



# DEPARTMENT OF PUBLIC WORKS

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Date: October 28, 2015

Re: Closure of Eales Avenue at the E. Moreland Boulevard & White Rock Avenue Intersection

The reconstruction of E. Moreland Boulevard between the Fox River and Manhattan Drive is scheduled to begin in 2017 with the possibility of advancement to 2016. The project will replace the existing roadway and include work on the sanitary sewer, water main and the installation of a new storm sewer for flood mitigation improvements. With this reconstruction project the five-leg intersection of E. Moreland Boulevard & White Rock Avenue / Eales Avenue has been studied to improve safety, intersection geometrics and traffic operations. Following the studies, a Public Involvement Meeting was held to hear feedback on the finding of the studies which determined that removing Eales Avenue from the intersection will improve safety, intersection geometrics and traffic operations.

A traffic study was done which found that the existing non-traditional configuration of the five-leg intersection of E. Moreland Boulevard & White Rock Avenue / Eales Avenue is the root cause of the following intersection problems:

- Drivers are often confused by mainline E. Moreland Blvd. having to "turn left" and some drivers confuse Eales Avenue for mainline.
- This intersection has the 2<sup>nd</sup> highest accident frequency in the City at 75 accidents in 5 years and an equally high accident rate.
- The existing non-traditional signal phasing causes poor signal operations, it is difficult to properly time and operates at a low level of service.

A crash analysis diagram was completed by a consultant, TADI and is summarized by the following:

- This intersection is the 2<sup>nd</sup> highest accident frequency in the City at 75 accidents in 5 years
- Intersection has a 1.06 crash rate which is 5<sup>th</sup> highest in the City
- 15 accidents can be attributed to driver confusion at the middle islands of the intersection
- 8 accidents (mostly rear end) occurred for eastbound E. Moreland at White Rock due to back up caused by left turners
- 6 accidents (mostly rear end) occurred for northbound White Rock due to excessive queuing for this direction
- 6 accidents (mostly rear end) occurred for westbound E. Moreland due to confusion about the stop line and hatched out area for White Rock.
- 5 accidents (side swipes) are caused by mainline traffic (E. Moreland) having to turn left for eastbound

It is expected that the proposed changes to the E. Moreland Avenue & White Rock Avenue intersection, with Eales Avenue removed, will resolve accident prone operational issues with left turners at White Rock Avenue, queue back ups, side swipe accidents due to the mainline traffic having to make a dual left turn and many other issues with left turning at and stopping at the north leg of the White Rock Avenue intersection. A crash diagram is attached.

A traffic study was performed by the City's Consultant GRAEF that evaluated the existing traffic conditions and analyzed the conditions resulting from the proposed improvement that removes Eales Avenue from the intersection. The E. Moreland Boulevard & White Rock Avenue / Eales Avenue Intersection Traffic Study dated August 30, 2015 is available for review upon request. In summary, the study found the following:

- The E. Moreland Boulevard & White Rock Avenue / Eales Avenue intersection will operate at an unacceptable level of service during the PM peak hour of traffic volumes if the intersection is to remain in the current configuration.
- Reconfiguring the E. Moreland Boulevard & White Rock Avenue / Eales Avenue intersection to eliminate access to Eales Avenue will improve safety and the overall traffic operations to a more acceptable level of service during the peak hours of traffic.

The City held a Public Involvement Meeting on September 30, 2015 for displaying and hearing feedback on the proposed improvement that removes Eales Avenue from the E. Moreland Boulevard & White Rock Avenue intersection. The official summary of the Public Involvement Meeting is available for review upon request. In summary, a total of 15 people responded with written comments all were supportive of the closure, except one Cleveland Ave. resident and three Gas Station representatives.

The City of Waukesha Engineering Division, Police Department and Fire Department recommend that Eales Avenue be removed from the E. Moreland Boulevard & White Rock Avenue intersection to improve safety, intersection geometrics and traffic operations.

<input checked="" type="checkbox"/> <b>ENGINEERING DIVISION</b> Paul G. Day, PE City Engineer 130 Delafield St Waukesha, WI 53188 262-524-3600 Fax – 262-524-3898	<input type="checkbox"/> <b>MUNICIPAL PARKING SERVICES</b> Patti Cruz Parking Supervisor 241 South St Waukesha, WI 53186 262-524-3622 Fax – 262-650-2573	<input type="checkbox"/> <b>STREETS DIVISION</b> 300 Sentry Dr Waukesha, WI 53186 262-524-3615 Fax – 262-524-3612	<input type="checkbox"/> <b>WASTEWATER TREATMENT PLANT</b> Jeff Harenda WWTP Manager 600 Sentry Dr Waukesha, WI 53186 262-524-3625 Fax – 262-524-3632	<input type="checkbox"/> <b>WAUKESHA METRO TRANSIT</b> Brian Engelking Transit Manager 2311 Badger Dr Waukesha, WI 53188 262-524-3634 Fax – 262-524-3646
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