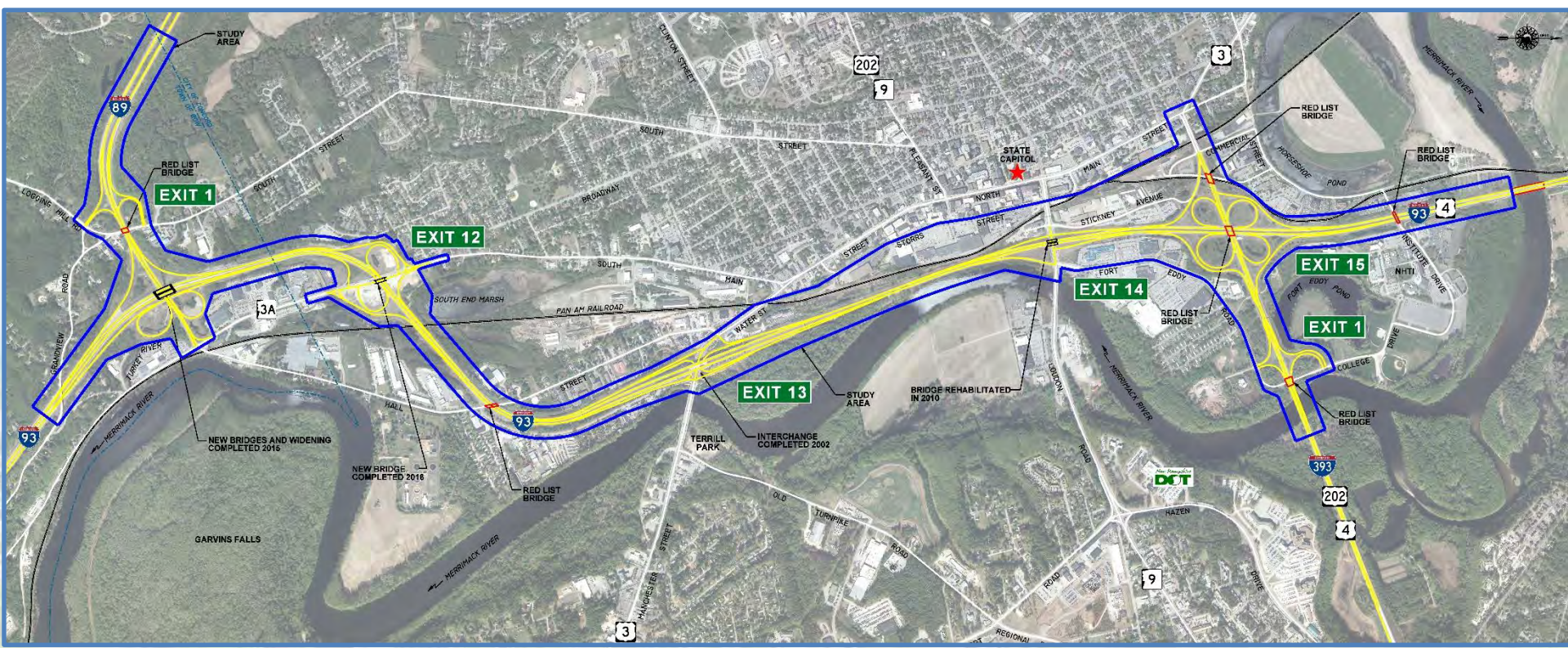


***Bow Concord I-93 Improvements
T-A000(018)
13742***

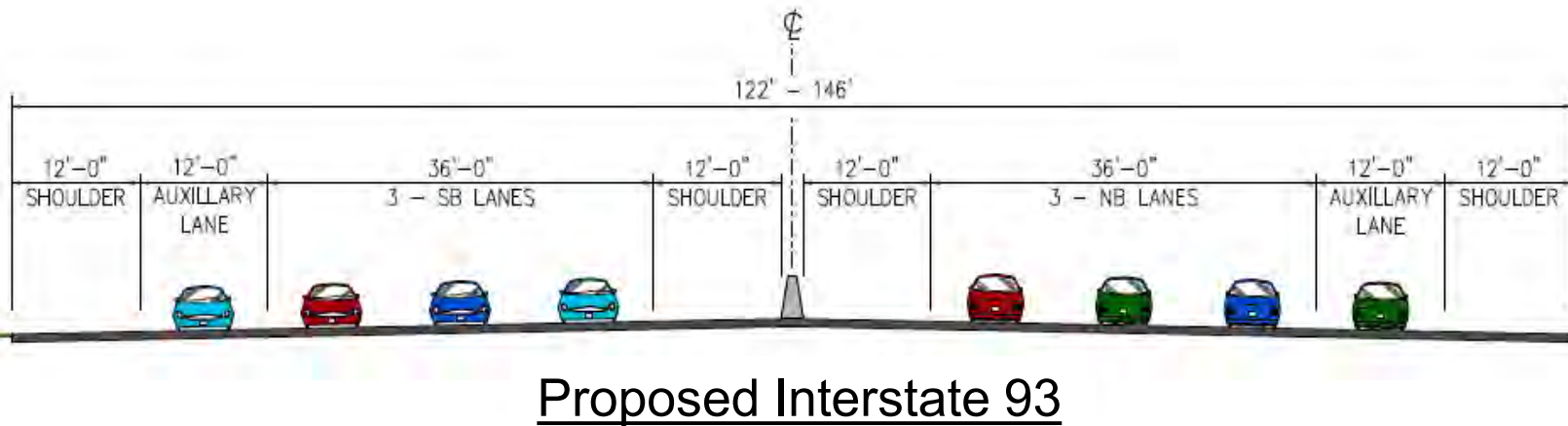
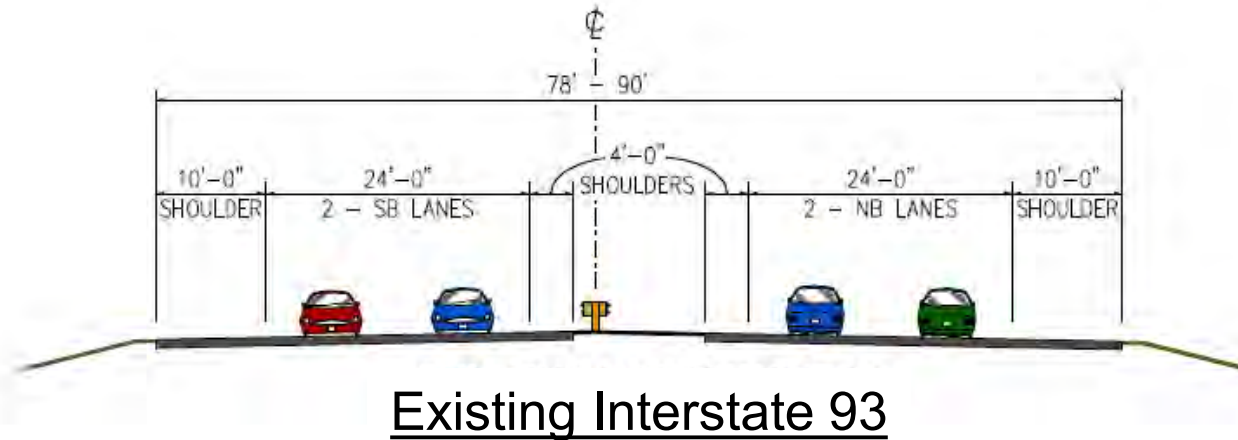
Joint Public Workshop

