

TRAFFIC MANAGEMENT PLAN FOR
W.T. WHITE HIGH SCHOOL
DALLAS, TEXAS

DeShazo Project No. 15191

Prepared for:

Masterplan

900 Jackson Street, Suite 640
Dallas, Texas 75202

Prepared by:

DeShazo Group, Inc.

Texas Registered Engineering Firm F-3199

400 South Houston Street, Suite 330
Dallas, Texas 75202
214.748.6740



February 10, 2016



Traffic Management Plan for
W.T. White High School

~ DeShazo Project No. 15191 ~

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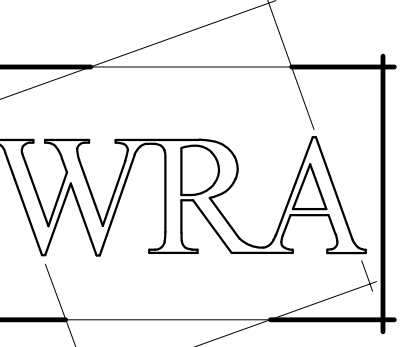
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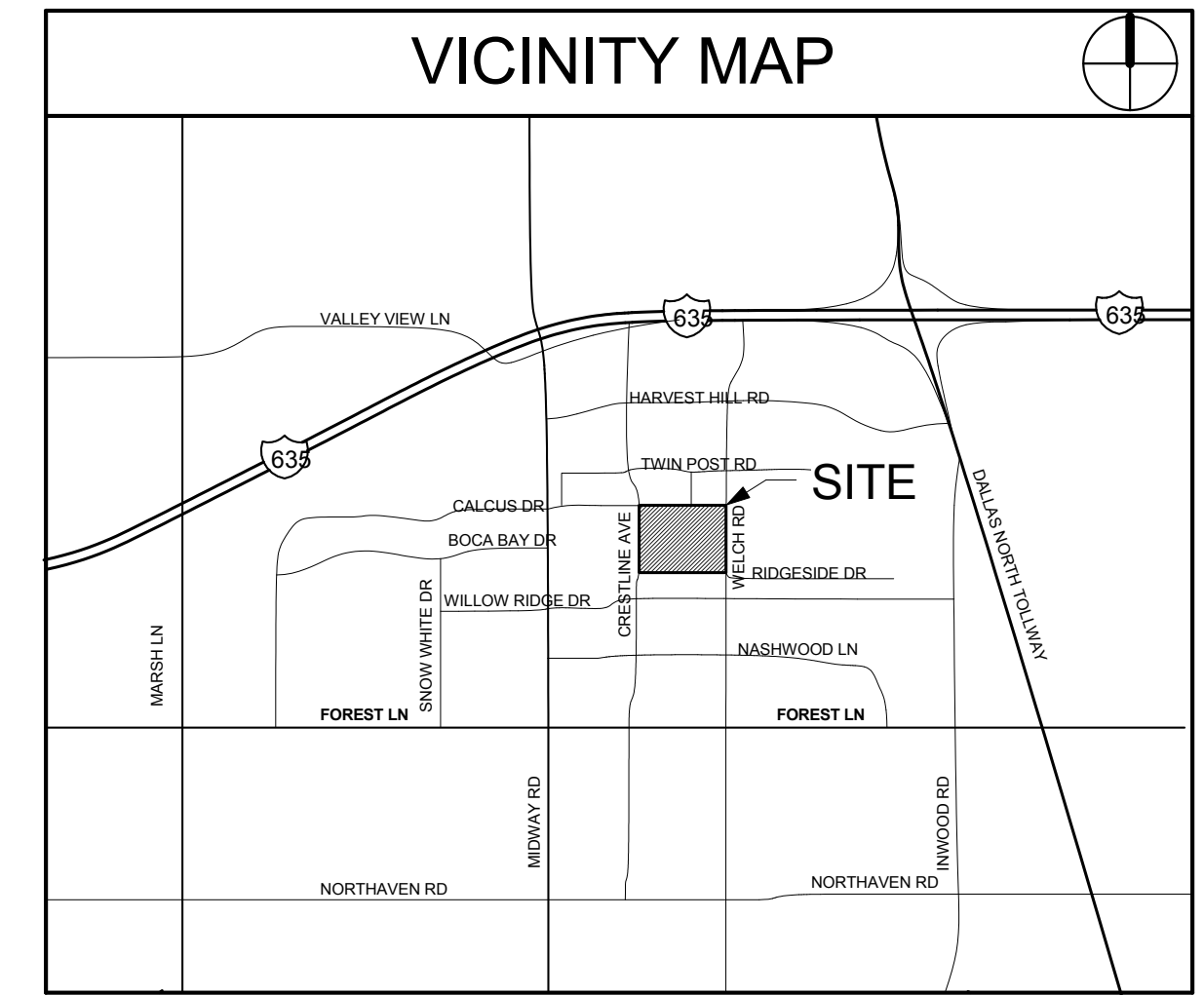
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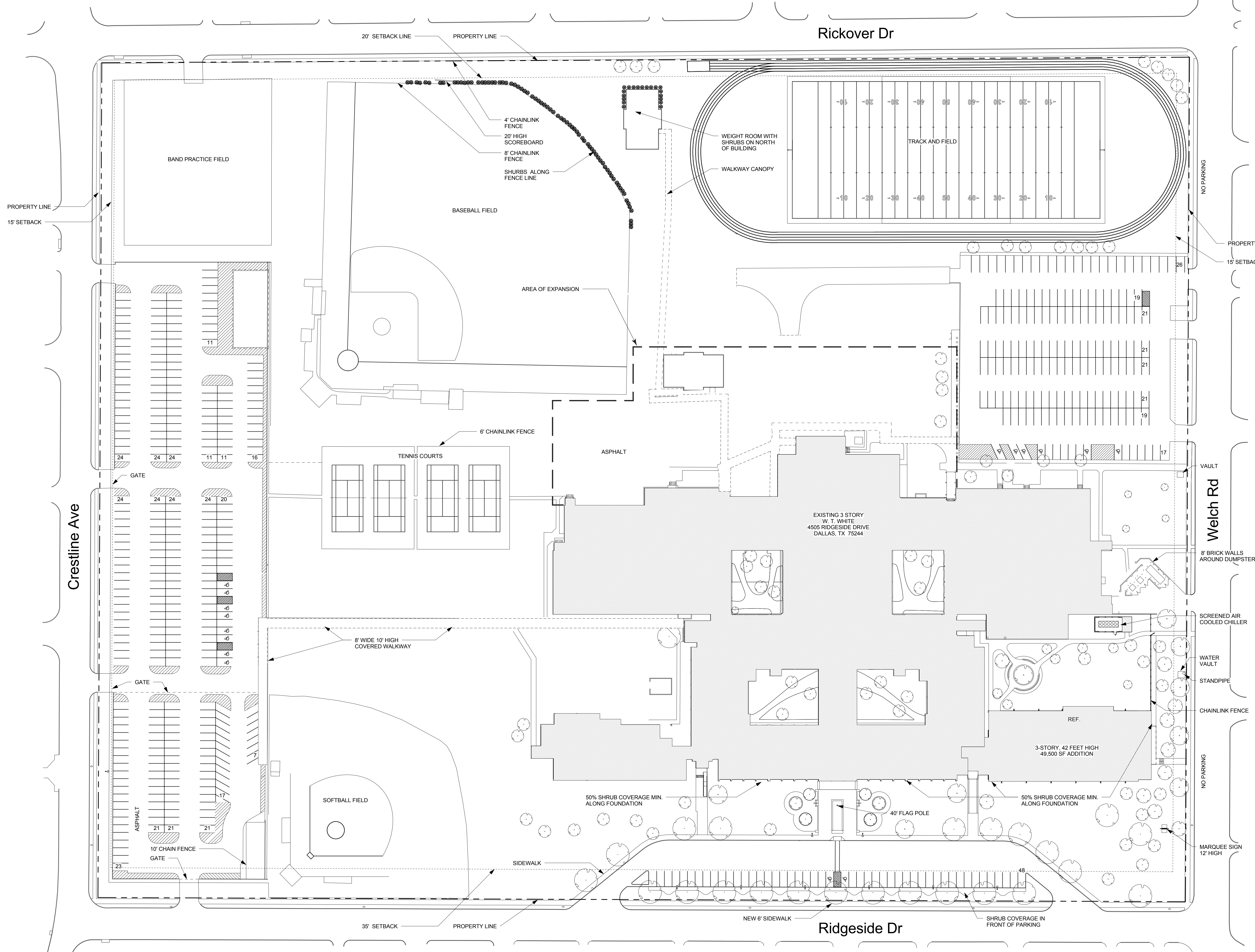
APPENDIX



