Stop Sign Warrant Evaluation

To: Melissa Reynolds, PE, MPA, CFM, Director of Engineering & Capital Projects From: Jennifer R. Shortess, PE, CFM, Asst. Director of Engineering & Capital Projects

Date: November 3, 2025

Subject: Stop Sign Warrant Evaluation – Coral Way at Field Brook

1. Purpose

This memo documents the engineering study conducted to determine whether an all-way stop sign configuration is warranted at the intersection of Coral Way and Field Brook in accordance with the Manual on Uniform Traffic Control Devices (MUTCD), 11th Edition (Part 2B).

2. Background

The intersection of Coral Way and Field Brook is currently controlled by a one-way stop sign, with Coral Way as the through condition (without stop). The surrounding area is characterized by residential. Recent concerns were raised regarding speeding and limited sight distance.

3. Data Collection

Date of Field Study	October 21, 2025
Crash History (past 3 years)	0 crashes
Traffic Volumes (8-hour average)	Major: 103 vph; Minor: 12 vph
Speed (85th percentile)	25 mph on major street
Sight Distance	Adequate - Subdivision was designed in
	2017 and does not meet American
	Association of State Highway and
	Transportation Officials (AASHTO)
	Geometric Design Requirements.
Pedestrian/Bicycle Activity	13 pedestrians were observed during the
	study period

4. MUTCD Warrant Analysis

A. One-Way Stop Control (Section 2B.07)

- Coral Way (major street) is clearly more heavily traveled.
- Field Brook (minor street) traffic is 12% of major street.
- Sight distance on minor street is adequate.
- Crash history indicates 0 right-angle or turning crashes.

Conclusion: Conditions are met for a one-way stop.

B. Multiway Stop Control (Section 2B.09)

Criterion	MUTCD Threshold	Observed	Met?
Correctable crashes	≥ 5	0	No
(12 mo)			
Major street volume	≥ 300 vph (8 hrs)	103	No
Minor street volume	≥ 200 vph (8 hrs)	12	No
Pedestrian/Sight	Qualitative	No	No
distance issues			

5. Alternative Measures Considered

- Improve sight lines (trim vegetation, restrict parking)
- Install warning signage ("Cross Traffic Does Not Stop" or "Intersection Ahead")
- Apply pavement markings
- Consider neighborhood traffic calming (reduced speed limit) or increased speed enforcement

6. Recommendation

Based on MUTCD warrants and field observations, installation of a Multi-Way Stop Sign is not recommended at the intersection of Coral Way and Field Brook.

7. Supporting Attachments

- Traffic count summary
- Intersection sketch / aerial photo with sight distance measurements

Stop Sign Evaluation Checklist

Item	Criteria	Notes
1	Major/minor road volume difference defined	Yes
2	Crash history (right-angle or turning)	No
3	Restricted sight distance	No
4	Right-of-way confusion observed	No
5	Pedestrian/bicycle needs	No
6	MUTCD volume warrants met	No
7	MUTCD crash warrant met (≥5 in 12 mo)	No
8	School crossing or special conditions	No
9	Alternatives reviewed	Yes
10	Consistency with nearby intersections	Yes

2. Coral Way at Field Brook - TMC

Tue Oct 21, 2025

Full Length (7 AM-6 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1350515, Location: 29.609047, -98.001185



