Michael May

From: Stollenwerk, Roy T - DOT <Roy.Stollenwerk@dot.wi.gov>

Sent: Wednesday, October 9, 2024 10:25 AM

To: Michael May

Cc: Jennifer Schroeder; Wiesen, Joshua J - DOT; Blackwood, Allison - DOT; Dedrick, Dan I - DOT; Cain, Douglas - DOT; DOT 21600601 STH 181

Wisconsin-Center

Subject: RE: [External] FW: WIS 181 & North Ave City proposal to expand islands

Mike,

See our responses below in *red*.

Additionally, you had asked about a short term alternative that enlarged the size of the existing right-turn porkchop islands to allow for additional space for pedestrian refuge. WisDOT has no concerns with the City of Wauwatosa's proposal to expand the intersection islands with new concrete and curb and gutter. Our understanding is that the lane configuration and bike accommodation will not change with the proposal. As long as this is the case, the City of Wauwatosa has the authority to perform this work without additional approval from WisDOT because the operations would not change.



From: Michael May <mmay@wauwatosa.net>

Sent: Monday, October 7, 2024 2:22 PM

To: Stollenwerk, Roy T - DOT <Roy.Stollenwerk@dot.wi.gov>

Cc: Jennifer Schroeder < Jschroeder@wauwatosa.net>; Wiesen, Joshua J - DOT < Joshua.Wiesen@dot.wi.gov>; Blackwood, Allison - DOT

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Center@dot.wi.gov>

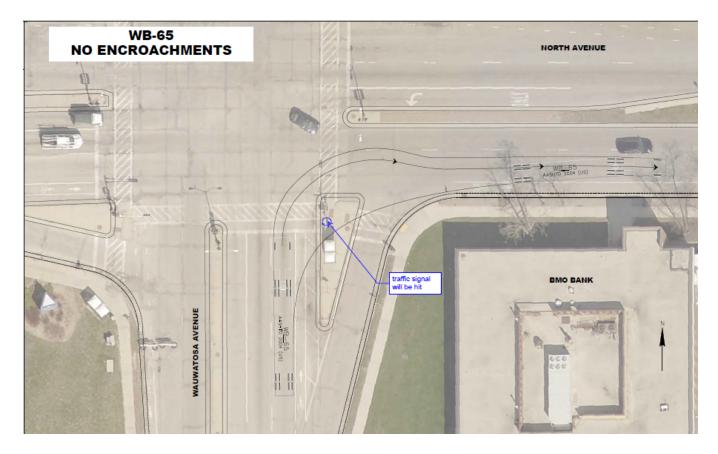
Subject: RE: [External] FW: WIS 181 & North Ave City proposal to expand islands

Thank you, Roy,

I appreciate the response. Is the timing of the demonstration the only concern?

Here are the questions I foresee being asked back from the committee regarding the slip lanes being closed.

- What if the demonstration was held off until late March (spring break timeframe) and run through end of the school year, and it then gets removed over summer before school is back in session. Would that alleviate Ops concerns?
 - WisDOT is supportive of a permanent change that does not degrade safety and provides acceptable operations. Our concern with the short-term, temporary test was focused primarily on the many young users of the intersection. We believe that there would be a risk to the students developing a new expectation about crossing at the intersection and then it being reverted to the previous condition. Operations does not support a temporary trial at this location. The duration and the time of the year is not the issue; the fact that it is temporary is the issue. Additionally, there are geometric concerns as explained in the 3rd bullet below for why WisDOT does not recommend a temporary closure of the right turn slip lane.
- What if the demonstration was held off until late March (spring break timeframe) and run through end of the school year, and the City wants to make it a 5-year interim change over summer before school is back in session? Would that alleviate Ops concerns?
 - We understand this to mean that if the trial was completed with positive results, the city would make a more permanent change that would be in place until the WisDOT project is constructed. As discussed above and in the 3rd bullet below, any type of permanent change would require partial or complete removal of the existing right-turn porkchop islands to allow for appropriate truck turning movements. This work could become very involved, including the need to accommodate potential signal relocations, and required ADA accommodations. WisDOT would be open to reviewing a design concept that would meet FDM standards.
 - The extent of the revisions needed to make these changes, would be similar to the alternatives that WisDOT is proposing as part of the current pavement replacement project.
- Are there any other safety/crash or geometric concerns that WisDOT has with a demonstration, and if so what? Any statistics to share (CMFs, etc.)?
 - Both STH 181 and North Avenue are National Highway System Routes which requires us to provide appropriate turning radii for large trucks. The
 design vehicle is a WB-65. Turning templates show that a WB-65 truck making a turn from the right turn lane will have its rear wheels
 "overtrack" onto the existing right-turn porkchop islands. This is an unacceptable condition that would cause knock downs of existing traffic
 signals and put pedestrians standing on the island in danger.



