August 11, 2023
PK# 2215-21.352

TRAFFIC MANAGEMENT PLAN

Z212-260

Dallas Independent School District Harry C. Withers Elementary School
CITY OF DALLAS

Introduction

The services of **Pacheco Koch** (PK) were retained by **Masterplan** 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 DISD Harry C. Withers Elementary School described below. The school has an existing enrollment of 428 students and is anticipated to remain after improvements 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 Monday, April 11th, 2022 and Tuesday, April 12th, 2022 during morning and afternoon periods that validates all information in this report.

1. TMP EXHIBIT

(See attached Exhibit 1 - Traffic Management Plan)

Pacheco Koch
a Westwood company

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

2. SCHOOL LOCATION AND DESCRIPTION

- **School site location**: 3959 Northaven Road, Dallas, Texas
- **Description of adjacent roadways**:
    - Adjacent Streets:
        - Northaven Road:
            - Cross-section: Approximately 38' in width, two lanes, two-way operation, undivided.
            - Sidewalk connectivity evident along frontage of school. *[School Zone]*
            - Speed Limit: *30 mph [School Zone of 20 mph]*
        - Wonderland Trail:
            - Cross-section: Approximately 36' in width, two lanes, two-way operation, undivided.
            - Sidewalk connectivity evident along frontage of school.
            - Speed Limit: *30 mph*
        - Alta Vista Lane:
            - Cross-section: Approximately 35' in width, two lanes, two-way operation, undivided.
            - Sidewalk connectivity evident along frontage of school.
            - Speed Limit: *30 mph*
    - **Adjacent Intersections**:
        - Northaven Road and Candlelight lane - Marked crosswalks on all approaches, with barrier free ramps provided on the northwest corner.
        - Northaven Road and Wonderland Trail - Marked crosswalks on north, west, and south legs approaches, with barrier free ramps provided on all corners.
        - Alta Vista Lane and Wonderland Trail - Marked crosswalks on west and south legs approaches, no barrier free ramps provided on any 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**:
    - Wonderland Trail: No Driveways (Existing); Two Driveways (Proposed)
    - Northaven Road: One Driveway (Existing and Proposed)
- **Student (Building) Ingress/Egress Points**:
    - Main student pedestrian access will be located at the main entrance on the south and east side of the school building.

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 Monday, April 11th, 2022 and Tuesday, April 12th, 2022. All information provided in the table below is strictly for the afternoon student pick-up release period.

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 (Existing)		
1	Pre-K – 5th	7:15 AM – 3:00 PM	428	428	84 (84)	34 (0)	-50 (-84)

*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:

Parent traffic enters the area traveling eastbound on Alta Vista Lane and turn onto Wonderland Trail. Parent traffic queues/stands on the southbound curb lane of Wonderland Trail, east of the school building as a managed loading system. Queuing then backs along Wonderland Trail and onto Alta Vista Lane along the eastbound curbside. (See **Exhibit 2**)

Traffic exits continuing south after the vehicle has sufficiently unloaded/loaded the student(s) exiting/entering the vehicle. Traffic then exits turning right or left onto Northaven Road.

School buses load and unload students along the westbound curbside of Northaven Road adjacent to the site.

Staff and visitor parking lots are provided west of the school building.

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:

Parent traffic is to enter the area traveling on eastbound on Alta Vista Lane and turn onto Wonderland Trail. Parent traffic queues along the recessed area provided on site adjacent to the southbound curb lane of Wonderland Trail, east of the school building as a managed loading system. Queuing then backs along Wonderland Trail and onto Alta Vista Lane along the eastbound curbside. Parent traffic also queues northbound along Wonderland Trail to turn left at the entry driveway.

Traffic is to queue in the recessed area provided on-site along Wonderland Trail (See **Exhibit 1**)

Traffic exits continuing east after the vehicle has sufficiently unloaded/loaded the student(s) exiting/entering the vehicle. Traffic then exits turning right or left onto Wonderland Trail to exit the area via Northaven Road or Alta Vista Lane.

