

TECHNICAL MEMORANDUM

TO: Lelia Goehring
FROM: Dean Stuller, P.E.
EMAIL: dstuller@halff.com
SUBJECT: McWhorter Elementary School Traffic Management Plan (TMP)



DATE: April 7, 2020
AVO: 38347

Dean S. Stuller

I. INTRODUCTION

Halff Associates, Inc. (Halff) is a full service architectural / engineering firm based in Richardson, Texas with licensed engineers specializing in traffic and transportation. Halff was retained by LPA Design Studios (Client) to prepare a Traffic Management Plan (TMP) for the Carrollton-Farmers Branch Independent School District's (CFBISD) McWhorter Elementary School (ES) in Dallas, Texas. The school does not have an existing TMP. As part of the school's Special Use Permitting (SUP) renewal, the City of Dallas is requiring a TMP be developed.

The site is bordered by Vail Street on the south, Timberglen Road on the west, single-family residences on the north and a trail on the east. Figure 1 below is a map detailing the site location.



Aerial photo reprinted with permission from Nearmap

Figure 1 – Site Location Map



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As mentioned above, as part of the school's SUP renewal a TMP is required. With this TMP submittal, the school is agreeing to implement the management plan strategies as presented and will be self-accountable unless the City of Dallas deems further measures are appropriate or necessary.

II. TRAFFIC MANAGEMENT PLAN

The purpose of the TMP is to identify established procedures for traffic flow and circulation around the elementary school related to student drop-off and pick-up operations. Use of a TMP helps improve traffic / student safety and helps maximize the efficiency of drop-off and pick-up operations, reducing delays during those time periods. The analysis summarized in this report identifies critical elements of the TMP such as existing available queuing space on- and off-site, existing queuing during the drop-off and pick-up periods and circulation patterns for the school facility. A successful TMP requires effort and compliance by school administration, staff, students, and parents.

2.1 Current Drop-Off and Pick-Up Operations Queuing Evaluation

Halff conducted traffic counts and observations at the school on Tuesday February 25, 2020 during the AM and PM peak periods. Based upon the observations, at no time during the AM peak period did the vehicle drop-off queue in the front loop get close to spilling out into Timberglen Road. (There is no official student drop off in the back loop.) During the PM peak pick-up period, there was a maximum of 36 vehicles queued in the front loop and six vehicles queued out into Timberglen Road. (It was noted that the vehicles queued in the front loop were not using the space very efficiently. Some sections of the queue had large gaps between the vehicles.) Based on the amount of queue space in the front loop and assuming 22 feet per vehicle, the front loop has a capacity of approximately 39 vehicles.

In the back loop there are two lanes for pick up during the afternoon peak pick-up period. The left lane is used by parents picking up students. The maximum vehicle queue in this lane was nine vehicles with a queue capacity in this lane of 18 vehicles. The right lane, closest to the building, is used by the special education school bus and day care vehicles. The maximum queue in this lane was the school bus and five day care vehicles which in total occupied approximately 220 feet of the available 390 feet of queue space.

Based on the afternoon peak period observations, the front loop had a maximum vehicle queue demand of 42 vehicles (36 vehicles queued on the site and six vehicles queued on Timberglen Road waiting to enter the site. The back loop had a maximum parent pick-up queue demand of nine vehicles for a total parent school queue demand of 51 vehicles. With a parent pick-up queue capacity of 39 vehicles in the front loop and 18 vehicles in the back loop for a total of 57 vehicles, the school site has sufficient queue capacity to accommodate the typical PM peak period pick-up demand.



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Based upon the information above and discussions with school staff, Halff developed the attached TMP to serve the school.

III. RECOMMENDATIONS AND SUMMARY

Based on the morning and afternoon traffic counts / observations and discussions with school staff, Halff offers the following recommendations to assist in providing for the safe and efficient movement of pedestrians and vehicles on and around the McWhorter ES campus.

