

**Memorandum
Public Works Department**



To: City Manager
Subject: Stop Signs
Date: February 13, 2015
Number: 2015-022

SOURCE OF REQUEST:

Jeffrey and Joanne Wolever
2720 20th Avenue
Rock Island, IL 61201

NATURE OF REQUEST:

The Traffic Engineering Committee received a request from Jeffrey and Joanne Wolever to change the 2-way stop into a 4-way stop at the intersection of 27th Street and 20th Avenue.

MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES WARRANTS:

The excerpts from the Manual of Uniform Traffic Control Devices (MUTCD) are attached.

CONTACTS WITH RESIDENTS:

None

TRAFFIC STUDY INFORMATION:

The Engineering Division conducted a traffic study of this intersection and determined that the installation of stop signs is not warranted.

A copy of the traffic study is attached.

COST:

The cost to the city is minimal.

RECOMMENDATION:

The Traffic Engineering Committee recommends that the City Council deny the request.

Submitted by: Randall D. Tweet, Public Works Director
Traffic Engineering Committee

Approved by: Thomas Thomas, City Manager

Memorandum

Public Works Department



To: Traffic Engineering Committee
Subject: Request for STOP signs 20th Avenue at 27th Street
Date: February 09, 2015
TEC No: 14-28

The Engineering Division evaluated a request about installing four-way STOP signs along 20th Avenue at the intersection of 27th Street. Current traffic control signage is STOP signs on 27th Street at the avenue. Traffic at the above intersections was counted on December 12, 2014. According to the latest Manual of Uniform Traffic Control and Devices (MUTCD), STOP signs can be warranted at an intersection if one of the following warrants is met:

Intersection of a less important road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law: The traffic study indicated the following volumes at these intersections:

- 20th Avenue carried 257 to 928 AADT;
- 27th Streets carried 197 to 269 AADT.

The intersections were observed to meet the application of the normal right-of-way rule with reasonable compliance with the law in accordance with their current traffic control signage. Therefore this warrant was not met.

Street entering a through highway or street (arterial): 20th Avenue and 27th Street are classified as local streets. *Therefore this warrant was not met.*

Unsignalized intersection in a signalized area: In accordance with MUTCD criteria, this intersection is in a non-signalized area. *Therefore this warrant was not met.*

Minimum vehicular volumes: To satisfy the traffic warrant, the vehicular volume entering the intersections from the major street (20th Avenue) approaches (total of both approaches) should average at least 300 vehicles/hour for any 8 hours of an average day. The study indicated that the major street averaged less than 87 vehicles/hours for the busiest 8 hours of an average day. *Therefore this warrant was not met.*

Restricted view or crash records indicate a need for control by the STOP sign: There are no obstructions that would restrict a motorist's vision at these intersections. To satisfy the accident experience warrant, at least 5 or more reported crashes in a 12-month period that is susceptible to correction by a STOP sign installation at each intersection. Accident reports filed with the City of Rock Island Police Department indicate that there were no reported accidents at these intersections in the past 3 years that may have been avoided with the installation of 4-way STOP Signs. *Therefore this warrant was not met.*

Summary: *The traffic study performed on the dates referenced above indicated that the intersections of 20th Avenue with 27th Streets did not meet any of the above warrants or conditions for the installation of 4-way STOP signs.*

Submitted by: Michael J. Kane, P.E., City Engineer

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ROCK ISLAND
ILLINOIS

November 21, 2014

Jeffrey and Joanne Wolever
2720 20th Avenue
Rock Island, IL 61201

SUBJECT: Stop Signs

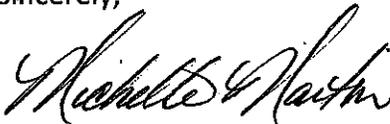
Dear Jeffrey and Joanne Wolever:

The City of Rock Island's Traffic Engineering Committee received your request to change the 2-way stop into a 4-way stop at the intersection of 27th Street and 20th Avenue.

Due to the weather conditions, we will not be able to use the necessary equipment to complete a traffic study. Once the weather breaks we will complete the traffic study and submit it to the Traffic Engineering Committee for review. Once the Traffic Engineering Committee makes its recommendation to the City Council a copy of the report will be sent to you in the mail.

