

**Staff Recommendation:**

**Revise TMP to (1) address pending engineering/traffic items as outlined in staff report, and (2) for consistency with proposed site plan.**

November 27, 2023

PK# 5484-22.556

# TRAFFIC MANAGEMENT PLAN

**Z223-272**



A handwritten signature in blue ink that reads "Hunter W. Lemley".

DISD EDWIN J. KIEST ELEMENTARY SCHOOL  
CITY OF DALLAS

## **Introduction**

The services of **Pacheco Koch** (PK) were retained by **PGAL** on behalf of **Dallas Independent School District (DISD)** to prepare a Traffic Management Plan (TMP), as requested by the City of Dallas, for the existing Edwin J. Kiest Elementary School described below. The new school has an existing enrollment of approximately 570 students and is anticipated to increase to a maximum of 850 students after improvements of the new building are complete.

As described in Appendix A6 of the City of Dallas *Street Design Manual*, a school Traffic Management Plan is a "site-specific plan providing guidelines to coordinate traffic circulation during school peak hours. TMPs should promote strategies to manage all modes of transportation and maintain student safety paramount at all times. An effective plan requires continual planning, renewed understanding and coordinated efforts by city staff, school administration and staff, neighbors, parents, and students.

This TMP was prepared by registered engineers at Pacheco Koch who are experienced in transportation and traffic engineering (the "Engineer"). Pacheco Koch is a licensed engineering firm based in Dallas, Texas, that provides professional engineering and related services.

The engineer performed most recent on-site dismissal field observations on Wednesday, August 31<sup>st</sup>, 2022, and Thursday September 1<sup>st</sup>, 2022, during morning and afternoon periods that validates all information in this report.

## **1. TMP EXHIBIT**

(See attached Exhibit 1 - Traffic Management Plan)

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## 2. SCHOOL LOCATION AND DESCRIPTION

- **School site location:** 2611 Healey Drive, Dallas, Texas
- **Description of adjacent roadways:**
  - Adjacent Streets:
    - Shiloh Road:
      - Cross-section: Four lanes, two-way operation, no median.
      - Sidewalk connectivity evident along frontage of school. *[School Zone]*
      - Speed Limit: 30 mph *[School Zone of 20 mph]*
    - Millmar Drive:
      - Cross-section: Two lanes, two-way operation, no median.
      - Sidewalk connectivity evident along frontage of school. *[School Zone]*
      - Speed Limit: 30 mph *[School Zone of 20 mph]*
    - Casa Oaks Drive:
      - Cross-section: Two lanes, two-way operation, no median.
      - Sidewalk connectivity evident along frontage of school. *[School Zone]*
      - Speed Limit: 30 mph *[School Zone of 20 mph]*
    - Healey Drive:
      - Cross-section: Two lanes, two-way operation, no median. (One-way westbound during school hours)
      - Sidewalk connectivity evident along frontage of school. *[School Zone]*
      - Speed Limit: 30 mph *[School Zone of 20 mph]*

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- **Adjacent Intersections:**

- Shiloh Road and Millmar Drive - Marked crosswalks on the west, south, and east legs, barrier free ramps provided on all corners.
- Shiloh Road and Healey Drive - Marked crosswalks (faded) on the north, west, and east legs, barrier free ramps provided on all corners.
- Casa Oaks Drive and Millmar Drive - Marked crosswalks on all approaches, barrier free ramps provided on all corners.
- Casa Oaks Drive and Healey Drive - Marked crosswalks on all approaches, barrier free ramps provided on all corners.

NOTE: It is generally recommended that all applicable crosswalks/barrier free ramps/sidewalks comply with current ADA accessibility requirements. Pacheco Koch is not certified to provide a full ADA compliance inspection, which is performed by licensed inspectors during the design and permitting process. All pavement markings, traffic signs, school zones, and pedestrian infrastructure improvements are recommended to be upgraded at permitting as applicable and meet current city and TMUTCD standards.

### 3. INGRESS/EGRESS POINTS OF ACCESS

- **Vehicular Ingress/Egress Points:**

- Millmar Drive: Two Driveways (Existing); One Driveway (Proposed)
- Healey Drive: Two Driveways (Existing); One Driveway (Proposed)

- **Student (Building) Ingress/Egress Points:**

- Main student pedestrian access will be located at the main entrances on the north and south sides of the school building according to each pick up/drop-off locations per grade level.

