

**MEMORANDUM**

**To:** Traffic Study Files

**From:** City of Austin Transportation and Public Works Department

**Date:** June 1, 2023

**Subject:** Reduced Speed School Zone Investigation

**Location:** E 51<sup>st</sup> St, Manor Rd, Tilley St

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

A traffic engineering investigation has been conducted to determine if a reduced speed school zone is appropriate on East 51<sup>st</sup> Street, Manor Road, and Tilley Street for students attending Marshall Middle School.

The following information was collected and analyzed for this determination.

**General Conditions**

The streets of concern are located within the growing Mueller Development, a dense mixed-use neighborhood that emphasizes walkability and active transportation.

E 51<sup>st</sup> St functions as an east-west arterial street between Berkman Dr and Manor Rd with two travel lanes, a two-way left turn lane and in-street bike lanes for both directions. Bartholomew District Park, the Windsor Park Neighborhood, and Blanton Elementary are located north of E 51<sup>st</sup> St and the Mueller Development, which includes various commercial and retail businesses as well as a high-activity HEB grocery store and Marshall Middle School, is south of E 51<sup>st</sup> St.

Manor Rd functions as a two-lane arterial street between Berkman Dr and E 51<sup>st</sup> St, curving around the southeast quadrant of the Mueller Development and has an intermittent two-way left turn lane and continuous protected in-street bike lanes in both directions. A small neighborhood is located east of Manor Rd and the Mueller Development and Marshall Middle School are west of Manor Rd.

Tilley Street functions as a north-south neighborhood connector within Mueller for pedestrians, cyclists, and motorists traveling between Manor Road and East 51<sup>st</sup> Street. Tilley Street operates as a bi-directional two-lane residential collector and includes a protected bi-directional cycle-track. The adjacent land uses are primarily residential single family, multi-family, and dense multi-family properties, with a 2-acre lot planned for future development. Marshall Middle School is located directly adjacent to Tilley Street.

### **Marshall Middle School**

The Austin Independent School District (AISD) opens Marshall Middle School in Fall 2023 with initial enrollment of approximately 280 students and will have a maximum capacity of 800. The school site is located on the east side of Tilley Street and the main entrance is located at the intersection of Tilley Street and Simond Avenue. The middle school will accept students from Andrews, Barbara Jordan, Blanton, Harris, Norman-Sims, Overton, Pecans Springs, and Winn elementary schools. Students walking to school will use the main entrance at Tilley Street and Simond Avenue. The bus loop will utilize the driveway at the intersection of Tilley Street and Philomena Street and parent drop-off will be facilitated with a driveway off Zach Scott Street west of Taniguchi Street and a driveway at the intersection of Tilley Street and Camacho Street.

### **Existing Conditions**

E 51<sup>st</sup> St has a 42 ft cross section that includes two travel lanes, a two-way left turn lane, and unprotected in-street bike lanes. There is no on-street parking along E 51<sup>st</sup> St. There is a marked crosswalk across E 51<sup>st</sup> St at Tilley St, with a pedestrian refuge island, however vehicular traffic is uncontrolled through the crossing.

Manor Rd has a 42 ft cross section that includes two travel lanes, a two-way center left turn lane, and in-street protected bike lanes. There is no on-street parking along Manor Rd. There is a marked crosswalk across Manor Rd at Zach Scott St, with a pedestrian refuge island, however vehicular traffic is uncontrolled through the crossing.

Tilley St has a 26 ft cross section with bulb-outs and pedestrian ramps at cross-streets that narrow the street width to 20 ft where intersecting McBee Street, Simond Avenue, and Camacho Street. On-street parallel parking is present along the east side of Tilley Street and a 10 ft wide bidirectional cycle track runs parallel to Tilley St, separated by a median. There are currently no marked pedestrian crosswalks across Tilley Street at McBee St, Simond Ave, or Camacho St.

### **Planned Pedestrian Crossings on Tilley Street**

Marked pedestrian crossings will be installed across Tilley Street at the intersections with McBee Street, Simond Avenue, and Camacho Street, within the proposed reduced speed school zone on Tilley St. The crossings will utilize high-visibility crosswalk markings and signage to indicate the pedestrian crossings to drivers. All-way stop controls may be installed at Simond Avenue and Tilley St, pending a separate all-way stop study. The crossings at McBee St and at Camacho St will remain uncontrolled.

### **Proximity of Pedestrian Crossings to the School**

The existing pedestrian crossing of E 51<sup>st</sup> St at Tilley St is 0.4 miles from Marshall MS and provides the most direct designated path for a portion of students who would be attending from the Blanton Elementary School feeder, located in the Windsor Park Neighborhood, north of E 51<sup>st</sup> St.

