

September 21, 2018

PK# 4032-17.390

Z178-221

# TRAFFIC MANAGEMENT PLAN

Project:

**DISD E.D. Walker Middle School**

*In Dallas, Texas*

Prepared for:

**City of Dallas**

On behalf of:

**Dallas Independent School District**

Prepared by:



Hunter W. Lemley, P.E.



7557 Rambler Road, Suite 1400

Dallas, Texas 75231-2388

(972) 235-3031 [www.pkce.com](http://www.pkce.com)

TX.REG: ENGINEERING FIRM F-469

TX. REG. SURVEYING FIRM LS-100080-00

# TRAFFIC MANAGEMENT PLAN DISD E.D. Walker Middle School

Dallas, Texas

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Exhibit 1. Recommendations/Proposed Conditions - Elementary School

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## INTRODUCTION

The services of **Pacheco Koch** (PK) were retained by Baldwin Associates, on behalf of **Dallas Independent School District**, to prepare a Traffic Management Plan (TMP) for E.D. Walker Middle School (the "School") located at 12532 Nuestra Drive in Dallas, Texas. This TMP is site-specific and relates to the peak traffic activity associated with school traffic at the site.

DISD is seeking amend the Planned Development District for the property from the City of Dallas (the "Approving Agency") to facilitate proposed site Improvements. Submittal of a TMP, prepared by a registered professional engineer experienced and skilled in the field of traffic/transportation engineering, is one of the requirements of Approving Agency's application process. This TMP was prepared by registered professional engineers employed by Pacheco Koch. Pacheco Koch is a licensed engineering firm based in Dallas, Texas, that provides professional services in traffic engineering, transportation planning, and other fields.

### **School Description**

The School consists of an existing middle school with grades 6<sup>th</sup> through 8<sup>th</sup>. Proposed site improvements include the construction of a new kindergarten and elementary school building and new gymnasium areas. Site improvements are anticipated to be completed for the 2019-2020 school year. After the proposed site improvement, DISD anticipates enrollment will increase to 1,100 students.

The Elementary School is proposed to start at 7:45 AM and end at 2:55 PM, while the Middle School currently starts at 8:25 AM and ends at 3:35 PM. Current enrollment is 758 students. A summary of the existing and future school enrollment is provided in **Table 1**.

*Table 1. School Enrollment Summary*

GRADES	EXISTING	PROPOSED
K – 5 <sup>th</sup> Grade	--	660
6 <sup>th</sup> – 8 <sup>th</sup> Grade	758	440
<b>TOTAL</b>	<b>758</b>	<b>1,100</b>

\*Enrollment Data provided by DISD

Access to the campus is provided on Nuestra Drive and Wozencraft Drive. Nuestra Drive, a local street, intersects with Wozencraft Drive, a local street, at the northwest corner of the property. Land uses surrounding the site are exclusively single-family residential.

Existing school zones surrounding the school are located on Nuestra Drive and Wozencraft Drive.

## **TMP Objectives**

A Traffic Management Plan (TMP) is a site- or area-specific plan of recommended actions and strategies to manage vehicular traffic and parking, pedestrian activity, and travel by all other modes during peak demand conditions for a planned event. The “Objectives” of a TMP are to:

1. Provide a safe environment for all Users on site and the travelling public in the vicinity of the site during the Event times;
2. Minimize (and maintain within reasonable levels) travel delays and traffic congestion on site and in the vicinity of the site during the Event;
3. Ensure reasonable access and circulation is maintained on the public street system in the vicinity of the site during the Event;
4. Provide appropriate information to the travelling public in the vicinity of the site to allow for proper awareness of anticipated traffic conditions during the Event; and,
5. Promote reasonable strategies to manage travel demand to and from the site, including use of alternative modes of travel (such as walk, bike, bus, transit, etc.), when practical.