### 4. QUEUING SUMMARY TABLE

The following table presents the projected queuing vehicle accumulation for the subject campus. The calculations for vehicle accumulation and parking are based upon estimated ratios – estimated linear feet of queue per student – along with the assumptions provided by DISD for this campus have been validated by on-site dismissal observations conducted on Wednesday, August 31<sup>st</sup>, 2022, and Thursday September 1<sup>st</sup>, 2022. All information provided in the table below is strictly for the afternoon student pick-up release period.

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See Section 12(b) for specific information on the methodology and calculations used in the table below. Specific separation of modes of transportation was provided by DISD and is provided in Section 6.

Table 1. Queuing Summary Table

Dismissal Period (Loading Zone)	Grades	Start/End Times*	Total Enrollment	Maximum Vehicle Accumulation	(On-Site) Storage Capacity (veh)	Surplus /Deficit (veh)
			Existing (Proposed)		Proposed	
1A	Pre-K – 2 <sup>nd</sup>	7:45 AM – 3:15 PM	330 (493)	61 (91)	94	+3
1B	3 <sup>rd</sup> – 5 <sup>th</sup>	7:45 AM – 3:15 PM	240 (357)	51 (66)	75	+9

\*All times are subject to change

## 5. CIRCULATION

This section provides on-site traffic circulation, including any temporary traffic control devices.

### - Description of Existing Conditions

#### On-Site Circulation:

- Pre-K:

Parent traffic enters the area traveling via Shiloh Road and turns onto Healey Drive. Parent traffic queues/stands on the northbound and southbound curbsides along the property frontage.

- Kindergarten – 2<sup>nd</sup> Grade:

Parent traffic enters the area traveling via Casa Oaks Drive and turns onto Millmar Drive. Parent traffic queues/stands on the eastbound curbside along the property frontage and along the recessed area on Millmar Drive circulating in a counter-clockwise pattern.

Traffic exits the recessed area exiting back onto Millmar Drive after the vehicle has sufficiently unloaded/loaded the student(s) exiting/entering the vehicle.

- 3<sup>rd</sup> Grade – 5<sup>th</sup> Grade:

Parent traffic enters the area traveling via Shiloh Road and turns onto Healey Drive. Healey Drive operates as one-way westbound during school hours. Parent traffic queues/stands on the westbound curbside along the property frontage and along

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the recessed area on Healey Drive circulating in a counter-clockwise pattern.

Traffic exits the recessed area exiting back onto Healey Drive and continuing westbound after the vehicle has sufficiently unloaded/loaded the student(s) exiting/entering the vehicle.

School buses arrive to the site load and unload students along the recessed area on Healey Drive.

Staff and visitor parking lots are provided surrounding the site.

#### **Temporary traffic control devices:**

- Temporary traffic control devices are not proposed to be used for this TMP in order to facilitate drop-off/pick-up operations.

#### **- Description of Proposed Conditions**

##### **On-Site Circulation:**

- Pre-K – 2<sup>nd</sup> Grade:

Parent traffic is to enter the area traveling via Casa Oaks Drive and turn onto Millmar Drive headed eastbound. Parent traffic queues/stands onsite by entering the recessed area on Millmar Drive circulating in a counter-clockwise pattern.

Two queue lines will form outside the queueing area and stack until the end of the queueing isle on site. Students are to be loaded into parent vehicles as a 3-lane stacking system in front of the queue. A center median isle will be installed to present a safe refuge area for students to wait for the appropriate queued vehicle. Staff members will take extreme caution as they will communicate from within the school and outside the school to accompany students as the students arrive to the appropriate location and help cross through to the median location.

Traffic is to exit the site back onto Millmar Drive after the vehicle has sufficiently unloaded/loaded the student(s) exiting/entering the vehicle.

- 3<sup>rd</sup> Grade – 5<sup>th</sup> Grade:

Parent traffic enters the area traveling via Shiloh Road and turns onto Healey Drive. Healey Drive operates as one-way westbound during school hours. Parent traffic queues/stands on site in the recessed area entering on Healey Drive circulating in a counter-clockwise pattern.

Two queue lines will form outside the queueing area and stack until the end of the queueing isle on site. Students are to be loaded into parent vehicles as a 3-lane stacking system in front of the queue. A center median isle will be installed to present a

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safe refuge area for students to wait for the appropriate queued vehicle. Staff members will take extreme caution as they will communicate from within the school and outside the school to accompany students as the students arrive to the appropriate location and help cross through to the median location.