If you have any questions, please give me a call at 732-2200.

Sincerely,



Michelle Martin
Assistant to the Public Works Director
Traffic Engineering Committee

To: City of Rock Island Traffic Division

From: Jeffrey and Joanne Wolever 2720th Avenue Rock Island, Illinois 61201

This letter is a request to change the two-way stop into a four-way stop at the intersection of 27th street at 20th Avenue.

Traffic needs to be slowed on 20th Avenue for the safety of motorists, pedestrians, bicyclists, and 20th Avenue residents. There are several reasons for making this request.

** 20th Avenue has become a busy, highly traveled route with motorists speeding along it without regard to the above citizens.

** Hy Vee traffic has continued to increase on 20th Avenue because Hy Vee has an entrance/exit onto 20th Avenue meant to divert traffic away from 18th Avenue. Also, the proposed CVS store on 18th Avenue will certainly increase traffic at the intersection since there is a traffic light on 18th Avenue and 27th street in front of the new CVS proposed sight.

** Motorists continue to be confused while using this intersection uncertain as to who should stop. Motorists traveling north and south bound don't always follow the traffic signs thereby creating a potential hazard for motorists and pedestrians traveling east and west bound along 20th avenue and 27th street.

** Finally, two new four way stops have already been installed on 20th Avenue within the past few months.

Therefore, due to recent road improvements, **now is the time** to add the four way stop to make motorists slow down and become more aware of other motorists, pedestrians, bicyclists, and residents on 20th avenue and also in preparation for increased traffic due to the proposed CVS site on 18th avenue.

On a personal note, having resided on 20th Avenue for over 30 years, we have witnessed the increase in the amount of traffic in our residential neighborhood. Also, we are extremely alert while doing yard work on our boulevard due to nearby unaware speeding motorists.

Jeffrey Wolever
309 798-3758

Joanne Wolever
309 230-3631

STOP

Regulatory Signs

2B-5 Warrants for Stop Sign

Because the STOP sign causes a substantial inconvenience to motorists, it should be used only where warranted. A STOP sign may be warranted at an intersection where one or more of the following conditions exist:

1. Intersection of a less important road with a main road where application of the normal right-of-way rule is unduly hazardous.
2. Street entering a through highway or street.
3. Unsignalized intersection in a signalized area.
4. Other intersections where a combination of high speed, restricted view, and serious accident record indicates a need for control by the STOP sign.

Prior to the application of these warrants, consideration should be given to less restrictive measures, such as the YIELD sign (2B-7) where a full stop is not necessary at all times. Periodic reviews of existing installations may be desirable to determine whether, because of changed conditions the use of less restrictive control or no control could accommodate traffic demands safely and more effectively.

STOP signs should never be used on the through roadways of expressways. Properly designed expressway interchanges provide for the continuous flow of traffic, making STOP signs unnecessary even on the entering roadways. Where at-grade intersections are temporarily justified for local traffic in sparsely populated areas, STOP signs should be used on the entering roadways to protect the through traffic. STOP signs may also be required at the end of diverging roadways at the intersection with other highways not designed as expressways. In most of these cases, the speeds will not warrant any great increase in the sign sizes.

STOP signs shall not be erected at intersections where traffic control signals are operating. The conflicting commands of two types of control devices are confusing. If traffic is required to stop when the operation of the stop-and-go signals is not warranted, the signals should be put on flashing operation with the red flashing light facing the traffic that must stop.

Where two main highways intersect, the STOP sign or signs should normally be posted on the minor street to stop the lesser flow of traffic. Traffic engineering studies, however, may justify a decision to install a STOP sign or signs on the major street, as at a three-way intersection where safety considerations may justify stopping the greater flow of traffic to permit a left-turning movement.

STOP signs may be used at selected railroad-highway grade crossings only after their need has been determined by a detailed traffic engineering study. Use of the STOP

sign at railroad-highway grade crossings is described in section 8B-9.

Portable or part-time STOP signs shall not be used except for emergency purposes. Also, STOP signs should not be used for speed control.

