

Providence Bicycle and Pedestrian Advisory Commission

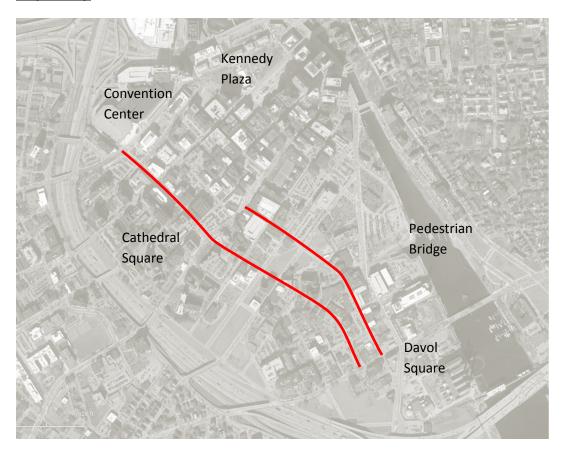
Jorge O. Elorza, Mayor

<u>Staff Report:</u> Empire, Chestnut, and Richmond Streets – Downtown – Ward 1 (For Action) Presented at August 15, 2018 BPAC meeting

Project Background

The City of Providence Department of Planning and Development seeks comments from the BPAC regarding conceptual plans for bicycle facilities on Empire, Chestnut, and Richmond streets in Downtown. This will be a conceptual level review of the project and will be the first of two reviews before the Commission.

Project Map





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Previous Recommendations

- 6/15/16: "Empire Street should be restriped between Weybosset Street and Sabin Street. One of the three vehicular travel lanes should be eliminated and the remaining two travel lanes should be reduced to 11' in width in order to accommodate two 5' wide bike lanes and two 3.5' buffer zones/door zones between the parking lanes and the bike lanes."
- 10/18/17: "The Department of Planning and Development and the Rhode Island Public Transit
 Authority should continue conversations about bicycle infrastructure on Eddy Street and
 Richmond Street, at Rhode Island Hospital, and Exchange Street with the Chair of the BPAC if
 appropriate and report back to the BPAC at the November meeting on the results of those
 conversations."

Description of Improvements

- The two options presented would both create new bicycle connections between Fountain St in the north and Point St in the south.
- On Empire St between Fountain St and Weybosset St:
 - Option 1 features one-way bike lanes on either side of the street, sometimes without protection and sometimes with a buffer that could incorporate vertical separation.
 - Option 2 features a two-way separated bike lane on the west side of Empire St.
- For Chestnut St and Richmond St, both options involve converting the streets entirely to oneway, with Richmond St becoming only northbound and Chestnut St becoming only southbound.
 In both options, the street not used for bike facilities would feature increased on-street parking supply to make up for the displaced parking on the other corridor.
 - Option 1 makes use of the planned Clifford St two-way protected bike lane between Chestnut St and Richmond St to put the two-way protected bike lane on Chestnut St between Weybosset St and Clifford St, and on Richmond St between Clifford St and Point St.
 - Option 2 features a two-way protected bike lane on Chestnut St alone between Weybosset St and Point St.

Staff Recommendations on Concept Plans

- Include pedestrian refuge islands and pedestrian bulb-outs at intersections to reduce pedestrian crossing distances, especially on Empire Street.
- For Empire Option 1 at Westminster St (northbound), the bike lane should remain against the curb with the parking protecting it from vehicular traffic.