June 26, 2019

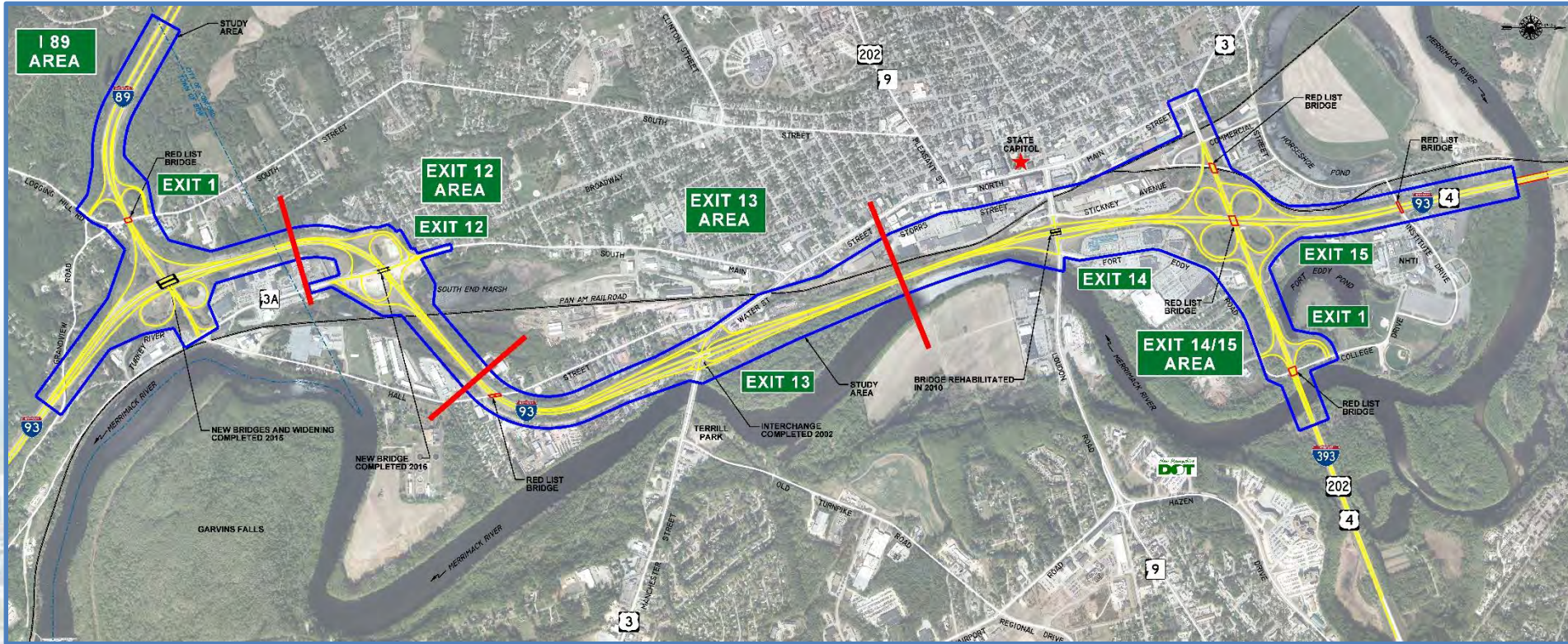
Project Overview



I-93 Typical Sections



Project Goals



- Red List Bridges
- Address Geometric Issues
- Address Operational Issues
- Maintain Access
- Pedestrian/Bicycle Accommodation
- Provide Stormwater Treatment
- Minimize Resource Impacts
- Minimize Property Impacts

Exit 14/15 Area



Exit 15 - Proposed

- Cloverstack
- Eliminates 2 Loop ramps
- Eliminates 4 weaves
- Maintains all Access



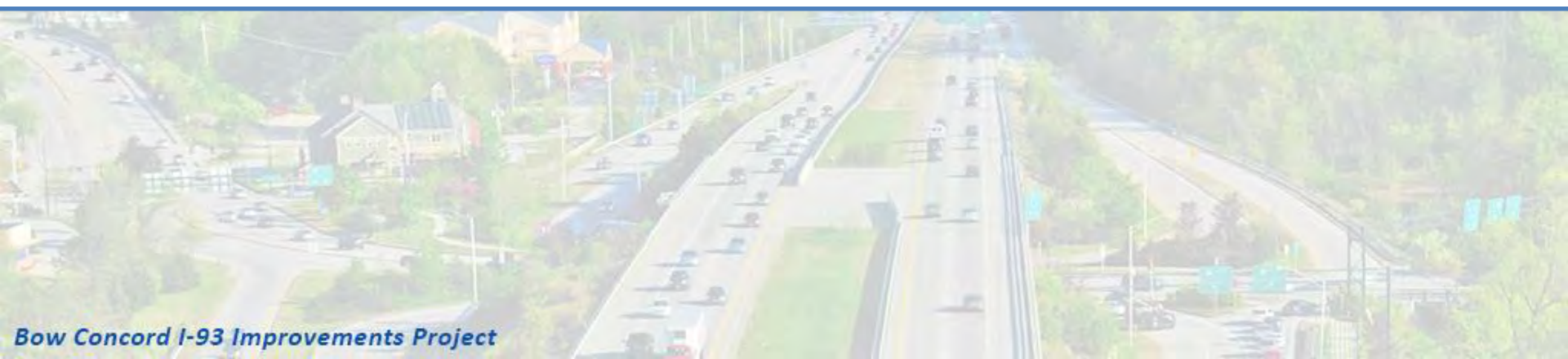
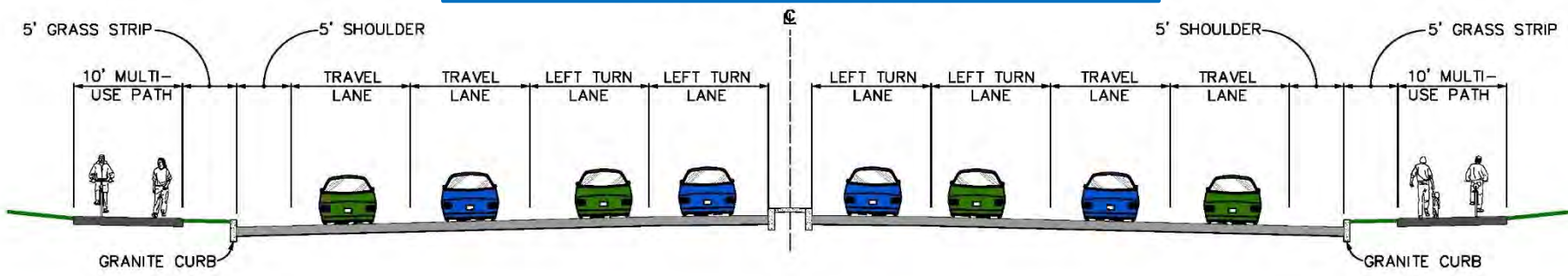
Exit 14 - Proposed



- Modified Diamond
- Eliminates Northbound Entrance Ramp
- Easterly shift of I-93
- Maintains access to Stickney Ave
- Avoids Historic Buildings
- Avoids Unutil Sub-station
- Avoids Railroad corridor

Exit 14 - Proposed

LOUDON ROAD – TYPICAL SECTION



Concord Comments/Concerns

1. Clear brush along I-93
2. Remove Highway Garage complex on Stickney Avenue
3. Consistency with Concord's Vision for I-93
4. Pedestrian Access from Downtown to the Merrimack River
5. Increased Traffic on Fort Eddy Road
6. Loss of the Northbound Entrance ramp at Exit 14

Concord Comments/Concerns

1. Clear brush along I-93

City is coordinating with Bureau of Turnpikes to get permission for the City to do the clearing.

