

Technical Memorandum

TO: Darrell West

Director, Bonneville Metropolitan Planning Organization

FROM: Stephen Lewis, P.E., PTOE

Senior Transportation Engineer, Keller Associates

DATE: February 12, 2019

SUBJECT: Intersection of Olsen Avenue and Rushton Road in Iona



I have reviewed the preliminary traffic improvements to the intersection of Olsen Avenue and Rushton Road in Iona, and I agree with the City that the intersection should have stop control on eastbound Rushton Road and be free flowing north and south on Olsen Avenue. This is the traditional treatment for "T" intersections, meets driver expectancy, and follows the basic rules of the road where the stem of the T stops for traffic traveling across the top of the T.

Multi-way (all-way) stop control is not recommended at Olsen Avenue and Rushton Road, nor at Olsen Avenue and Steele Avenue. The Manual on Uniform Traffic Control Devices (MUTCD) has specific criteria and engineering study that is required before placement of a multi-way stop; these criteria relate primarily to traffic volume, approach speed, available sight distance, and reported crash history. When multi-way stops are installed without these criteria being met, associated safety concerns include pedestrians, bicyclists, and all road users expecting other road users to stop. In addition, multi-way stop control is used where the volume of traffic on the intersecting roads is approximately equal.

The Olsen Avenue intersections do not meet the criteria for multi-way stop control. However, once the reconfigured intersection of Olsen Avenue and Rushton Road is operational for a time and development of Freedom Fields Estates to the north progresses, a new traffic study may be conducted.

Regarding the approximate five-foot offset north to south across the intersection, it is not ideal but given the limited shift and 25 mph speed it can be mitigated. The relocated luminaire shown on the east side of the intersection is a good safety feature. In addition, I recommend adding a centerline extension through the intersection north to south, and normal centerline striping for 100 feet north of the intersection, to bring the through offset to drivers' attention. These recommended modifications, as well as a few others are shown on the attached plan sheet mark-up. Please feel free to contact me with any questions.

Attachment: Rushton and Olsen Pavement Marking and Signing Plan Mark-up