WRA Architects, Inc.
 12377 Merit Drive
 Suite 1800
 Dallas, Texas 75251
 214.750.0077 voice
 214.750.5931 fax
 www.wraarchitects.com



W.T. WHITE HIGH SCHOOL
 LOCATED IN THE CITY BLOCK 7680
 AND BEING OUT OF THE
 A.M. HARDWOOD SURVEY, ABSTRACT NO 581
 CITY OF DALLAS, DALLAS COUNTY, TEXAS



SITE SUMMARY

OWNER:	
DALLAS INDEPENDENT SCHOOL DISTRICT 3700 ROSS AVENUE DALLAS, TX 75204	
LOT 1, BLOCK E77680	28.77 ACRES
AREA:	
MAXIMUM BUILDING HEIGHT:	75 FEET
BUILDING AREA	
EXISTING:	278,802 SF
NEW ADDITION:	49,500 SF
TOTAL:	328,302 SF
CLASSROOMS	
EXISTING:	54
PROPOSED:	30
TOTAL:	84
PARKING	
EXISTING:	512
NEW:	48
TOTAL:	560

W.T. WHITE ADDITIONS AND RENOVATIONS
 4505 Ridgeside Dr Dallas, TX 75244

REVISIONS:
 No. Date

JOB NO. 1510
 DATE: 10/28/2015

Development Plan

Z100



Traffic. Transportation Planning. Parking. Design.

400 S. Houston Street, Suite 330
Dallas, TX 75202
ph. 214.748.6740
deshazogroup.com

Technical Memorandum

To: Mr. Karl Crawley — Masterplan
From: David Nevarez, P.E. — DeShazo Group, Inc.
Date: February 10, 2016
Re: Traffic Management Plan for DISD W.T. White High School in Dallas, Texas
DeShazo Project Number 15191

INTRODUCTION

DeShazo Group, Inc. (DeShazo) is an engineering consulting firm based in Dallas, Texas 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 to provide a requisite traffic management plan (TMP) for the W.T. White High School campus located at 4505 Ridgeside Drive in Dallas, Texas. The school is currently in operation at the subject site with a student enrollment in 9th through 12th grade. The school proposes to expand the current facilities with floor area for 30 additional classrooms. However, the expansion is attributed to a remodeling of the existing modular and didactic floor areas. The school capacity will remain within the most recent trends. The school has an existing enrollment of 2,310 students. Based on recent growth trends evident from middle schools in the district, school officials anticipate a student enrollment of 2,372. The attached site plan, prepared by Masterplan, shows the proposed modifications.

But what is the new capacity of the addition? it is hard to believe that 30 new classrooms will only hold 62 more students.

The school property is currently Plan Development District (PD) 696. In order to gain entitlements for the proposed improvements, DISD is seeking approval of a change to the development plan. If approved, the implementation of the proposed site and operational modifications are anticipated to take place before the start of the 2017-2018 school year.