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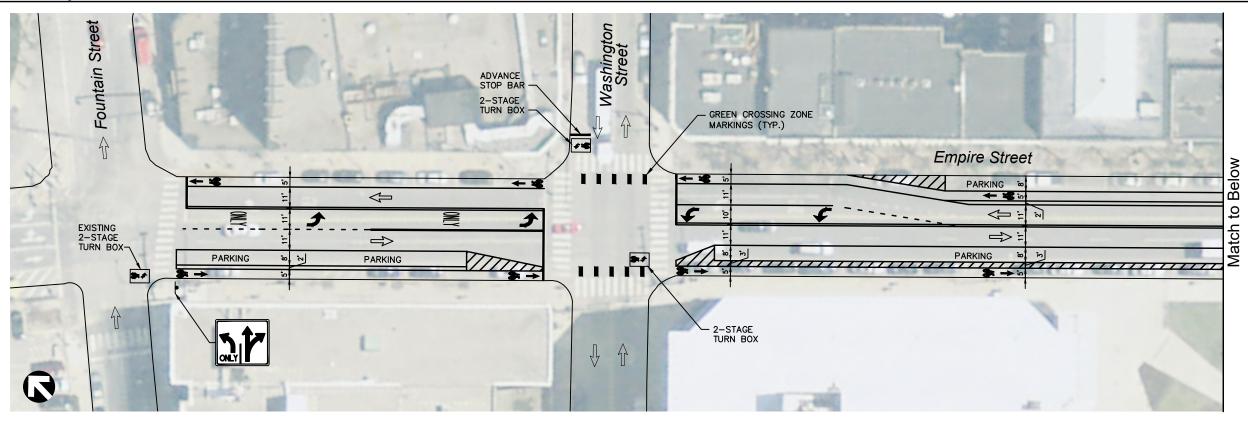
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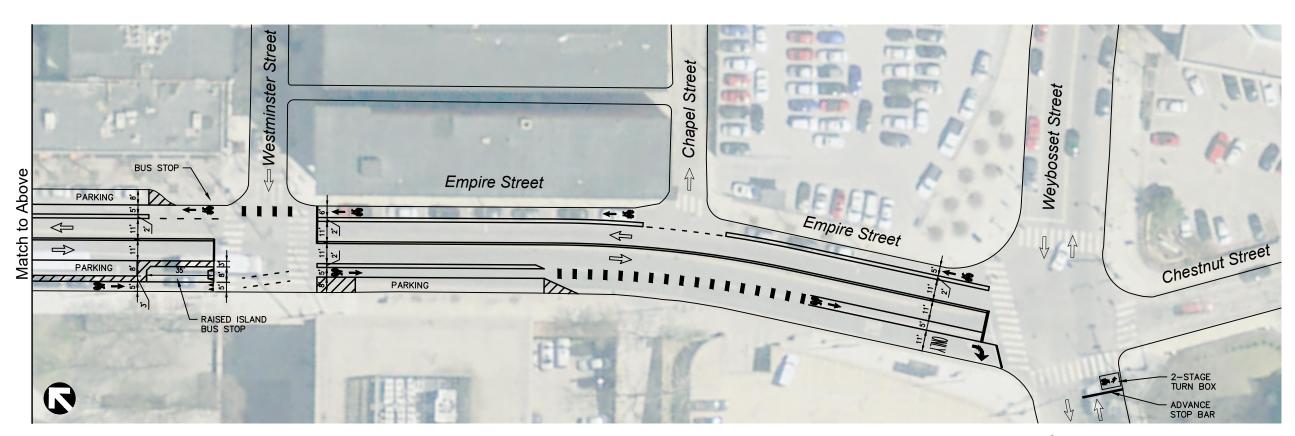
- Look into a protected intersection treatment for intersection of Weybosset St and Empire St (keeping bike lane against the curb, see Fig. 1 to right)
- In Option 2 for Empire St at Westminster St, the entire crossing should be raised out to the extended curb in the buffer zone, with bike lanes ramping up to sidewalk height.
- In Option 1 for Richmond St, between Clifford St and Ship St, the bike lane should be widened to 10 ft with a 2 ft buffer, a 10 ft travel lane, and an 8 ft parking lane.
- On Empire St in both options, consider removing the left-turn only lane from the northbound approach to Washington St, using that width instead to extend parking on both sides of the street to Washington St.

