

Technical Memorandum

To: Mr. Tony Valdez — A+ Charter Schools, INC
From: DeShazo Group, Inc.
Date: January 17, 2019
Re: Traffic Management Plan Update for A+ Charter
DeShazo Project Number 18153

INTRODUCTION

DeShazo Group, Inc. (DeShazo) is an engineering consulting firm based in Dallas, Texas, providing licensed engineers and planners skilled in the field of traffic and transportation engineering. DeShazo's services were retained A+ Charter to provide a traffic management plan (TMP) for A+ Charter located at 10327 Rylie Road in Dallas, Texas.

The school is currently in operation at the subject site with an enrollment of 817 students in grades Pre-K through 6th and has an enrollment capacity of 1500 students.

The school site is zoned R-7.5(A) (Single Family) and will be undergoing construction of a track and field directly north of the school buildings. As part of the approval process, submittal of a TMP to the City of Dallas is required as a record of the preferred strategies to be used by the school to ensure overall traffic safety and efficiency. This TMP is intended to assess existing and anticipated traffic conditions at the school during the morning drop-off and afternoon pick-up peak periods on the basis of satisfying these objectives. By consent of the TMP, the school agrees to be held self-accountable for the enforcement of the strategies presented herein until and unless the City of Dallas deems further measures are necessary. (NOTE: In this report, the term "parent" refers to any individual who is involved in the drop-off or pick-up of one or more students at the school.)

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. By properly managing the vehicular traffic generated during critical periods, the safety and efficiency of other modes of travel—including pedestrian traffic—will also inherently improve and the operational impact on the public street system should also be minimized. **This plan, however, should not be considered a comprehensive set of instructions to ensure adequate safety; it should be used as a tool to facilitate a safer and more efficient environment.**

Z189-171

School Operational Characteristics

As required by the City of Dallas, DeShazo observed on-site traffic on four different occasions at the following times.

- Friday, December 14, 2018, during student dismissal
- Monday, December 17, 2018, during student dismissal
- Tuesday, December 18, 2018, during student arrival
- Tuesday, November 18, 2018, during student dismissal

Field observations indicate that current practices during the morning drop-off and afternoon pick-up periods do not present a significant obstruction to vehicular traffic. Arrival of vehicles in the morning is also notably more sporadic than any traffic generated during the afternoon pick-up period. In general, vehicular traffic near the vicinity of the school operates without any evident traffic delay or congestion. **Table 1** summarizes the school’s operational characteristics assumed in this analysis.

Table 1. School Operational Characteristics

	Existing Conditions	Proposed Conditions
Enrollment (by grade)	Pre-K – 85 students Kindergarten – 107 students 1 st Grade – 94 students 2 nd Grade – 81 students 3 rd Grade – 104 Students 4 th Grade – 104 Students 5 th Grade – 116 Students 6 th Grade – 126 Students <i>Total: 817 students</i>	 <i>Total: 850 students</i>
Daily Start/End Schedule	All Grades: >Start: 7:40 AM >End: 3:20 PM	No significant changes
Approximate Percentage of Students Travelling by Mode Other Than Drop-off/Pick-up	By Walking: ≈ 1%	No significant changes

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. The analyses and recommendations presented in this report for “proposed” or “future” conditions were based upon evaluations of “existing conditions” and may be supplemented by DeShazo’s professional judgment and experience. “Proposed”/“Future” conditions are intended to reflect the anticipated day-to-day conditions at full occupancy.

NOTE #2: Occasional functions or other events may be held at the school, which generate traffic outside of the traditional peak drop-off and pick-up periods. While some of the measures presented in this report may be applicable in such cases, traffic characteristics other than those directly associated with the primary drop-off and pick-up periods are not the subject of this analysis.

EXISTING TRAFFIC CONDITIONS

Site Access and Circulation

The school currently has one point of ingress and one point of egress for the parking lot on Rylie Road. In addition, there are three access points for the parking lot on Tufts Road. The northernmost access point serves as a point of ingress, the middle access point serves as both a point of ingress and egress, and the southernmost access point serves as a point of egress.

Student Loading

Morning Drop-Off

During the morning drop-off period all students, regardless of grade, are dropped-off in either parking lot.

