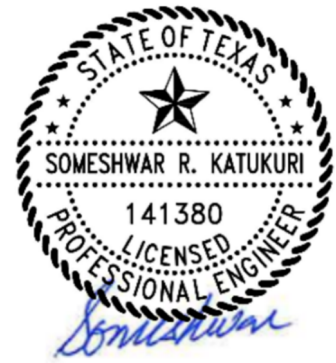


TRAFFIC MANAGEMENT PLAN

Z223-343



Dallas Independent School District (DISD)
H. Grady Spruce High School
CITY OF DALLAS

Introduction

The services of **Pacheco Koch** (PK) were retained by **Dallas Independent School District (DISD)** to prepare a Traffic Management Plan (TMP), as requested by the City of Dallas, for the existing H. Grady Spruce High School described below. The school has an existing enrollment of 1,467 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 drop-off and dismissal field observations on Tuesday, May 16, 2023 and Wednesday, May 17, 2023 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:** 9733 Old Seagoville Road, Dallas, Texas
- **Description of adjacent roadways:**
 - Adjacent Streets:
 - Old Seagoville Road:
 - Cross-section: Two lanes, two-way operation, undivided.
 - Sidewalk connectivity evident along frontage of school. *[School Zone]*
 - Speed Limit: *30 mph [School Zone of 20 mph]*
 - Crenshaw Drive:
 - Cross-section: Two lanes, two-way operation [northbound one-way operational during school hours], undivided.
 - Sidewalk connectivity evident along frontage of school.
 - Speed Limit: *30 mph*
 - Grady Lane:
 - Cross-section: Two lanes, two-way operation, undivided.
 - Sidewalk connectivity evident along frontage of school.
 - Speed Limit: *30 mph*
 - **Adjacent Intersections:**
 - Old Seagoville Road and Crenshaw Drive - Marked crosswalks (faded) on all approaches, barrier free ramps provided on all corners.
 - Old Seagoville Road and Campus Drive - Marked crosswalks (faded) on all legs, barrier free ramps provided on south corners.
 - Crenshaw Drive and Grady Lane - Marked crosswalk (faded) on south leg, barrier free ramps provided on south corners.

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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:**
 - Old Seagoville Road: Three Driveways (existing and proposed)
 - Crenshaw Drive: Six Driveways (including two to access the Student Parking Lot)
 - Grady Lane: Three Driveways (including two to access the Student Parking Lot)
 - Faculty and staff park within the parking lots immediately south, east, and northwest of the school building, entering and exiting throughout the entire day. The access points for the faculty and staff parking lot to the south and east of the school building are located along Old Seagoville Road. Additionally, the access points for the faculty and staff parking lot to the northwest of the school building are located along Crenshaw Drive.
 - The student parking lot is located west of Crenshaw Drive, where students can enter in the morning and exit in the afternoon. Two access points for the student parking lot are located along Crenshaw Drive with the northernmost driveway being gated. With improvements to the site, this lot will be repurposed as a softball field. The parking lots east of Crenshaw Drive will serve as the student lot in the future.
 - The existing student parking lot is currently underutilized. It is proposed that the new student parking lot be converted to be utilized for pick-up in the afternoon. Vehicular access to this new student parking lot would remain with one driveway on Crenshaw Drive and one driveway on Grady Lane.
- **Student (Building) Ingress/Egress Points:**
 - The main student pedestrian access is at the western doors along Old Seagoville Road. Secondary access is provided northwest of the building and northeast of the 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

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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 drop-off and dismissal observations conducted on Tuesday, May 16, 2023 and Wednesday, May 17, 2023. 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 | | | |
| 1 | 9 th – 12 th | 9:10 AM – 4:30 PM | 1,467 | 1,467 | 224 (224) | 160 (44) | -64 (-180) |

*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 via Old Seagoville Road and Crenshaw Drive. Parent traffic queues/stands in the queuing recessed area on site south of the school building as well as on the eastbound and westbound curbsides of Old Seagoville Road past the frontage of the property. Parent vehicles also queues/stands on the northbound and southbound curbsides of Crenshaw Drive, Campus Drive, and Legacy Drive.

Fourteen (14) school buses load and unload students along the northbound curbside of Crenshaw Drive adjacent to the site. Buses arrive in a staggered manner and loads students all at once. Buses depart to the north as Crenshaw Drive operates as one-way northbound during school hours.

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.

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Description of Proposed Conditions

(NOTE: only changes to the Existing Conditions are mentioned below)

- **On-Site Circulation:**

Parent traffic is to enter the new to be constructed parking lot east of the school building via a new driveway on Old Seagoville Road.