Traffic is to exit the recessed area exiting back onto Healey Drive and continuing westbound after the vehicle has sufficiently unloaded/loaded the student(s) exiting/entering the vehicle.

School buses arrive to the site before any parent activity in the area provided north of the building and load and unload students along the drop off/pick up lane. The school staff will actively be involved in managing the parent queue to ensure the school bus to safely exit the drop off/pick up lane.

Staff and visitor parking lots are provided surrounding the site.

#### **Temporary traffic control devices:**

- Temporary traffic control devices are not proposed to be used for this TMP in order to facilitate drop-off/pick-up operations.

## **6. DROP-OFF/PICK-UP COORDINATION**

This section provides proposed student drop-off/pick-up coordination information.

- **Subject School Recommended Loading System:**
  - Administered Sequential Loading System

#### **DEFINITIONS:**

A "Administer Sequential Loading System" refers to a managed system that enforces a prescribed policy for picking up students at a specific release time. Passenger loading and vehicle departures are sequential and consecutive order based upon order of arrival. During a prior coordination phase, drivers are provided with some form of identification that school personnel observe upon arrival so that the corresponding passenger is prepped for loading before the vehicle arrives at the designated loading area. In situations with a double queue line, students are loaded in "groups" where students enter several vehicles in an instance. After, that group of vehicles depart, then another group of vehicles pull forward for the next set of students to enter each vehicle. Groups of vehicles can contain 5-10 vehicles at one time.

A "Monitored Non-Sequential System" refers to a more commonly used managed system that includes a passively supervised protocol that monitors and discourages unsafe activity along the perimeter of the site. This protocol manages students that wait to exit the

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building at parent vehicle arrival to get to their destination. Passenger loading and vehicle departures are considered non-consecutive to allow drivers to circulate through the area on a more random, but structured basis.

An "Unmanaged System" refers to an unmanaged protocol where students are not monitored or supervised during the loading period. Vehicle arrivals are non-consecutive and circulate through the area on a more random basis without the supervision of school staff.

- **Separation of modes of transportation:**

- Bus: 5%
- Walk: 10%
- Picked Up by Parent: 85%

NOTE: Information provided by DISD and validated with field observations

- **Staggered times:**
  - 7:45 AM – 3:15 PM

## 7. SCHOOL STAFF ASSISTANCE

- Number:
  - Observed: 10+ Staff Members
  - Desired: 10+ Staff Members
- Location:
  - Observed: At beginning of queue lines
  - Desired: At beginning of queue lines
- Staff Requirements and expectations:
  - Staff assistance shall be present to allow students to enter and exit the school building in a safe and efficient manner.

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## 8. ADULT SCHOOL CROSSING GUARDS AND/OR OFF-DUTY DEPUTIZED OFFICERS

- Number:
  - Observed: Three
- Location:
  - Desired: Intersections of:
    - Shiloh Road at Millmar Drive
    - Shiloh at Healey Drive
    - Casa Oaks Drive at Healey Drive



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## 9. SCHOOL ADMINISTRATION INPUT STATEMENT

The engineer collaborated with both the School District personnel and on-site staff/principal and Student Transportation Services as needed, before and during the process of creation of the Traffic Management Plan.

The site engineer, the architect and the traffic engineer have collaborated the traffic patterns of parent routes, bus routes, and recommendations of the TMP with the on-site and District personnel. The onsite and District personnel have completed a thorough review and any changes that have been discussed have been applied to this version of the plan.

### REVIEW AND COMMITMENT

This school traffic management plan (TMP) for DISD Edwin J. Kiest Elementary School was developed with the intent of optimizing safety and efficiently accommodating vehicular traffic generated during the school's typical student drop-off and pick-up periods. This plan was developed with direct input from individuals familiar with the general characteristics of the traffic needs of the school. It is important to note that a concerted and ongoing effort by and the full participation of the school administration are essential to accomplish these goals.

By the endorsement provided below, the school administration hereby agrees to implement, adhere to, and support the strategies presented in this TMP for which the school is held responsible until or unless the City of Dallas deems those strategies are no longer necessary or that other measures are more appropriate.