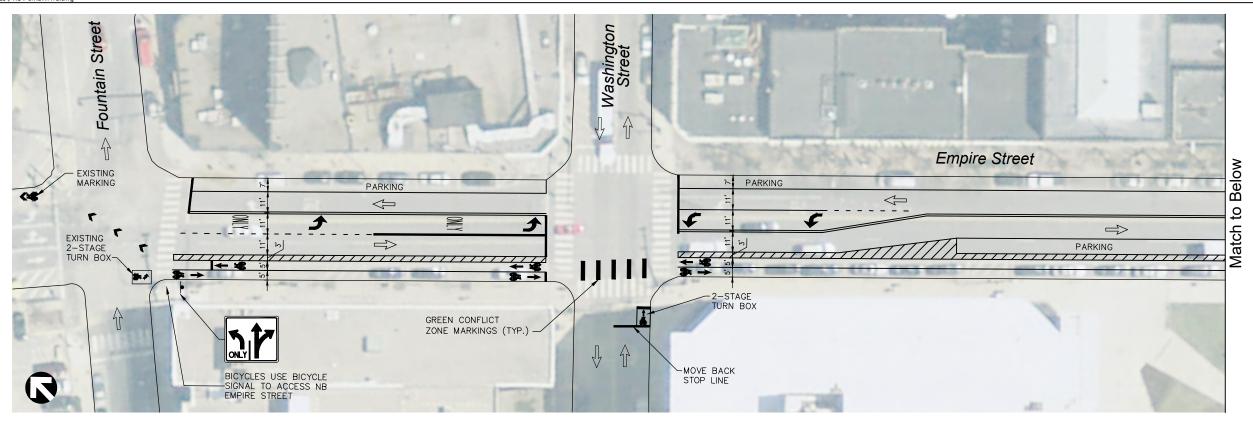
Crossing Setback 19.5 ft preferred if if conflicting turning movements are allowed Queuing **Corner Radius** 8 x 6.5 ft 20 ft or greater based Preferred on control vehicle **Apron Radius** (If applicable 10-20 ft based on passenger car turning speed Pedestrian **Approach Taper**For smooth transition Island 6.5 - 14 ft to setback crossing

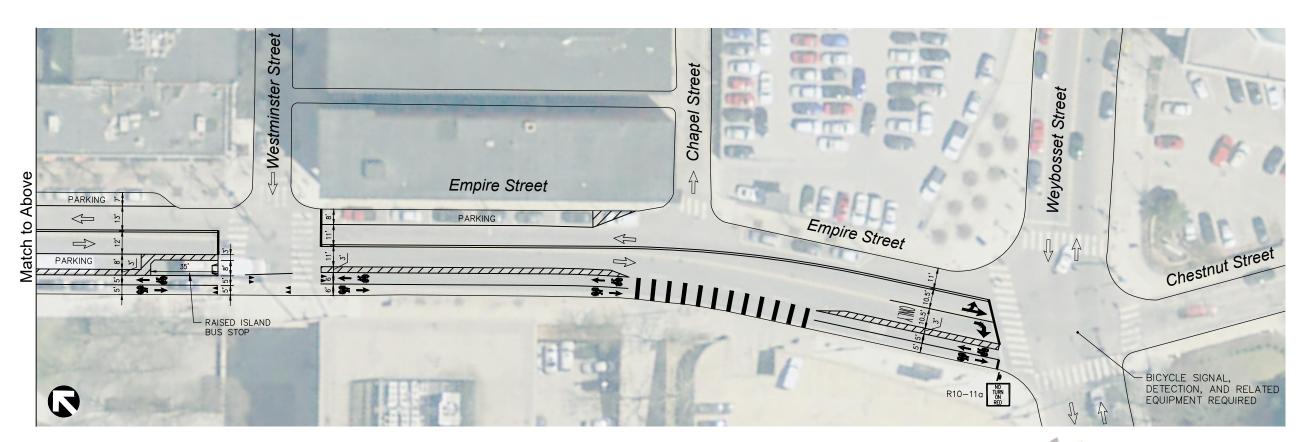
Respectfully submitted by Alex Ellis.