Parent traffic is to enter the new, to be constructed, student parking lot northwest of the school building and east of Crenshaw Drive via the northernmost driveway on Crenshaw Drive. Traffic will travel in a counterclockwise manner and exit the queueing area through the easternmost driveway on Grady Lane after the vehicle has sufficiently unloaded/loaded the student(s) exiting/entering the vehicle. The students will be picked in the parent waiting area as shown in the exhibit. The students will be loaded in the student parking area. There is no designated student loading area similar to an elementary or middle school. As this is a high school, students walk to their parent vehicles and do not wait at a specific location.

- **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.

- **EVALUATION OF SCHOOL ZONES:**

- Relocation of the school zones is not recommended.

6. DROP-OFF/PICK-UP COORDINATION

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

- **Subject School Recommended Loading System:**

- Monitored Non-Sequential 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.

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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: 10%
 - Walk: 15%
 - Student Drivers: 5%
 - Picked Up by Parent: 70%

NOTE: Information provided by Dallas Independent School District (DISD) and validated with field observations

- **School Hours:**
 - 9:10 AM – 4:30 PM

7. SCHOOL STAFF ASSISTANCE

- Number:
 - Observed: 4-7
 - Desired: 4-7
- Location:
 - Observed: South of the school building
 - Desired: South of the school building
- 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:
 - Existing Conditions: 2
 - Proposed Conditions: 2
- Location:
 - Existing Conditions: South of the school building near the main entrance
 - Proposed Conditions: South of the school building near the main entrance

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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 H. Grady Spruce High 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

Date

Name: _____

Title: _____

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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: 10%
 - ii. Walk: 15%
 - iii. Students Drivers: 5%
 - iv. Picked Up by Parent: 70%
 - NOTE: Information provided by Dallas Independent School District (DISD) and validated with field observations
 - d. Projected maximum vehicle accumulation: 224
 - e. Projected on-site storage capacity: 156
 - f. Surplus/Deficit: -68
- 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 and/however, the anticipated (and observed) pedestrian routes include the sidewalk paths along Old Seagoville Road.
- d) Existing Parking Management Strategies:
 - a. On-street parking restrictions:
 - i. Old Seagoville Road: Eastbound curbside restrictions during school hours
 - b. Onsite parking:

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- i. Faculty Parking: South, east, and northwest of building
 - ii. Visitor Parking: South of building
 - iii. Student Parking: Northwest of building
- e) Recommendations (if applicable) for walking/biking: (See **Exhibit 1**)
 - a. No changes to existing school zones
- f) Other Recommendations: (See **Exhibit 1**)

