

Traffic Management Plan

To: Michael Longanecker
Richardson Independent School District

From: Christy Lambeth, P.E., PTOE
Lambeth Engineering Associates, PLLC, F-19508

Date: September 26, 2018

Re: TMP for Lake Highlands High School on Church Road in Dallas, Texas;
City of Dallas #Z178-317; Lambeth #18107

Introduction

The services of Lambeth Engineering Associates, PLLC (herein Lambeth) were retained to conduct a traffic management plan (TMP) for Lake Highlands High School (LHHS). LHHS is part of the Richardson Independent School District and is located northeast of the Church Road/White Rock Trail intersection in Dallas, Texas. The high school property is currently zoned PD 467 and the athletic field is zoned PD 451. PD 467 requires amendment to allow the planned school improvements. A TMP is required as part of the City's approval process for amending PD 467.

The purpose of this TMP is to ensure safe vehicular and pedestrian circulation during peak morning drop-off and afternoon pick-up periods. When possible, school-related vehicular traffic should queue on-site. When school-related vehicles queue on public roads, it is imperative that they do not block other motorists from safely navigating through the streets.

School Description

LHHS currently has 126 classrooms and 2,887 students in 9th through 12th grades. There will be 148 classrooms after the planned improvements. Dr. Delich, LHHS's principal, noted that RISD is planning on a future LHHS population of 3,000 – 3,200 students. However, to be conservative, the future student population was grown proportionately to the number of future available classrooms for this analysis, resulting in a planned student population of 3,392 students.

School begins at 9:00 AM and classes are dismissed at 4:10 PM. Approximately 10% of the students drive, 35% ride buses, and others walk or are transported by parents. About 15% of the students stay for after school activities.

The school's access is via Church Road and White Rock Trail. Church Road is a four-lane, undivided roadway and White Rock Trail is a two-lane, undivided roadway. Bike lanes are on both sides of White Rock Trail from Church Road to the Lake Highlands Trail. School zones are present on both streets adjacent to the school. Sidewalks are located on both sides of Church Road and on the east side of White Rock Trail, north of Church Road. Outside of school peak hours, both roads were observed to have light traffic flow. No parking signs are posted on Church Road, although not followed by parents.

Traffic Management Plan

Observations

Traffic observations were conducted at the following dates and times.

- Wednesday, August 22, 2018 – PM Dismissal
- Wednesday, August 29, 2018 – AM Arrival and PM Dismissal
- Thursday, August 30, 2018 – PM Dismissal
- Friday, August 31, 2018 – PM Dismissal
- Tuesday, September 4, 2018 – AM Arrival and PM Dismissal

The peak queue of parents picking up students was observed to be 240 vehicles. Most of the traffic clears the LHHS campus in less than 15 minutes once school is dismissed. The current traffic pattern is summarized in the **Appendix**.

There are currently four City of Dallas Police Officers assigned to the school; these school resource officers (SRO) remain on campus throughout the day and assist with dismissal.

Lambeth met with Ms. Sandra Hayes, Dr. Joshua Delich, Dr. Eldridge Moore and Mr. Gilbert throughout the process of developing the TMP.

Recommendations

The recommended TMP is shown in **Exhibit 1**. Detailed list of items to be implemented is described in the **Appendix**, including recommendation that the City evaluate timing of nearby intersections on Church Road. LHHS should communicate the new circulation plan with parents at student orientations, post the plan on-line, and send to parents electronically and/or print. It is recommended a copy of the TMP be posted in both offices the first week of school so that it is visible. Extra copies should be available at the counselor's reception area for new students enrolling.

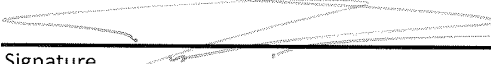
Summary

The Lake Highlands High School Traffic Management Plan is designed to provide safe vehicular and pedestrian movement to and from school and can accommodate the projected vehicular queues on-site. If traffic congestion or unsafe movements are noticed, the plan should be reviewed and updated promptly.

If City, neighbors or the recreation center have concerns with the school's day to day traffic operations, they may contact Mr. Gilbert, Associate Principal at andru.gilbert@risd.org or 469.593.1013. To get in touch with the principal, Dr. Joshua Delich, Lambeth communicated with his executive assistant, Ms. Sherry Hicks, at 469.593.1005 to set up meeting times.

I understand this traffic management plan (TMP) is part of the City of Dallas zoning approval for the planned school improvements. When approved, Lake Highland High School is required to follow the TMP. I understand if there are concerns with traffic flow, the plan should be reviewed. If updates are necessary, approval must be obtained from the City of Dallas.