As previously mentioned, arrival of vehicles in the morning is notably more sporadic than afternoon. Observations found a total of 43 vehicles queued in the parking lot to the west of the school with a spillover of two vehicles on Rylie Road and 20 vehicles queued in the parking lot to the north of the school during the peak drop-off time.

Afternoon Pick-Up

During the afternoon pick-up period parents picking up students in Pre-K through 2nd grade either form a double queue in the parking lot to the west of the school or park on either side of Rylie Road and walk in to pick-up students. Observations found a total of 43 vehicles double queued in the parking lot while 34 vehicles were either in a single queue upon entering the double queue or parked on Rylie Road during the peak pick-up time. According to the City of Dallas, the queue on the Rylie Road need to be contained inside the school.

Parents picking up students in 3rd and 4th grade proceed to the parking lot to the north of the school in a single queue upon arriving to the loading area. Observations found a total of 40 vehicles queued in the parking lot during the peak pick-up time.

5th and 6th graders are picked-up at the old church, owned by the school, on the east side of Tufts Road adjacent to the school. These students are directed by five school staff members and a crossing guard from the school to this site during dismissal to be picked-up by their parents. Queueing operations here are also well enforced by school staff. Observations indicated a total of 16 vehicles double queued in the parking lot with a spillover of 21 vehicles on Mulberry Street during the peak pick-up time. According to the City of Dallas Traffic management plan Guidelines, all traffic should be contained inside the school

property. The measures need to be taken for proper traffic management for loading and unloading during pickup/drop-off period-

1. All traffic will enter either from the driveway on Rylie road or from the northern driveway on Tufts Road during drop-off during morning and drop-off at designated locations.
2. During afternoon dismissal, all traffic must enter from the northern most driveway on Tufts Road and make a double queue. The required queue length for the afternoon dismissal is 3178 ft and the provided space is about 3678 ft.
3. The Pk-2 passenger vehicles will move towards the driveway and make a double queue on both of the driveways and exit from the Rylie Road.
4. The 3-4th grades pickup will be on the north side of the school and will exit from the middle driveway on the Tufts road
5. The 5-6th grades will be picked-up on the eastern side of the school and will exit on the southernmost driveway on Tufts Road.
6. All movement will be controlled by school staff.

Vehicular Queue Lengths

A+ Charter should accommodate all morning arrival traffic operations in accordance with **Exhibit 1**. All afternoon dismissal traffic operations should be in accordance with **Exhibits 2**, depending on the students' grade. School staff should try to maximize efficiency of student loading operations at all times. Maximum accumulation of vehicles is subject to both the rate of arrival traffic and the rate at which the school staff is able to load/unload students into their corresponding cars; any delay or inadequacy in the loading/unloading operations results in unwarranted accumulation of traffic.

RECOMMENDATIONS

The school administration should continue to implement an active management of student loading to expedite queueing operations and reduce the maximum accumulation of traffic. Queue pick-up participation is a challenge that schools face constantly. Despite the anticipated practices and operational characteristics at A+ Charter, full cooperation of all school staff members, students and parents is crucial for the success of the systematic queue. Proper training of school staff on the duties and expectations pertaining to this plan is recommended. Sufficient communication at the beginning of each school term (and otherwise, as needed) with students and parents on their duties and expectations is also recommended. DeShazo recommends consideration of the following recommendations to optimize queue operations:

Traffic Queue Operations

- Implementation of an "Advance Passenger Identification System" to expedite queue operations. This system uses hangtags displayed through the windshield of arriving vehicles to identify arriving vehicles with the name(s) of corresponding student(s).
- Use of apps or software (e.g., Driveline Dispatch®) to expedite queue operations. This software efficiently displays family names of upcoming vehicles on indoor screens and provides students and school staff with a chart of vehicles approaching the loading zone.