Pasadena, TX, 77503, US

Provided by: C. J. Hensch & Associates Inc. 5215 Sycamore Ave.,

Leg	Cor	al Way					Field B	rook	(Coral V	Vay					Alle	ywa	y				
Direction	Sou	thboun	d				Westbo	und					Northbo	ound					East	bou	nd				
Time	R	T	L	U	Арр І	Ped*	R	Т	L	U	Арр	Ped*	R	T	L	U	App	Ped*	R	Т	L	U	App	Ped*	Int
2025-10-21 7:00AM	0	78	7	0	85	0	5	0	7	0	12	0	2	16	0	0	18	0	0	0	0	0	0	0	115
8:00AM	0	61	4	0	65	0	5	0	3	0	8	6	2	16	0	1	19	0	0	0	0	0	0	1	92
9:00AM	0	33	3	0	36	0	4	0	1	0	5	2	2	17	0	0	19	0	0	0	0	0	0	1	60
10:00AM	0	23	6	0	29	0	4	0	4	0	8	0	5	23	0	0	28	0	0	0	0	0	0	0	65
11:00AM	0	28	2	0	30	0	7	0	8	0	15	0	3	27	0	0	30	0	0	0	0	0	0	0	75
12:00PM	0	43	5	0	48	0	5	0	2	0	7	0	1	29	0	0	30	0	0	0	0	0	0	0	85
1:00PM	0	34	5	0	39	0	7	0	3	0	10	0	3	26	0	0	29	0	0	0	0	0	0	0	78
2:00PM	0	33	5	0	38	0	2	0	2	0	4	0	3	43	0	0	46	0	0	0	0	0	0	0	88
3:00PM	0	26	6	0	32	0	6	0	8	2	16	1	4	40	0	0	44	1	0	0	0	0	0	0	92
4:00PM	0	39	5	0	44	0	7	0	4	0	11	0	4	60	0	0	64	0	0	0	0	0	0	0	119
5:00PM	0	44	11	0	55	0	13	0	8	0	21	1	7	61	0	1	69	0	0	0	0	0	0	0	145
Total	0	442	59	0	501	0	65	0	50	2	117	10	36	358	0	2	396	1	0	0	0	0	0	2	1014
% Approach	0%	88.2%	11.8%	0%	-	-	55.6%	0% 4	42.7%	1.7%	-	-	9.1%	90.4% (0%	0.5%	-	-	0%	0% (0%	0%	-	-	-
% Total	0%	43.6%	5.8%	0% 4	19.4%	-	6.4%	0%	4.9%	0.2%	11.5%	-	3.6%	35.3% (0%	0.2% 3	9.1%	-	0%	0% (0%	0%	0%	-	-
Lights	0	433	59	0	492	-	63	0	48	2	113	-	35	348	0	2	385	-	0	0	0	0	0	-	990
% Lights	0%	98.0%	100%	0% 9	98.2%	-	96.9%	0% 9	96.0%	100%	96.6%	-	97.2%	97.2% (0% 1	100% 9	7.2%	-	0%	0% (0%	0%	-	-	97.6%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0% (0%	0%	0%	-	0%	0% (0%	0%	-	-	0%
Buses and Single-Unit																									
Trucks	0	9	0	0	9	-	2	0	2	0	4	-	1	10	0	0	11	-	0	0	0	0	0	-	24
% Buses and Single-Unit	00/	2.00/	00/	00/	1.00/		2.10/	00/	4.00/	00/	2 40/		2.00/	2.00/ /	20/	00/	2.00/		00/	00/	00/	00/			2 40/
Trucks	0%	2.0%	0%	0%	1.8%	-	3.1%	J%	4.0%	0%	3.4%	10	2.8%	2.8% (0%	2.8%	- 1	0%	0% (0%	0%	-	-	2.4%
Pedestrians % Pedestrians	H		-	_		0	-	_	-		-		-	-	-	-	-	100%	_	_	_	_	- 1	2	
	-	-	-	-	-	-	-	-	-	-		100%	-	-	-	-		100%	<u> </u>	-	-	_	- 1	100%	_
Bicycles on Crosswalk	H			-	-	0	-	_		-	-	00/	-		-			00/	Ŀ	_	-	_		0	
% Bicycles on Crosswalk	-	-		-	-	-	_	-		-	-	0%	-	-	-		-	0%		-	-	-	-	0%	-

^{*}Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2. Coral Way at Field Brook - TMC

Tue Oct 21, 2025

Full Length (7 AM-6 PM)

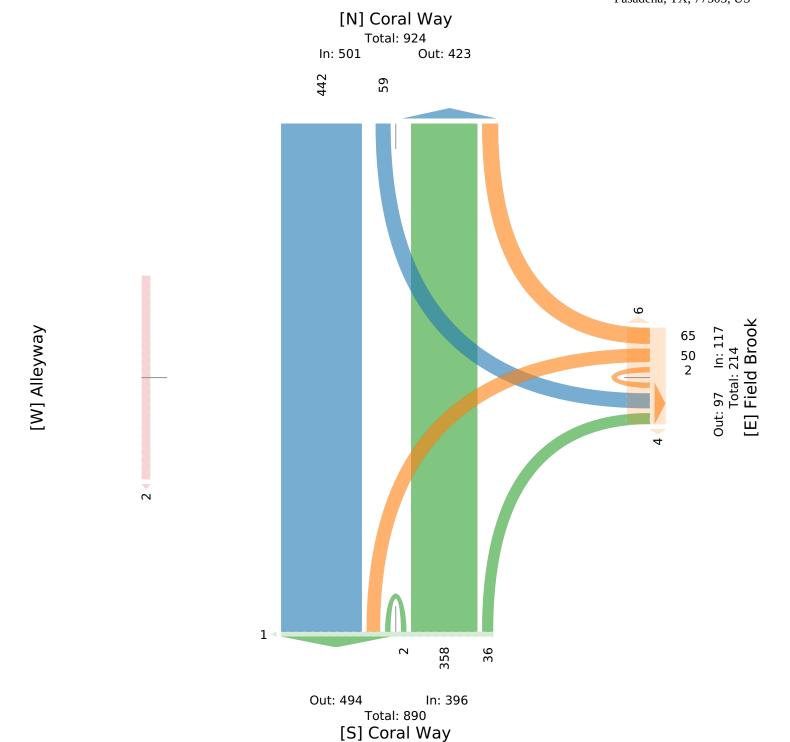
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