2. Remove Highway Garage complex on Stickney Avenue

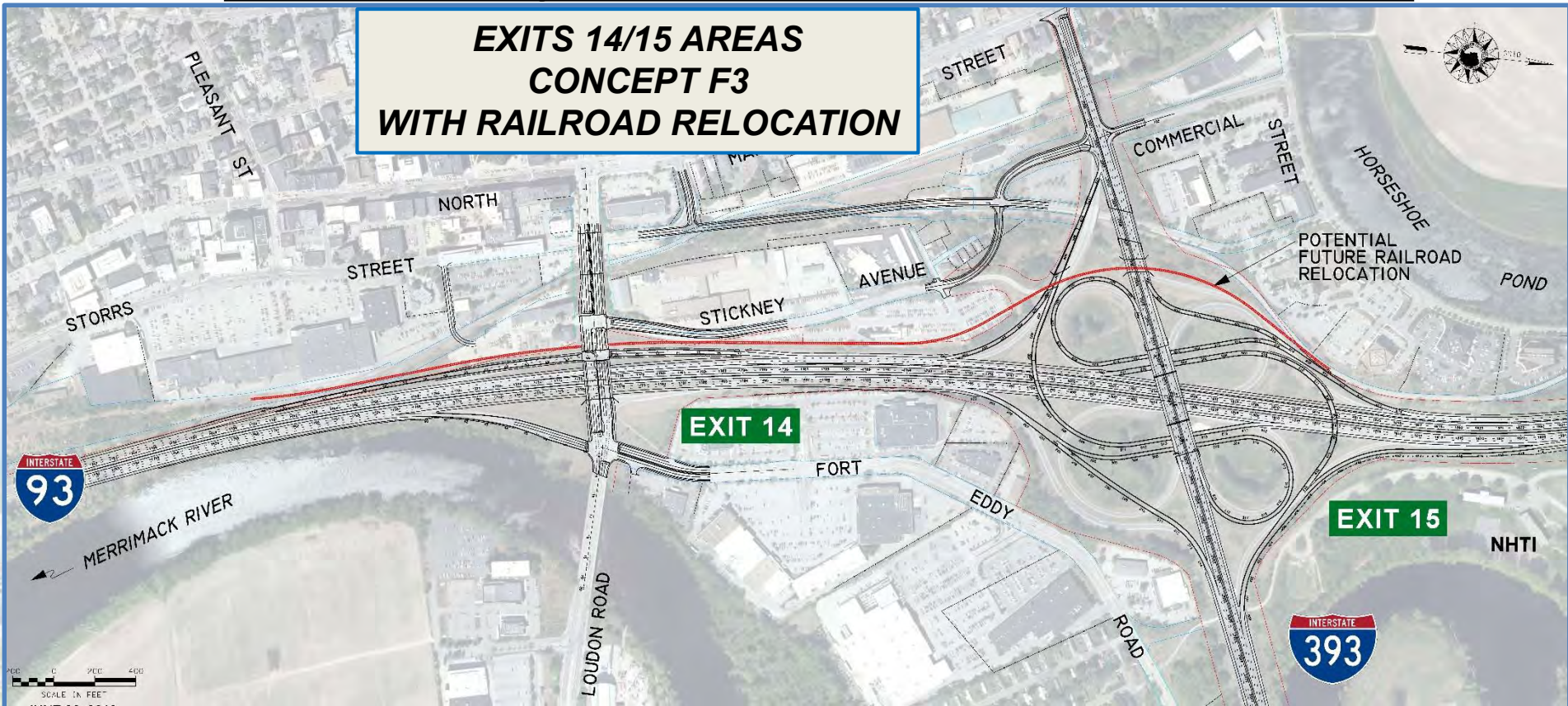
Separate project and not associated with Bow Concord. Funded through the State budget.

3. Consistency with Concord's Vision for I-93



- Functionally identical to Concept F2
- Loudon Road over I-93
- Relocation of Railroad possible
- Access to Ralph Pill via Stickney Ave.
- Additional \$41M
- Impacts Include:
 - ✓ 16-20 Month closure of Loudon Road (carries 20,000+ vehicles per day)
 - ✓ Short term closure of Exit 14 NB Off Ramp
 - ✓ Long term closure of both Exit 14 SB Ramps
 - ✓ Utilities under Loudon Road

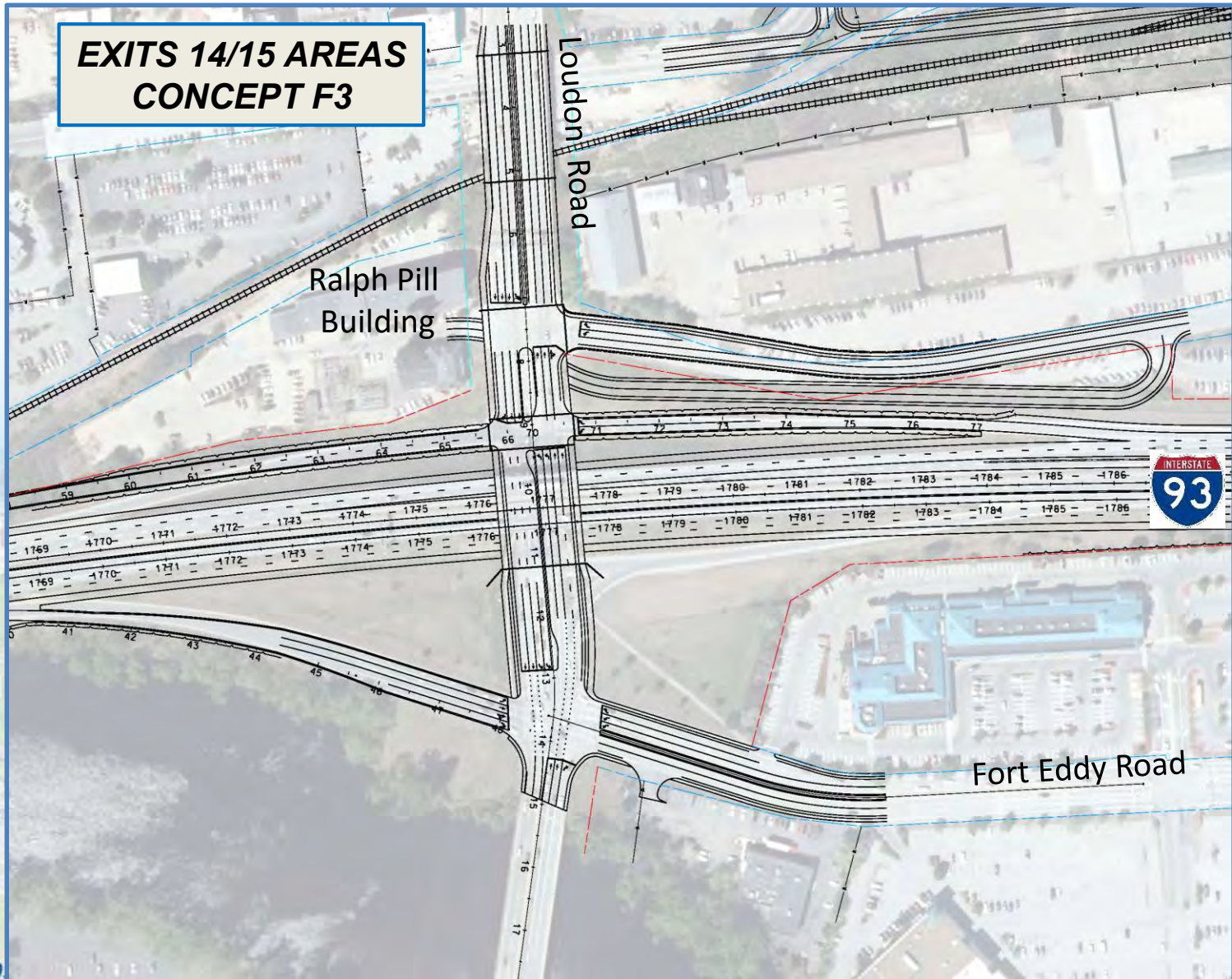
3. Consistency with Concord's Vision for I-93



- Relocate Railroad East close to I-93
- Access to Ralph Pill via Storrs Street
- Additional \$19.2M

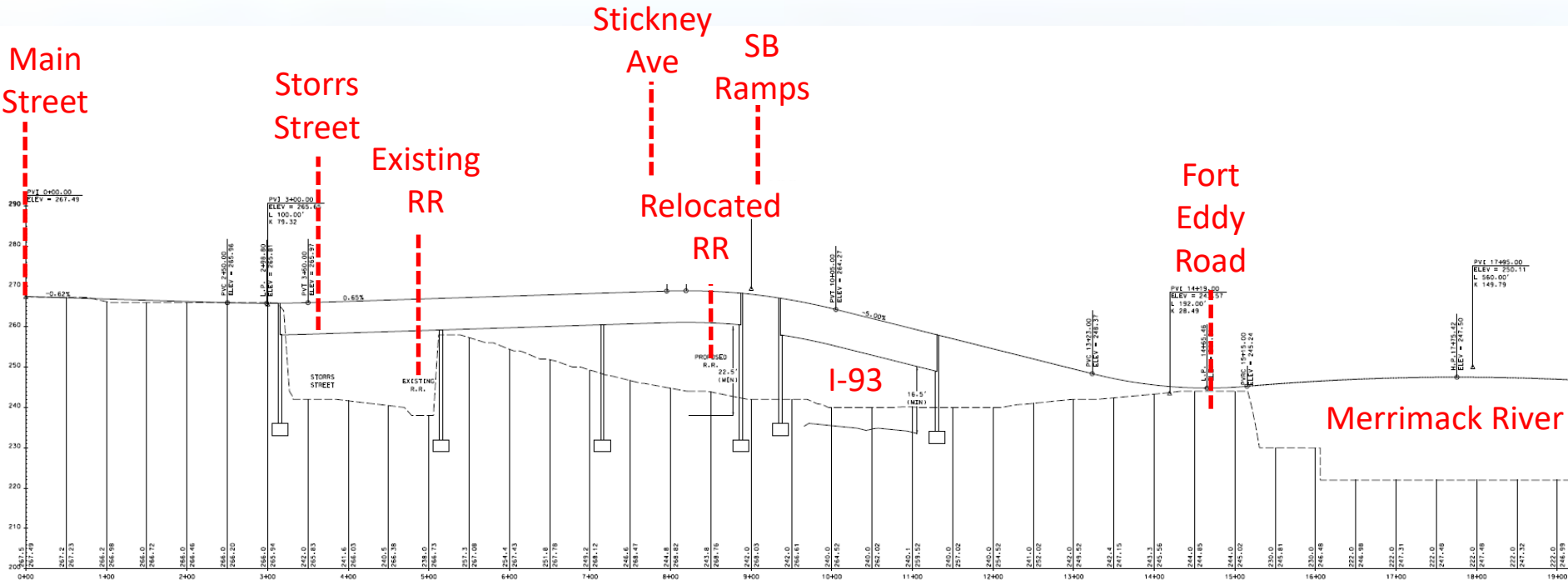
- Railroad Relocation Impacts include:
 - Unitil Substation
 - Historic Building
 - Bus Depot