Figure 1 - Alta Planning 2015: Evolution of the Protected Intersection

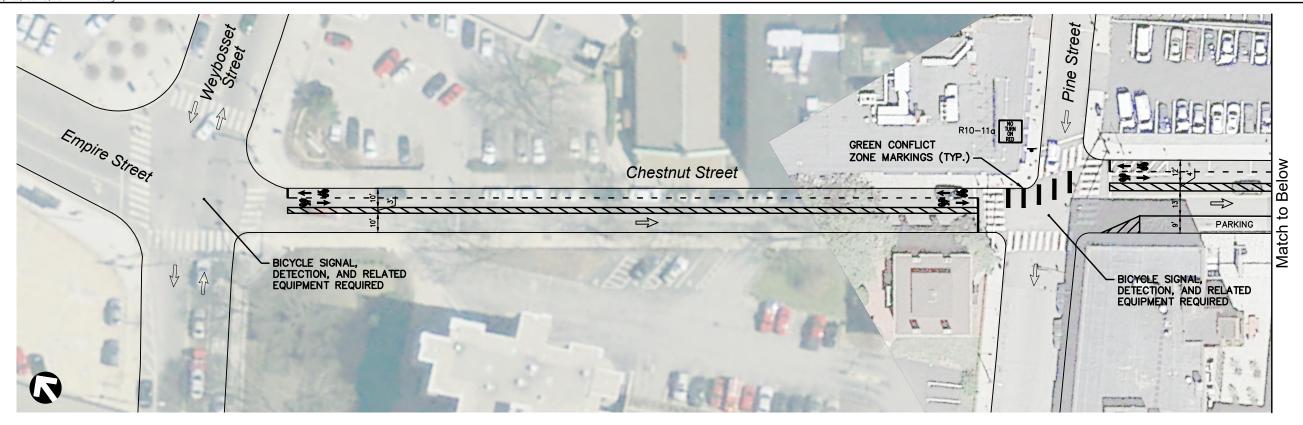


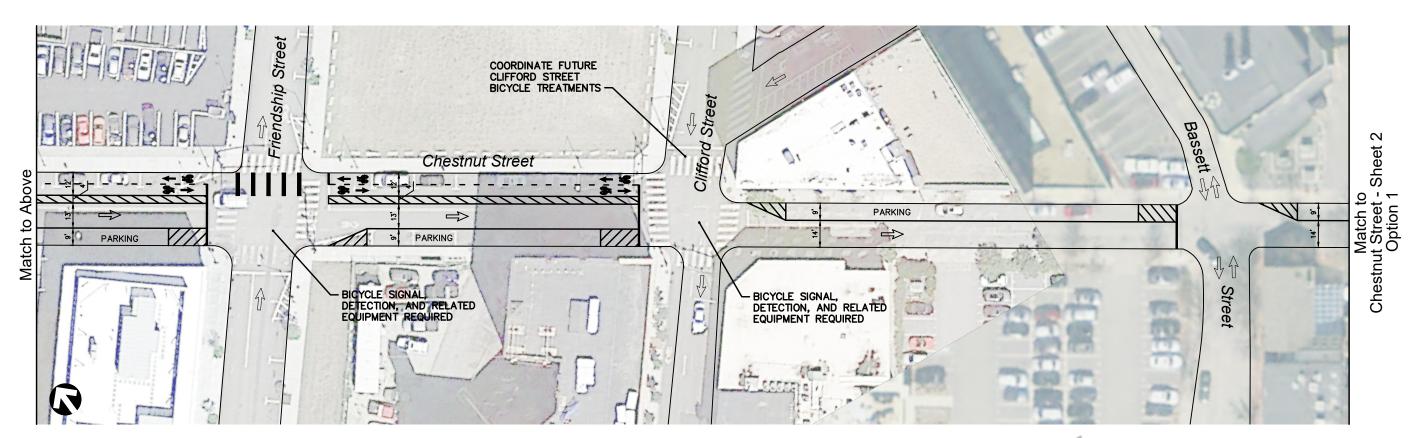






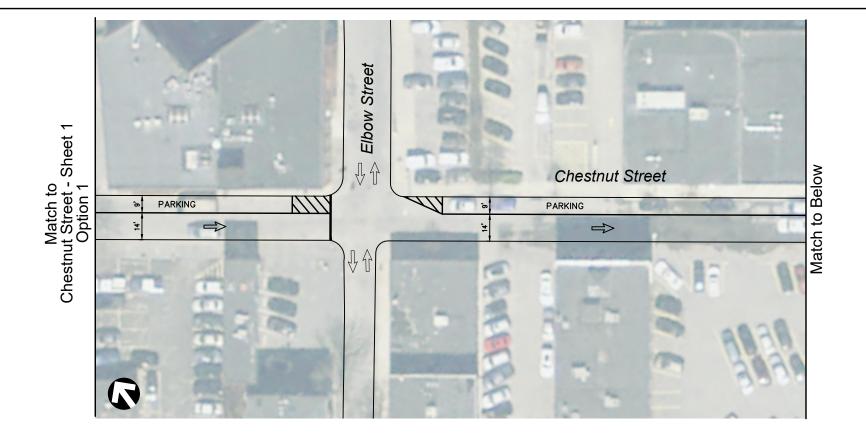
Empire Street
Option 2
Fountain Street to Weybosset Street
Providence, Rhode Island

