

Legislation Text

File #: 17-537, **Version:** 1

Presenter/Contact
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SUBJECT:

Discuss and consider approval of the second and final reading of an ordinance amending Ordinance 75-10 of the City of New Braunfels Code of Ordinances to install an all-way stop at the intersection of Gruene Road and Gruene Lake Drive (private street) and a private driveway.

BACKGROUND / RATIONALE:

Council District: 4

City Council approved with a vote of six in favor and one opposed the first reading of the ordinance amending Ordinance 75-10 of the City of New Braunfels Code of Ordinances to install an all-way stop at the intersection of Gruene Road and Gruene Lake Drive (private street) and a private driveway.

A citizen requested that an all-way stop be installed on Gruene Road at Gruene Lake Drive due to traffic safety concerns. This intersection has four approaches: two on Gruene Road; one from Gruene Lake Drive, which is a private street; and one private driveway. Gruene Road functions and is classified in the Regional Transportation Plan as a minor collector and is the major street at this intersection. There is currently a stop sign on Gruene Lake Drive at this intersection.

An engineering review was conducted in accordance with the Texas Manual on Uniform Traffic Control Devices (TMUTCD). Based on the stop sign criteria, this intersection did not meet the warrants for an all-way stop condition. The counts from the traffic study are shown in the attached Figure 1. The traffic from Gruene Road represents 84% at the intersection with 16% coming from Gruene Lake Drive and the private driveway.

The posted speed limit on Gruene Road is 30 miles per hour (mph). The Police Department collected speed data from November 28 to December 1, 2016 and found that the 85th percentile speed was 37 mph with the higher speed departing Gruene. The majority of traffic is traveling between 31-35 mph which is typical for a collector street.

The sight distance required for the posted speed limit at this intersection was previously obstructed by landscaping and private signs in the right-of-way, as shown in the attached Figure 2. These obstructions have been cleared and the sight distance at the intersection is unobstructed at this time. A photograph of the cleared sight distance is shown in the attached Figure 3.

In addition to the all-way stop warrant study, an analysis of the intersection was conducted using traffic analysis software to determine the change in delay if an all-way stop was installed. The results

demonstrate that the delay for the currently uncontrolled traffic on Gruene Road increases from almost no delay at the intersection to 8.8 seconds per vehicle with the addition of an all-way stop. It is important to note that this analysis does not account for future growth in the area, which is anticipated to increase traffic further on Gruene Road. Traffic volumes are not expected to increase by the same amount on Gruene Lake Drive.

An all-way stop is more appropriate at the proposed Waterway Lane collector-collector roadway network between Gruene Road and Common Street that is currently shown on the Regional Transportation Plan. This proposed collector is needed to alleviate some of the traffic delays at the intersections of Common Street and Gruene Road and FM 306 and Hunter Road. It will also assist in addressing some of the cut through issues on Hanz Drive and Gruene Vineyard Crossing, which both have residential frontage. While there is city right-of-way for the Waterway Lane collector, there are currently no plans or funding for a project at this time.

Staff does not recommend the installation of an all-way stop on a thoroughfare collector street at a private street/driveway with low traffic. Thoroughfare collector streets are moderate capacity roads that move traffic from local and arterial streets and other collectors. Speeds and traffic volumes are designed to be higher on collector streets. When stop signs are installed at locations where they are not warranted and unexpected, there is a likelihood of motorists disregarding or missing the stop sign which may create more serious traffic issues.

The recommended measure is an intersection warning sign on northbound Gruene Road to indicate the presence of the Gruene Lake private street and private driveway intersection and the possibility of turning or entering traffic.

ADDRESSES A NEED/ISSUE IN A CITY PLAN OR COUNCIL PRIORITY:

2006 Comprehensive Plan: Transportation Goal 21: Provide a system of convenient and safe transportation facilities through comprehensive, cooperative, and continuing transportation system planning and development.

FISCAL IMPACT:

Traffic control signs cost approximately \$150 each and stop bar striping for Gruene Road costs approximately \$530. Sufficient funding is available in the FY16-17 approved street and drainage budget.

COMMITTEE RECOMMENDATION:

This request was considered by the Transportation and Traffic Advisory Board at their meeting on July 13, 2017. The motion passed with four members in favor and one opposed.

STAFF RECOMMENDATION:

Staff does not recommend the installation of an all-way stop at the intersection of Gruene Road and Gruene Lake Drive because this intersection did not meet the warrants for an all-way stop specified in the TMUTCD, the sight distance obstructions have been removed, the traffic control measure does not meet the appropriate traffic control for the transportation network, and an unwarranted stop sign at this location will result in compliance issues and possibly increase traffic crashes.