3. Consistency with Concord's Vision for I-93



3. Consistency with Concord's Vision for I-93

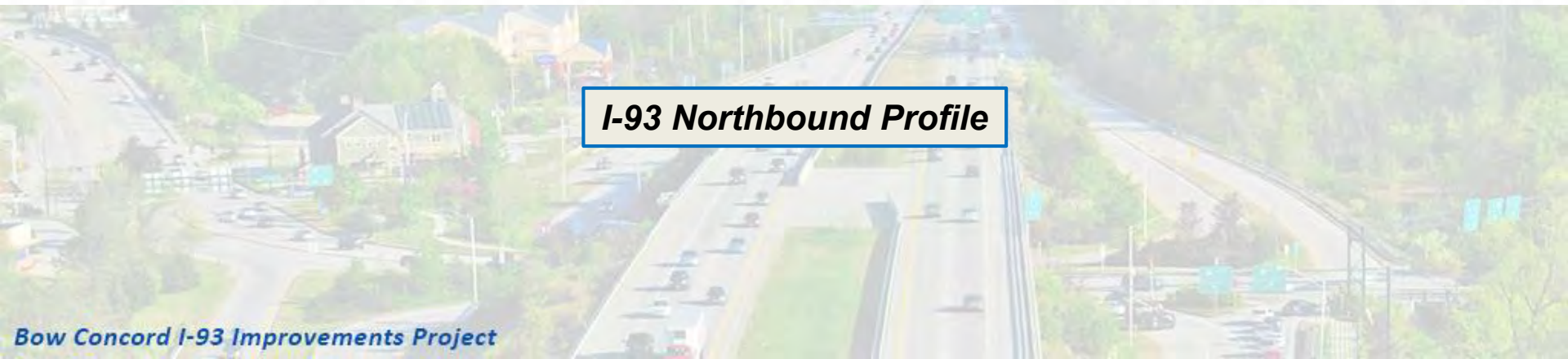
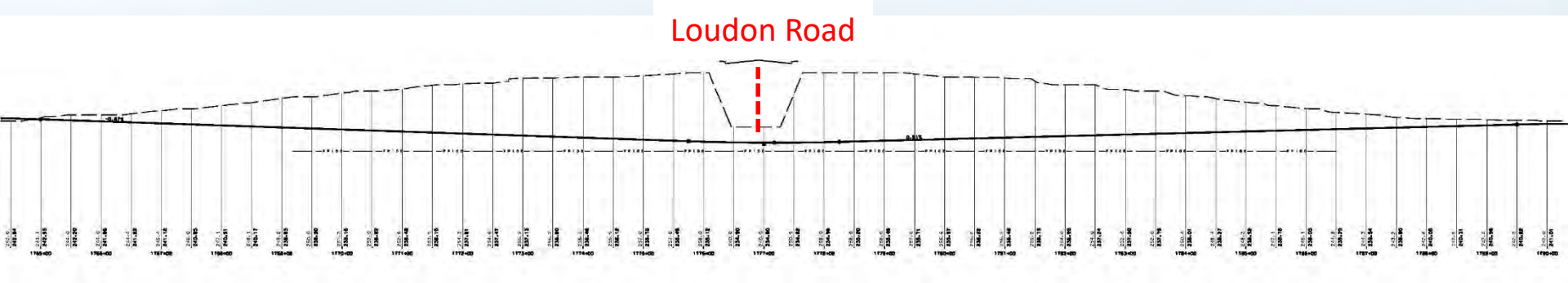
EXITS 14/15 AREAS CONCEPT F3



Loudon Road Profile

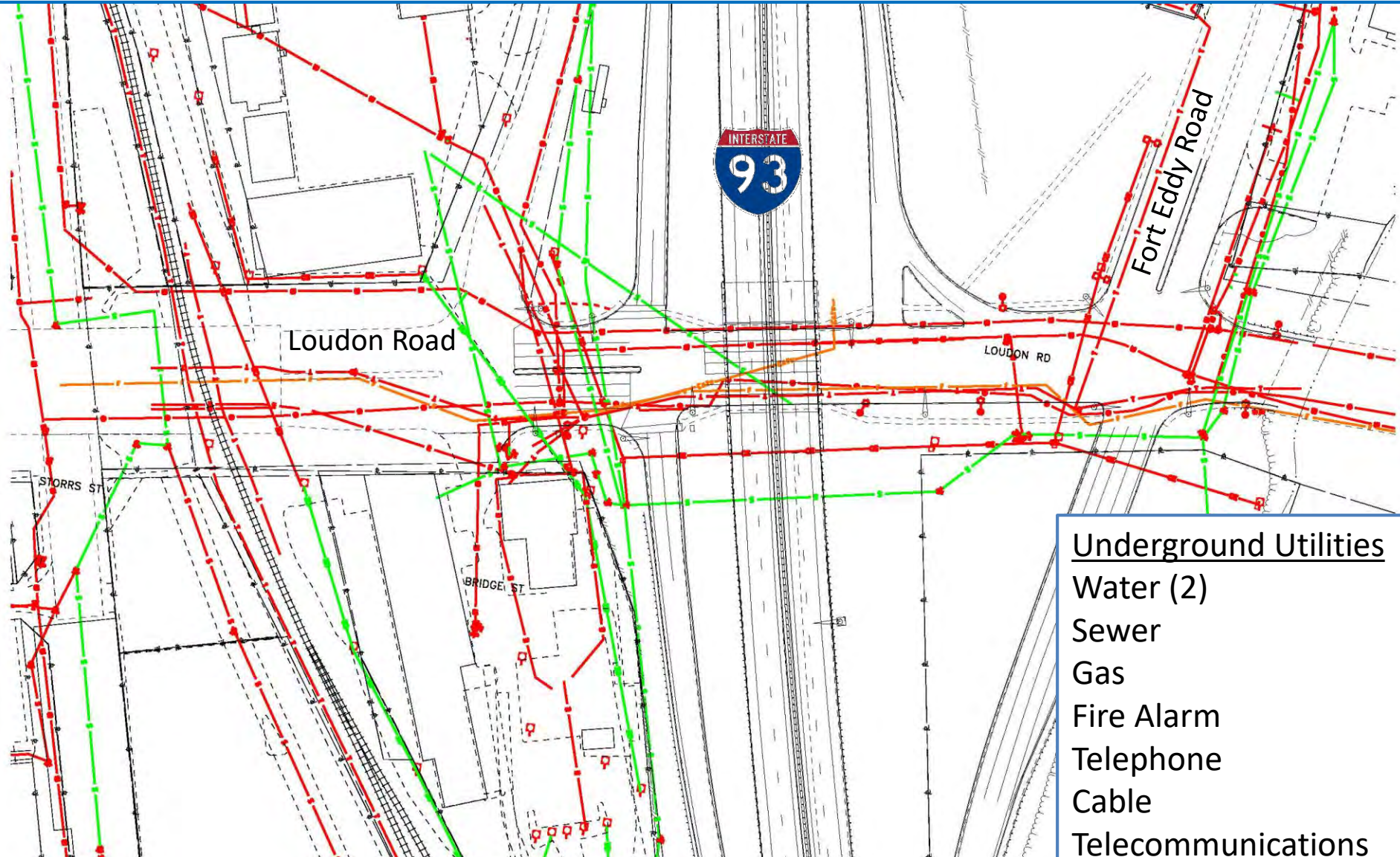
3. Consistency with Concord's Vision for I-93