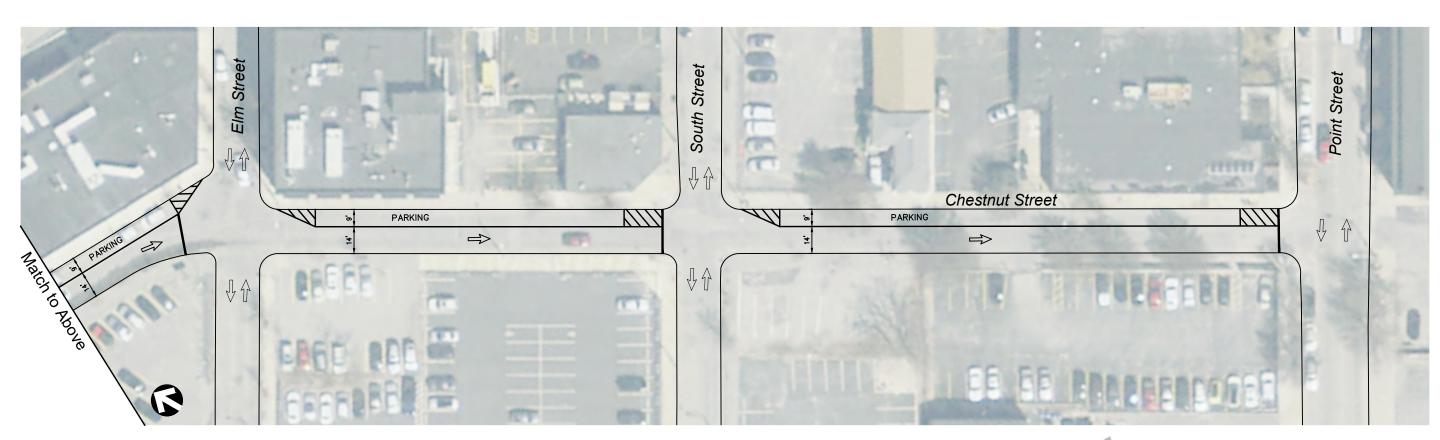




vhb

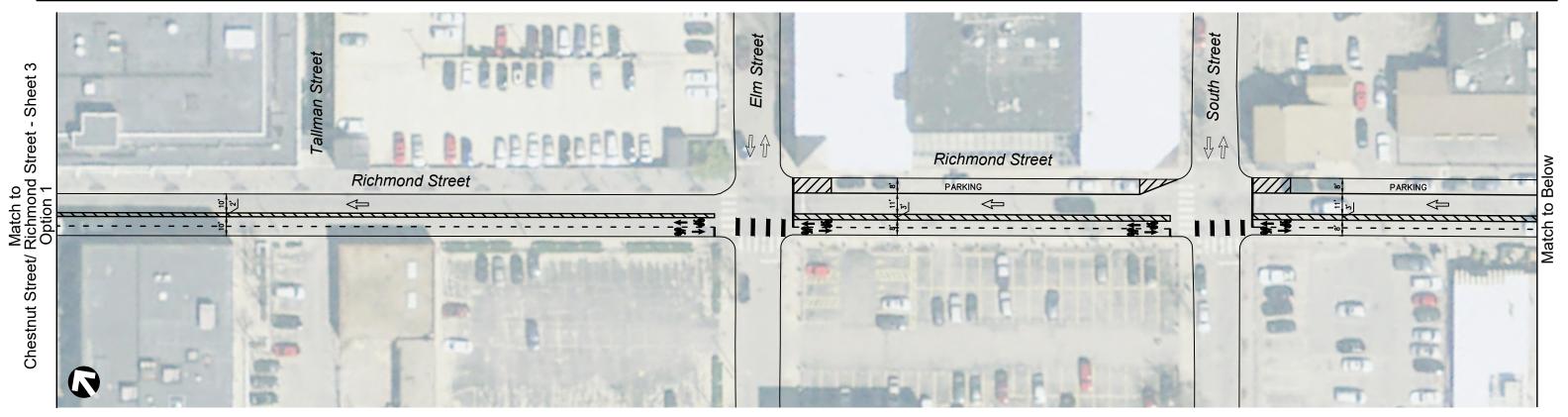
Chestnut Street / Richmond Street - Sheet 1 Option 1 Weybosset Street to Point Street Providence, Rhode Island