School buses load and unload students along the westbound curbside of Northaven Road adjacent to the site.

Staff and visitor parking lots are provided west of the school building.

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.

EVAULATION OF SCHOOL ZONES:

- Due to new driveways/recessed area to be utilized for pick-up, the installation of a school zone for Wonderland Trail is recommended – PENDING CITY COUCIL APPROVAL.

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:

    An "Administered 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 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: 5%
    - Student Drivers: 0%
    - Picked Up by Parent: 90%

  NOTE: Information provided by DISD and validated with field observations
- **Staggered times**:
    - 7:15 AM – 3:00 PM (Pre-Kindergarten - 5th)

7. SCHOOL STAFF ASSISTANCE

- Number:
    - Observed: +15
    - Desired: +15
- Location:
    - Observed: Northaven Road, Wonderland Trail
    - Desired: Northaven Road and Wonderland Trail
- 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.

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

- Number:
    - Observed: 0
    - Desired: 0
- Location:
    - Observed: N/A
    - Desired: N/A

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 Harry C. Withers 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.

Wendy K. Miller — Principal Signature

8/29/2023 — Date

Name: Wendy K. Miller

Title: Harry C. Withers ES, Principal

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.

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: 5%

      iii. Students Drivers: 0%

      iv. Picked Up by Parent: 90%

      NOTE: Information provided by DISD and validated with field observations

   d. Projected maximum vehicle accumulation: 84

   e. Projected on-site storage capacity: 34

   f. Deficit: -50

c) Proposed Pedestrian Routes: The pedestrian routes will be based on the attendance zone map when finalized. The attendance zone was not provided at the time of this study however, the anticipated pedestrian routes include the sidewalk paths on site.

d) Proposed Parking Management Strategies:

   a. On-street parking restrictions: no parking signs along eastbound and westbound curbsides on Northaven Road. No parking signs along northbound and southbound curbsides on Wonderland Trail.