As part of the approval process for changes to the PD, 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. A TMP is intended to assess the existing and/or 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 submittal, the school is agreeing to the strategies presented herein for which the school will be held self-accountable until and unless the City of Dallas deems further measures are appropriate.

TRAFFIC MANAGEMENT PLAN

A Traffic Management Plan (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 the critical periods, the safety and efficiency of other modes of travel – including walking – will also inherently improve, and the operational impact on the public street system should also be minimized. The TMP should not be considered a comprehensive set of instructions to ensure adequate safety; however, it should be used as a tool to facilitate a safer and more efficient environment.

The analysis summarized below utilizes the proposed school site plan to evaluate aspects such as passenger loading/unloading and vehicle queuing (i.e., stacking) that occur at the school in order to accommodate the observed peak demands within the site. A concerted effort and full participation by the school administration, staff, students, and parents are encouraged to provide and maintain safe and efficient traffic operations. [NOTE: In this report the term “parent” refers to any parent, family member, legal guardian, or other individual who is involved in the pick-up or drop-off of one or more students at the school.]

School Operational Characteristics

Table 1 summarizes the operational characteristics for W.T. White High School assumed in this analysis:

Table 1. School Operational Characteristics

	Existing Conditions	Proposed Conditions
Enrollment:	<i>Total (all grades): approximately 2,310 students in 9th through 12th grade.</i>	<i>Total (All grades): approximately 2,372 students in 9th through 12th grade.</i>
Daily Start/End Schedule	Grades 9-12th: >Start: 7:55 AM >End: 2:55 PM	Grades 9-12th: >Start: 7:55 AM <i>(no change)</i> >End: 2:55 PM <i>(no change)</i>
Approximate Percentage Travel by Mode:	By School Bus: <5% By Walking: <5% Student Drivers: <10% Parent Pick-Up: >80%	By School Bus: <5% <i>(no change)</i> By Walking: <5% <i>(no change)</i> Student Drivers: <10% <i>(no change)</i> Parent Pick-Up: >80% <i>(no change)</i>

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 conditions were based upon evaluations of existing conditions and may be supplemented by DeShazo’s professional judgment and experience. Proposed 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 subject site provides two separate lots for faculty/staff and student parking on Welch Road and Crestline Avenue, respectively. A third lot is allocated to school buses in front of the school building along Ridgeside Drive. No on-site area is currently available for student drop-off or pick-up operations—all loading/unloading takes place within public rights-of-way. The site is also part of an entire block. All adjacent public streets are two-lane, undivided roadways currently operating as two-way direction. Except for the curb side along Ridgeside Drive, parents park or stand on public streets surrounding the subject block during the school's peak dismissal period.

Passenger Unloading/Loading and Vehicle Queuing

DeShazo conducted qualitative observations of traffic during typical school-day conditions in the *Fall 2015* semester. These observations indicate that vehicles during the corresponding morning and afternoon periods circulate around the perimeter of the school property; conditions are generally very orderly.

During the afternoon pick-up period, the vast majority of students are transported by parents in personal vehicles. Observations of peak traffic associated with student pick-up activities indicate a maximum of approximately 117 vehicles. The school does not provide a loading station for students. Currently, vehicles approach the school from different directions and park on both sides of the streets. Students are typically dismissed and proceed to exit the school property through one of several access points. The vast majority of students are transported by parents who drive personal vehicles and drop-off/pick-up their children.

NOTE: The same operation is in effect during the morning; however, the overall volume of vehicles is less concentrated during the morning, so the peak vehicle demand are lower than in the afternoon. Therefore, detailed analysis results are based upon the afternoon pick-up period.

Recommendations

The following recommendations are provided by DeShazo to W.T. White High School for the management of vehicular traffic generated by the school during peak traffic conditions. Generally, traffic delays and congestion that occurs during the afternoon pick-up period is notably greater than the traffic generated during the morning drop-off period due to the timing and concentration characteristics. In most instances, achieving efficiency 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.