- Staff participating in student drop-off/pick-up operations should, in lieu of simple hand gestures, procure and use reversible hand-paddle signs with the messages “STOP” and “SLOW”. Optional additional equipment for staff may include whistles (for audible warnings) and flashlights (for visual warnings) in order to gain the attention of motorists.
- Morning arrival and afternoon dismissal traffic operations should be managed in accordance with the traffic circulation, loading zones, and on-street parking depicted in **Exhibit 1** and **Exhibit 2**. These plans include the recommended configuration of temporary traffic control devices (such as traffic cones, etc.) that shall be installed on a daily basis when typical traffic conditions are expected. An appropriate number of school staff shall be assigned to fulfill the duties of student supervision, traffic control, and other related duties as generally depicted on the plan.
- Parents should refrain from parking on Street.
- **Parents should not arrive more than 30 minutes prior to the student’s dismissal time.**

Student Safety

- Student safety should remain paramount at all times. School administration should continuously remind students, parents and staff of their expectations relative to this traffic management plan throughout the school year.
- School administration should review traffic operations and address any problems concerning this traffic management plan and identify solutions in the interest of student safety.
- In accordance with the Transportation Code, Section 545.4252, State law prohibits the use of wireless communication devices while operating a motor vehicle during the time a school zone is in effect. Restrictions do not apply to stopped vehicles or the use of handheld free devices.

SUMMARY

This TMP should be used by A+ Charter 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 within the site at peak traffic periods. School administration should review details of this TMP on a regular basis to confirm its effectiveness.

END OF MEMO

SCHOOL REVIEW AND COMMITMENT

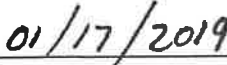
This plan was developed for A+ Charter with the intent of optimizing safety and efficiency related to vehicular traffic generated by the School during peak traffic periods. A concerted effort and full participation by the School administration, staff, students and parents are essential to maintain safe and efficient traffic operations.

The School has reviewed the Traffic Management Plan and is in support of the strategies presented herein.

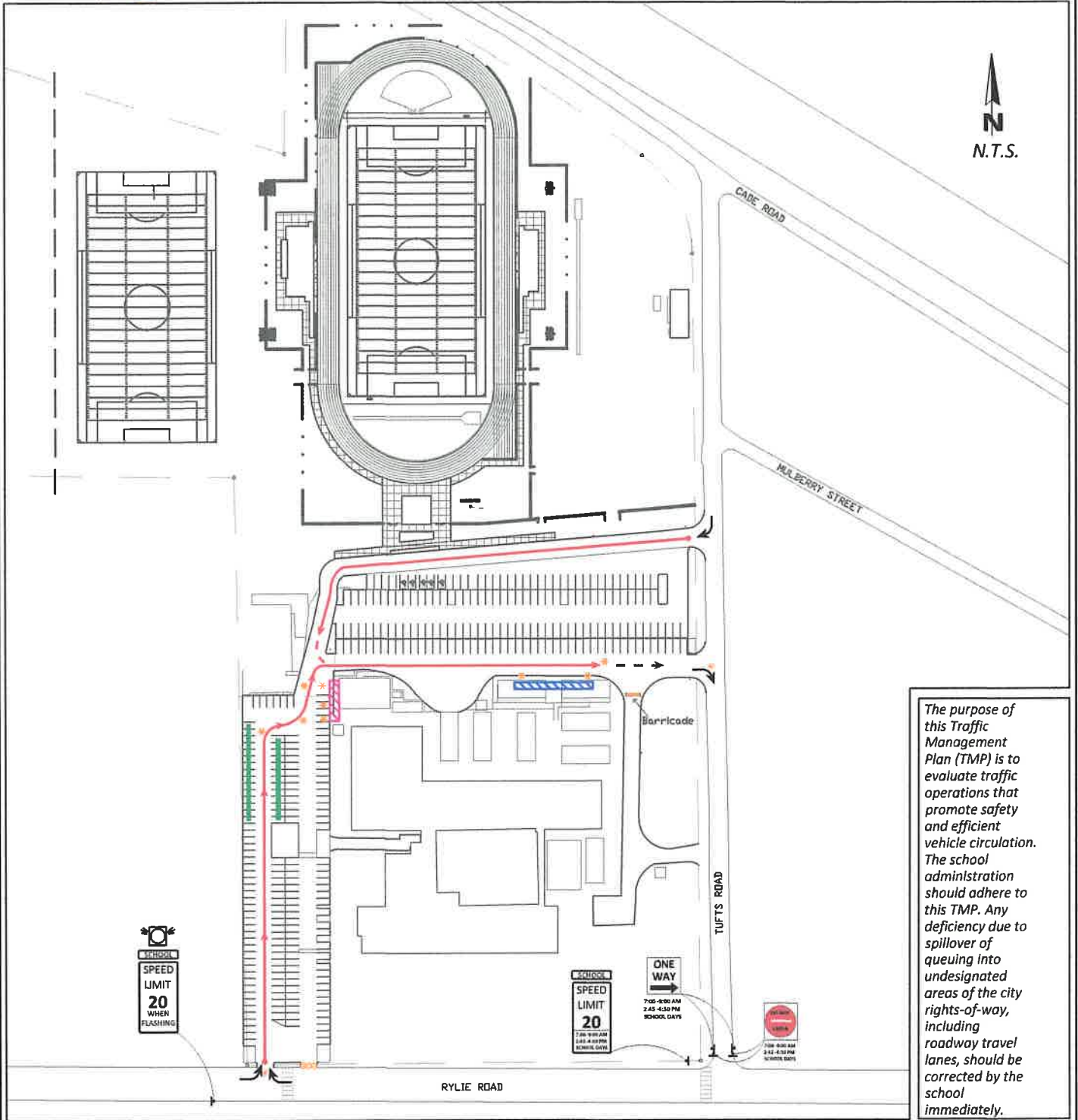
The School is committed to continually reviewing and assessing the effectiveness of the TMP and if warranted, will implement changes in the interest of increasing safety, efficiency and minimizing impacts on the surrounded community.