END OF MEMO

TMP MANAGEMENT STRATEGIES

Student ID System: *Monitored Non-Sequential Loading System*

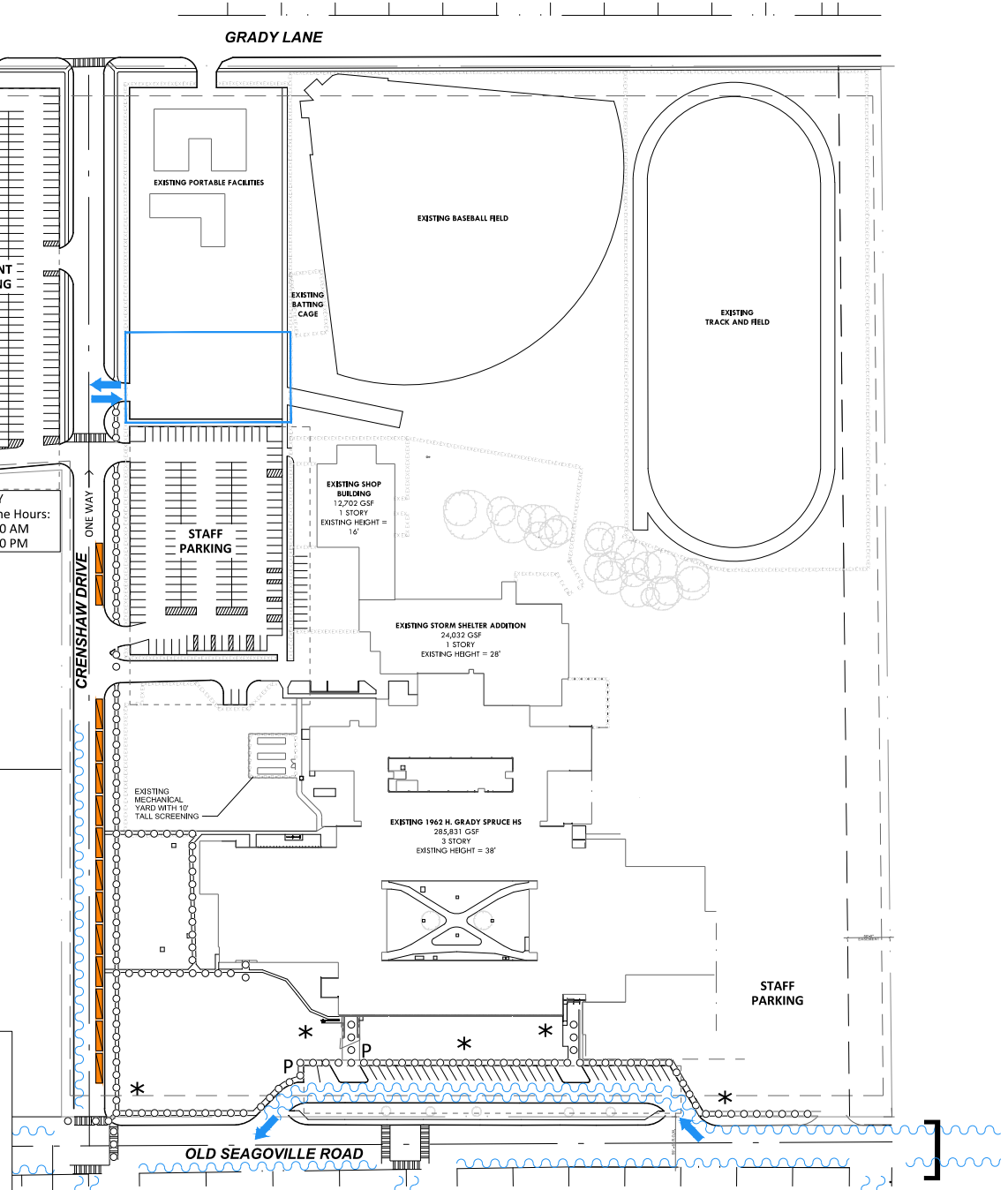
of Staff Assistance: 4-7

of Crossing Guards: *None*

School Times: 9:10 AM - 4:30 PM



- LEGEND**
- Queue Area (Conventional Loading)
 - Parent Loading/Waiting Area
 - Circulation/Flow
 - School Bus Loading/Unloading
 - Pedestrian Access Point
 - Parent Vehicle Access Point
 - Crosswalk
 - Pedestrian Route
 - School Zone
 - Staff Assistance
 - Off-Duty Police Officer(s)



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



01-03-2024

Existing Conditions

R0044552.00 (LHC: 01/03/24)

EXHIBIT 2 Z 223-343
Traffic Management Plan
 DISD H. Grady Spruce High School, Dallas, Texas
Pacheco Koch
Westwood company