Although the school's site plan does provide a parking lot with significant area for off-street queuing, the parking lot is the only facility large enough to contain the number of student parking. The school issues approximately 200 parking permits to students on average for the past couple of years. Also, based upon on-site observations during typical school-day conditions, it is believed that traffic operations of on-street pick-up are generally organized and do not present and obstruction to the background traffic.

Public school buses also serve students at W.T. White High School. A designated school bus loading zone is provided on the south curb of Ridgeside Drive. A small number of students may also live within close proximity to the school and walk to/from the School. A crossing guard currently serves the school. The crossing guard is stationed at the crosswalk on the north side of the intersection of Ridgeside Drive and Crestline Avenue.

As previously mentioned, current traffic conditions are generally acceptable and do show any indications of unsafe measures. However, In order to better organize the school projected traffic demands during peak periods, the school should allocate the proposed loading area in front of the school building along Welch Road. Vehicles primarily access the site via Welch Road or northbound on Crestline Avenue. These vehicles should be encouraged to circulate in a clockwise formation and proceed to pick up students along the curb of the school's property.

DeShazo also recommends general actions that will better accommodate the traffic needs of the school and facilitate an enforceable and safe management plan:

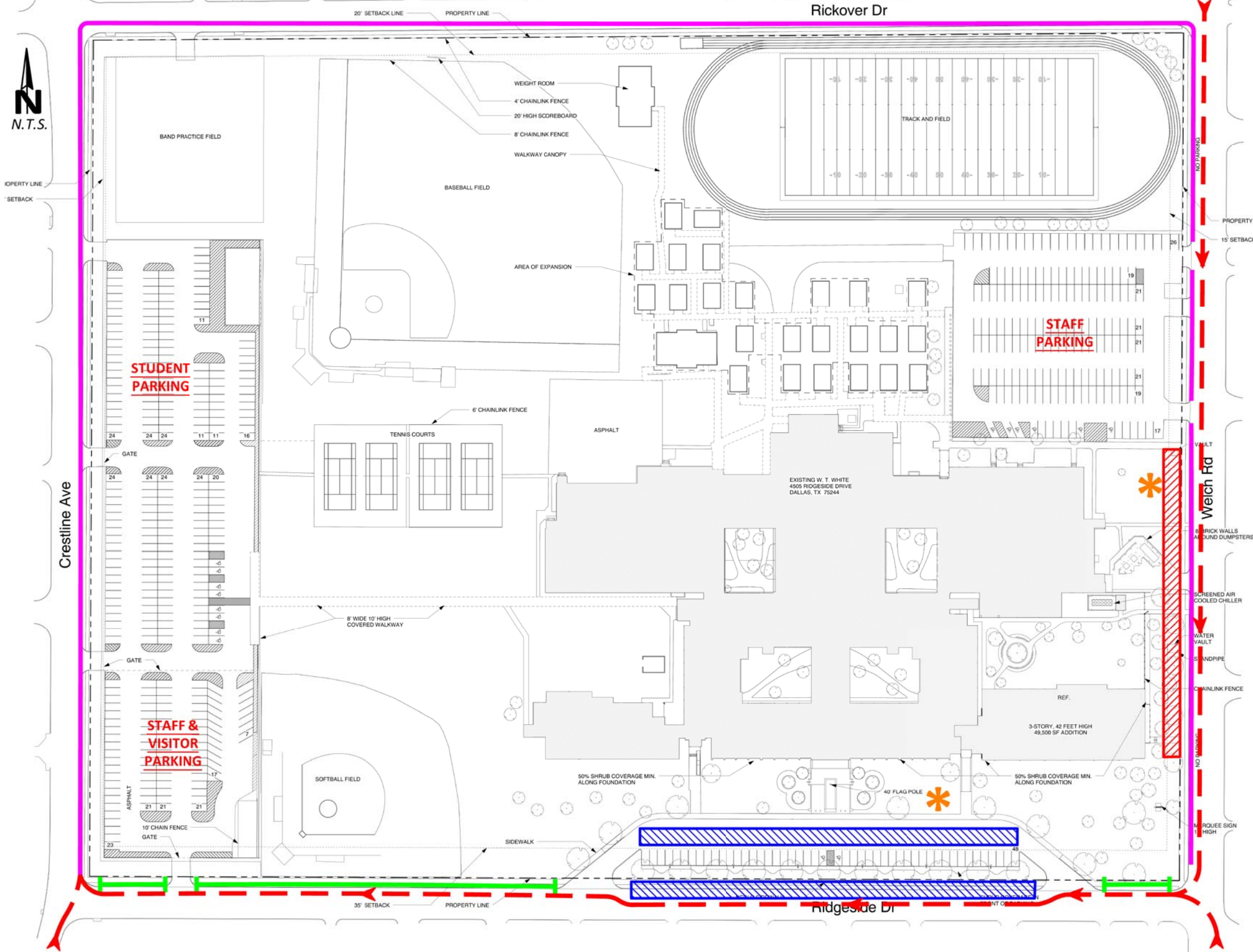
- To maximize personal safety, passenger loading/unloading within the public right-of-way should strive to only occur in areas designated the City of Dallas.
- To minimize liabilities, no persons other than deputized officers of the law (including crossing guards) should engage or attempt to influence traffic operations in public right-of-way.
- The full cooperation of all school staff members, students, and parents is crucial for the success of a 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.