Tony Valdez, Director of Maintenance
A+ Charter



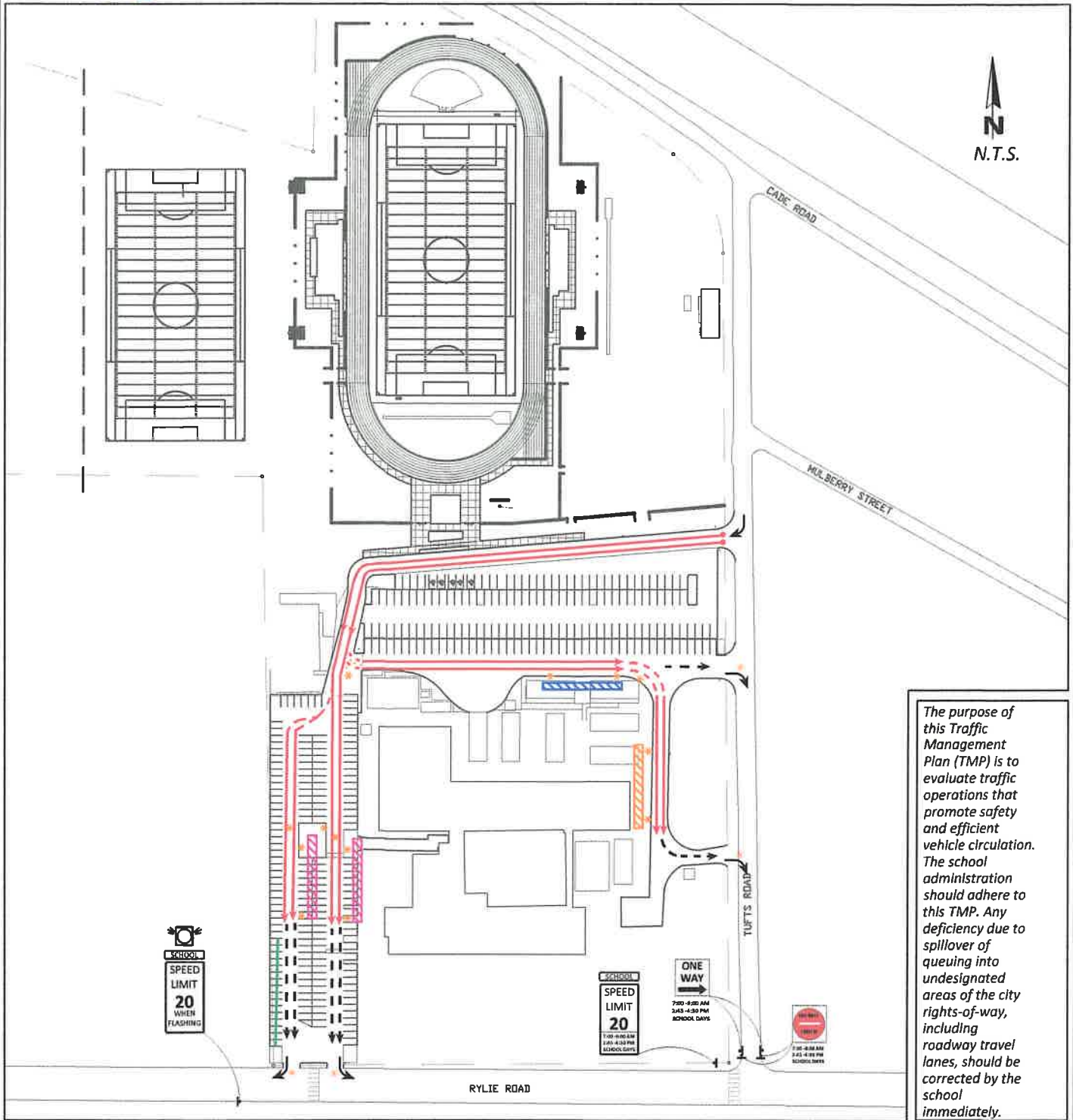
Date



The purpose of this Traffic Management Plan (TMP) is to evaluate traffic operations that promote safety and efficient vehicle circulation. 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.

Legend	
	- On-Site Vehicle Queue
	- Vehicle Loading Zone
	- Parent Parking
	- Inbound/Outbound
	- Outbound Route
	- School Staff
	- Off-Duty Deputy Officer

Student Grade	Student Enrollment	Start/End Schedule	Travel Modes	Vehicular Traffic Demand Queue Summary
