Memorandum

DATE: February 27, 2014

TO: Board of Public Works

FROM: Mark Radtke, Director of Public Works MR

RE: Reconfiguration of London Street/Plank Road Intersection

BACKGROUND INFORMATION

The City of Menasha 2014 Budget includes funds for the rehabilitation of London Street from Plank Road to Ninth Street. In reviewing the project, we studied the intersection configuration at London Street and Plank Road and realized safety improvements could be made by eliminating one of the street access points onto Plank Road. The current configuration results in three separate intersections located in close proximity, which creates many potential conflict points.

We are requesting the Board's approval of eliminating one of the street legs onto Plank Road, creating one intersection, with London Street in line with Konemac Street to the south of Plank Road. The Police Department was solicited for its input and a memo from Chief Styka in support of the reconfigured intersection is enclosed.

ANALYSIS

When designing intersections and analyzing traffic concerns, one of the more important safety parameters is the number of conflict points present at the intersection. There are 58 conflict points for vehicular traffic with the current configuration and 41 conflict points with the proposed configuration. Also, of similar importance in this vicinity, given the limited routes to Jefferson Park and Jefferson School, the number of pedestrian/vehicle conflict points is reduced by 11 with the proposed layout.

The proposed configuration provides all right angle views for motorists, bicyclists and pedestrians, a much safer situation than having to look over your shoulder for any approaching traffic, which occurs with the existing layout. The proposed layout meets the turning radius requirements for our Fire Department equipment, a concern of NMFR. The crossing guard at the intersection also would only need to be concerned with the one intersection rather than all sides of the existing island.

The proposed configuration will result in approximately 3,100 square feet of green space versus the 1,000 square feet present with the current layout. I would suggest planting the area similar to the traffic island located at Third Street and Plank Road, which is attractive but low maintenance. The Plank Road/London Street intersection would then tie in with the adjacent Third Street intersection and also present a strong visual appeal at this prominent intersection.

FISCAL IMPACT

The proposed layout results in additional curb and gutter and sidewalk, but reduces the amount of asphalt pavement needing replacement. The net estimated increase in project costs for the street construction items is $3,150. If the resultant green space were planted similarly as the Third Street island, we estimate the cost of materials to be $5,000. If it were to be simply seeded (matching the current island) the approximate cost would be $1,500. Because of the intent to utilize City work force for some of the advance work along the entire London Street project corridor, we expect the funds in the 2014 Budget are sufficient to cover the anticipated cost increase.

RECOMMENDATION

We are recommending the reconfiguration of the London Street/Plank Road intersection per the enclosed drawing. In our opinion, this layout will provide a safer intersection for motorists, bicyclists and pedestrians alike. We also would recommend a landscaping plan similar to that of the Third Street/Plank Road traffic island for the City owned green space resulting from the intersection reconfiguration.

Enclosure

Mark Radtke

From: Tim Styka
Sent: Wednesday, February 26, 2014 2:09 PM
To: Alan Conger
Cc: Mark Radtke
Subject: RE: London St. Rehab

Hi Al,

Thanks for sharing the intersection proposal. The Police Department overall would be in favor of the redesigned intersection. The cleaner X intersection will be easier for pedestrians to cross Plank Rd as there would no longer be traffic movements on both sides of the existing crosswalk on off of the island to the southwest corner. In addition, we have always been concerned about the uncontrolled nature of the area just north of the island. Another benefit would be currently when a vehicle is east on Plank and is waiting to turn left (north) onto London St. traffic will often pass in the bike lane to go around the stopped vehicle. This movement is illegal and can be dangerous for a person using the bike lane in the east direction. Finally, any unusual street configurations can cause confusion. Because this is s State Highway, there is a higher volume of non-regular commuter traffic, or people unfamiliar with the area and this can cause issues. With this being a heavier use area for bikes and pedestrians in the summer, creating a simpler more standard intersection I believe would be a benefit.

Our only concern is how eastbound Plank Rd traffic which turns north onto London St. currently only has to contend with westbound traffic to complete their movement. There is no conflict with southbound traffic on London St. Under the new plan there is the potential of conflict of London St. traffic going south onto Konemac or east on Plank.

Overall we believe this new configuration would be a positive improvement to the intersection.