### DEFINITIONS:

Terms are used in this report:

“Event”– a planned event(s), recurring or non-recurring, for which this TMP is being prepared (i.e., “school day”)

“School” (a.k.a., “Event Organizer”) – the person, group, or organization responsible for the Event

“TMP Manager” – a person or persons designated by the School to implement the TMP (also see additional tasks in the *Expectations* section)

“Users” – guests/patrons attending the Event

“Analyst” – the person(s) preparing the TMP for the School

“Approving Agency” – the municipality or government agency requiring the Traffic Management Plan

“Traffic Department” – the department of the public agency responsible for traffic operations for a given right-of-way

“Site” – the property at which the Event is located (generally assumed to be occupied by the School)

“TMP Strategies” – actions recommended by the Analyst to be undertaken before, during, or after the Event in order to manage traffic on or off site

"Parent Waiting Area" - the area for the parent/guardian of a student to wait and load their student into the vehicle. This parent/guardian chooses to bypass the intended queuing line and park. (For a managed queue, the parent/guardian walks up to the school building to pick-up their student).

#### DISCLAIMERS:

A TMP should be developed by, or in concert with, an individual familiar with the general characteristics of the Event and the associated traffic/transportation needs. For this study, PK worked with School representatives to develop the proposed recommendations.

Recommended TMP Strategies should be based upon applicable engineering principles of traffic safety and traffic operations.

Any recommended TMP Strategies involving traffic control devices in the public right-of-way (including installation or removal of signs, pavement markings, etc.) are subject to the approval of, and must be implemented under direction of, the Traffic Department.

No private individual should perform, or attempt to perform, any act of traffic control within public right-of-way; only deputized officers of the law or other authorized representatives of the Traffic Department may manipulate traffic conditions within the public right-of-way.

The recommendations presented in this report reflect Pacheco Koch's assessment of current and projected traffic needs based on observations and professional judgment and incorporate feedback from DISD representatives. Pacheco Koch is not responsible for operations at the school; however, the recommendations have been presented to on-site school personnel with authority over implementation of the Plan (see **Exhibit 1** and **Exhibit 2** for on-site contact information). Pacheco Koch was not involved with site selection, site design, or the current operations for this project.

### ***Methodology***

When feasible, the Analyst should conduct first-hand observations of existing event to develop an understanding of site-specific traffic/transportation characteristics, such as: drop-off/pick-up frequency, parking needs, alternative travel mode use, safety issues, queuing, traffic congestion, site access, current traffic management strategies in use, etc. When it is not feasible to conduct such observations, interviews with staff or personnel familiar with those items is desirable. When neither option is available, the Analyst may be required to rely upon published information and/or professional judgment and experience.

Once the base information is assembled, the Analyst should estimate the projected traffic/transportation characteristics generated by the proposed Event. Next, the Analyst should inventory the attributes and resources of the subject site and determine how the site can best accommodate those projected conditions. Based upon that assessment, the recommended TMP Strategies shall be developed to optimally achieve the basic TMP Objectives. The recommended

TMP Strategies should be reviewed by the School (ideally, the TMP Manager) for refinement and approval before formal submittal to the Approving Agency.

## **Expectations**

*NOTE TO SCHOOL: By submittal of a TMP to the Approving Agency, the School is implicitly agreeing to implement, maintain, and comply with the recommended actions presented herein subject to acceptance by Approving Agency and any associated conditions Approving Agency may impose. It is also inferred that the School agrees to be self-accountable for these actions until and unless Approving Agency deems further measures are appropriate or the TMP is no longer required.*

Recommended TMP Strategies may include one-time measures to be implemented before the Event and/or ongoing actions to be performed before, during, or after the Event. Recommended TMP Strategies involving on-site measures or actions are generally considered to be the responsibility of the School.

To ensure appropriate compliance and consistent implementation of the TMP, it is recommended that the School appoint a TMP “Manager”. In general, a Manager should be a qualified and capable individual or group of individuals assigned to take responsibility of the TMP and be accountable for successful implementation in order to achieve the Objectives described earlier (see “**Exhibit 1**” and “**Exhibit 2**”). Other specific duties of the Manager include:

- Monitor effectiveness of TMP strategies and make prudent adjustments, as needed, to more effectively accomplish the TMP Objectives
- Maintain an awareness of readily-available alternative transportation modes serving the site and facilitate and promote their use during the Event when practical
- Serve as a liaison to the Approving Agency(-ies), when needed
- When applicable, provide training and direction to other personnel assigned to implement the TMP measures
- Provide instruction to Users on how to comply with the intent of the TMP

Recommended TMP Strategies were developed specifically for the period(s) of peak traffic demand and are depicted in the respective exhibit. For periods of less intense traffic demand, recommended TMP Strategies may be utilized, in part or in whole, as needed to realize the TMP Objectives.

