1 2			PROPOSED BY: <u>Public Works - Engineering</u> INTRODUCTION DATE: <u>9/29/2020</u>									
3 4	ORDINANCE NO											
5 6	INSTALLATION OF A STOP SIGN ON HOMESTEADER RD											
7 8 9	WHEREAS, in compliance with RCW 36.32.120 and 46.61.200, it is found necessary and expedient to install traffic control signs on certain County Roads; and											
10 11 12	WHEREAS, stop sign installation has been requested by a citizen; and											
13 14 15	WHEREAS , it is found possible to install a stop sign to help control traffic at the intersection of Homesteader Road and Standard Road; and											
16 17	WHEREAS , the County Engineer has agreed that it is necessary to formally establish the new stop sign; and											
18 19 20	NOW, THEREFORE, BE IT ORDAINED by the Whatcom County Council that the following be added to the Whatcom County Code Section 10.16:											
21 22 23	Road Name	Direction- Stopping	Cross Street									
24 25	Homesteader Road	Westbound	Standard Road									
26 27 28	BE IT FURTHER ORDAINED , that the County Engineer is hereby directed to install the appropriate signs and the Whatcom County Sheriff and the Washington State Patrol be notified by a copy of this ordinance.											
29 30 31	ADOPTED this day of	, 202	20.									
32 33 34	ATTEST:		WHATCOM COUNTY COUNCIL WHATCOM COUNTY, WASHINGTON									
35 36 37	Dana Brown-Davis, Clerk of the Co	ouncil	Barry Buchanan, Council Chair									
38 39 40 41	APPROVED AS TO FORM:		WHATCOM COUNTY EXECUTIVE WHATCOM COUNTY, WASHINGTON									
42 43	Approved via email Christopher Quinn,		Satpal Singh Sidhu, County Executive									
44	Sr. Deputy Prosecuting Attorney,		Satpar Singir Sidna, County Executive									
45 46	Civil Division		() Approved () Denied									
47			Date Signed:									

Change the Guidance of MUTCD Section 58.02, Stop and Yield Signs, to become an Option and amend to read: East of intersection is gravel road Add stop control to Westbound Homesteader Rd, East of Standard Rd STOP (R1-1) and YIELD (R1-2) signs may be considered for use on low-volume roads where engineering judgment or study, consistent with the provisions of Sections 2B.04 to 2B.10, WAC 468-95-29005 Traffic control devices for low-volume roads - stop and yield signs. B. An intersection that has restricted sight distance for the prevailing vehicles speeds. Sight Distance to the east does not meet standards for stopping sight distance Homesteader Rd Striping indicates EB to NB and SB to WB have the ROW indicates that either of the following conditions applies: 11 Westbound Eastbound Large Arrow SB to WB Large Arrow EB to NB Recommendation: **Currently no stop** control Northbound outhbound Vicinity Map 41 Vestbound Eastbound To SR-9

Standard Rd



Homesteader Rd – Standard Rd Intersection Review

This review was at the request of Maya Henderson, 2938 Standard Rd, to consider the addition of a stop sign at this intersection on 7/26/2019.

The traffic study consisted of 3 traffic counts near the intersection, measuring sight distance, review of collisions, review of signs and markings, and measurement of road and shoulder. Homesteader Road and Standard Road both have a Federal Function Classification of Rural Local Access. Standard Road has two 9 foot BST driving lanes with 1 foot gravel shoulders; Homesteader Road has two 9 foot BST driving lanes with 1 foot gravel shoulders west of the intersection and a 14 foot wide gravel road east of the intersection. Both roads have speed limits of 35 mph per Whatcom County Code 10.04.050 Thirty-five miles per hour - Maximum generally.

Vicinity Map



Traffic Counts

Traffic counts were taken on Standard Road, north of Homesteader Road and Homesteader Road, east and west of Standard Road. These counts consisted of volume, speed and truck volume percentage.

WHATCOM COUNTY TRAFFIC COUNTS																				
					TOTAL V	OLUME	WEEKDAY	WEEKDAY DIRECTIONAL VOLUME					SPEED (MPH)				CLASSIFICATION			
ROAD NAME	I FG	CROSS ROAD	BEGAN	ENDED	ADT Weekday		PM PEAK Traffic	PM PEAK TIME	DIR N/E			ADT S/W	2000		DIR SAV		DIR N/E	TRUCKS N/E	DIR S/W	TRUCKS S/W
HOMESTEADER RD				6/25/2020		19	3	9:00	E	10	W	11	E	32.7	W	29.6	E	4.60%	W	4.50%
HOMESTEADER RD	W	STANDARD RD	6/17/2020	6/25/2020	81	74	9	15:00	Е	41	W	40	Е	30.0	W	31.6	Е	23.00%	W	23.80%
STANDARD RD	N	HOMESTEADER RD	6/17/2020	6/25/2020	28	27	3	15:00	N	14	S	14	N	29.6	S	30.5	N	21.60%	S	20.40%

Sight Distance

Sight distance checks were performed on 07/28/2020 and the results are as follows:

Stopping sight distance for southbound Standard Rd at Homesteader Rd was inadequate. Stopping sight distance for westbound Homesteader Rd at Standard Rd was adequate. Stopping sight distance for eastbound Homesteader Rd at Standard Rd was adequate.