**EXITS 14/15 AREAS
CONCEPT F3**

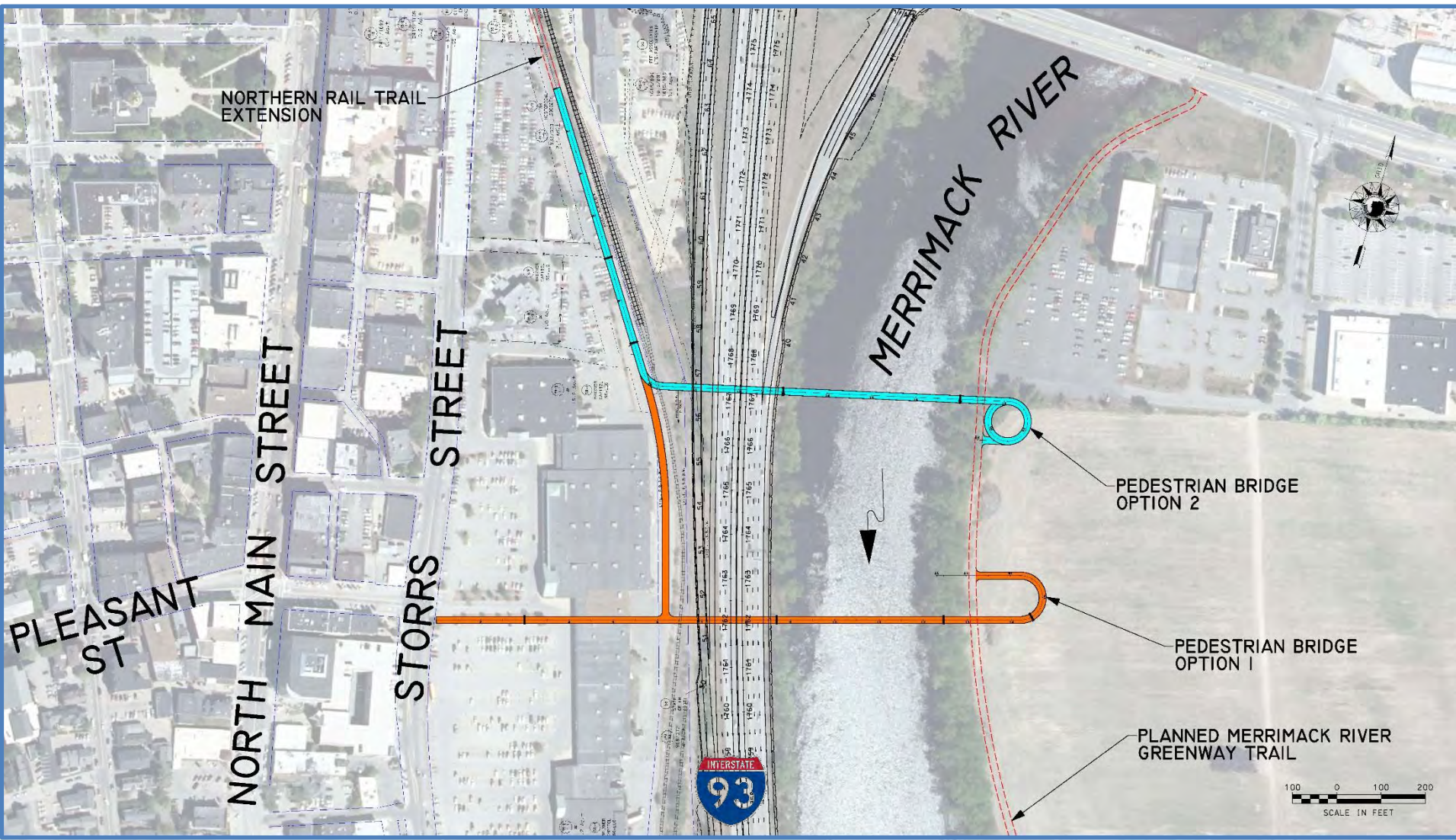


I-93 Northbound Profile

Utilities

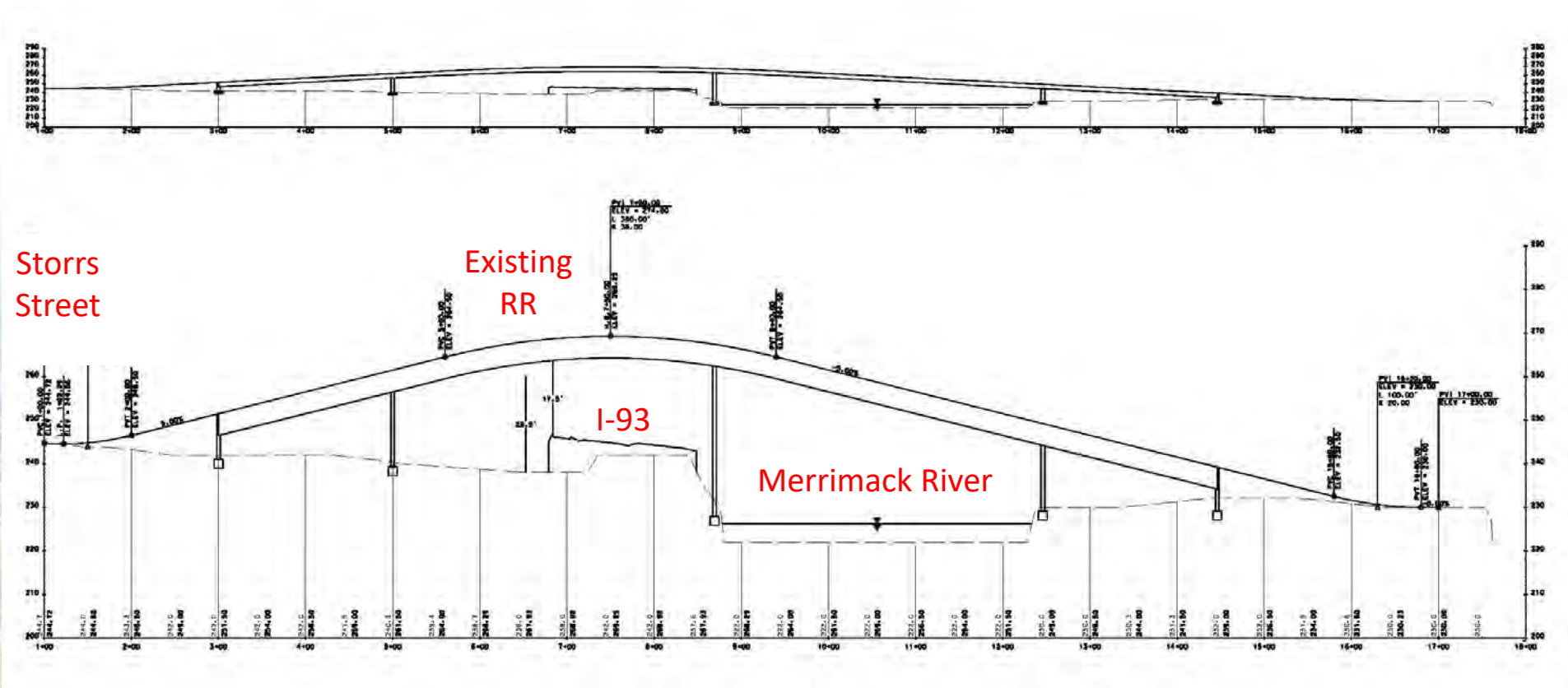


4. Pedestrian Access from Downtown to the Merrimack River



4. Pedestrian Access from Downtown to the Merrimack River