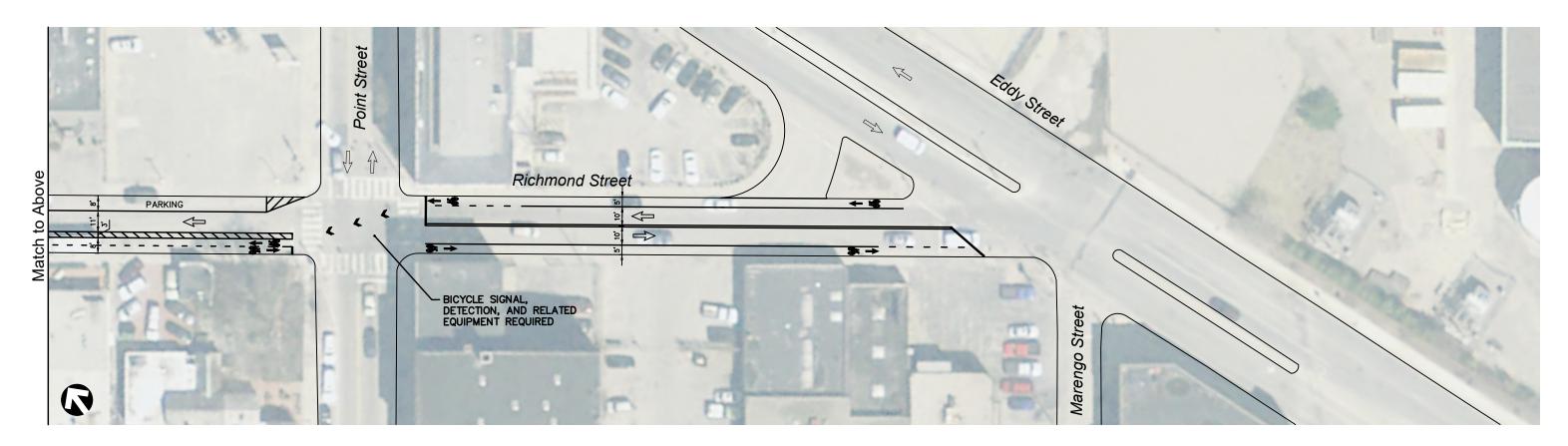




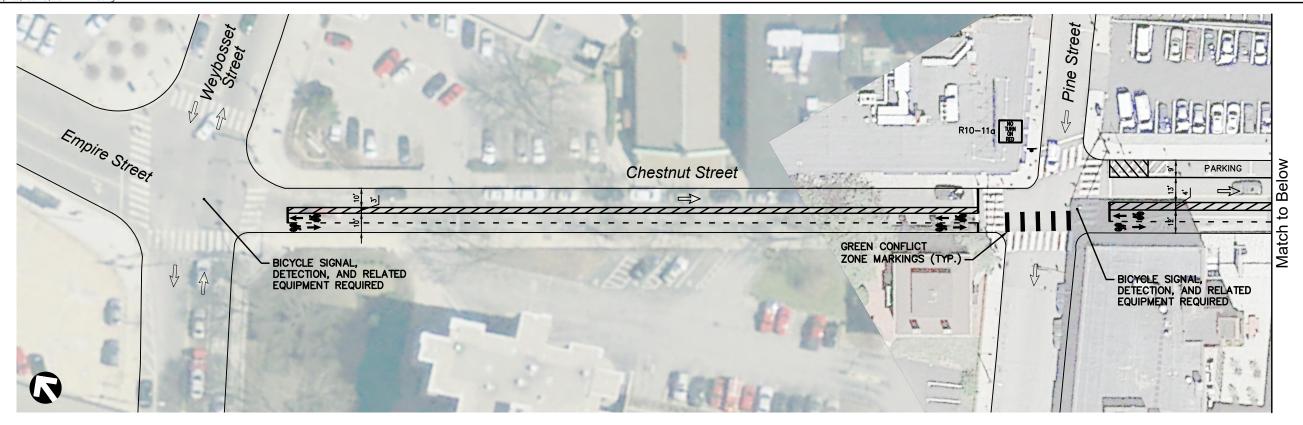


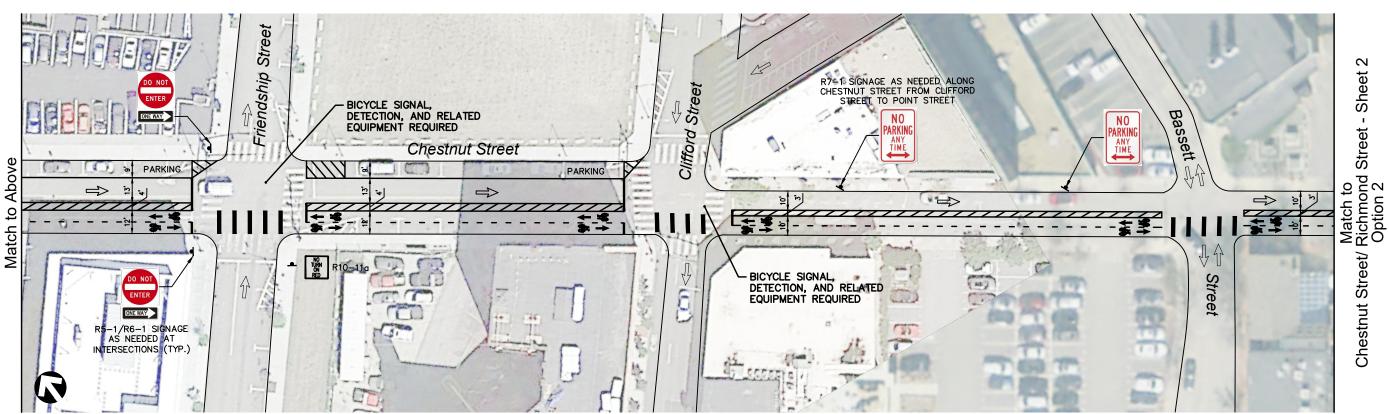




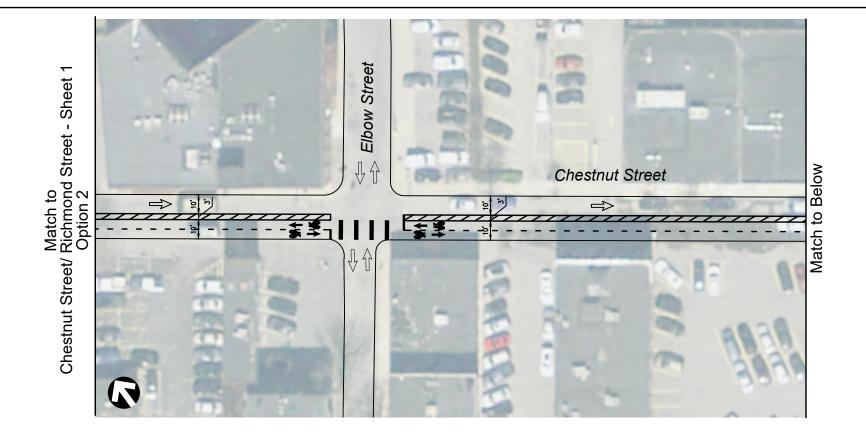