The existing pedestrian crossing of Manor Rd at Zach Scott St is 0.5 miles from Marshall MS and provides the most direct crossing for students residing in the neighborhood east of Manor Rd between Lovell Dr and Creekwood Rd, as well as students residing in the apartment complexes on the east side of Manor Rd, south of E 51<sup>st</sup> St.

The proposed pedestrian crossing of Tilley St at Simond Ave is located directly in front of the main entrance to Marshall MS and the crossings of Tilley St at McBee St and Camacho St are each located 0.05 miles from the main entrance.

### **Pedestrian Crossing Volumes**

Pedestrian crossing volume counts were not taken for the purpose of this investigation as the school zones are to be established prior to the opening of Marshall Middle School. AISD Transportation staff have indicated that all students residing within 2 miles of the school will be within the designated walking area, which includes the entirety of the Mueller Development and 5 of the 8 feeder elementary schools: Andrews ES, Blanton ES, and Harris ES to the north of E 51<sup>st</sup> St, and Pecan Springs ES and Norman-Sims ES to the east of Manor Rd.

The feeder elementary schools north of E 51<sup>st</sup> St and those east of Manor Rd are expected to contribute to school crossing demand across E 51<sup>st</sup> St and across Manor Rd respectively. Significant demand is expected for students to cross Tilley Street due to the general walkability of the Mueller Development.

### **Presence of Adult Crossing Guard or Student Safety Patrol**

TPW's Safe Routes to School Program will coordinate with AISD regarding the feasibility of an adult crossing guard at planned pedestrian crossings.

### **Sight Distance**

There are no sight distance concerns for the school zones proposed on E 51<sup>st</sup> St, Manor Rd, or Tilley St.

### **Sidewalks**

Continuous sidewalks are present on the north and south side of E 51<sup>st</sup> St between Berkman Dr and Manor Rd.

Continuous sidewalks are present on the east and west sides of Manor Rd from Lovell Dr to 360 feet north of Zach Scott St, with the east sidewalk continuing to E 51<sup>st</sup> St.

A continuous sidewalk is present on the west side of Tilley Street from McBee Street to Zach Scott Street and a sidewalk is present on the east side from McBee Street to Camacho Street.

Sidewalks are not currently present on either side of Tilley Street between Philomena Street and McBee Street or on the east side between Camacho Street and Zach Scott Street. However, these sidewalk gaps will be filled by future ongoing development.

### Recommendation

Based on the analysis of the information provided in the above sections:

A reduced speed school zone of 15 miles per hour (mph) should be installed on Tilley Street from 200 feet north of McBee Street to 200 feet south of Camacho Street.

A reduced speed school zone of 20 mph should be installed on East 51<sup>st</sup> Street from 240 feet west of Tilley Street to 200 feet east of Tilley Street.

A reduced speed school zone of 20 mph should be installed on Manor Rd from 240 feet north of Zach Scott Street to 200 feet south of Zach Scott Street.

Figure 1 presents the investigation area and limits of the proposed reduced speed school zone on E 51<sup>st</sup> St.

