

Traffic Management Plan
Seagoville High School

Introduction

DeShazo Group, Inc. (DeShazo) is an engineering consulting firm providing licensed engineers skilled in the field of traffic/transportation engineering. The services of DeShazo were retained by Masterplan on behalf of the Dallas Independent School District (DISD) to prepare an update of the Traffic Management Plan (TMP) for the Seagoville High School (the School) located at 15920 Seagoville Road in Dallas, Texas.

The school has a current enrollment of 1,338 students in grades 9 through 12. The School proposes to renovate the current facilities with twelve new classrooms. However, the school capacity is anticipated to increase only by 45 students up to 1,383 students. A proposed site plan prepared by Perkins+Will showing the proposed modifications at the school upon completion is attached for reference.

The school site is zoned Planned Development (PD) District 512. In order to gain entitlements for the proposed improvements, the school administration is seeking approval of a change to the development plan. As part of the approval process, the City of Dallas requires submittal of a TMP update as a record of the preferred traffic control strategies and to ensure overall traffic safety and efficient operations.

This report contains DeShazo's review of the current traffic conditions on and around the school campus as well as an evaluation of the proposed conditions. The plan is intended to assess anticipated traffic conditions during the School peak activities. By consent of the TMP submittal, the school agrees to the strategies presented herein. The school is held self-accountable to enforce the plan until and unless the City of Dallas deems further mitigation measures are necessary.

Traffic Management Plan

A school TMP is important to safely achieve an optimum level of traffic flow and circulation during peak traffic periods associated with student drop-off and pick-up operations. By properly managing the vehicular traffic generated during critical periods, the safety and efficiency of school carpool operations will also inherently improve. This TMP should not be considered a comprehensive set of instructions to ensure adequate safety; however, it is a tool that aims to facilitate a safer and more efficient environment.

The analysis summarized below identifies the projected vehicle demand—including parking and queuing space (i.e. vehicle stacking)—needed on site to accommodate projected school traffic demands during peak periods. A concerted effort and full participation by the school administration, staff, students and parents are essential to maintain safe and efficient traffic operations. The use of designated parking and queuing areas is necessary to minimize the operational impact on adjacent properties and the public street system.

School Operational Characteristics

Table 1 summarizes the known operational characteristics for Seagoville High School assumed in this analysis:

Table 1. School Operational Characteristics

	Existing Conditions	Proposed Conditions
Enrollment (by grade):	9 - 12 th Grade - 1338 students	9 - 12 th Grade - 1383 students
Daily Start/End Schedule	Grades 9-12th: >Start: 9:00 AM >End: 4:15 PM	Grades 9-12th: >Start: 9:00 AM >End: 4:15 PM
Approx. Number of Students Travelling by Mode Other Than Drop-off/Pick-up:	By School Bus/ Transit: 40% By Walking: 15% By Self-Driving: 10%	No Change
Approx. Number of Students With Alternate Schedules:	Extracurricular Activities: 10%	No Change

NOTE #1: To the highest degree practical, the accounts of "existing conditions" presented in this report were based upon actual on-site observations conducted by DeShazo during typical school day(s) conditions and from personal interviews of school representatives.

Site Access and Circulation

A total of five driveways provide access to the School to/from Seagoville Road and Stark Road: one inbound and one outbound only driveway on Seagoville Road and two two-way driveways leading to student parking and school bus loading area on Stark Road. A fifth driveway on Stark road serves maintenance as well as deliveries and goods and service vehicles. Student pick-up/drop-off is concentrated around the staff parking lot and accessed via the driveway on Seagoville Road.

During the drop-off period, most parents either enter the campus via Seagoville Road or Stark Road to unload passengers (students) within the site or unload passengers from the sidewalk on Seagoville Road. During the pick-up period, parents either enter the campus via Seagoville Road to form two adjacent queues in the driveway while waiting for student, or park on one side Seagoville Road while waiting for students. Some parents also choose to wait for students at the student parking lot on Stark Road. School buses access the school site at the easternmost driveway on Stark Road, load students and then proceed to exit onto Stark Road.