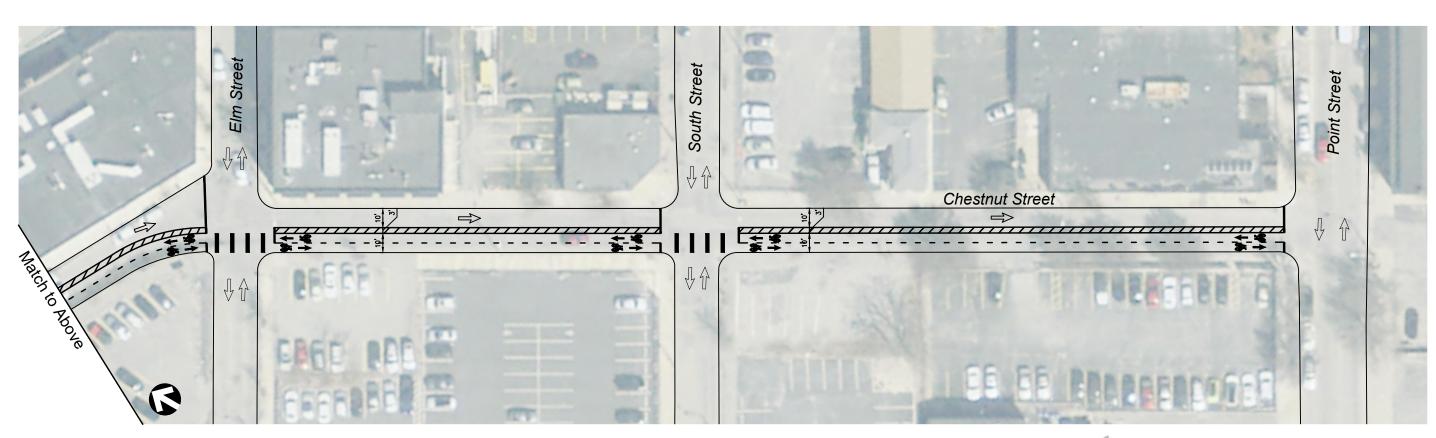
Chestnut Street/ Richmond Street - Sheet 4 Option 1 Weybosset Street to Eddy Street Providence, Rhode Island





Chestnut Street/ Richmond Street - Sheet 1 Weybosset Street to Point Street Providence, Rhode Island





Chestnut Street/ Richmond Street - Sheet 2 Option 2 Weybosset Street to Point Street Providence, Rhode Island





50 Feet