Please let me know if you have any questions,

Tim Styka

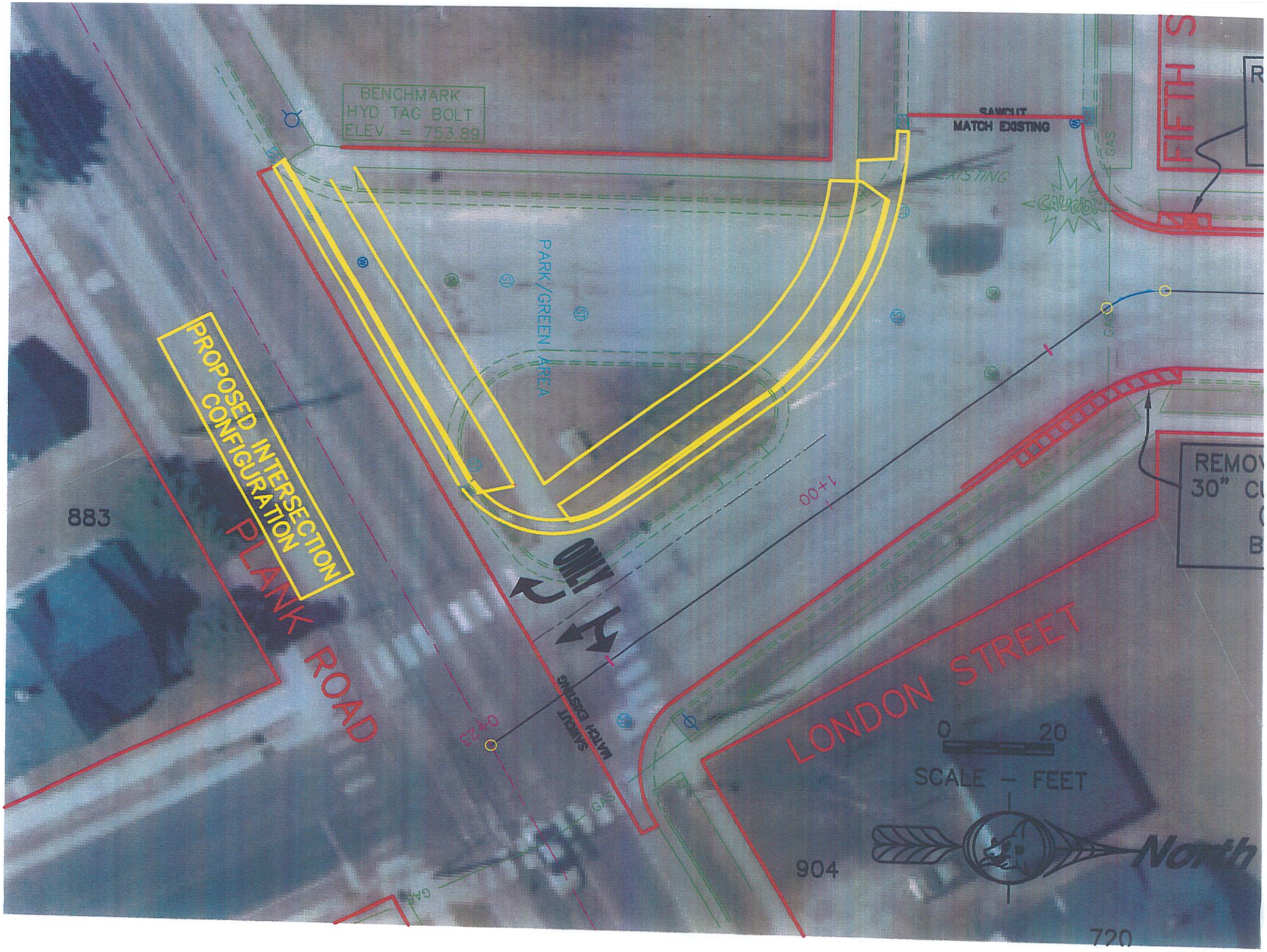
Chief Timothy J. Styka
Menasha Police Department
430 First St.
Menasha, WI 54952
920.967.3500

From: Alan Conger
Sent: Wednesday, February 26, 2014 11:04 AM
To: Tim Styka
Cc: Mark Radtke
Subject: London St. Rehab

Hi Tim –

Attached you will find a PDF of the proposed changes to the Plank Rd/London St. intersection.

EXISTING INTERSECTION
CONFIGURATION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