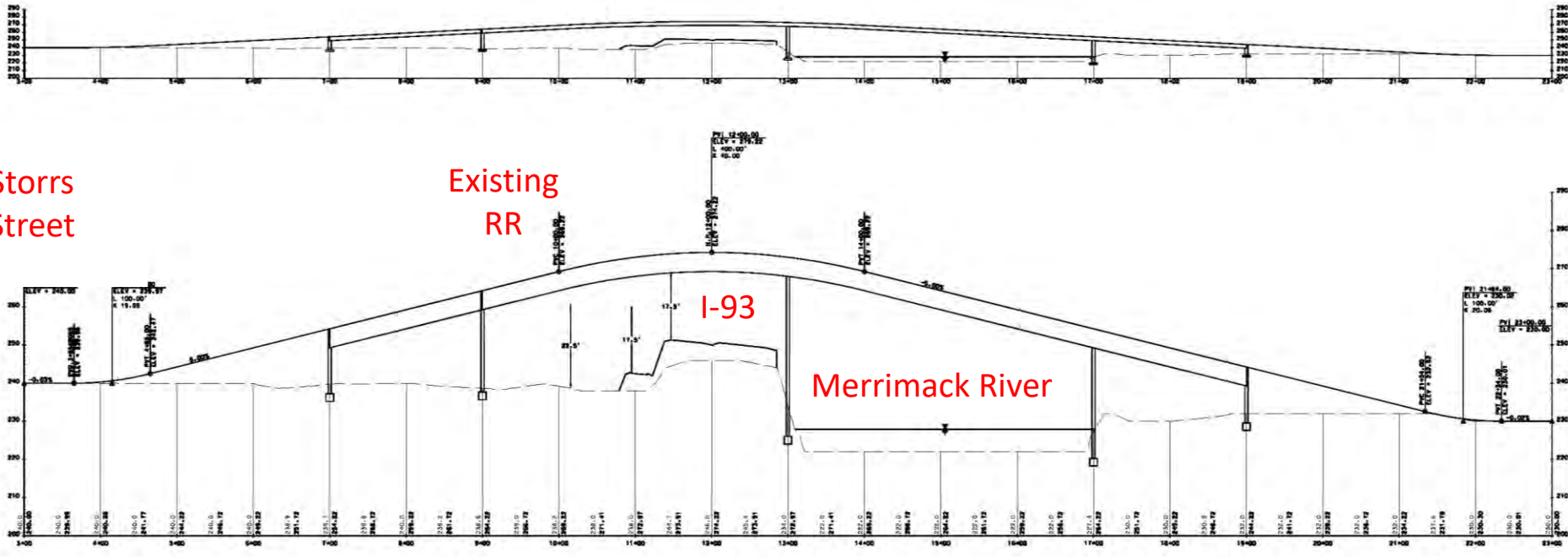
Pedestrian Bridge – Option 1



Note: Pedestrian could be lowered about 3' for Concept F3.

4. Pedestrian Access from Downtown to the Merrimack River

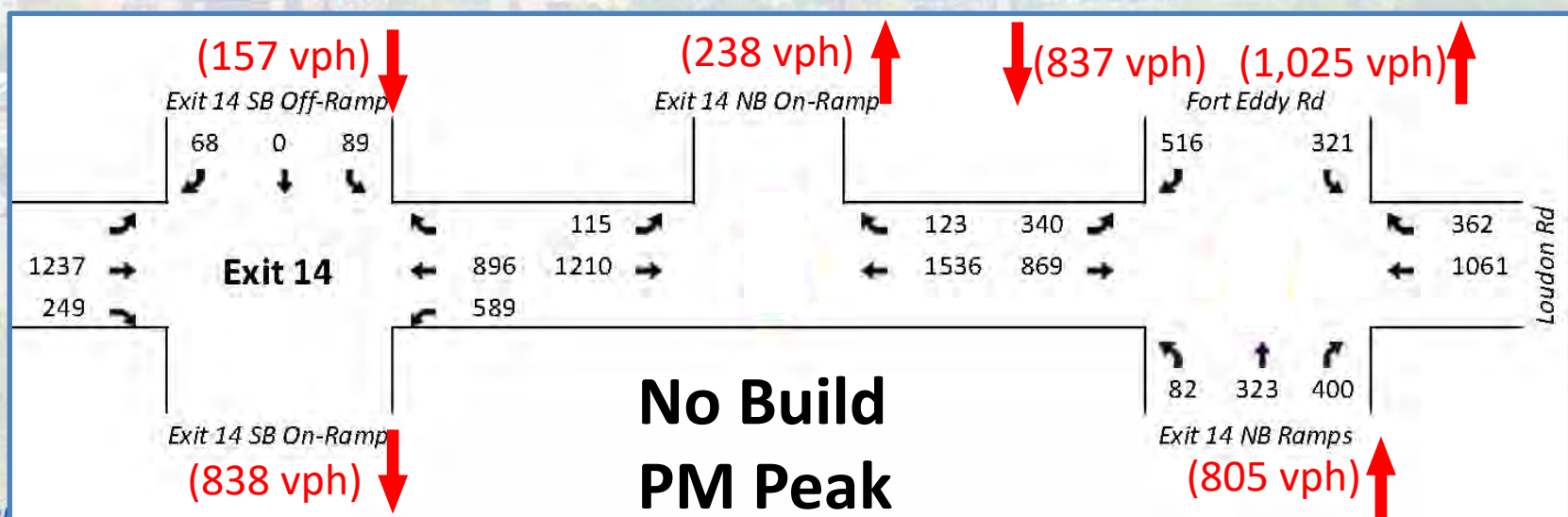
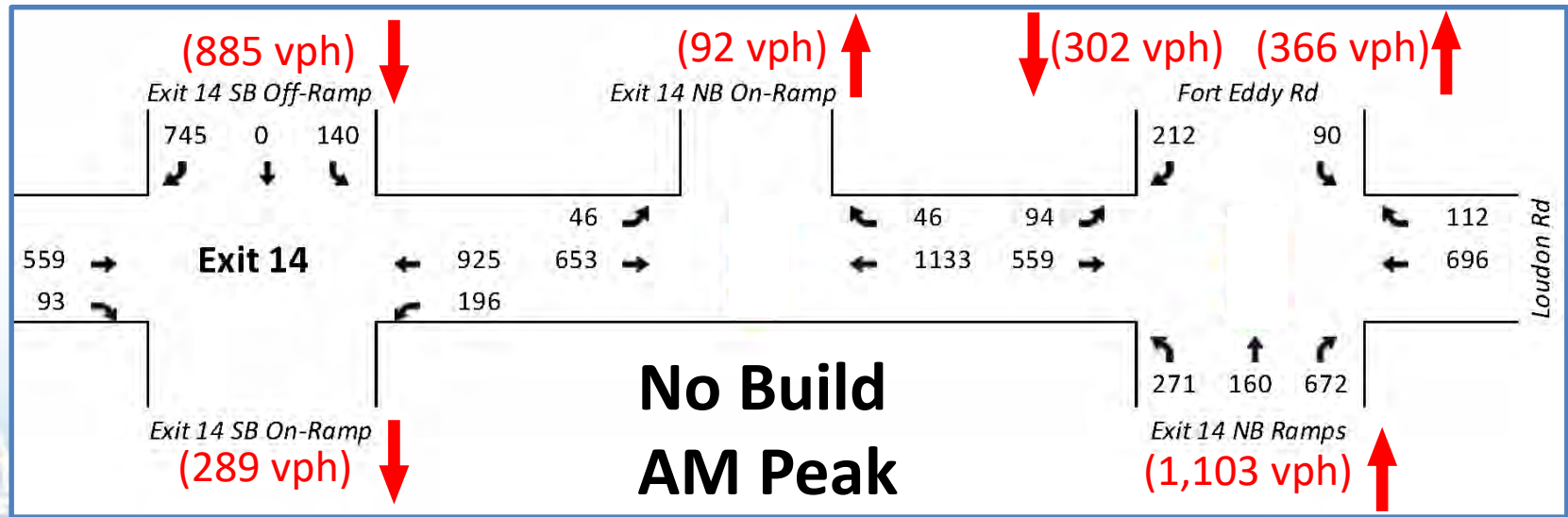
Pedestrian Bridge – Option 2

