

**Memorandum
Public Works Department**



To: City Manager
Subject: Stop Sign
Date: May 23, 2011
Number: 2011-149

SOURCE OF REQUEST:

W. Thomas McCune, Jr.
Plumbers and Pipefitters Local Union 25
4600 46th Avenue
Rock Island, IL 61201

NATURE OF REQUEST:

The Traffic Engineering Committee received a request from W. Thomas McCune, Jr. Plumbers and Pipefitters Local Union 25, to install a stop sign at the "T" intersection of 45th Street Court and 47th Avenue Court.

MANUAL OF 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: Robert T. Hawes, P.E., Assistant City Manager/Public Works Director
Traffic Engineering Committee

Approved by: John C. Phillips, City Manager



MEMORANDUM
Public Works Department

TO: City Manager **TEC Number:** 11-13
SUBJECT: Request for Installing STOP Signs **Date:** 04/25/11
45th Street Court at 47th Avenue

The Engineering Division evaluated a request about installing 3-way STOP signs on 45th Street Court at its intersection with 47th Avenue. Currently, there are no traffic control signs at this intersection. Traffic at the above intersection was studied on April 20 and April 21, 2011. According to the latest edition of the 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:

- 45th Street Court carried 327 AADT;
- 47th Avenue carried 76 to 394 AADT.

This intersection was observed to meet the application of the normal right-of-way rule with reasonable compliance with the law. *Therefore this warrant was not met.*

Street entering a through highway or street (arterial): 45th Street Court and 47th Avenue are classified as local streets. *Therefore this warrant was not met.*

Unsignalized intersection in a signalized area: In accordance with MUTCD criteria, there are no signalized intersections in this area. *Therefore this warrant was not met.*

Minimum vehicular volumes: To satisfy the traffic warrant, the vehicular volume entering the intersection from the major street approaches (total of both approaches) should average at least 300 vehicles/hours for any 8 hours of an average day. The study indicated that 47th Avenue averaged 40 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 this intersection. 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. In the past 3 years, there have been no reported crashes at this intersection. *Therefore this warrant was not met.*

Summary: *The traffic study performed on the dates referenced above indicated that this intersection did not meet any of the above warrants or conditions for the installation of STOP signs.*

SUBMITTED BY: Michael J, Kane, P.E., Assistant City Engineer

APPROVED:



April 15, 2011

Public Works Department
Attn: Traffic Engineering
600 Mill Street
Rock Island, IL 61201

To Whom It May Concern:

Plumbers and Pipefitters Local Union 25 would like to request a traffic investigation and possible stop sign at the intersection of 45th Street Court and 47th Avenue Court. This is a 'T' intersection with no current traffic warning signage. There have been numerous close calls due to the fact that drivers exiting 45th Street Court do not look, yield, or stop as they pull onto 47th Avenue Court which has two-way traffic.

Thank you for your time and consideration for this request.

Best Regards,

A handwritten signature in blue ink that reads "W. Thomas McCune, Jr.".

W. Thomas McCune, Jr.
Business Manager

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.