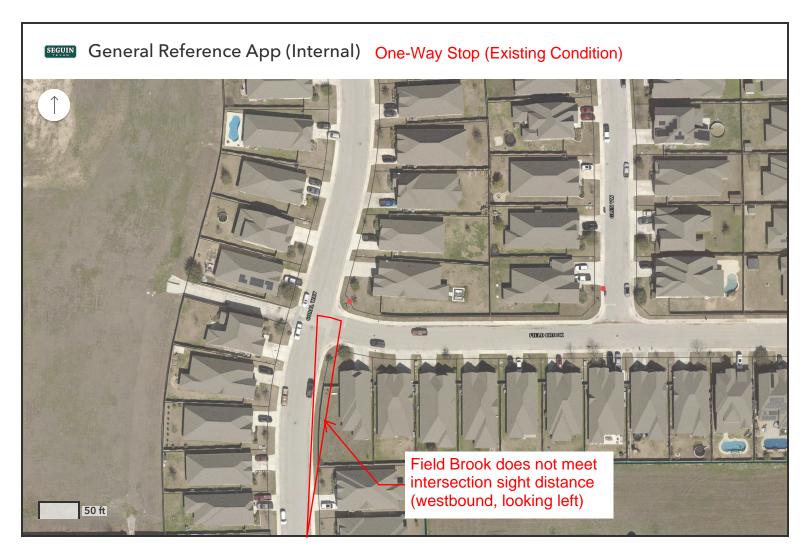
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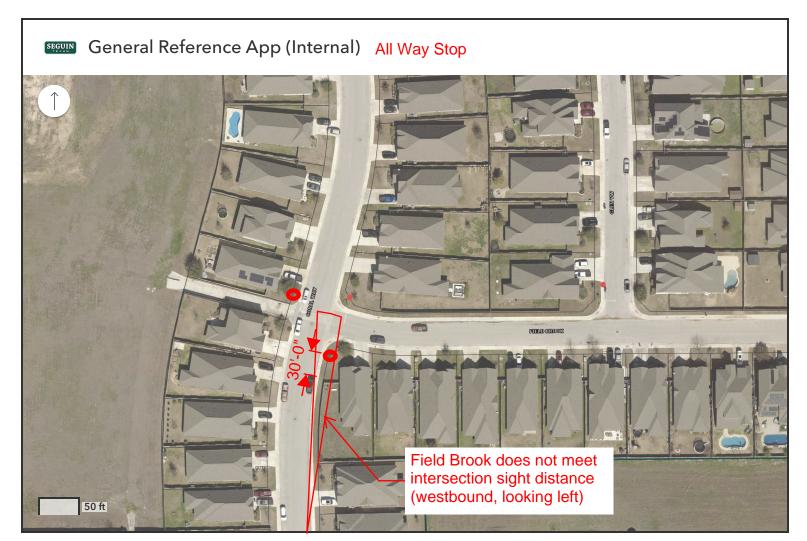


Provided by: C. J. Hensch & Associates Inc. 5215 Sycamore Ave., Pasadena, TX, 77503, US





1"=120'



1"=120'

Texas Transportation Code Section 545.302 - Stopping, Standing, or Parking Prohibited in Certain Places

- (b) An operator may not stand or park an occupied or unoccupied vehicle;
 - (1) in front of a public or private driveway
 - (2) within 15 feet of a fire hydrant
 - (3) within 20 feet of a crosswalk at an intersection
 - (4) within 30 feet on the approach to a stop sign