Collisions

A review of collisions that we have received from the Washington State Patrol showed there has been 1 collision in the past 5 plus years at the intersection from 01/01/2015 to 07/14/2020. No collisions were the result of failure to yield the right of way. The 1 property damage collision was a single vehicle collision where the vehicle went into the ditch and hit a power pole while exceeding a reasonably safe speed on compact snow and ice.

Signs and Markings

There are no stop or yield signs at this intersection. There is a One Direction Large Arrow Warning Sign (Right) for southbound traffic on Standard Rd and a One Direction Large Arrow Warning Sign (Left) for eastbound traffic on Homesteader Rd. Current markings of double no-pass are painted through the intersection and end approximately 65 feet north of the intersection on Standard Road. These markings would indicate that precedent is being given to the eastbound to northbound and southbound to westbound turning movements.

MUTCD Section 2b.04 Right-of-Way at Intersections

The Manual on Uniform Traffic Control Devices (MUTCD) is the standard for the installation of signs on roads in the United States. Guidelines within the manual help determine the proper locations to install traffic control devices.

Support:

01 State or local laws written in accordance with the "Uniform Vehicle Code" (see <u>Section 1A.11</u>) establish the right-of-way rule at intersections having no regulatory traffic control signs such that the driver of a vehicle approaching an intersection must yield the right-of-way to any vehicle or pedestrian already in the intersection. When two vehicles approach an intersection from different streets or highways at approximately the same time, the right-of-way rule requires the driver of the vehicle on the left to yield the right-of-way to the vehicle on the right. The right-of-way can be modified at through streets or highways by placing YIELD (R1-2) signs (see <u>Sections 2B.08</u> and <u>2B.09</u>) or STOP (R1-1) signs (see <u>Sections 2B.05</u> through <u>2B.07</u>) on one or more approaches.

Guidance:

02 Engineering judgment should be used to establish intersection control. The following factors should be considered:

- A. Vehicular, bicycle, and pedestrian traffic volumes on all approaches;
- B. Number and angle of approaches;

- C. Approach speeds;
- D. Sight distance available on each approach; and
- E. Reported crash experience.

03 YIELD or STOP signs should be used at an intersection if one or more of the following conditions exist:

- A. An intersection of a less important road with a main road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law;
- B. A street entering a designated through highway or street; and/or
- C. An unsignalized intersection in a signalized area.

04 In addition, the use of YIELD or STOP signs should be considered at the intersection of two minor streets or local roads where the intersection has more than three approaches and where one or more of the following conditions exist:

- A. The combined vehicular, bicycle, and pedestrian volume entering the intersection from all approaches averages more than 2,000 units per day;
- B. The ability to see conflicting traffic on an approach is not sufficient to allow a road user to stop or yield in compliance with the normal right-of-way rule if such stopping or yielding is necessary; and/or
- C. Crash records indicate that five or more crashes that involve the failure to yield the right-of-way at the intersection under the normal right-of-way rule have been reported within a 3-year period, or that three or more such crashes have been reported within a 2-year period.

05 YIELD or STOP signs should not be used for speed control.

WAC 468-95-29005 Traffic control devices for low-volume roads – Stop and yield signs.

Change the Guidance of MUTCD Section 5B.02, Stop and Yield Signs, to become an Option and amend to read:

STOP (R1-1) and YIELD (R1-2) signs (see Figure 5B-1) may be considered for use on low-volume roads where engineering judgment or study, consistent with the provisions of Sections 2B.04 to 2B.10, indicates that either of the following conditions applies:

- A. An intersection of a less important road with a main road where application of the normal right-of-way rule might not be readily apparent.
- B. An intersection that has restricted sight distance for the prevailing vehicles speeds.

Conclusion

Given that sight distance southbound on Standard Rd to the east is inadequate, and following the guidance of WAC 468-95-29005 subsection B, a stop sign is recommended for westbound Homesteader Rd at Standard Rd. This would be consistent with both: the current striping which gives precedent to the eastbound Homesteader Rd to northbound Standard Rd and southbound Standard Rd to westbound Homesteader Rd turn movements; and the current eastbound W1-6L One Direction Large Arrow (Left) warning sign and the southbound W1-6R One Direction Large Arrow (Right) warning signs.