Pre-K	85	7:40 AM - 3:20 PM	Parent Pick-Up: 99% Walking: 1%	Provided: 1,482 LF (74 veh) Required: 1,300 LF (65 veh) Surplus: 182 LF (9 veh)
K	107			
1	94			
2	81			
Total: 817 Students				



The purpose of this Traffic Management Plan (TMP) is to evaluate traffic operations that promote safety and efficient vehicle circulation. 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.

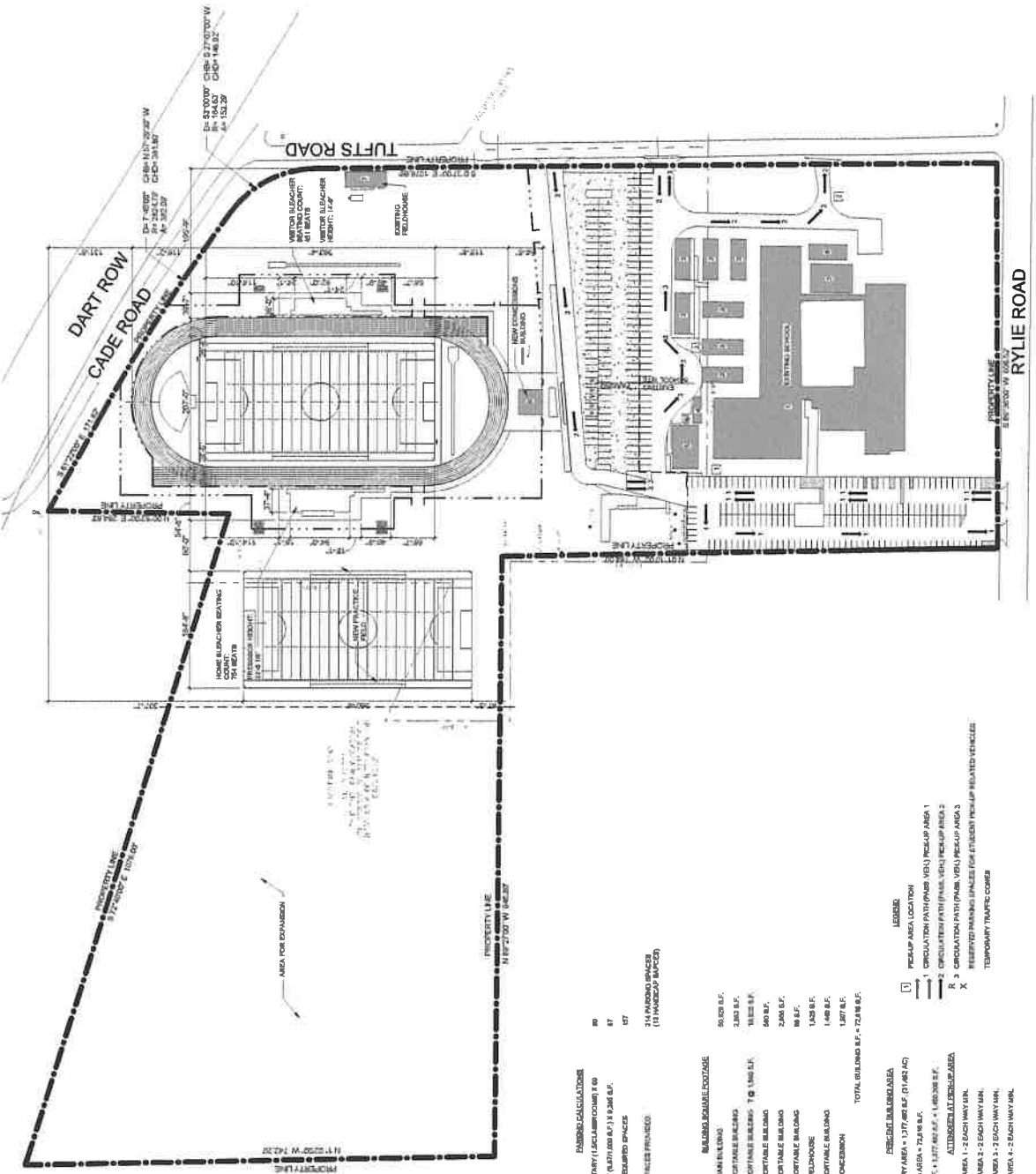
Legend	
	- On-Site Vehicle Queue
	- Vehicle Loading Zone
	- Parent Parking
	- Traffic Cones
	- Outbound Route
	- School Staff
	- Off-Duty Deputy Officer
	- Inbound/Outbound

