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TRAFFIC MANAGEMENT PLAN FOR

A.W. BROWN

FELLOWSHIP LEADERSHIP ACADEMY

EARLY CHILDHOOD CAMPUS

DALLAS, TEXAS

DeShazo Project No. 16143

Prepared for:

Building Solutions

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DeShazo Group

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Traffic Management Plan for

A.W. Brown Fellowship Leadership Academy, Early Childhood Campus

~ DeShazo Project No. 16143 ~

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Traffic. Transportation Planning. Parking. Design.

Technical Memorandum

To: *William Marshall* — Building Solutions

CC: A.W. Brown Fellowship Leadership Academy, Early Childhood Campus

From: *David Nevarez, P.E., PTOE* — DeShazo Group, Inc.

Date: January 5, 2017

Re: Traffic Management Plan for A.W. Brown Fellowship Leadership Academy, Early Childhood Campus; *DeShazo Project Number 16143; Z___-___ ( )*

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. The services of DeShazo were retained by Building Solutions on behalf of the school administration at A.W. Brown Fellowship Leadership Academy to provide a requisite traffic management plan (TMP) for their Early Childhood Campus. The subject site is located at 6901 S. Westmoreland Road—the northwest quadrant at the intersection of S. Westmoreland Road and W. Camp Wisdom Road in Dallas, Texas.

The school is currently in operation at the subject site with an enrollment of 1,264 students in grades Pre-K through 2nd. The school is proposing improvements to current facilities, providing a student capacity of 1,250 students. The school is currently operating under regulations provided in SUP 1929; approval by the City of Dallas is required in order to gain entitlements for the proposed modifications.

As part of the SUP 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.)

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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.**

School Operational Characteristics

DeShazo, in coordination with school representatives, visited A.W. Brown Fellowship Leadership Academy Early Childhood Campus to evaluate aspects such as passenger loading and unloading and vehicle queuing. Field observations indicate that current practices during the morning drop-off period do not present significant obstruction of vehicular traffic. Arrival of vehicles 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 during the morning drop-off period. **Table 1** summarizes the school operational characteristics assumed in this analysis.

Table 1. School Operational Characteristics

	Existing Conditions	Proposed Conditions
Enrollment (by grade):	Pre-K3: 227 students Pre-K4: 282 students Kindergarten: 251 students 1st Grade: 244 students 2nd Grade: 260 students *Total: 1,264 students*	Pre-K3: 250 students Pre-K4: 250 students Kindergarten: 250 students 1st Grade: 250 students 2nd Grade: 250 students *Total: 1,250 students*
Daily Start/End Schedule	Grades Pre-K3 through 2nd: >Start: 8:00 AM >End: 3:30 PM	Grades Pre-K3 through 2: >Start: 8:00 AM >End: 3:30 PM
Approximate Percentage of Students Travelling by Mode Other Than Drop-off/Pick-up:	By Daycare/Van: ≅ 10% By Walking: ≅ 0% By Transit: ≅ 0% Parent Pick-Up ≅ 90%	By Daycare/Van: ≅ 10% By Walking: ≅ 0% By Transit: ≅ 0% Parent Pick-Up ≅ 90%

NOTE: To the highest degree practical, accounts of existing conditions presented in this report are based upon actual on-site observations conducted by DeShazo during typical school days and from personal interviews of school representatives.

Site Access and Circulation

To assess the current queuing operations from both arrival and dismissal times, DeShazo conducted field observations on three different days during typical school-day conditions, two days in November and one day in December. The Early Childhood Campus provides a site access driveway on S. Westmoreland Road. Parents currently queue on S. Westmoreland instead of on-site at the designated loading zones. Once parents are advised by adult crossing guards to enter the site, a double queue is formed from front of the school building towards the kindergarten to 2nd grade loading zone. The second loading zone is for Pre-K and daycare, which is located on the south side of the school. Here, parents also queue on S. Westmoreland instead of on-site.

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Existing traffic signs in the vicinity of the school direct school traffic along a preferred arrival route. Vehicles are encouraged to arrive the school site from the north and form a systematic queue along the west curb of S. Westmoreland Road without obstructing any intersections or private driveway. Parents arriving from the south are directed to proceed northbound to the end of the queue after making a U-turn on S. Westmoreland Road. Existing conditions warrant corrective measures to eliminate a queueing spillback on S. Westmoreland Road and any adverse impact to adjacent properties resulting from peak school traffic.

Student Loading

During the afternoon pick-up period, the school implements a managed "carpool" system. The carpool queue consists of two, side-by-side lanes that are loaded simultaneously in front of the school building. At the beginning of each school term, school should issue hangtags to all parents with unique identification that pairs them with the corresponding student. During the pick-up period, the hangtags should be on display through the vehicle's windshield while parents arrive through the prescribed route. School staff is positioned at strategic locations ahead of the loading area and relay the sequence of parent arrival back to the loading area via hand radio. Students are prepped for pick-up as the parents approach. With the assistance of other school staff stationed at the loading area, several vehicles are loaded simultaneously. Once loaded, school staff clears vehicles to carefully exit the site sequentially along the designated route.