## **Changes to TMP**

Informal changes to any recommended TMP Strategies presented herein to improve efficiency or effectiveness may be implemented at the discretion of the School if those changes are prudent and do not compromise the TMP Objectives. It is recommended that changes implemented under such circumstances be documented and retained by the School for future reference or upon request. At the discretion of the Approving Agency, submittal of a formally revised TMP

report/document or a validation study may be required on a predetermined or as-needed basis.

## TRAFFIC MANAGEMENT PLAN

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*NOTE: Recommended TMP Strategies contained herein are based upon the best data, site-specific information, and analytical processes readily available at the time of the study. However, specific quantities related to traffic congestion at peak periods (e.g., duration, length of queue, etc.) are estimated values. Actual quantities may vary due to unknown or unquantifiable variables and other operational factors that may occur. In the event that actual, future conditions generate undue burden on Users and/or the travelling public, modifications to the TMP should be considered. (See preceding NOTE for guidance on implementing changes to the TMP.) However, in extreme conditions, TMP actions may not be capable of mitigating all traffic conditions, and it may be incumbent on the School to consider operational, institutional, or other long-term changes to address issues on a more permanent basis.*

Graphical summaries of recommendations and proposed conditions are depicted in **Exhibit 1** and **Exhibit 2**.

A summary of existing conditions is provided below:

- Parent pick-up activity currently occurs on-site and on Wozencraft Drive.
- Traffic operations at the intersection of Nuestra Drive and Wozencraft Drive is a minor STOP-approach on Wozencraft Drive and contains both heavy inbound and outbound traffic. The intersection's approach includes outbound left-turn and right-turn lanes.
- Buses stage at the recessed area on Nuestra Drive, located west of the school building.

A summary of specific recommendations for **Exhibit 1** (Elementary School) is provided below:

1. **Enforce existing, on-street parking restrictions in residential areas** -- Enforce existing, on-street parking restrictions along both curbsides of Wozencraft Drive and Nuestra Drive adjacent to school during school traffic periods. [Intent: to minimize traffic congestion on thoroughfares.]

A summary of specific recommendations for **Exhibit 2** (Middle School) is provided below:

1. **Enforce existing, on-street parking restrictions in residential areas** -- Enforce existing, on-street parking restrictions along both curbsides of Wozencraft Drive and Nuestra Drive adjacent to school during school traffic periods. [Intent: to minimize traffic congestion on thoroughfares.]

END OF MEMO

**GENERAL NOTE:** The subject school administration shall issue a formal communication that summarizes the intent of the Traffic Management Plan at least once every school year.

Parking Information*	Vehicles
Parking Supply	140
Parking Required	106
Surplus	+34