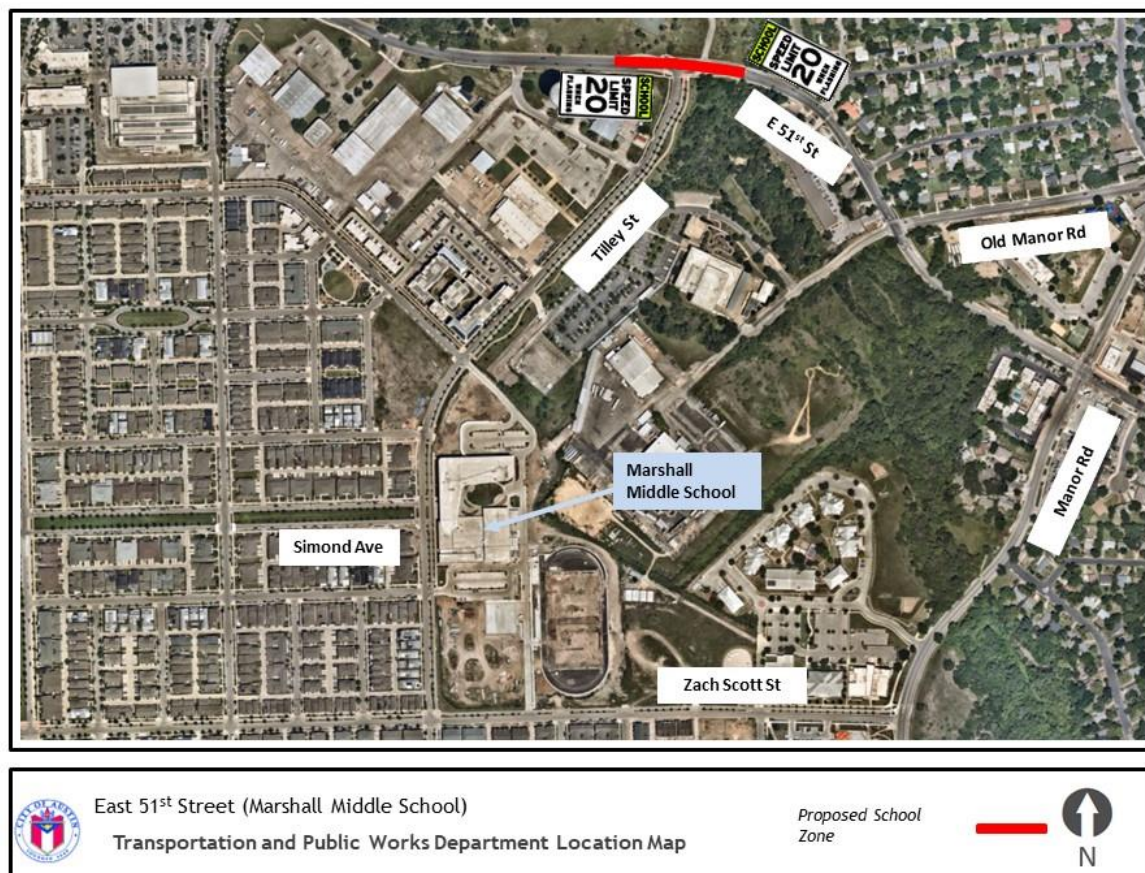


Figure 1: Proposed School Zone on E 51<sup>st</sup> St



Figure 2 presents the investigation area and limits of the proposed reduced speed school zone on Manor Rd.

