

INFRASTRUCTURE COMMITTEE
Tuesday, June 23, 2015 at 5:15 p.m.
City Hall Council Chambers

Agenda

1. Update: Construction Projects
(Provided by Jerry Livengood and Joshua Saucier)

2. Flashing Pedestrian Beacons
(Memo and Map Provided by Public Works Director, Dana Wardwell)

3. Sidewalk Grant Applications
(Materials Provided by City Engineer, John Theriault)
 - Broadway - Grandview to Burleigh Road
 - Union Street - Vermont Avenue to Penobscot Community Healthcare

4. Update: Stillwater Avenue, Exit 186 Left Turn
(Materials Provided by City Engineer, John Theriault)



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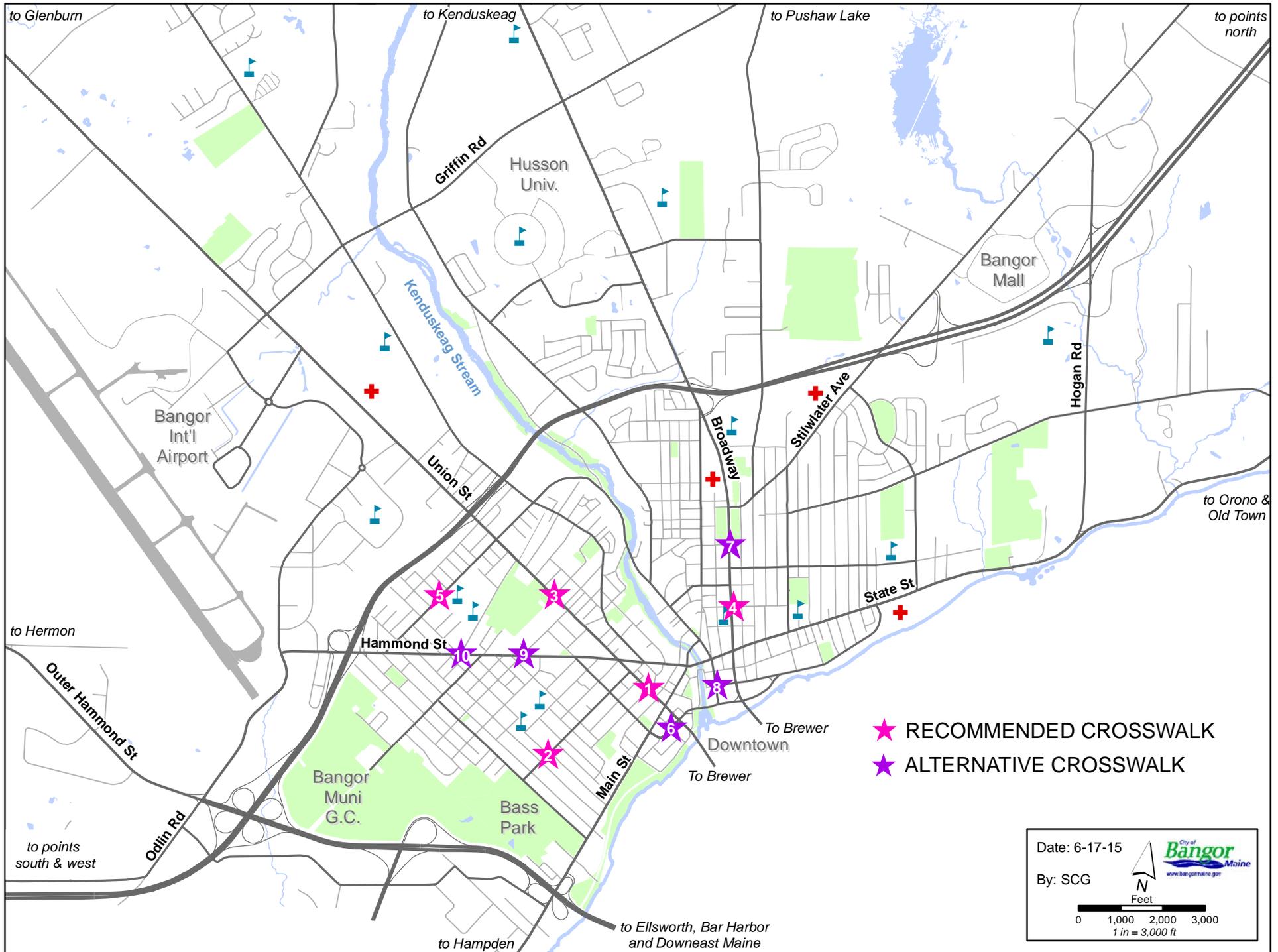
PUBLIC SERVICES DEPARTMENT – OPERATION and MAINTENANCE