   b. Faculty Parking: parking lot on south of the building

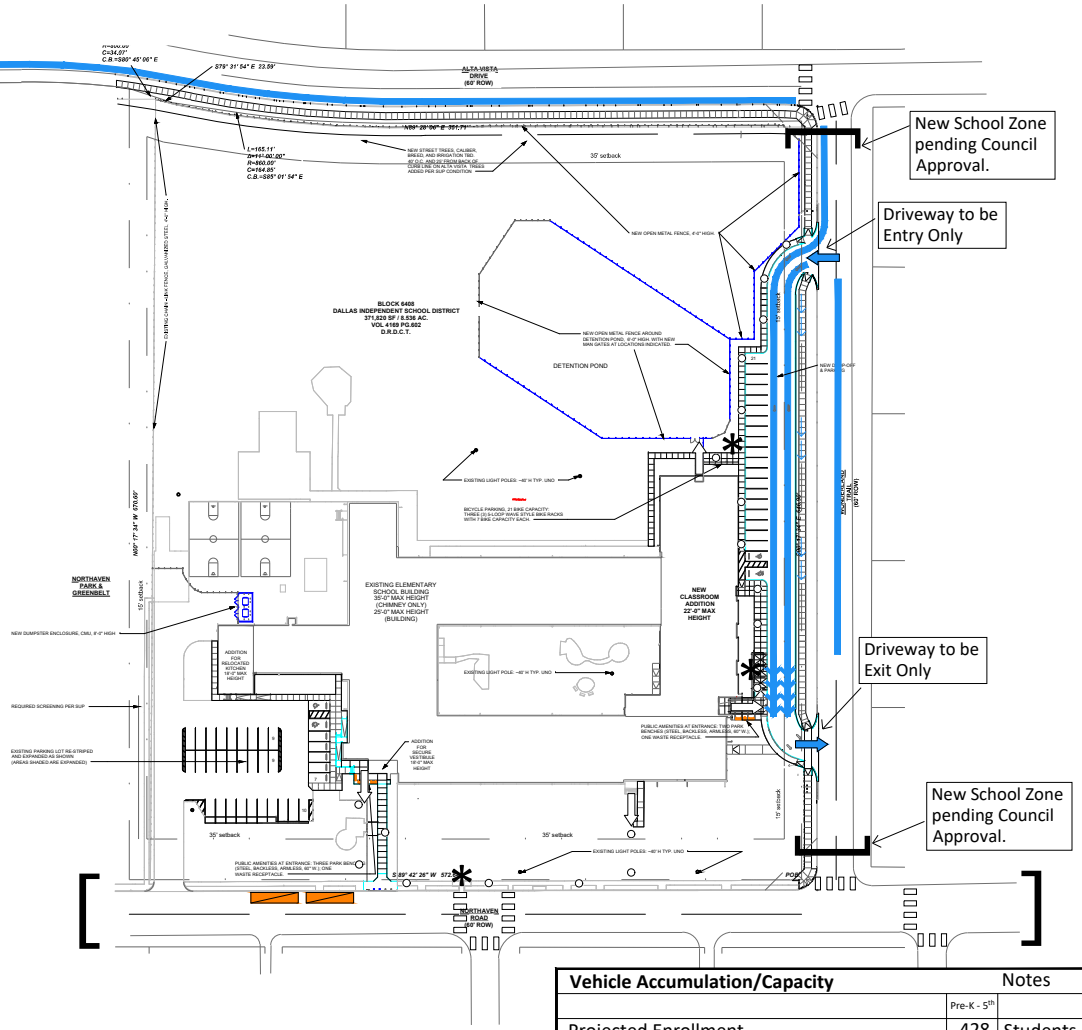
   c. Visitor Parking: parking lot on south of the building

e) Recommendations (if applicable) for walking/biking: (See **Exhibit 1**)

f) Other Recommendations: (See **Exhibit 1**)

END OF MEMO

Student ID System: *Administered Sequential Loading System*
# of Staff Assistance: *+15*
# of Crossing Guards: *None*



LEGEND
- Queue Area (Sequential Loading)
- Front (or Start) of Queue
- Circulation/Flow
- School Bus Loading/Unloading
- Pedestrian Access Point
- Parent Vehicle Access Point
- Crosswalk
- Pedestrian Route
[ ] - School Zone
* - Staff Assistance

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.

4. Queues are not to obstruct crosswalks at intersections. School Buses to load/unload at least 50' from crosswalks

5. School Zone is pending City Council approval

Vehicle Accumulation/Capacity	Pre-K - 5th	Notes
Projected Enrollment	428	Students
Deductions:		
By School Bus (5%)*	22	Students
By Walking (5%)*	22	Students
Other (0%)*	0	Students
Students by Pick-up/Drop-off	384	Students
Engineer Recommended Rate:	5.12	lf of max. queue per student
Average Length of Vehicle:	23.5	lf/veh (Pacheco Koch Observed)
"Projected Maximum Vehicle Accumulation":	84	Vehicles (1,966 LF)
Projected On-Site Capacity:	34	Vehicles (809 LF)
DEFICIT	-50	

*Information given by school district

PK 2215-21.352 (DAC: 08/11/23)

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

STATE OF TEXAS
HUNTER W. LEMLEY
125343
LICENSED PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY HUNTER W. LEMLEY, P.E. 125343 ON 08/11/23. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