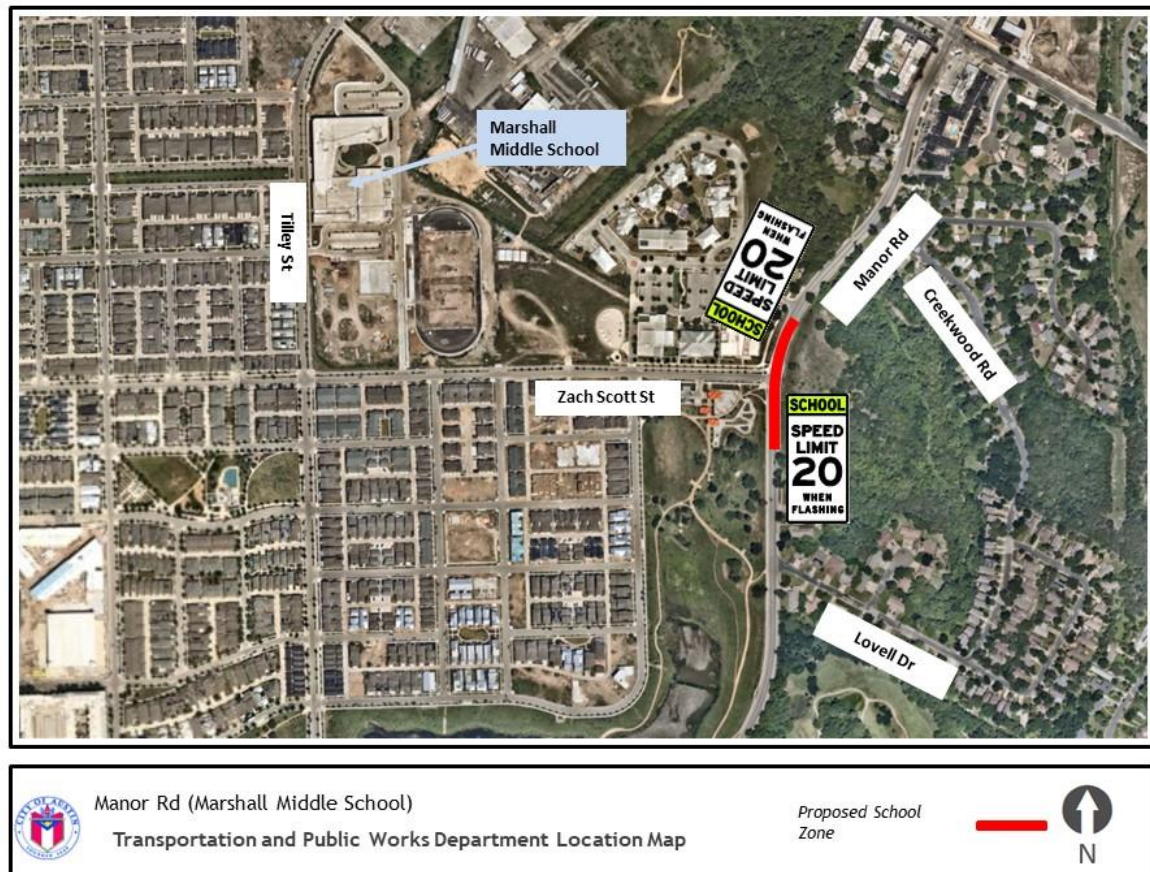


Figure 2: Proposed School Zone on Manor Rd

Figure 3 presents the investigation area and limits of the proposed reduced speed school zone on Tilley St.

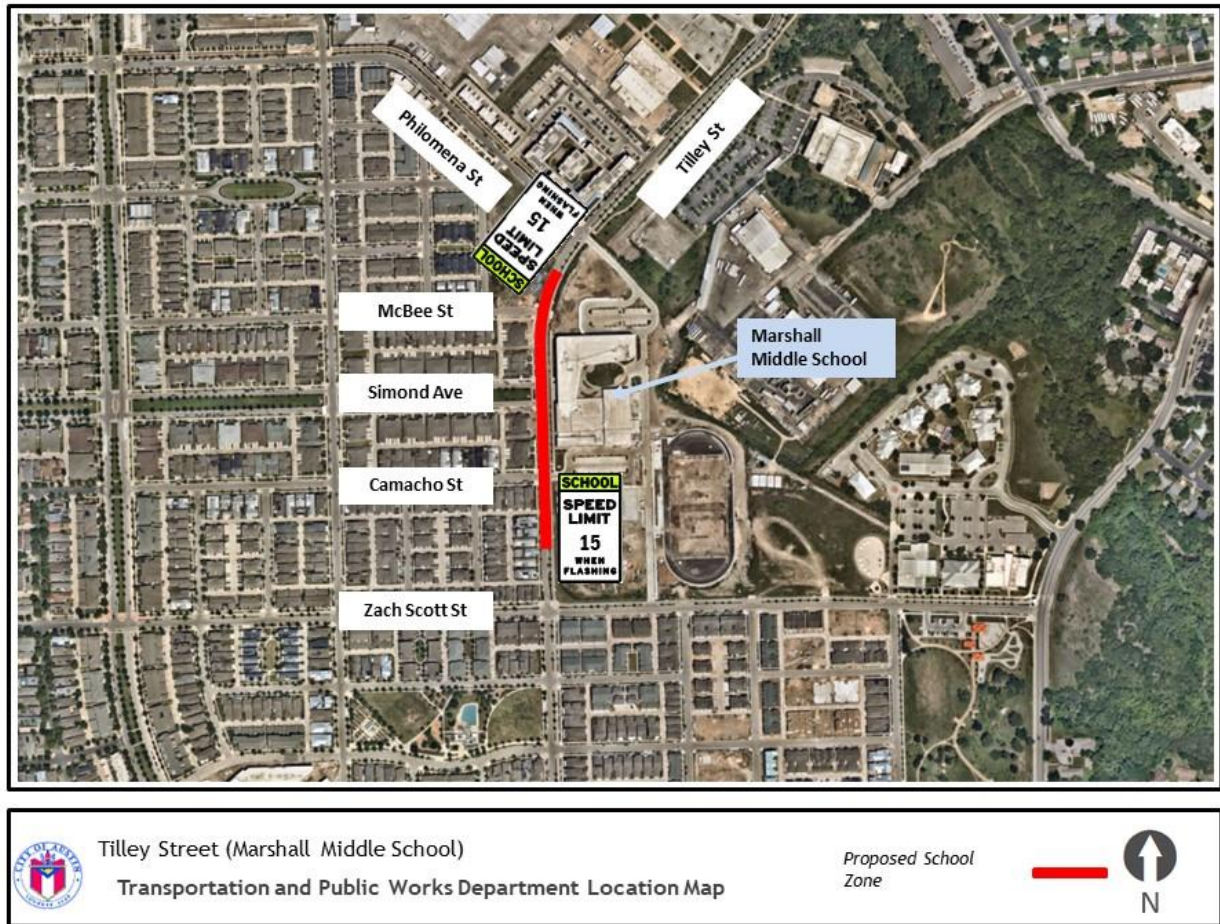


Figure 3: Proposed School Zone on Tilley St