\*Based on most recent available development plan

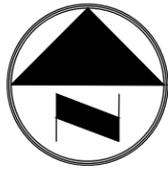
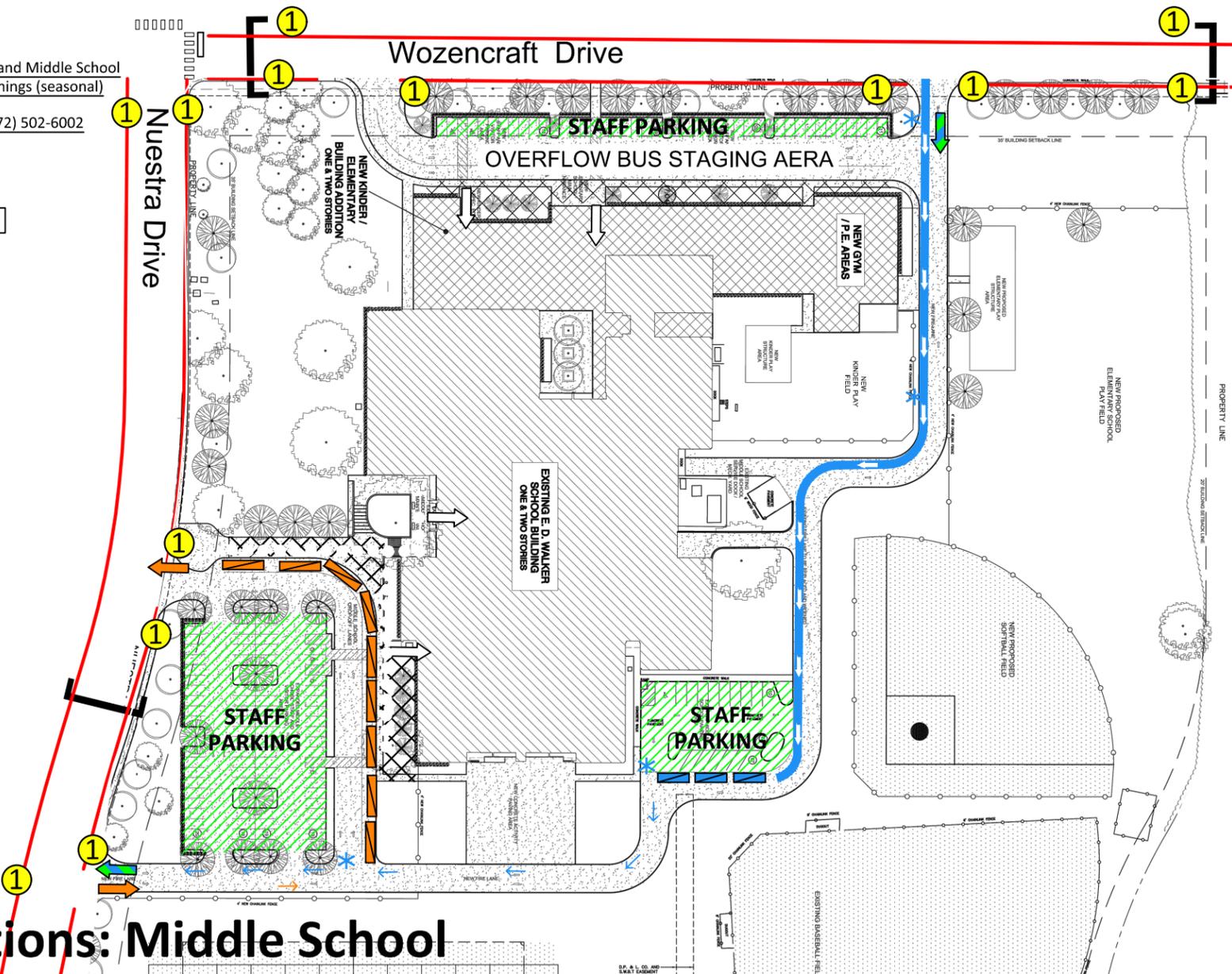
**BACKGROUND:**

**Event Information**

Approving Agency: City of Dallas  
 Event/Type: Public School  
 Event Organizer: E. D. Walker Elementary and Middle School  
 Event Time(s)/Date (s): Weekday morning & evenings (seasonal)  
 Event Frequency: Recurring  
 On-Site Contact: Ms. Wallace/Principal/(972) 502-6002

NOTE: This drawing is conceptual only and does not reflect a detailed design.