 WisDOT's Safety Engineer has previously discussed that CMFs indicate safety benefits to having channelized right turn lanes. The CMF for right turn lanes from the IHSDM engineering manual is shown in the table below. The 4SG row represents a four-leg, signalized intersection. Removing the channelized right turn lane would be a disbenefit as it would increase crashes and is not preferred.

Table 21. Crash Modification Factors (CMF_{3i}) for installation of Right-Turn Lanes on Approaches to Intersection (HSM, Table 12-26)

Intersection Type	1 Approach with Right-Turn Lane	2 Approaches with Right-Turn Lanes	3 Approaches with Right-Turn Lanes	4 Approaches with Right-Tur
3ST	0.86	0.74	-	-
3SG	0.96	0.92	-	-
4ST	0.86	0.74	-	-
4SG	0.96	0.92	0.88	0.85

- Perhaps the question could be asked: What would it take to get to "Yes"?
 - As discussed above, WisDOT approval would require modifications that allow for appropriate turning radii for large trucks (WB-65), required ADA accommodations, traffic signal relocations, etc. An alternative that removes the right turn slip lanes is advancing through the pavement

replacement project's design process along with the other alternatives and WisDOT does not object to this as long as FDM design standards are met.

Thank you, Roy. Again, these are questions I anticipate may be asked by the committee members. I don't want to mischaracterize or misrepresent WisDOT – if a formal letter could be prepared I think that would help.

Mike

Michael May, PE, PTOE, RSP1

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Direct: 414-479-8930 mmay@wauwatosa.net

From: Stollenwerk, Roy T - DOT < Roy. Stollenwerk@dot.wi.gov >

Sent: Monday, October 7, 2024 10:57 AM **To:** Michael May <mmay@wauwatosa.net>

Cc: Jennifer Schroeder < Jschroeder@wauwatosa.net>; Wiesen, Joshua J - DOT < Joshua.Wiesen@dot.wi.gov>; Blackwood, Allison - DOT

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Center@dot.wi.gov>

Subject: [External] FW: WIS 181 & North Ave City proposal to expand islands

See below for WisDOT Operations response to the request for a 90-day trial to close the right turn slip lanes at North Avenue and your most recent inquiry to enlarge the intersection islands.



From: Blackwood, Allison - DOT < Allison.Blackwood@dot.wi.gov >

Sent: Friday, October 4, 2024 11:11 AM

To: Stollenwerk, Roy T - DOT < Roy.Stollenwerk@dot.wi.gov > Cc: Wiesen, Joshua J - DOT < Joshua.Wiesen@dot.wi.gov > Subject: WIS 181 & North Ave City proposal to expand islands

Hi Roy,

Ops has no concerns with the City of Wauwatosa's proposal to expand the intersection islands with new concrete and curb and gutter. Our understanding is that the lane configuration and bike accommodation will not change with the proposal. As long as this is the case, the City of Wauwatosa has the authority to perform this work without additional approval from WisDOT because the operations would not change.

Ops is supportive of a permanent change that does not degrade safety and provides acceptable operations. Our concern with the short-term test was focused primarily on the many young users of the intersection. We believe that there would have been a risk to the students developing a new expectation about crossing at the intersection and then it being reverted to the previous condition.