

Fort Bend County Engineering FORT BEND COUNTY, TEXAS

Richard W. Stolleis, P.E. County Engineer

December 12, 2016

Commissioner Richard Morrison Fort Bend County Precinct 1 1517 Eugene Heimann Circle Richmond, TX 77469

RE: Greatwood Parkway at Rabbs Crossing – Multi-Way Stop Control

Dear Commissioner Morrison:

The Fort Bend County Engineering Department has completed a review of the operational conditions at the intersection of Greatwood Parkway at Rabbs Crossing in response to a request for multi-way stop control. The posted speed limit is 35 mph on Greatwood Parkway and 25 mph on Rabbs Crossing. The intersection currently operates with stop control on Rabbs Crossing. Both roadways are identified as Collectors in the 2015 Fort Bend County Major Thoroughfare Plan.

Traffic counts were collected and used to evaluate the intersection for multi-way stop control based on the warrants specified in the Texas Manual on Uniform Traffic Control Devices. Based on the data collected, traffic volumes warrant multi-way stop control at the intersection. The multi-way stop control worksheet and updated traffic control plan are attached.

Based on the above results, Engineering recommends the conversion of the intersection to multi-way stop control. If you have any questions please do not hesitate to contact me at 281-633-7528 or chris.debaillon@fortbendcountytx.gov.

Regards,

Chris Debaillon, PE, PTOE

Assistant County Engineer - Traffic

CD/mjs

CC:

Judge Robert E. Hebert, County Judge Marc Grant - FBC Road & Bridge Brian Fields - Signage Department Wendy Troxler – Greatwood HOA

File

Attachments

Multi-Way Stop Warrant Analysis Summary

2011 Texas Manual on Uniform Traffic Control Devices Multi-Way Stop Warrants

Precinct



Streets		Speeds:	85th Pct.	Posted
Major	Greatwood Pkwy		38	35
Minor	Rabbs Crossing		. set	30

Fort Bend County Engineering

Eight Highest Hours:

Survey Date: 10/18/2016

Hour	Major St.	Minor St.	
nour	Veh. Total	Unit Total	
7:00	721	330	
16:00	858	278	
8:00	389	258	
17:00	989	255	
6:00	336	248	
19:00	524	244	
15:00	585	234	
18:00	841	213	
Average	655	258	

Required Average Vehicle Volumes:

Major St Both Approaches			Minor St Both Approaches		
100%	80%	70%	100%	80%	70%
300	240	210	200	160	140

80% Condition used when there have been 4 or more crashes susceptible to correction by a multi-way stop in a 12-month period

70% Condition used when major street posted or 85th percentile speed exceeds 40 mph

Eight-Hour Average Vehiclular Volume Warrant Satisfied?

Yes

Is a traffic signal warranted and are arrangements being made for its installation?		
Have there been 5 or more crashes susceptible to correction by a multi-way stop in a 12-month period?		
Is a driver on the minor street, after stopping, unable to see conflicting traffic and is unable to reasonably negotiate the intersection unless conflicting cross traffic is also required to stop?		
Is there a need to control pedestrian/vehicle conflicts and is the intersection near a location generating high pedestrian volumes?		
Is the intersection composed of two residential neighborhood collector streets of similar design and operating characteristics where multi-way stop control would improve operations?		
Comments:		
Installation of multi-way stop is warranted and recommended.		