1. All student drop-offs should occur in the front loop.
2. All day care vehicles and the special education school bus should drop off and pick up in the back loop.
3. Add a third staff member in the front loop in the AM peak to assist with unloading vehicles.
4. Position the three staff members unloading the vehicles in the front loop at stations 1 - 3 to encourage parents to pull up to the white line when dropping off.
5. Have the staff member working the front loop crosswalk wave parents forward to pull up to the white line at the end of the drop off area.
6. Assign one staff member to each of the eight loading zones in the front loop in the PM peak to increase the capacity of loading students into the vehicles.
7. Continue using the hanging tag identification system in the front loop for calling students for loading. A staff member should be positioned upstream of the drop off / pick up area to identify vehicles entering the area, direct them to a designated loading space and call for the associated student to move to the designated space to load into their vehicle.
8. Provide a minimum of two staff members in the back loop to assist with loading students into private vehicles.
9. School staff should continue to encourage parents to use only designated areas located on-site for pick-up and drop-off activity. Pick-up and drop-off activity on public right-of-way should be discouraged.
10. The school administration should continue to train school staff on their duties associated with pick-up and drop-off procedures as outlined in the TMP.
11. The school administration should communicate to parents and students regarding expectations and responsibilities related to the TMP throughout the school year as needed. It is particularly important to communicate to parents of new students, who may not be familiar with pick-up / drop-off procedures.



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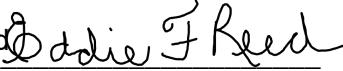
The purpose of the TMP is to identify established procedures for traffic flow, circulation student drop off / pick up operations around the McWhorter ES site. Using a TMP helps to improve student and driver safety and maximize the efficiency of drop-off and pick-up operations, reducing delays during those time periods. This report identifies critical elements of the TMP such as existing available queuing space on- and off-site, projected queuing during the drop-off and pick-up periods and vehicular and pedestrian circulation patterns for the school facility. A successful TMP requires effort and compliance by school administration, staff, students, and parents. The TMP procedures should be distributed to parents in advance of school starting each semester and posted on the school's website to be available at all times.

IV. SCHOOL REVIEW AND COMMITMENT

The Traffic Management Plan for McWhorter Elementary School was developed to optimize safety and accommodate vehicular queues generated by the school on the school site. Full participation by and cooperation between the school administration, staff, parents and students is essential to maintain safe and efficient traffic operations on and around the school campus.

By consent of this TMP submittal, the school agrees to the strategies presented herein for which the school will be held accountable unless the City deems further measures are appropriate.

The school is committed to continually reviewing and assessing the effectiveness of the TMP and, if warranted, implementing changes to increase safety and minimize impacts on the surrounding community.

