash Reduction
- Reduce or Eliminate Weaving b/w Interchanges
- Improve Inadequate Deceleration
- Reduce Congestion & Slow Speeds (Delay & Queuing)

City Benefits

- Improved Safety (Interchanges & Intersections)
- Fills Gap in MRGT
- Accommodates Pedestrians & Bicyclists
- Stormwater Treatment
- Limited Property Impacts
- Relocate Railroad Tracks
- Reduced Emissions & Fuel Consumption
- Reduced Congestion on Local Roads

Traffic Volumes



Cost Update

Project Cost Presented at Public Hearing (2018\$) \$267.9 M

Proposed 2022 Revisions (2022\$)

Old Turnpike Improvements	\$5 M
Exit 14 NB On-Ramp	\$4 M
MRGT Expansion	\$3 M
Railroad Relocation	<u>\$3 M</u>
	\$15 M

New Project Cost \$282.9 M

Additional Loudon Rd. Bridge Widening \$15 M

Next Steps

- Need City of Concord Support for Proposed Revisions
- Public Informational(s) Meeting – Winter 2023
- Revise NEPA Document (EA) – Winter to Summer 2023
- Public Hearing – Fall 2023
- Begin Final Design – Winter 2024

Project Contacts:

Jason Ayotte, PE

NHDOT Project Manager

(603) 271-3921

Jason.M.Ayotte@dot.nh.gov

Gene McCarthy, PE

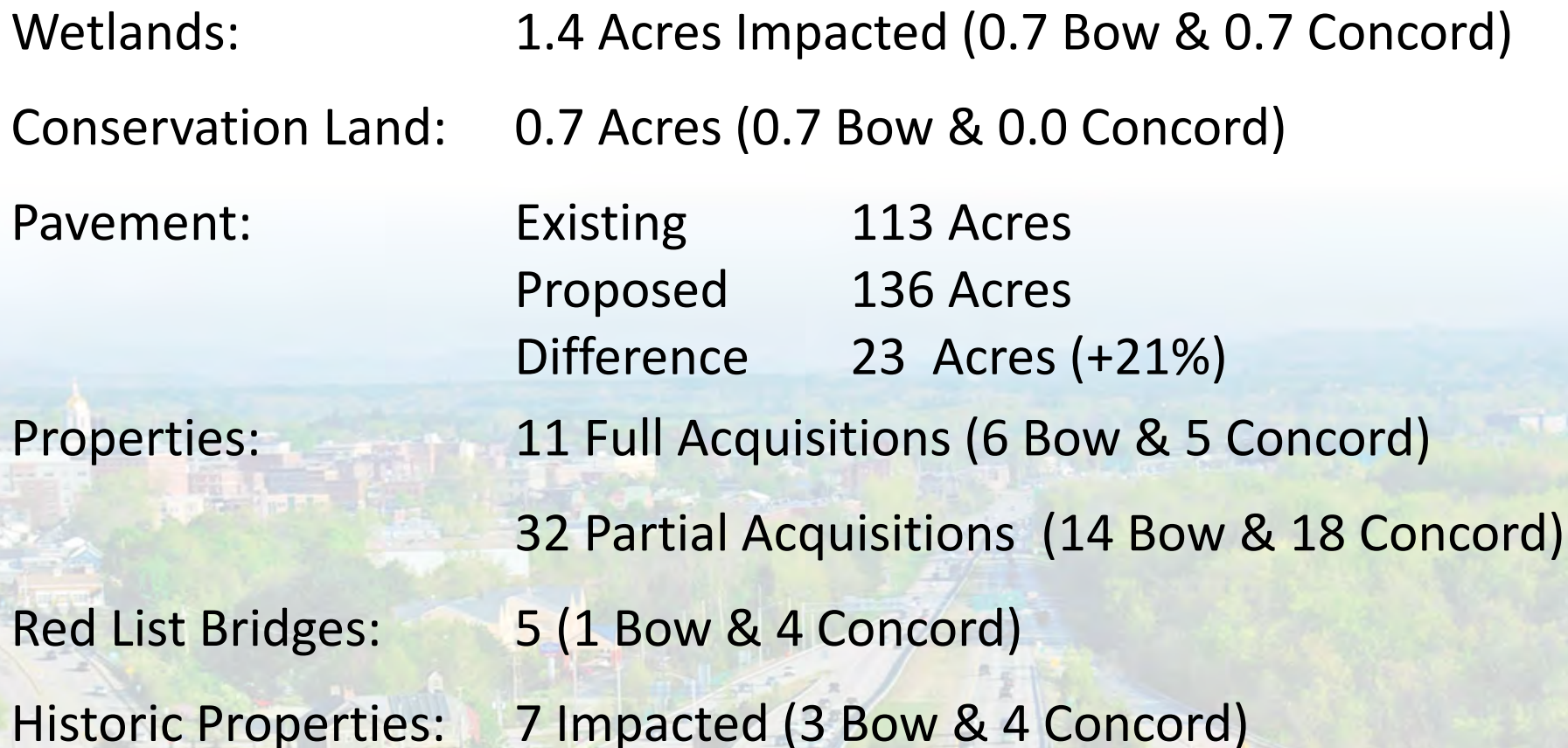
MJ Project Manager

(603) 225-2978

gmccarthy@mjinc.com

www.i93bowconcord.com

Fact Sheet



Wetlands:	1.4 Acres Impacted (0.7 Bow & 0.7 Concord)
Conservation Land:	0.7 Acres (0.7 Bow & 0.0 Concord)
Pavement:	Existing 113 Acres Proposed 136 Acres Difference 23 Acres (+21%)
Properties:	11 Full Acquisitions (6 Bow & 5 Concord) 32 Partial Acquisitions (14 Bow & 18 Concord)
Red List Bridges:	5 (1 Bow & 4 Concord)
Historic Properties:	7 Impacted (3 Bow & 4 Concord)