Although traffic congestion is appreciable under current condition, there is no known history of traffic accidents. Based upon DeShazo's review of the proposed site conditions and the anticipated needs of traffic during peak conditions, it is recommended that the proposed circulation plan and traffic operations be maintained. The existing conditions are also a result of an investment in resources and refinements made by the school and by the City of Dallas over many years. Given that no additional resources or space for expansion options are available, the status quo is considered to provide the best alternatives and has the advantage of familiarity. **Exhibit 1** provides a graphical summary of the recommended circulation plan.

SUMMARY

This TMP is to be used by W.T. White 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



Queuing Summary

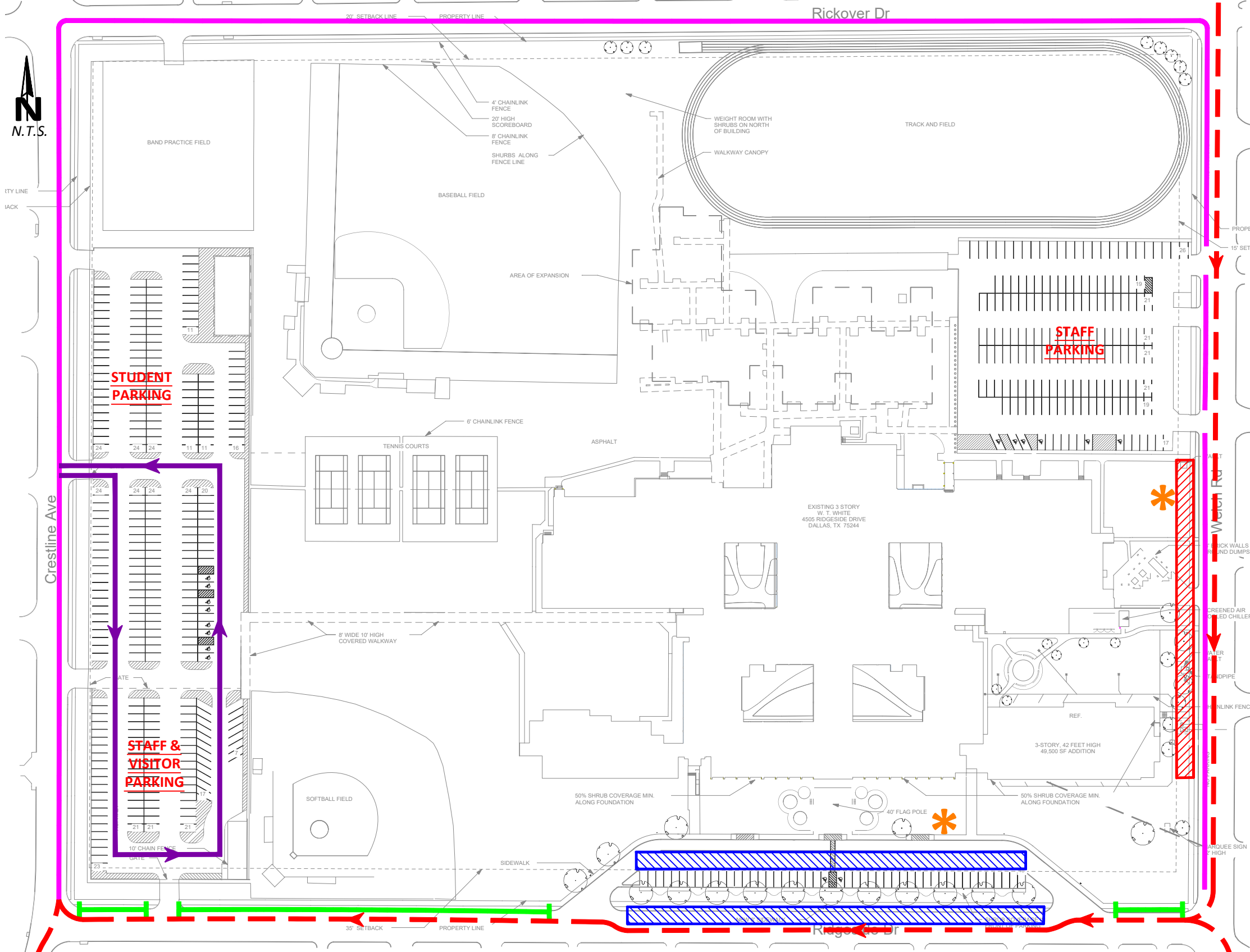
Student Group	Dismissal Times & Number of Students	Vehicular Traffic Demand	
		Provided:	Queue
Grades 9-12	2:55 PM (2,372 Students)	3,213 LF (136 Cars)	
		Required*:	2,750 (117 Cars)
		Surplus:	463 LF (19 Cars)

**Based on existing field observations*

Legend

- School Staff
- Designated Loading Area
- On-Street Vehicle Queue
- Inbound Traffic Route
- No Parking (ANY TIME)
- Designated Bus Loading Area

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 site constraints preclude the school's ability to accommodate vehicular queue on-site. While it may not be feasible to eliminate queuing in public right-of-way, establishing a designated school route will lessen impact to neighborhood /through traffic. This option is subject to approval from the City of Dallas Street Services Department.



Queuing Summary

Student Group	Dismissal Times & Number of Students	Vehicular Traffic Demand	
		Queue	
Grades 9-12	2:55 PM (2,372 Students)	On-Street:	3,213 LF (136 Cars)
		Off-Street:	1,124 LF (47 Cars)
		Provided:	4,337 LF (184 Cars)
		Required*:	2,750 LF (117 Cars)
		Surplus:	1,587 LF (67 Cars)

*Based on existing field observations

Legend

- School Staff
- Designated Loading Area
- On-Street Vehicle Queue
- Off-Street Vehicle Queue
- Inbound Traffic Route
- No Parking (ANY TIME)
- Designated Bus Loading Area

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 site constraints preclude the school's ability to accommodate vehicular queue on-site. While it may not be feasible to eliminate queuing in public right-of-way, establishing a designated school route will lessen impact to neighborhood /through traffic. This option is subject to approval from the City of Dallas Street Services Department.