Signed: Eddie F. Reed 

Date: 4/7/20

Title: Principal

McWhorter Elementary School

LEGEND

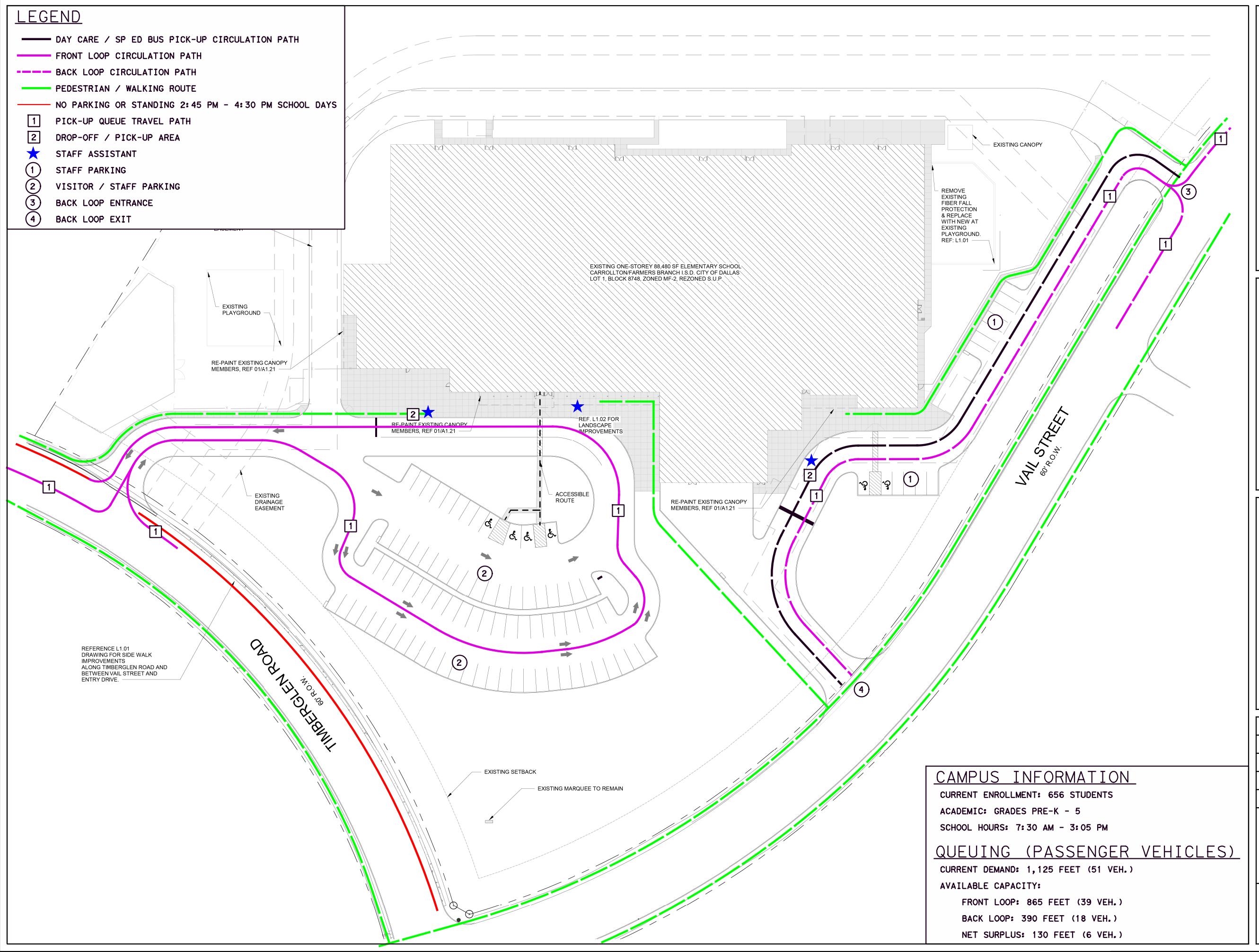
- DAY CARE / SP ED BUS PICK-UP CIRCULATION PATH
- FRONT LOOP CIRCULATION PATH
- BACK LOOP CIRCULATION PATH
- PEDESTRIAN / WALKING ROUTE
- NO PARKING OR STANDING 2:45 PM - 4:30 PM SCHOOL DAYS
- [1] PICK-UP QUEUE TRAVEL PATH
- [2] DROP-OFF / PICK-UP AREA
- ★ STAFF ASSISTANT
- STAFF PARKING
- VISITOR / STAFF PARKING
- BACK LOOP ENTRANCE
- BACK LOOP EXIT

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RICHARDSON, TX 75081-2275
TBEELS ENGINEERING FIRM #312

McWHORTER ELEMENTARY SCHOOL
3678 TIMBERGLEN ROAD
DALLAS, TEXAS

Project No.: 38347.001

Issued: APRIL 2020

Drawn By: TMM

Checked By: SM

Scale: NTS

Sheet Title

TRAFFIC MANAGEMENT PLAN

EXHIBIT 1

Sheet Number