Dana R. Wardwell, Director

Date: June 16, 2015
To: Infrastructure Committee
From: Dana Wardwell
Subject: Flashing Pedestrian Beacons

The flashing pedestrian beacons at several downtown locations have been very well received. Included in the FY 16 Budget are 6 flashing pedestrian beacons. One of these beacons has been designated to be installed across Main Street at Cross Street when the sidewalk in front of the Discovery Museum is replaced later this summer. Listed below, in my recommended order of priority, are 10 locations where the flashing pedestrian beacons may be appropriate. Also included is a map showing the locations of these crosswalks. Staff is requesting approval of the first five locations for installation of flashing pedestrian beacons or committee suggestions on other locations to install flashing pedestrian beacons.

- | <u>Across</u> | <u>At</u> |
|----------------------|---------------------------|
| 1. Union Street | Second Street/High Street |
| 2. Third Street | Vine Street |
| 3. Union Street | Thomas Hill Road |
| 4. Broadway | Somerset Street |
| 5. Fourteenth Street | Ralph Street |
| 6. Summer Street | May Street |
| 7. Broadway | South Park Street |
| 8. Exchange Street | Hancock Street |
| 9. Hammond Street | West Broadway |
| 10. Hammond Street | Thirteenth Street |



★ RECOMMENDED CROSSWALK
 ★ ALTERNATIVE CROSSWALK

Date: 6-17-15
 By: SCG

0 1,000 2,000 3,000
 1 in = 3,000 ft

Recommendations

As a result of the analyses completed for the Exit 186 Intersection Study, the following recommendations are made. Figure 5 highlights these recommendations.

1. Lift the left-turn prohibition on the westbound intersection approach from Exit 186. The analyses show that this change will have no significant difference in the capacity or level of service of the intersection. There will be a need to modify the signing, signals, and markings on this to replace the single through lane with a shared through-left lane.
2. To address the strong pattern of rear-end crashes on the southbound approach to the Exit 186 intersection, the addition of an advance (nearside) traffic signal is recommended to give southbound traffic an earlier indication of the signal ahead. This could be a pedestal-mounted signal on the northwest corner of the intersection.
3. On the eastbound (Kohl's) approach to the Exit 186 intersection, consider restriping and resigning the four approach lanes to two left-turn lanes, one through lane, and one right-turn lane. This would convert the left-through lane to a left-turn lane. This change would improve the balance of volumes in the eastbound approach lanes, providing a modest improvement in intersection capacity.
4. Link the cross-Stillwater walk phase concurrently to the eastbound vehicular phase to avoid conflicts between pedestrians and westbound left-turning vehicles.
5. At the Exit 186 intersection, consider improved sidewalk continuity between the west end of the Stillwater Avenue crosswalk and pedestrian destinations such as the Kohl's plaza and the southbound pullover/drop-off space.
6. To increase the width of northbound shoulders for bicycle users between the Drew Lane and Exit 186 intersections, reduce the width of northbound through lanes from 12' to 11'.
7. To provide northbound shoulders for bicycle users between the Exit 186 and Bangor Mall intersections, replace the right-most through lane with a northbound shoulder and right-turn pockets located as necessary for the two intersections. The two northbound shoulder recommendations will provide better shoulder continuity along Stillwater Avenue without significantly affecting intersection capacity or level of service.
8. Although not evaluated in this study, consider the potential for cycle lengths for signals on Stillwater Avenue that are shorter than 140 seconds. Long cycle lengths can provide more traffic capacity than short cycle lengths and help enhance progressive movement through intersections for some users. However, short cycle lengths can provide shorter delays, shorter queue lengths, and better levels of service on side-street approaches, and shorter wait times for pedestrians crossing Stillwater Avenue.

Figure 1. Recommended improvements at the intersection of Stillwater Avenue and Exit 186 / Kohl's plaza.