\_\_\_\_\_  
Principal Signature

11/29/2023  
Date

Name: Fernando Rubio

Title: Principal of Edwin J. Kiest Elementary

\_\_\_\_\_  
Police Department Signature

\_\_\_\_\_  
Date

Name: \_\_\_\_\_

Title: \_\_\_\_\_

## 10. ENGINEER SEAL

This report is signed, stamped, and dated by a licensed Professional Engineer in the State of Texas with specific expertise in transportation and traffic engineering.

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## 11. REPORT FORMAT

This report follows the City of Dallas Traffic Management Plan format as described in Appendix A6 of the City of Dallas *Street Design Manual*.

## 12. OTHER ITEMS WHERE APPLICABLE

- a) School Bus Operations: (See Section 5)
- b) Methodology:
  - a. Engineer Recommended Rate: 5.12 linear feet per student
  - b. Average Length of Vehicle: 23.5 feet
  - c. Separation of modes of transportation:
    - i. Bus: 5%
    - ii. Walk: 10%
    - iii. Picked Up by Parent: 85%

NOTE: Information provided by DISD and validated with field observations
  - d. Projected maximum vehicle accumulation:
    - i. PreK – 2<sup>nd</sup>: 91
    - ii. 3<sup>rd</sup> – 5<sup>th</sup>: 66
  - e. Projected on-site storage capacity:
    - i. PreK – 2<sup>nd</sup>: 94
    - ii. 3<sup>rd</sup> – 5<sup>th</sup>: 75
  - f. Surplus/Deficit:
    - i. PreK – 2<sup>nd</sup>: +3
    - ii. 3<sup>rd</sup> – 5<sup>th</sup>: +9
- c) Proposed Pedestrian Routes: The pedestrian routes are based on the attendance zone map when finalized. The attendance zone was not provided at the time of this study however, the anticipated (and observed) pedestrian routes include the sidewalk paths along Millmar Drive, Casa Oaks Drive, and Healey Drive.
- d) Proposed Parking Management Strategies:
  - a. On-street parking restrictions:
    - i. Shiloh Road: No restrictions posted

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- ii. Healey Drive: restriction for westbound curbside during school hours
- iii. Casa Oaks Drive: "No Parking" anytime on southbound curbside
- iv. Millmar Drive: No restrictions posted
- b. Faculty Parking: North and south of the building
- c. Visitor Parking: south of the building
- e) Recommendations (if applicable) for walking/biking: (See **Exhibit 1**)
- f) Other Recommendations: (See **Exhibit 1**)

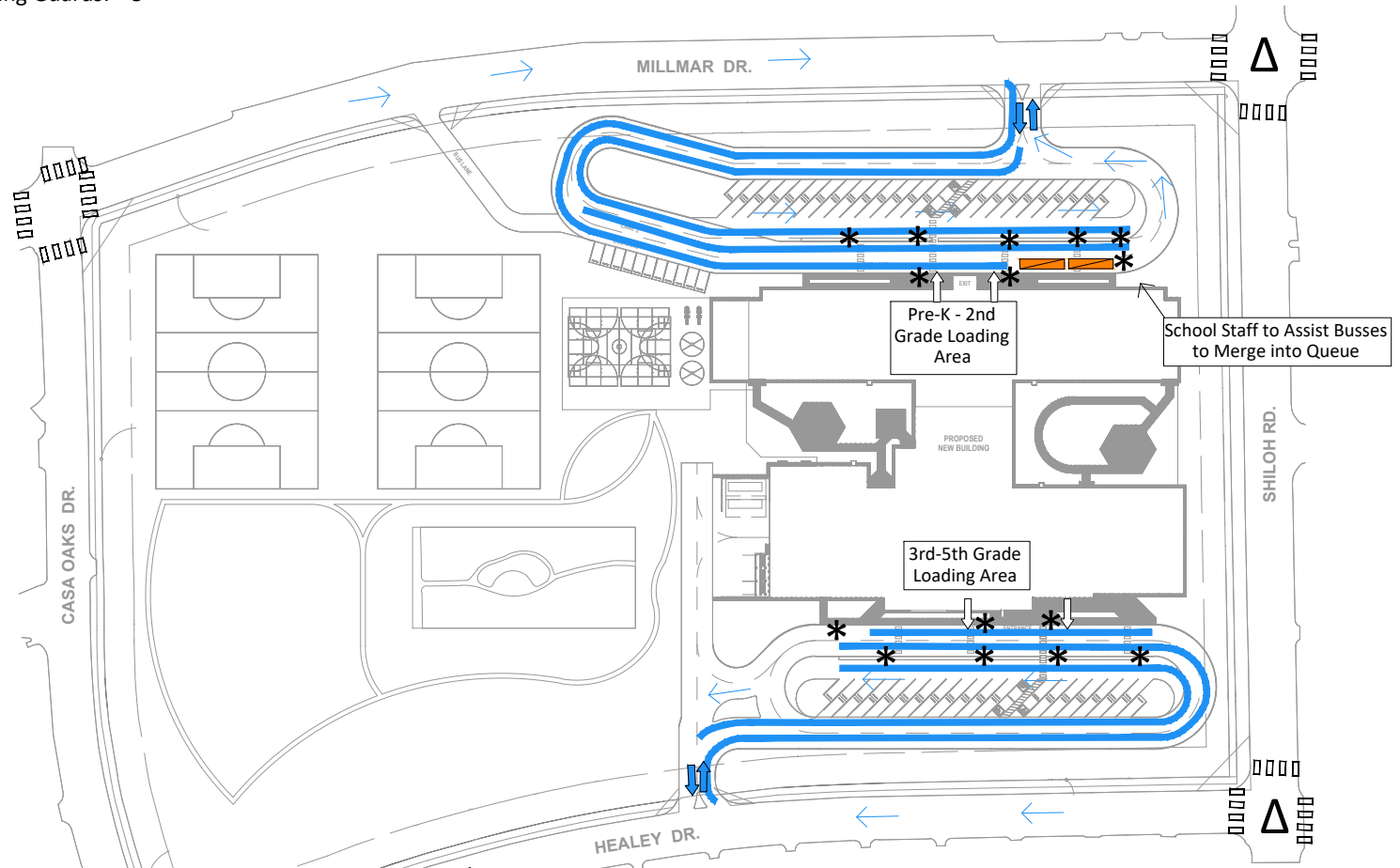
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**TMP MANAGEMENT STRATEGIES**