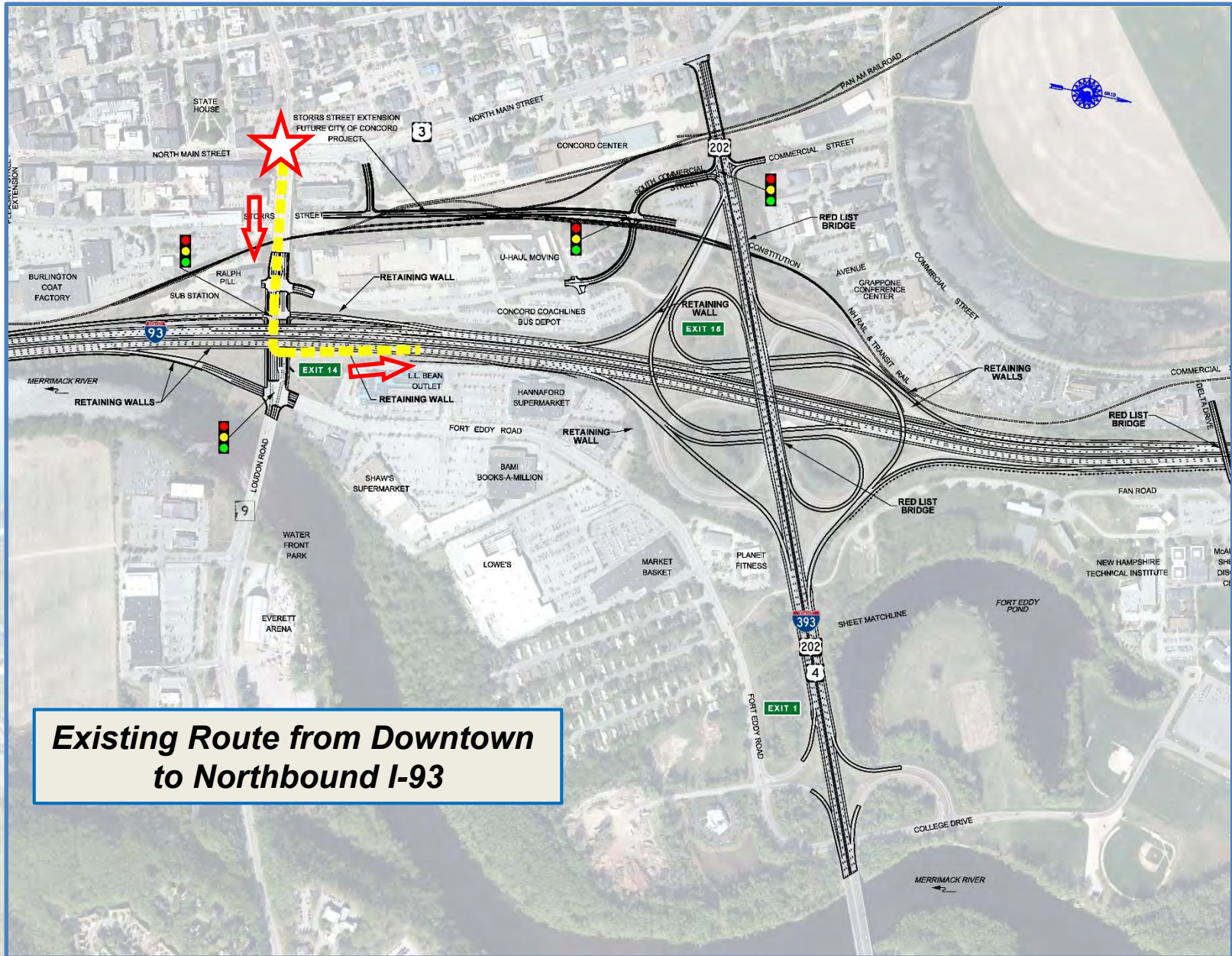


Note: Pedestrian could be lowered about 4' for Concept F3.

