WHATCOM COUNTY PUBLIC WORKS DEPARTMENT



ENGINEERING SERVICES JAMES P. KARCHER, P.E. County Engineer 5280 Northwest Drive Bellingham, WA 98226 Phone: (360) 778-6220 Fax: (360) 778-6221

Jon Hutchings Director

W. Pole Rd at Northwest Dr Traffic Study Completed 12/8/2021



3 complaints regarding sight distance caused by cedar trees planted on the north side of W. Pole Rd and east side of Northwest Dr, one complaint from a citizen to Rodney Vandersypen on May 28th; another from Chet Zender on June 22nd; third complaint on October 28th from Rick Keller. Trees are close enough that we'd need a survey to see if they are within ROW or not.

Site visit by Jason Ardt and Owen Richey on June 25th, 2021. Current sight distance measured 8 feet behind the stop line: Southbound check #1 = 126 feet Southbound check #2 = 134 feet

Minimum Sight Distance for 35 MPH roadway per Chapter 5 of Whatcom County Development Standards is 250 feet

Looking North from sight cone



Stop line could be removed and sight distance measured at 10 feet from the travelled way, but with the location of the utility pole in the northeast corner of the intersection, the sight distance would actually be worse. Also removing the stop line at a T-intersection of 2 Major Collectors and 1 Minor Collector is not advised.

Stop line relocated by Maintenance and Operations to 4 feet from the travelled way on 7/13/2021. Trees were trimmed by Enfield Farms between August and October timeframe.

Site visit by Jason Ardt October 28th, 2021. Sight distance measured 8 feet behind the new stop line: Southbound check #1 = 215 feet Southbound check #2 = 215 feet Site distance is complicated here by a lack of available Right-of-Way as north of the intersection the ROW is only 33 feet (2 rods) in width.

Not achieved with this modification:

Minimum Stopping Sight Distance of 250 feet for a 35 MPH roadway

Minimum Stopping Sight Distance of 360 feet for a 45 MPH roadway, if the 85th percentile speed of 46.6 MPH, gathered by traffic count in August of 2020, was used.

Minimum Intersection Sight Distance for 35 MPH roadway of 390 feet @ 18 feet from the travelled way. Minimum Intersection Sight Distance for 45 MPH roadway of 500 feet @ 18 feet from the travelled way.

Conclusion:

Neither intersection nor stopping sight distance was not achieved at this location even with the tree trimming done by the property owners, therefore it meets the Multi-Way Stop Application warrant 05(C) of the MUTCD for a location where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop. Ordinance for the installation of a southbound stop sign will be pursued.

1. Stop SB traffic on Northwest Dr in addition to WB traffic on W. Pole Rd.

Make Intersection a Two-Way Stop – westbound and southbound

Section 2B.07 Multi-Way Stop Applications

05 Other criteria that may be considered in an engineering study include: C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop

Guidance:

08 Plaques with the appropriate alternative messages of TRAFFIC FROM LEFT (RIGHT) DOES NOT STOP (W4-4Ap) or ONCOMING TRAFFIC DOES NOT STOP (W4-4bP) should be used at intersections where STOP signs control all but one approach to the intersection, unless the only non-stopped approach is from a one-way street.

Ordinance for SB Stop, Add Stop Sign with Oncoming Traffic Does Not Stop plaque to SB Northwest Dr, add Traffic From Left Does Not Stop to WB W. Pole Rd Stop Sign