Middle School Hours: 8:25 AM - 3:35 PM



**No Parking**  
 - Existing, On Street (Red line)

**Parking Allowed**  
 - Off-street (General) (Green hatched area)  
 - Access Point (Green arrow)

**Queuing/Loading**

- Parent Waiting and Loading Area (Blue hatched area)
- Queue Area (Controlled) (Blue arrow)
- Loading Area (Designated) with Staff Assistance (Blue double arrow)
- Circulation/Flow (Blue arrow)
- Access Point (Blue arrow)
- School Bus Loading/Unloading (Orange arrow)
- School Bus Access Point (Orange arrow)
- Staff Assistance (Blue star)

**Pedestrian/Other**

- Pedestrian Access Point (White arrow)
- Crosswalk (White rectangle)
- School Zone (Black rectangle)
- Stop Line (White rectangle)
- Pedestrian Path (White circle)
- Pedestrian Safe Zone (White hatched area)
- Traffic Cone (Black dot)

**Proposed Conditions: Middle School**

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 TX. REG. SURVEYING FIRM LS-100080-00 (HWL: 09/21/18)

**RECOMMENDATIONS**  
 1 Enforce Existing, On-street Parking Restrictions

Vehicle Accumulation/Capacity	Notes
Projected Enrollment	440 Students
Deductions:	
By School Bus (60%)	264 Students (DISD Estimated)
By Walking (10%)	44 Students (DISD Estimated)
Other (0%)	0 Students (DISD Estimated)
Students by Pick-up/Drop-off	132 Students
City-Approved Rate:	5.12 lf of max. queue per student*
Average Length of Vehicle:	23.5 lf/veh (Pacheco Koch Observed)
"Projected Maximum Vehicle Accumulation":	29 Vehicles (676 lf)
Projected Capacity:	34 Vehicles (807 lf)
<b>SURPLUS</b>	<b>+5</b>

**EXHIBIT 2** **Z178-221**

**Traffic Management Plan**  
**Proposed Conditions**

DISD E. D. Walker Elementary and Middle School  
 Dallas, Texas

GENERAL NOTE: The subject school administration shall issue a formal communication that summarizes the intent of the Traffic Management Plan at least once every school year.

Parking Information*	Vehicles
Parking Supply	140
Parking Required	106
Surplus	+34

\*Based on most recent available development plan

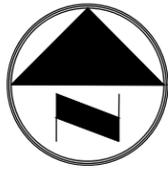
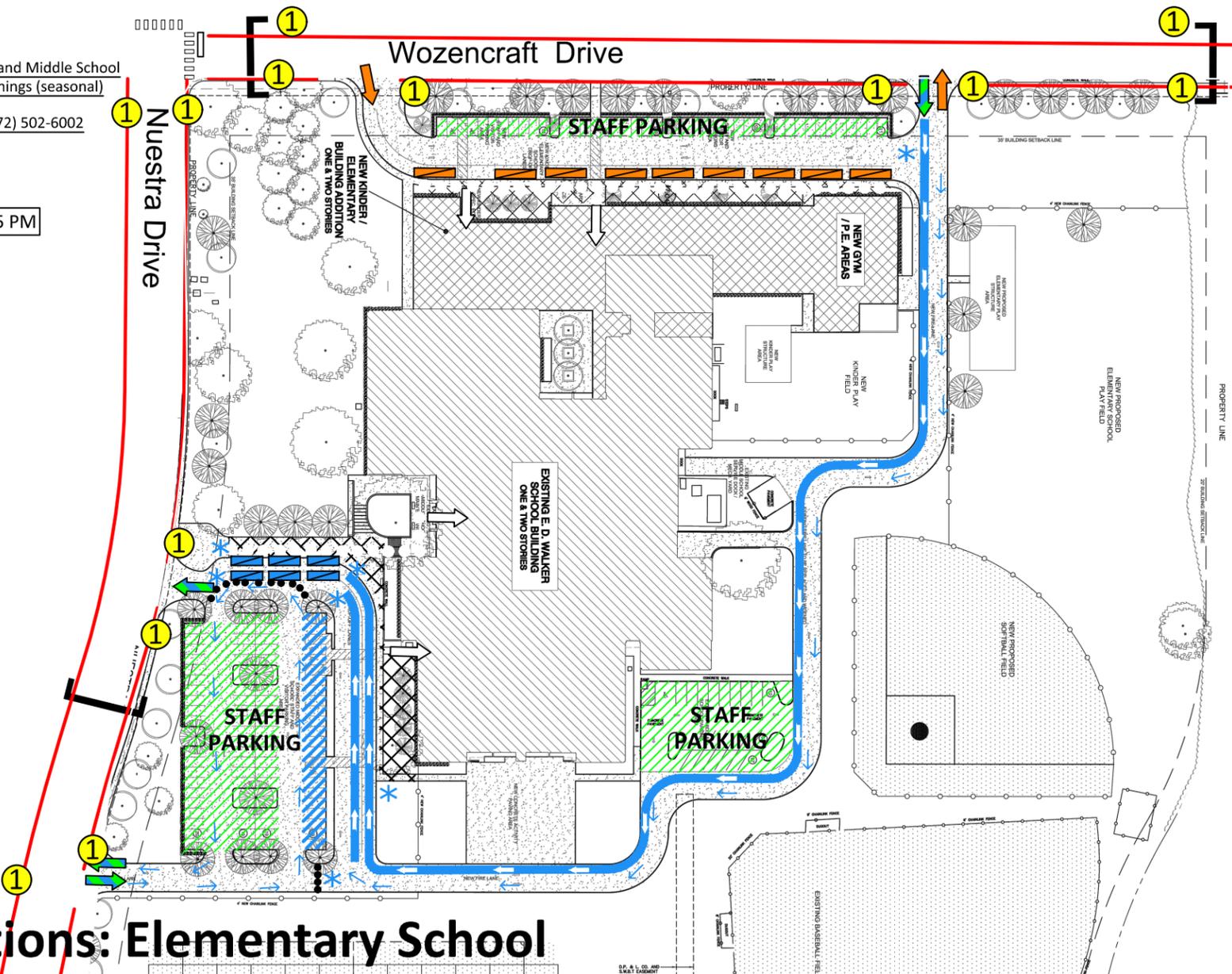
**BACKGROUND:**