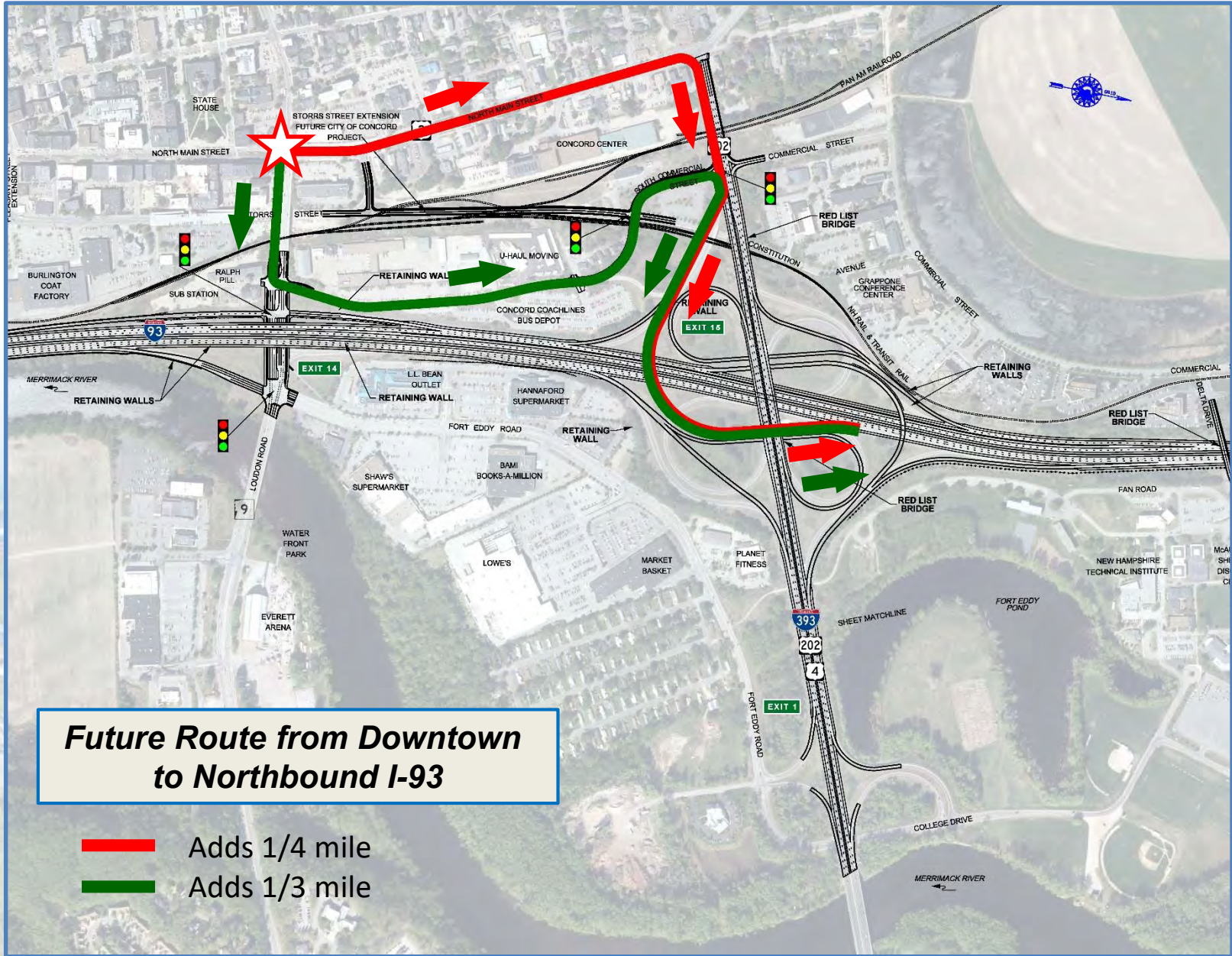
Design Year 2035

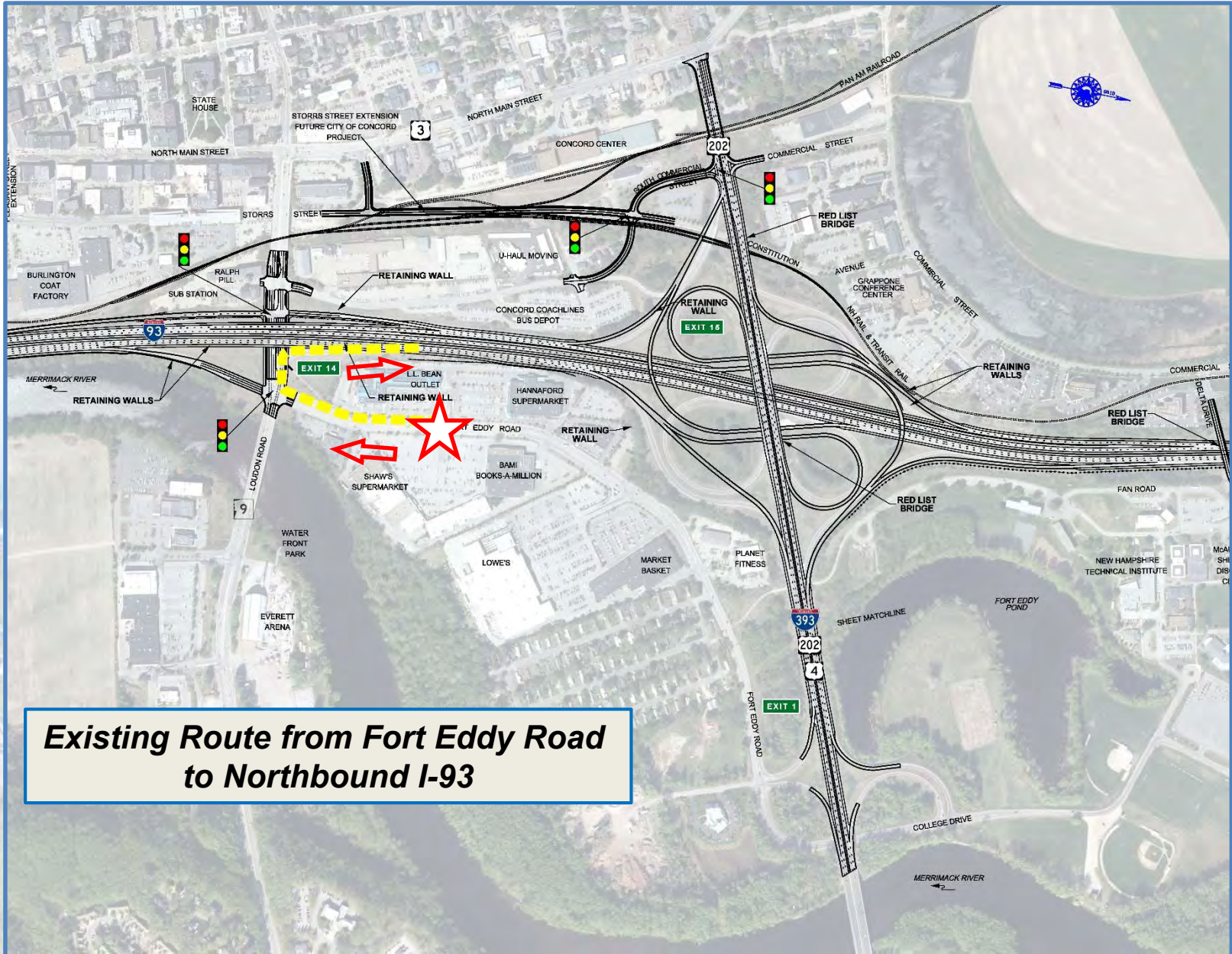
- 5. Increased Traffic on Fort Eddy Road
- 6. Loss of the Northbound Entrance ramp at Exit 14



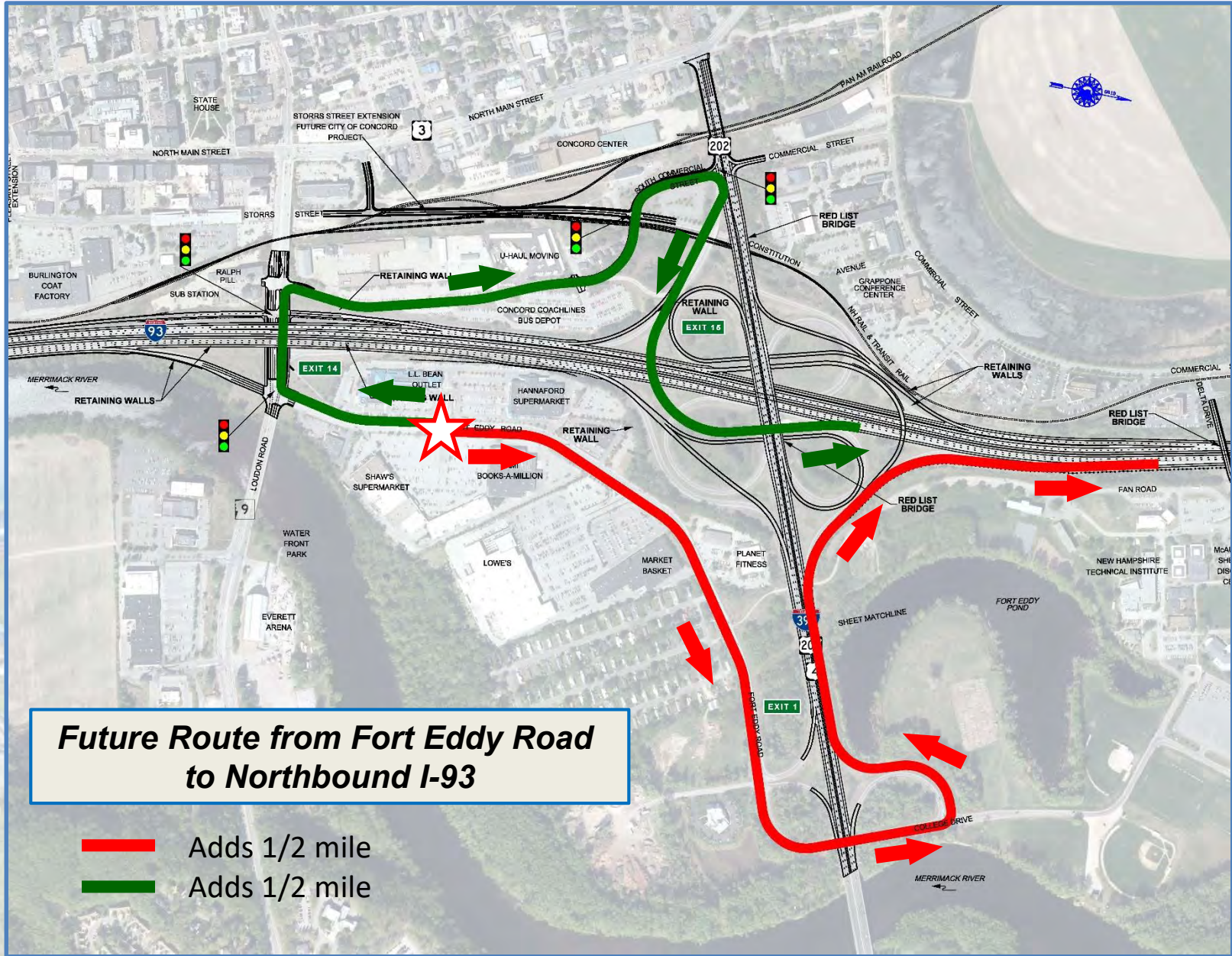


Existing Route from Downtown to Northbound I-93





**Existing Route from Fort Eddy Road
to Northbound I-93**



Future Route from Fort Eddy Road to Northbound I-93

- Adds 1/2 mile
- Adds 1/2 mile

Project Costs

Bow Concord I-93 Improvements Project

Preferred Alternative Cost Matrix

(Millions \$)

SEGMENT	Concept	Construction \$	Right-of-Way \$	Engineering and Permitting \$	Mitigation \$	Utility \$	Total Project \$
I-89 Area	K	\$62.0	\$1.16	\$6.20	\$0.62	\$0.00	\$70.0
Exit 12	F	\$29.5	\$0.09	\$2.95	\$0.30	\$1.00	\$33.9
Exit 13	B	\$34.8	\$0.36	\$3.48	\$0.35	\$0.00	\$39.0
Exit 14/15	F2	\$111.2	\$0.47	\$11.12	\$1.11	\$1.00	\$125.0
Total		\$237.5	\$2.1	\$23.8	\$2.4	\$2.0	\$267.9

(Assessed Value)

(10% of Constr.)

(1% of Constr +
any Major Items.)

Potential Costs

SEGMENT	Concept	Construction \$	Right-of-Way \$	Engineering and Permitting \$	Mitigation \$	Utility \$	Total Project \$
Exit 14/15	F2	\$111.2	\$0.47	\$11.12	\$1.11	\$1.00	\$125.0
Exit 14/15	F3	\$148.1	\$0.47	\$14.81	\$1.48	\$1.00*	\$165.9 +\$40.9
Exit 14/15	F3 with Railroad Relocation	\$153.2	\$5.09	\$15.32	\$1.53	\$10.00*	\$185.1 +\$60.1

*Does not include utility impacts/relocations on Loudon Road.

Pedestrian Bridge (Construction Only)

\$12M - \$30M

Open Discussion

Schedule

- Final Environmental Document – Summer 2019
- Final Design / Right of Way Acquisition – 2019 to 2023
- Construction – Begin 2024 with current funding
- Completion – 2033 or sooner



Questions

www.i93bowconcord.com

