



To: Village of Cambridge Board of Trustees, Village of Cambridge Plan Commission
From: Dan Moser, Planning Consultant
CC: April Little, Village Administrator
Date: August 1, 2007
Re: Recommendations for Pedestrian Trail Crossing Improvements

Introduction

The Village of Cambridge received a BUILD grant in 2006 to study options for Pedestrian Trail Crossings that could safely connect proposed pedestrian and bicycle trails north, south and through the Village. The BUILD Grant project description assigned top priority to trail crossing options that could connect segments of a proposed regional bicycle and pedestrian trail system eventually connecting the Glacial Drumlin Trail north of the Village to Cam-Rock Park and the Village of Rockdale south of the Village. However, consideration for was also to be given to the local need for pedestrian crossings connecting the northern and southern areas of the Village. Vandewalle & Associates, Inc. partnered with the engineering firm Strand Associates Inc. to conduct a study of various pedestrian crossing options identified by the Village in an earlier study. Options considered in our study are summarized on Map #1 and described in greater detail in the report prepared by Strand Associates, Inc.

Recommended Pedestrian Trail Crossings

Our recommendations for preferred trail crossing options are illustrate in Map #2. After considering such variables as safety, Department of Transportation design and road classification parameters, connectivity, cost, and the ability to provide a quality recreational experience as well as the practical needs of trail users, we recommend that priority be given to creating Pedestrian Trail Crossings at the intersection of Highway 12 and Pleasant Street and at Highway 18 just west of Koshkonong Creek bridge. Crossings at these locations would serve a highly desirable scenic recreation trail segment directly connecting Westside Park to the environmental corridor and Village-owned ponds at the north end of the Village via the western bank of the Koshkonong Creek and the south side of Highway 18.

Realizing that this option is not optimal to serve the additional goal of connecting the historic heart of the Village with new residential areas north of Highway 18, we recommend an additional crossing of Highway 18 at England Street.

Finally, we looked at the desirability of creating a pedestrian/bicycle bridge over the Koshkonong Creek to create a new connection between the proposed recreation trail and the Village's downtown area. The Village identified two possible locations for the study. Both have advantages relative to the other. Of the two, the more easterly of the two locations would be

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located further away from Highway 12 and provide more direct and aesthetically pleasing access to the downtown. The bridge would enhance better enhance both the trail and the Village downtown as a tourist attraction. The west bridge option would cost less and provide direct access to an existing parking lot which could possibly be used to redress the lack of parking for the proposed trailhead in Westside Park, but provide fewer benefits to the trail users. Whether or not either bridge option is implemented, priority should be given to completion of the actual trail and associated highway crossings. Unless and until one of these bridges is constructed, trail user's could be encouraged to explore the downtown through a combination of bike racks and signage in Westside Park directing trail users traveling on foot to downtown destinations.

Summary of Key Findings

A more thorough analysis of the potential crossing options and more detailed recommendations for the final design of the recommended crossings is included in the attached report prepared by Strand Associates.

For both the *priority* crossing options, it is recommended that both below-grade and at-grade crossing improvement are implemented. For the priority crossing locations, the below grade trail crossing would eliminate conflicts with vehicular traffic on Highways 12 and 18 completely, and presumably provide a more enjoyable trail experience. However, there may times of the year where high water levels will likely render these crossings unusable. Also during times of reduced traffic, some users may find the at-grade crossings more efficient and desirable.

The recommendation to create both an at-grade and below-grade improvements also applies to the recommended *secondary* crossing of Highway 18 at England Street. Unlike the recommended priority crossing locations, there is no bridge that would allow lower-cost below-grade improvements and would necessitate creation of a tunnel. Beyond the resistance to use by some would be trail users, the below-grade tunnel at this location would likely incur extraordinary costs to relocate existing buried infrastructure and high ground water levels. It should be noted that at current levels of traffic, an at-grade (street) pedestrian crossing at England Streets would minimally serve pedestrian needs, provided the recommended safety improvements are implemented. Nevertheless, we recommend that the Village preserve the option to implement the below-grade crossing (i.e. officially map enough right-of-way adjacent to England Street to accommodate the necessary ramps for an underground tunnel) as part of its long range transportation plan. This will provide the Village and future pedestrians with another safe alternative as traffic levels on Highway 18 increase.

Of the other crossing options considered, some were eliminated from our consideration for various reasons such as lack of right-of-way in which to accommodate both trail users and existing structures, sidewalks, on-street parking, and/or vehicular traffic. Other options, while feasible, and possibly desirable as part of a local bicycle transportation plan, were less desirable in terms of the regional recreation trail system, cost, or other factors. Our study did not consider above-grade crossing options (i.e. pedestrian bridges) owing to their extraordinary costs, land consumption, and likely resistance from certain user groups (such as the elderly).

Additional Considerations and Recommendations

A key aspect of assessing the viability of crossing options included consideration of the future use and design of Highways 12 and 18. The Wisconsin Department of Transportation, while generally willing to consider the at-grade crossing options recommended in this report, have

emphasized their resistance to installing full traffic control lights anywhere along Highways 12 or 18 now or in the foreseeable future. This eliminated the possibility considering traffic control lights to achieve safe crossing and led us to explore the implications of roundabouts as an alternative means of traffic calming that would be acceptable to WISDOT. A cursory exploration of the impact of traffic roundabouts indicated that they would not adversely affect the viability of the recommended crossing options and would also potentially permit consideration of additional crossings near the Junction of Highways 12 and 18.

In addition to implementing the improvements for the primary and possibly the secondary crossings detailed in the attached report, I recommend that the Village continue to consider these improvements in light of a comprehensive transportation plan for the Village. Additional local crossings to facilitate greater local connection to the proposed recreation trail and crossings not detailed in this study include but are not limited to:

- Dedicated, separated bicycle paths along one or both sides of Highway 18 (along the south side at minimum).
- A dedicated, separate bicycle path, (or lane) along the west side of Highway 12 from Water Street to at least the junction of Highway 12 and Highway 18 (and possibly paralleling Highway 12 further to the west).
- An at-grade crossing of Highway 12 somewhere between Water Street and the Junction of Highway 12 and Highway 18.