TMP MANAGEMENT STRATEGIES

Student ID System: *Monitored Non-Sequential Loading System*

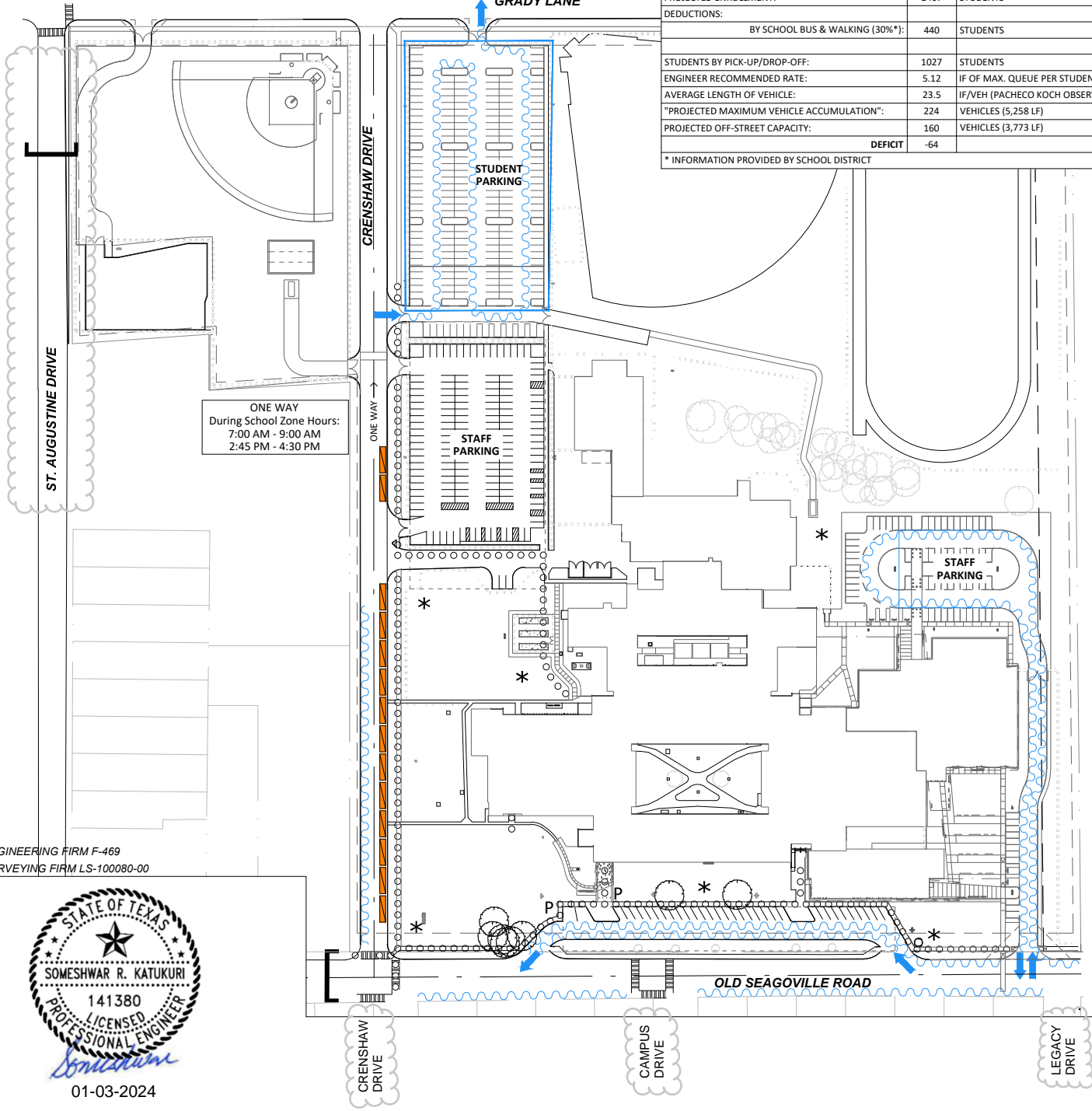
of Staff Assistance: 4-7

of Crossing Guards: *None*

School Times: 9:10 AM - 4:30 PM



| VEHICLE ACCUMULATION CAPACITY | | |
|---|----------------|--------------------------------|
| | | NOTES |
| 9TH GRADE - 12TH GRADE | | |
| PROJECTED ENROLLMENT: | 1467 | STUDENTS |
| DEDUCTIONS: | | |
| BY SCHOOL BUS & WALKING (30%*): | 440 | STUDENTS |
| STUDENTS BY PICK-UP/DROP-OFF: | 1027 | STUDENTS |
| ENGINEER RECOMMENDED RATE: | 5.12 | IF OF MAX. QUEUE PER STUDENT |
| AVERAGE LENGTH OF VEHICLE: | 23.5 | IF/VEH (PACHECO KOCH OBSERVED) |
| "PROJECTED MAXIMUM VEHICLE ACCUMULATION": | 224 | VEHICLES (5,258 LF) |
| PROJECTED OFF-STREET CAPACITY: | 160 | VEHICLES (3,773 LF) |
| | DEFICIT | -64 |
| * INFORMATION PROVIDED BY SCHOOL DISTRICT | | |



LEGEND

- Queue Area (Conventional Loading)
- Parent Loading/Waiting Area
- Circulation/Flow
- School Bus Loading/Unloading
- Pedestrian Access Point
- Parent Vehicle Access Point
- Crosswalk
- Pedestrian Route
- School Zone
- Staff Assistance
- Off-Duty Police Officer(s)

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.
5. The School Zone located on St. Augustine Drive is associated with DISD Julius Dorsey Leadership Academy which is located North of Grady Lane.

Information shown in clouded area was added by Steve E. Stoner, P.E., PTOE on 04/26/2024

R0044552.00 SMN: 04/26/24)

EXHIBIT 1 Z__-__
Traffic Management Plan
 DISD H. Grady Spruce High School, Dallas, Texas
Pacheco Koch
 a Westwood company

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



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