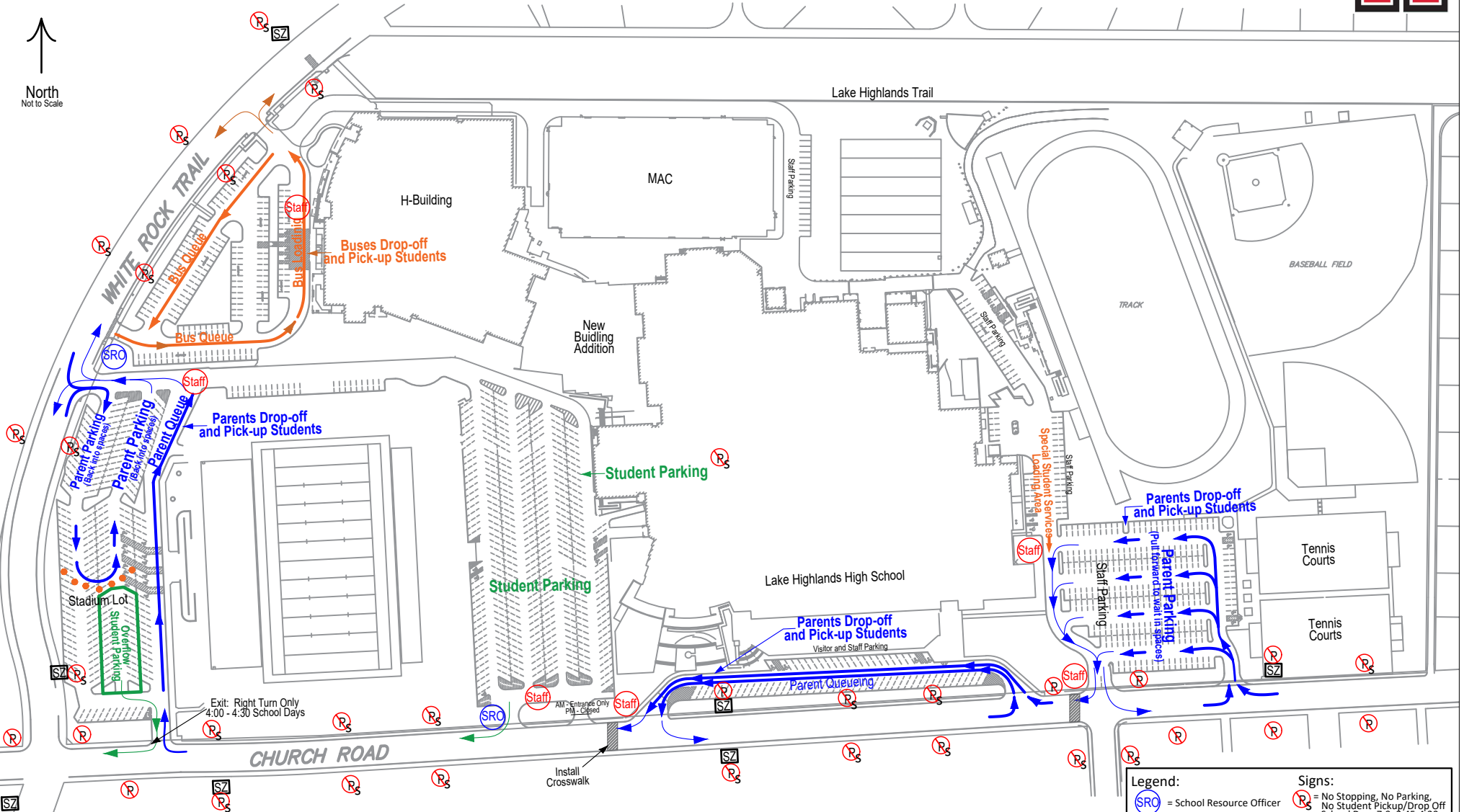
Lake Highlands High School, Richardson Independent School District

	9/10/18
Signature	Date
Joshua Delich	Principal
Printed Name	Title

Traffic Management Plan Lake Highlands High School

Dallas #178-317; PD 467

No student drop-off or pick-up on
Church Road, White Rock Trail, Fieldcrest Drive or
Lake Highlands North Recreation Center.



Planned Students/Grade	School Times	Travel Modes	Projected Queue (Vehicles)	Provided Queue (Vehicles)	Surplus Queue (Vehicles)
9 th 968	Beginning:	Buses 35%	16	20	4
10 th 909	9:00 AM	Parents ~25%	282	288	6
11 th 818		Student Drivers 10%	353	--	--
12 th 698	Dismissal:	Walkers ~30%	--	--	--
Total: 3,393	4:10 PM	Staff and Visitors --	404	--	--

Areas for Parent Pickup/Queue	Queueing		Parent Pickup Parking Spaces	Total	Total Parent Pickup/Queue Spaces
	Feet	Vehicles			
Stadium Lot (north of islands) - Parking			59	59	114 Stadium Lot
Stadium Lot (south of islands) - Parking			34	34	
Stadium Lot - Adjacent to field - Queue	497	21		21	
Front Lot - North Queue Lane	651	28		28	54 Front Driveway
Front Lot - South Queue Lane	602	26		26	
Tennis Court Parking Lot - Parking Spaces			120	120	120 Tennis Lot
Total:	1,750	75	213	288	288 Vehicles

Legend:

SRC

= School Resource Officer

Staff

= Lake Highlands Staff

●

= Cones

Signs:

R

= No Stopping, No Parking, No Student Pickup/Drop Off School Days 7-9, 2:45-4:30

R

= No Parking Anytime

SZ

= 20 MPH School Zone

LAMBETH

ENGINEERING ASSOCIATES, P.C.

