

# EXHIBIT A



## MEMORANDUM

**To:** Traffic Study Files

**From:** Alison Mills, P.E., South Austin Engineer  
Traffic Engineering Division  
Austin Transportation Department

**Date:** April 18, 2022

**Subject:** SPEED ZONE INVESTIGATION

**Location:** Escarpment Blvd – Padua Drive to Bernia Drive

**Date(s) of Previous Investigation:** None



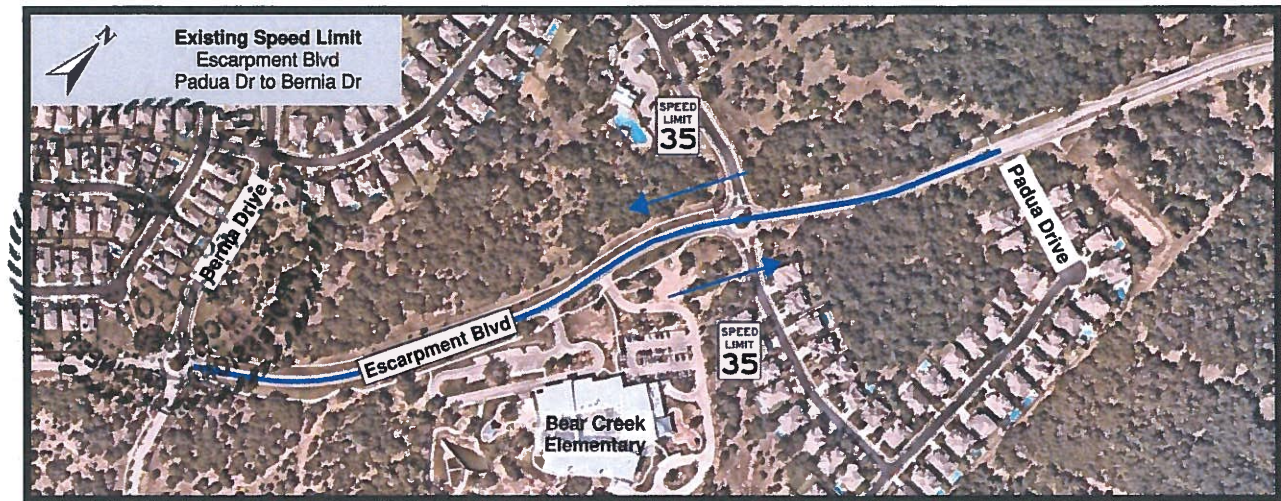
A Traffic Engineering Investigation has been conducted by the Transportation Engineering Division to determine the appropriate speed limit on Escarpment Boulevard from Padua Drive to Bernia Drive. Currently the speed limit from Padua Drive to Bernia Drive is 35 MPH. Figure 1 represents a map of the study area.

### Location Conditions:

Escarpment Blvd from Padua Drive to Bernia Drive is an undivided, two-way, two-lane, residential collector roadway, with an existing 35 MPH speed limit. See Table 1 for more information on the segment studied. Figure 1 represents the map of the street segment studied.

**Table 1: Location Information**

Street Segment:	Segment Length (Miles)	Number of Unsignalized Access Points	Number of Signalized Intersections	Width (ft)
From Padua Drive to Bernia Drive	0.5	7	0	32



**Figure 1: Study Area Aerial View with Existing Speed Limits**

### Speed and Volume Data:

A speed study was conducted in accordance with the Texas Procedures for Establishing Speed Zones. Speed and volume data were collected in April 2022 to determine the appropriate posted speed limit for Escarpment Boulevard. In 2020, 2,288 vehicles per day were recorded on Escarpment Boulevard from Padua Drive to Bernia Drive.

As summarized in Table 2, the 85<sup>th</sup> percentile speed on the eastbound and westbound lanes was recorded in the range of 34 mph to 36 mph. The average 85<sup>th</sup> percentile speed on Escarpment Boulevard was recorded at 35 mph for the eastbound and westbound lanes of traffic.