Student ID System: *Administered Sequential Loading System*  
 # of Staff Assistance: *10+ Staff Members*  
 # of Crossing Guards: *3*



- LEGEND**
- ▬ - Queue Area (Administered Sequential)
  - ↔ - Circulation/Flow
  - ▬ - School Bus Loading/Unloading
  - Pedestrian Access Point
  - Parent Vehicle Access Point
  - Crosswalk
  - - Pedestrian Route
  - [ ] - School Zone
  - \* - Staff Assistance
  - Δ - Crossing Guard(s)



School Staff to Assist Busses to Merge into Queue

Pre-K - 2nd Grade Loading Area

3rd-5th Grade Loading Area

ONE WAY WESTBOUND  
 During School Zone Hours:  
 7:00 AM - 9:00 AM  
 2:45 PM - 4:30 PM

Vehicle Accumulation/Capacity	Notes		
	PreK-2	3-5	
Projected Enrollment	493	357	Students
Deductions:			
By School Bus (5%)*	25	18	Students
By Walking (10%)*	50	36	Students
Other (0%)*	0	0	Students
Students by Pick-up/Drop-off	418	303	Students
Engineer Recommended Rate:	5.12	5.12	If of max. queue per student
Average Length of Vehicle:	23.5	23.5	If/veh (Pacheco Koch Observed)
"Projected Maximum Vehicle Accumulation":	91	66	Vehicles (2,140 lf, 1,551 lf)
Projected On-Site Capacity:	94	75	Vehicles (2,201 lf, 1,767 lf)
<b>SURPLUS/DEFICIT</b>	<b>+3</b>	<b>+9</b>	

\*Information given by school district

- GENERAL NOTES:**
1. The subject school administration shall issue a formal communication that summarizes the intent of the Traffic Management Plan at least once every school year.
  2. Parent drop-off activity in the morning has a similar protocol as the parent pick-up in the afternoon. Generally, excessive traffic delays and queuing were not evident during the morning peak.
  3. This drawing is conceptual only and does not reflect a detailed design. Site plan designed and provided by others.

TX. REG. ENGINEERING FIRM F-469  
 TX. REG. SURVEYING FIRM LS-100080-00

07-12-2023

PK #5484-22.556 (SRK: 07/12/23)

**EXHIBIT 1** 2223-271  
**Traffic Management Plan**  
 DISD Edwin J. Kiest Elementary, Dallas, Texas  
**Pacheco Koch**