- School staff should not stop or delay approaching vehicles to request student information. Maintaining a continuous flow of incoming traffic toward the front of the queue should be a priority at all times to expedite operations and increase the efficiency of the loading protocol.

Vehicular Queue Lengths

A.W. Brown Fellowship Leadership Academy Early Childhood Campus should accommodate all vehicular queuing and drop-off/pick-up procedures in accordance with the traffic management plan presented in this report. 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 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 following recommendations are provided to A.W. Brown Fellowship Leadership Academy Early Childhood Campus for the management of vehicular traffic generated by the school during peak traffic conditions. Generally, traffic delay or congestion during the afternoon pick-up period is notably greater than the traffic generated during the morning drop-off period due to timing and concentration characteristics. In most instances, achieving efficiencies during the afternoon period is most critical, while the morning traffic operations require nominal active management. Therefore, except where stated otherwise, the recommendations provided herein pertain specifically to the afternoon period operations.

A concerted effort and full participation of all school staff members, students, and parents is crucial for the success of this traffic management plan. Proper training of school staff on the 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.

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Traffic Queue Operations

- Based upon a review of the proposed site conditions and the anticipated needs of traffic during peak conditions DeShazo recommends full enforcement of the site traffic circulation. This plan was designed with the intent of optimizing the on-site vehicular circulation, retention of vehicle queuing in a manner that promotes safety and operational efficiency, and also inherently reducing queuing length. To achieve this, DeShazo recommends staggering dismissal times as depicted in **Exhibit 1**.
- Parents should immediately proceed to form a double queue on site upon arriving at the school during the afternoon pick-up period at the designated student(s) dismissal time. **Exhibit 1** provides queueing operations during staggering dismissal times as follows:
    - PreK3 – PreK4: (90% parent pick-up)
        - A proposed capacity of 1,577 linear feet available at 3:20 PM will accommodate a projected queue of 56 vehicles (approximately 1,316 feet) and provides a surplus of 261 linear feet.
    - Kindergarten – 1st Grade: (90% parent pick-up)
        - A proposed capacity of 1,783 linear feet available at 3:40 PM will accommodate a projected queue of 56 vehicles (approximately 1,316 feet) and provides a surplus of 467 linear feet.
    - 2nd Grade: (90% parent pick-up)
        - A proposed capacity of 1,990 linear feet available at 4:00 PM will accommodate a projected queue of 28 vehicles (approximately 658 feet) and provides a surplus of 1,332 linear feet.
- The school should implement a "Passenger Identification System" during the afternoon pick-up period. The school should issue hangtags to parents with unique identification that pairs them with corresponding student(s) at the beginning of each school term. Hangtags must be on display through the vehicle's windshield while parents arrive at the pick-up areas during pick-up periods. School staff should also be positioned at strategic locations ahead of the loading area and relay the sequence of arrivals via hand radio while students are prepped for pick-up. With the assistance of other school staff stationed at the loading area, several vehicles should be loaded simultaneously. After each loading, vehicles should be cleared by school staff to carefully exit the queue.
- The school should investigate the 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.

Student Safety

- Student safety should remain paramount at all times. School administration should remind students, parents and staff of their expectations relative to this traffic management plan continuously 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.

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- 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.

Enforcement

- School officials should appoint a safety committee whose objective is to implement actions of this TMP and make any necessary adjustments necessary to enforce a coordinated traffic management plan.
- The plan includes 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.
- To properly organize traffic operations, left-turns of northbound traffic into the school shall be prohibited during school peak hours—effectively encouraging parents to make a U-turn north of Ohana Place. This operation prevents any traffic conflicts with residents who live on Ohana Place. In lieu of traffic cones, staff should procure a temporary A-stand sign as shown in **Exhibit 1** to further emphasize this restriction.
- Dallas Police Department staff should continue to patrol traffic on S. Westmoreland Road as shown in **Exhibit 1**.
- A fence to discourage remote parking.
- DeShazo recommends parking markings to clearly designate queueing routes for each dismissal period.
- As needed, staff directing dismissed students out of the school building should, in lieu of simple hand gestures, procure and use reversible hand-paddle signs with the messages for STOP and SLOW. Optional additional equipment used by staff may include whistles (for audible warnings) and fluorescent vests (for visual warning).

SUMMARY

This TMP should be used by A.W. Brown Fellowship Leadership Academy Early Childhood Campus 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. School administration should review details of this TMP on a regular basis to confirm its effectiveness.