**Table 2: Speed and Volume Data Escarpment Blvd**

Block Numbers	Street Segment	Existing Speed Limit	85% Speed		50% Speed		Traffic Volume AADT
			NB	SB	NB	SB	
12600 - 13401	Padua Drive to Bernia Drive	35	40.0	39.6	34.2	35.0	2288

### General Comments:

Texas' Procedures for Establishing Speed Zones provides the information and procedures necessary for establishing speed zones and advisory speeds on the state highway system. Per these procedures speed limits can be reduced to 10 mph below the 85<sup>th</sup> percentile speed based on the additional roadway features listed below:

- A. Narrow roadway pavement widths (20 feet or less, for example)
- B. Horizontal and vertical curves (possible limited sight distance)
- C. Hidden driveways and other developments (possible limited sight distance)

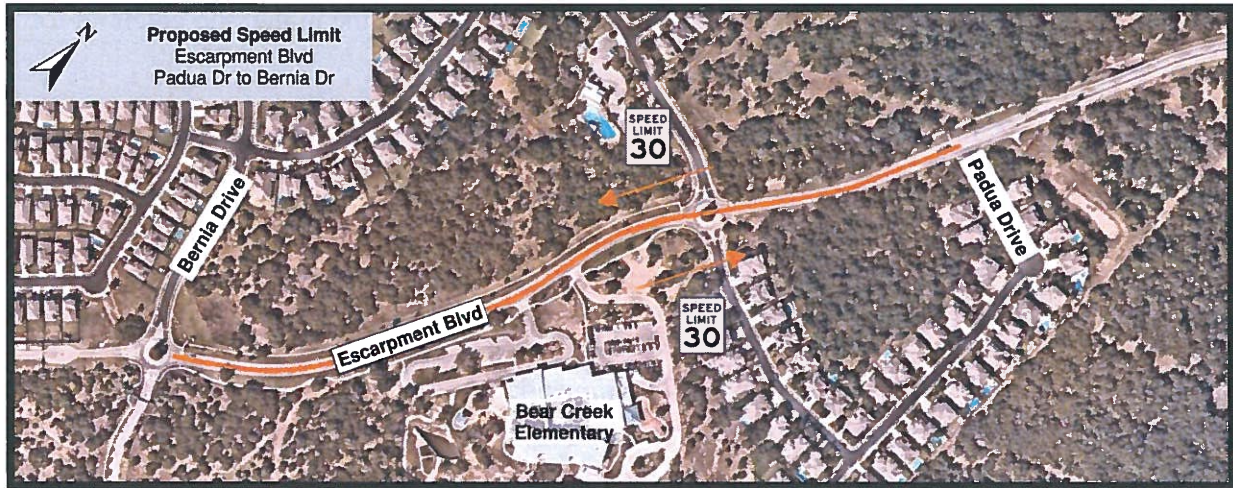
- D. High driveway density (the higher the number of driveways, the higher the potential for encountering entering and turning vehicles)
- E. Crash history along the location
- F. Rural residential or developed areas (higher potential for pedestrian and bicycle traffic)
- G. Lack of striped, improved shoulders (constricted lateral movement).

Escarpment Boulevard from Padua Drive to Bernia Drive is a newly developed residential street with high pedestrian traffic due to the nearby school, Bear Creek Elementary. The roadway segment also has unstriped shoulders. It is the conclusion of the engineer that this roadway meets the characteristics of features 'F' and 'G' above and should therefore receive a speed limit within 10 mph below the 85<sup>th</sup> percentile speed. The recommendations for speed limits along this segment are shown in Table 4 and Figure 5.

**Table 4: USLIMITS2 Speed Zoning Report Results**

Street Segment	Existing Speed Limit (NB & SB)	Engineer Recommended Speed Limit (NB & SB)	<b>Recommended Speed Limit (NB &amp; SB)</b>
From Padua Drive to Bernia Drive	35mph	30mph	<b>30mph</b>





**Figure 5: Proposed Speed Limit Along Escarpment Blvd from Padua Dr to Bernia Dr**

Based on the analysis of this information, it is my engineering judgement that the speed limit on Escarpment Boulevard from Padua Drive to Bernia Drive should be 30 miles per hour in both directions of travel.