Student Grade	Student Enrollment	Start/End Schedule	Travel Modes	Vehicular Traffic Demand Queue Summary
Pre-K	85	7:40 AM - 3:20 PM	Parent Pick-Up: 99% Walking: 1%	Provided: 3,678 LF (156 veh) Required: 3,178 LF (135 veh) Surplus: 500 LF (21 veh)
K	107			
1	94			
2	81			

Total: 817 Students

EXHIBIT 2 **Traffic Management Plan - Afternoon Dismissal**
A+ Charter
10327 Rylye Road, Dallas, Texas

DeShazo Group, Inc.
Texas Registered Engineering Firm F-3199
400 S. Houston St. Suite 330
Dallas, Texas 75202
(214) 748.6740



PERMITS CALCULATIONS

EXEMPTION (1) EXEMPTION 1 60
 EXEMPTION (2) EXEMPTION 2 45
 TOTAL EXEMPTION SPACES 105
 TOTAL SPACES PROVIDED 314 PARADE SPACES
 (11 HARBOR SPACES)

BLDG CALCULATIONS

1. MAIN BUILDING	50,000 S.F.
2. PORTABLE BUILDING	2,000 S.F.
3. PORTABLE BUILDING	10,000 S.F.
4. PORTABLE BUILDING	500 S.F.
5. PORTABLE BUILDING	2,000 S.F.
6. PORTABLE BUILDING	10,000 S.F.
7. PORTABLE BUILDING	1,000 S.F.
8. PORTABLE BUILDING	1,000 S.F.
9. CONCESSION	1,000 S.F.
TOTAL BLDG AREA	72,000 S.F.

PERMITS CALCULATIONS

BLDG AREA = 72,000 S.F. (1 PAR AD)
 BLDG AREA = 72,000 S.F.
 TOTAL S.F. = 1,000 S.F. + 72,000 S.F.
 TOTAL S.F. = 73,000 S.F.

ADDITIONAL PERMITS

PERMITS AREA 1 - 2 EACH WAY IRL
 PERMITS AREA 2 - 2 EACH WAY IRL
 PERMITS AREA 3 - 2 EACH WAY IRL
 PERMITS AREA 4 - 2 EACH WAY IRL

LOBBY

PERMITS AREA LOCATION

1. CIRCULATION PATH (PARK, VEH)
 2. CIRCULATION PATH (PARK, VEH)
 3. CIRCULATION PATH (PARK, VEH)
 X. RESERVED MARKING SPACES FOR STUDENT PICKUP RELATED VEHICLE

TEMPORARY TRAFFIC CORNER

1 SUP 1339 SITE PLAN
 SCALE: 1" = 80'-0"