Passenger Unloading/Loading and Vehicle Queuing

Queuing and traffic congestion is appreciably more pronounced during the afternoon period. During the afternoon pick-up period, around a third of the total student population is picked up by parents in personal vehicles. The School provides loading areas on campus with entry and exit driveways on Seagoville Road. Some parents also queue inside the staff parking lot blocking the exit route for parked vehicles.

DeShazo quantified the peak number of parent-vehicles during the afternoon pick-up period based upon field observations conducted by DeShazo on January 26, 2016. The vehicle accumulation count includes all vehicles in queue, or parked on- and off-campus. Assuming that the number of vehicles generated during the afternoon pick-up period is directly proportional to the number of students enrolled, the peak queue for the future conditions at full occupancy can be estimated. Table 2 provides a summary of the peak demand.

Table 2. Peak Vehicles Parked and in Queue during Afternoon Pick-up Period

	Existing Conditions (Observed)	Proposed Conditions (Estimated)
Peak Number of Vehicles	52 parent vehicles (for current enrollment of 1338 students)	54 parent vehicles (for maximum enrollment of 1383 students)

Recommendations

DeShazo conducted field observations during the student dismissal period. The following set of traffic operations are recommended for the Seagoville High School administration during peak traffic conditions:

- The traffic circulation plan depicted in **Exhibit 1** is based upon observations of existing traffic operations. The plan provides a designated route for parents. In general,
 - The School provides 1,481 linear feet of on-site vehicular queuing or storage. This capacity accommodates a projected peak vehicle queue of 54 vehicles and a surplus of 212 feet.
- Install a permanent sign at the eastern entrance of the student parking lot indicating the same.
- Staff should install temporary traffic control devices (such as traffic cones, etc.) at the staff parking lot entry to prevent parents from parking and queuing in the staff parking area.
- School should encourage parents to load/unload students within the school property to maximize personal safety. As needed, staff should direct traffic and coordinate the loading of students on School property. However, the School should allow no school staff other than DISD police and/or deputized officers of the law to engage or attempt to influence traffic operations in public right-of-way.

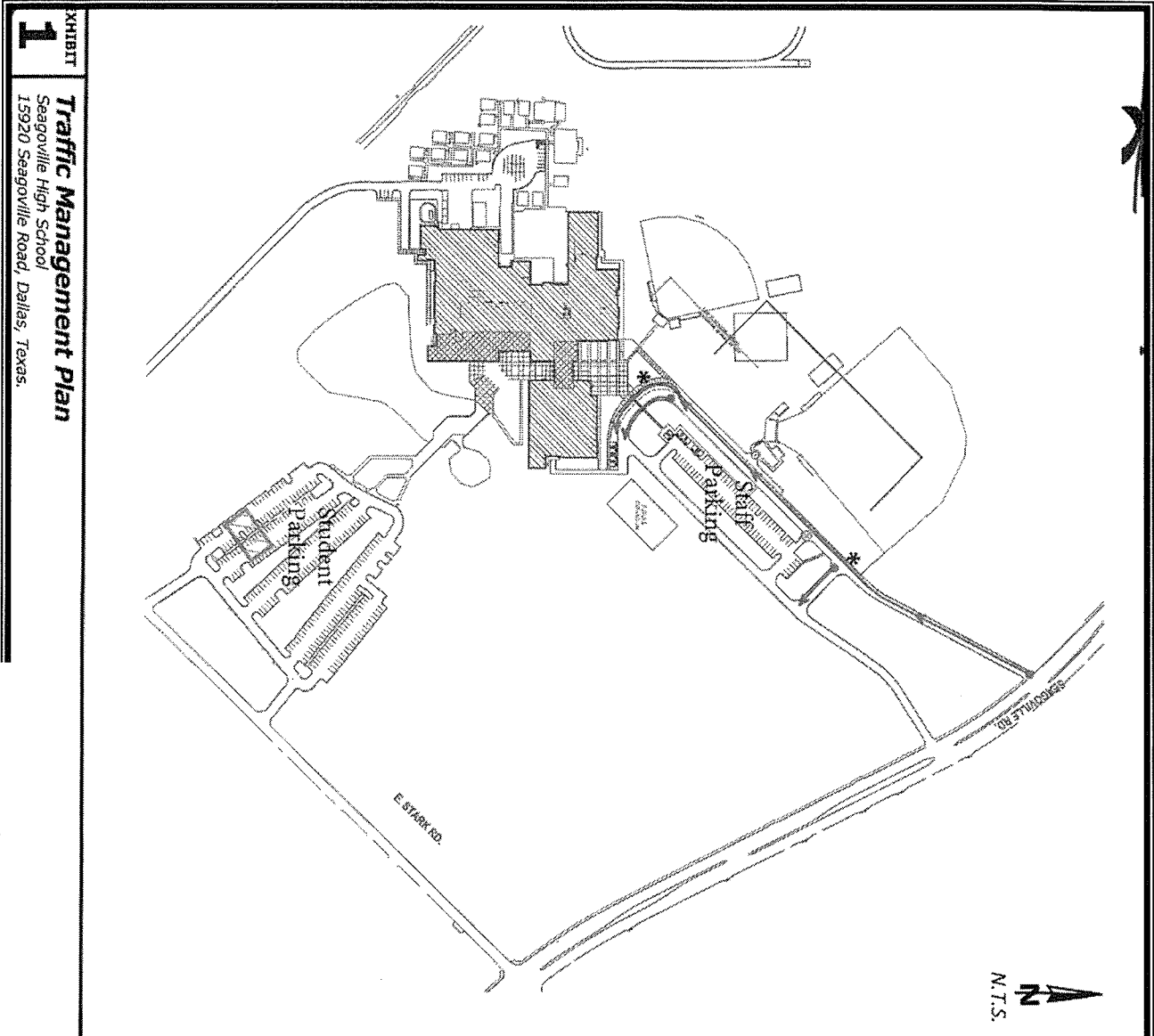
Full cooperation of all school staff members, students, and parents is crucial for the success of any traffic management plan. Proper training of school staff on duties and expectations pertaining to the plan is recommended. Sufficient communications at the beginning of each school term (and otherwise, as needed) with students and parents on their duties and expectations is also recommended.