**Event Information**

Approving Agency: City of Dallas  
 Event/Type: Public School  
 Event Organizer: E. D. Walker Elementary and Middle School  
 Event Time(s)/Date (s): Weekday morning & evenings (seasonal)  
 Event Frequency: Recurring  
 On-Site Contact: Ms. Wallace/Principal/(972) 502-6002

NOTE: This drawing is conceptual only and does not reflect a detailed design.

Elementary School Hours: 7:45 AM - 2:55 PM



**No Parking**  
 - Existing, On Street (Red line)

**Parking Allowed**  
 - Off-street (General) (Green hatched)  
 - Access Point (Green arrow)

**Queuing/Loading**

- Parent Waiting and Loading Area (Blue hatched)
- Queue Area (Controlled) (Blue arrow)
- Loading Area (Designated) with Staff Assistance (Blue double arrow)
- Circulation/Flow (Blue arrow)
- Access Point (Blue arrow)
- School Bus Loading/Unloading (Orange arrow)
- School Bus Access Point (Orange arrow)
- Staff Assistance (Blue asterisk)

**Pedestrian/Other**

- Pedestrian Access Point (White arrow)
- Crosswalk (White rectangle)
- School Zone (White bracket)
- Stop Line (White rectangle)
- Pedestrian Path (White circle)
- Pedestrian Safe Zone (White hatched)
- Traffic Cone (Black dot)

# Proposed Conditions: Elementary School

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**RECOMMENDATIONS**

- 1 Enforce Existing, On-street Parking Restrictions in Residential Areas

Vehicle Accumulation/Capacity	Notes
Projected Enrollment	660 Students
Deductions:	
By School Bus (60%)	396 Students (DISD Estimated)
By Walking (10%)	66 Students (DISD Estimated)
Other (0%)	0 Students (DISD Estimated)
Students by Pick-up/Drop-off	198 Students
City-Approved Rate:	5.12 lf of max. queue per student*
Average Length of Vehicle:	23.5 lf/veh (Pacheco Koch Observed)
"Projected Maximum Vehicle Accumulation":	43 Vehicles (1,011 lf)
Projected Capacity:	96 Vehicles (2,256 lf)
<b>SURPLUS</b>	<b>+53</b>

**EXHIBIT 1** **Z178-221**

**Traffic Management Plan**  
**Proposed Conditions**

DISD E. D. Walker Elementary and Middle School  
 Dallas, Texas