

Government of the District of Columbia

Department of Transportation



September 19, 2019

Mr. William Connor
4114 Ingomar Street, NW
Washington, DC 20015

Re: All-Way STOP Control at 42nd Street and Ingomar Street, NW

Dear Mr. Connor,

Thank you for your request for an All Way STOP Control (AWSC) at the intersection of 42nd Street and Ingomar Street, NW. This letter summarizes the results of a traffic engineering study conducted by the District Department of Transportation (DDOT) to determine the eligibility of installing this type of traffic control at the subject intersection. The study findings are presented below, along with steps DDOT will be taking to improve safety at the intersection.

Basis of Study

The federal standard on traffic control devices, the *Manual on Uniform Traffic Control Devices* (MUTCD, 2009) Provides that Multi-Way (All-Way) STOP Control can be useful as a safety measure at intersections if certain traffic conditions exists. However, it should not be used indiscriminately. The 2009 MUTCD guidelines require that a traffic engineering study be performed before an All-Way STOP Control is installed at an intersection. DDOT's traffic engineering evaluation of the intersection was conducted utilizing criteria outlined in the MUTCD, as well as other nationally-recognized standards, including guidance from the Institute of Transportation Engineers (ITE), the Federal Highway Administration (FHWA), and engineering judgment.

Factors considered in this evaluation include traffic volumes at the intersection, speeding characteristics, crash statistics, roadway geometry, location of pedestrian generators (including schools), and general traffic control conditions at the intersection. Field investigations and observations were conducted at different times on typical weekdays.

Study Findings

The investigation of current intersections conditions, as well as a thorough review of all the data collected and gathered, resulted in the following findings:

- Per the District of Columbia’s 2016 Functional Classification System, 42nd Street and Ingomar Street, NW are classified as local roads at the study intersection.
- Forty-second Street, NW is a bi-directional street which runs in the north-south direction, approximately 28 feet wide (curb to curb) with on-street parking on both sides.
- Ingomar Street, NW is a bi-directional street oriented in the east-west direction, approximately 22 feet wide (curb to curb) with on-street parking on the right side of the eastbound direction.
- Traffic on 42nd Street, NW is uncontrolled; however, traffic volumes traveling eastbound and westbound on Ingomar Street, NW are controlled by STOP signs.
- The results from peak-hour turning movement counts, conducted on July 2, 2019 show the following:
 - Forty-second Street, NW had peak-hour traffic volume of approximately 101 units of traffic per hour (uph) during the AM and 80 uph during the PM. These volume units include 12 and 8 pedestrians crossing 42nd Street, SE in the AM and PM peak hours, respectively.
 - Ingomar Street, NW had peak-hour traffic volumes of 58 uph during the AM and 101 uph during the PM peaks. These volume units include 19 and 13 pedestrians crossing Ingomar Street, SE in the AM and PM peak hours, respectively.
- No crash was reported at the study intersection over the past 12 months.
- The available Sight Distance (SD) for the eastbound approach left-turn met the minimum AASHTO criteria of 150 feet, but the eastbound approach right-turn and westbound approach left, and right-turn maneuvers did not.
- There are four (4) existing crosswalk pavement markings at the study intersection, which are in good condition. The STOP bars located on both approaches of Ingomar Street, NW are also in good condition.

Based on these findings, the operating conditions at the intersection of 42nd Street and Ingomar Street, NW **do not** meet the criteria stipulated by federal standards for the installation of a Multi-Way STOP Control for the following reason:

- Based on peak hour observations, the study intersection does not meet the minimum required volume threshold levels of at least 300 units per hour for eight (8) hours on the major roadway and the conflicting traffic of 200 per hour for the same hours on the minor roadway.

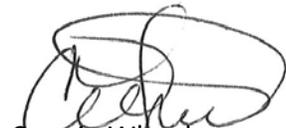
Numerous ITE and FHWA studies have shown that **stop compliance, and safety decreases with the installation of All-Way STOP Control when the federal guidelines are not followed, and the warrants are not met.** For this reason, DDOT will not install this type of control at the

intersection. However, DDOT will perform the following improvements to enhance traffic safety for all roadway users at the study intersection:

- Move existing parking restriction sign on west side of the southbound approach 10 feet north from their current location.
- Move existing parking restriction sign on the right side of the northbound approach 23 feet south from its current location.

If you have any further questions or concerns, please do not hesitate to contact me at (202) 671-4607 or connie.wheeler@dc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'Connie Wheeler', written over a circular scribble.

Connie Wheeler
Transportation Operations Administration
District Department of Transportation (DDOT)