Summary

This TMP is to be used by Seagoville High School to provide safe and efficient transportation of students, staff, and faculty to and from the site. The Plan was developed with the intent of optimizing safety and efficiency and the goal of accommodating vehicular traffic generated by the school at peak traffic periods within the site. The details of the TMP shall be reviewed by the school on a regular basis to confirm its effectiveness.

END OF MEMO

TMP CIRCULATION PLAN
Seagoville High School



2156-196(WF)

Queuing Summary

Student Group	School Timings & Number of Students	Vehicle Demand						
Grades 9-12th	9:00 AM to 4:15 PM 1383 Students	<table border="1"> <tr> <td>Provided</td> <td>63 Spaces (1481 LF)</td> </tr> <tr> <td>Required</td> <td>52 Spaces (1269 LF)</td> </tr> <tr> <td>Surplus</td> <td>9 Spaces (212 LF)</td> </tr> </table>	Provided	63 Spaces (1481 LF)	Required	52 Spaces (1269 LF)	Surplus	9 Spaces (212 LF)
Provided	63 Spaces (1481 LF)							
Required	52 Spaces (1269 LF)							
Surplus	9 Spaces (212 LF)							

* Vehicular queue calculated at 23.5 feet/passenger car based on field observations.

Legend

- * - School Staff
- ☒ - Bus Loading Area
- ↔ - Provided Queue
- ⊗ - Traffic Cones

The purpose of this Traffic Management Plan (TMP) is to evaluate traffic operations that promote safety and efficient vehicle circulation. This TMP was developed to prevent queuing of drop-off/pick-up related vehicles within the city rights-of-way. The school administration should adhere to this TMP. Any deficiency due to spillover of queuing into undesignated areas of the city rights-of-way, including roadway travel lanes, should be corrected by the school immediately.

L. David Navarro, P.E. #106200, certifies that site constraints preclude the school's ability to accommodate vehicular queue on-site. While it may not be feasible to eliminate queuing in public rights-of-way, establishing a designated school route will lessen impact to neighborhood as well as background traffic on the main roads. This option is subject to approval by the City of Dallas Street Services Department.

EXHIBIT 1
Traffic Management Plan
Seagoville High School
15920 Seagoville Road, Dallas, Texas.

Planned Development
District No. 512

Approved
City Plan Commission
April 21, 2016

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