END OF MEMO

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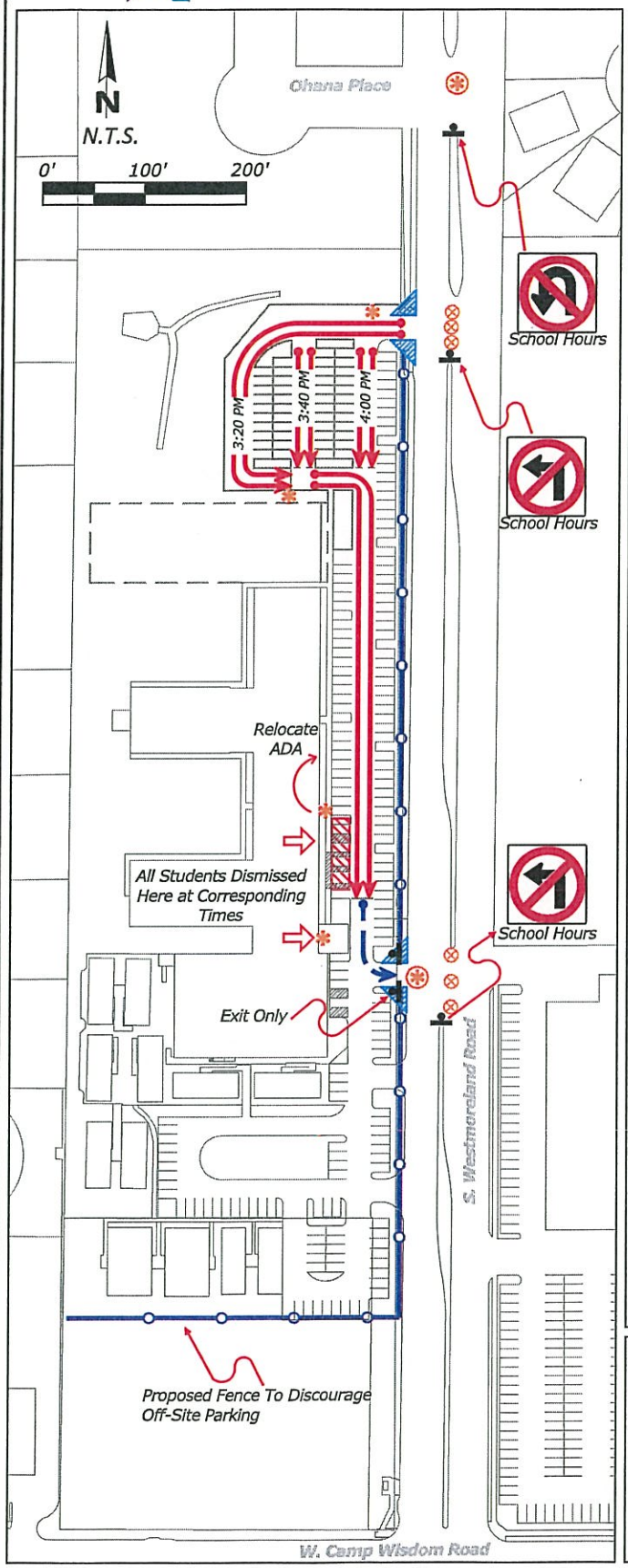
DeShazo Group, Inc. Job No. 16143 Exhibit Created on 01-05-2017



LEGEND

- School Staff
- Adult School Crossing Guard (DPD)
- Vehicular Queue
- Egress Route
- Traffic Cones
- Traffic Sign (Existing)
- Visibility Triangle (20' x 20' per City Code)

NOTE: sign within visibility triangles must not be less than 8' in height

PROPOSED CONDITIONS

Student Group/ Dismissal	Student Enrollment	Travel Modes		Vehicular Traffic Demand Queue	
PreK3 - PreK4 3:20 PM	500 Students	By Daycare/Van:	10%	Capacity:	1,577 LF (67 cars)
		By Walking:	~0%	Maximum:	1,316 LF (56 cars)
		By Transit:	0%	Surplus:	261 LF (11 cars)
		Parent Pick-Up:	90%		
Kindergarten - 1st Grade 3:40 PM	500 Students	By Daycare/Van:	10%	Capacity:	1,783 LF (75 cars)
		By Walking:	~0%	Maximum:	1,316 LF (56 cars)
		By Transit:	0%	Surplus:	467 LF (19 cars)
		Parent Pick-Up:	90%		
2nd Grade 4:00 PM	250 Students	By Daycare/Van:	10%	Capacity:	1,990 LF (84 cars)
		By Walking:	~0%	Maximum:	658 LF (28 cars)
		By Transit:	0%	Surplus:	1,332 LF (56 cars)
		Parent Pick-Up:	90%		

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

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.

I, David Nevarez, P.E. #106200, certify that the results of the queuing analysis–upon complete enforcement of this Traffic Management Plan–indicate that no queuing of vehicles will extend into City of Dallas rights-of-way as a result of internal queuing constraints during the study peak hours of school operation.

EXHIBIT 1

Traffic Management Plan

A.W. Brown-Fellowship Leadership Academy Early Childhood Campus
6901 S. Westmoreland Road, Dallas, Texas

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