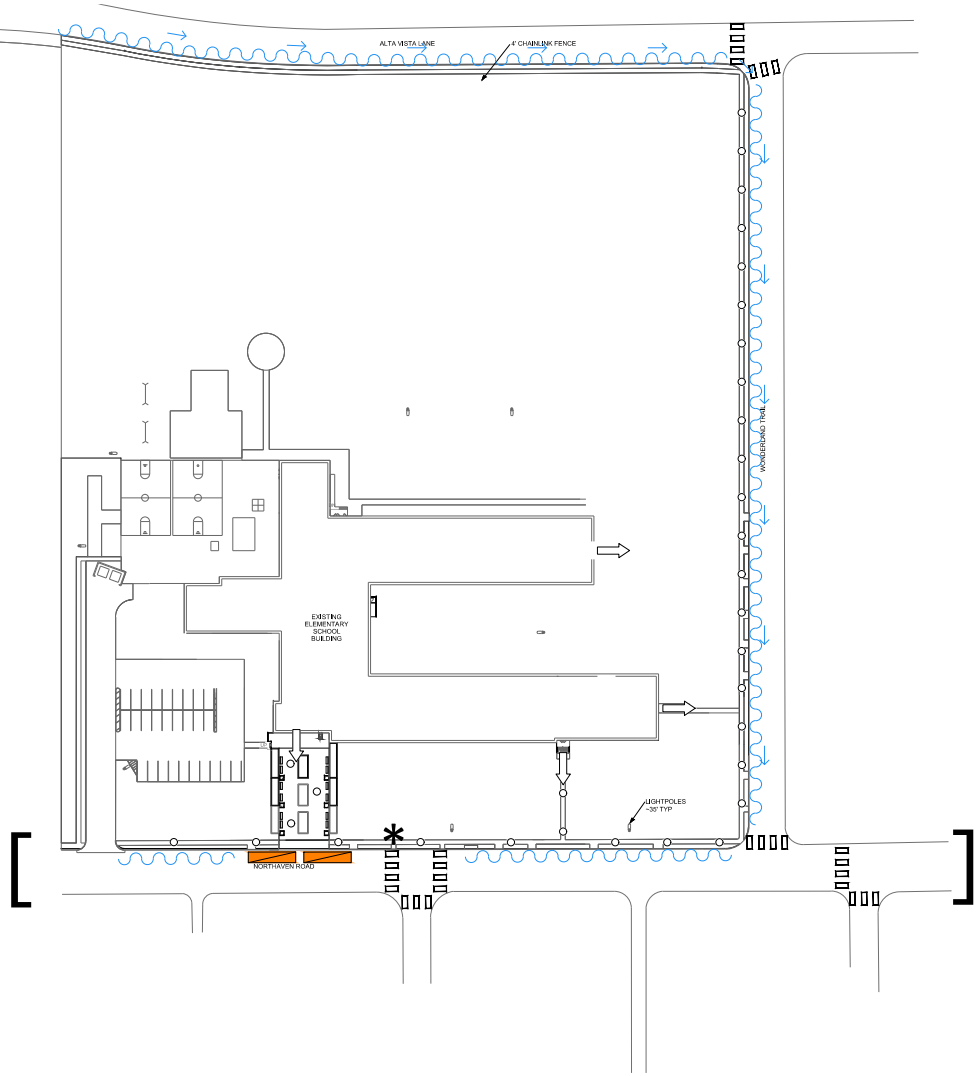
EXHIBIT **1** Z212-260

Traffic Management Plan

DISD Harry C. withers Elementary School, Dallas, Texas

Pacheco Koch
a Westwood company

Student ID System: *Non-Sequential Loading System*
# of Staff Assistance: *+15*
# of Crossing Guards: *None*



LEGEND

- Queue Area (Non-Sequential Loading)
- Circulation/Flow
- School Bus Loading/Unloading
- Pedestrian Access Point
- Crosswalk
- Pedestrian Route
- School Zone
- Staff Assistance

GENERAL NOTES:

1. 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.

2. This drawing is conceptual only and does not reflect a detailed design. Site plan designed and provided by others.

PK 2215-21.352 (DAC: 07/31/23)

Existing Conditions

EXHIBIT **2** Z212-260

Traffic Management Plan

DISD Harry C. Withers Elementary School, Dallas, Texas

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