Texas Registered Engineering Firm F-19508

Site plan provided by RLG Engineering 08/20/18.

09/10/2018 LHHS TMP, Lambeth #18107, TMP created by Christy Lambeth, P.E., PTOE, PE#1036

Appendix

TMP Recommendations

Intersection Improvements:

1. **CITY:** Westbound vehicles leaving the site via Church Road queued at both the Church Road/White Rock Trail and Church Road/Skillman Street intersections. The queue for both westbound lanes extended past the student parking lot on Church Road. It was observed that approximately 85% of the westbound vehicles in the right-lane turned right onto Skillman Street. The longest queue observed on Skillman was five (5) vehicles, which quickly dispersed during each cycle. Therefore, it appears that additional green time can be given to Church Road without impacting Skillman Street.

It is recommended that the City of Dallas evaluate updating the signal timing at the Church Road/Skillman, Church Road/White Rock Trail intersections to allow dispersion of school traffic from 4:10 PM – 4:30 PM. Also, the Church Road/Audelia Road intersection timing could be evaluated to ensure updated timing for all adjacent intersections.
2. **CITY:** Westbound vehicles on Church Road turning left onto Skillman were observed to extend past the left-turn lane. It is recommended the City evaluating extending the striping for the left-turn lane.
3. **CITY:** It is recommended the City consider re-striping southbound White Rock Trail to extend the right-turn lane to Church Road.
4. **CITY:** It is recommended that the City improve the crosswalk markings at the following intersections: Church Rd./Skillman St., Church Rd./Audelia Rd. and Church Rd./Fieldcrest Dr.

Parent Drivers:

5. It is recommended that the eastern gate serving the parking lot next to the tennis courts be opened during school hours. Install an “entrance only” sign at the eastern driveway as well as install pavement arrows marking direction of flow throughout the parking lot. The western gate should have an “exit only” sign as well as pavement markings for a right- and left-turn lanes exiting.
6. Create a designated area in the stadium lot for parents to pick up students. Parents could enter the stadium lot via Church Road or White Rock Trail and exit on White Rock Trail; these parents should back into the stadium parking spaces before school is dismissed so that they can pull forward to leave more promptly upon their students arrival.

Parents should also park in the tennis court lot to pick up students, parents. These parents should pull forward through the parking spaces so that they can leave the lot without backing up.

LHHS staff should guide parents parking in both lots the first two weeks of school, then evaluate to see if further assistance is needed. Staff should arrive in parking lot prior to 4:00 PM.

7. It is recommended that an SRO help stop traffic on Church Road during AM drop-off period for parents to exit the parking lot in front of the school’s main entrance. The morning queue of parents dropping off students in the front parking lot was primarily attributable to not being able to exit the parking lot promptly.
8. It is recommended to install pavement markings in the front driveway to encourage parents to form two lines. Left- and right-turn arrows should also be painted at the exit.
9. All stopping, parking, student drop-off and pick-up should be prohibited on Church Road and White Rock Trail during school arrival and dismissal periods.

10. **CITY:** It is recommended to install no parking signs with plaques noting no stopping and/or no student drop-off/pick-up on White Rock Trail during school arrival/dismissal hours.
11. **CITY:** Church Road has no parking signs. No stopping and/or no student drop-off/pick-up plaques should be installed under the signs.

The first eastbound no parking sign has two no parking signs on the pole – no parking anytime and no parking during school arrival/dismissal hours. One of the signs should be removed.

Church Road, adjacent to the main building, no parking signs have “bus zones” noted on them. These signs should be replaced since buses do not utilize this area.

Note: Lambeth does not recommend City install signs that they will not be enforcing.

Student Drivers:

12. An SRO should continue helping students exit on Church Road.
13. Due to the westbound queue on Church Road, it is recommended that the Church Road exit from the stadium parking lot be signed **Right-Turn Only 4:00 PM – 4:30 PM School Days**.
14. Students should be prohibited from parking at the Lake Highlands North Recreation Center.

Buses:

15. To separate bus traffic from student drivers, it is recommended that buses unload/load students adjacent to the H-Building and enter/exit via White Rock Trail.
16. An SRO should stop traffic for buses to safely and efficiently exit the campus the first two weeks of school, then evaluate the need for further assistance.
17. Bus routes should be evaluated so that all buses are not turning east onto Church Road; this would be helpful in more efficiently dispersing the buses and reducing queues on Church Road west of the school.
18. Some buses are currently running two routes to accommodate all students. Students are currently waiting outside the school building for their bus to return to the school to pick them up. It would also be ideal for students to have a protected area to wait during inclement weather.

Pedestrians:

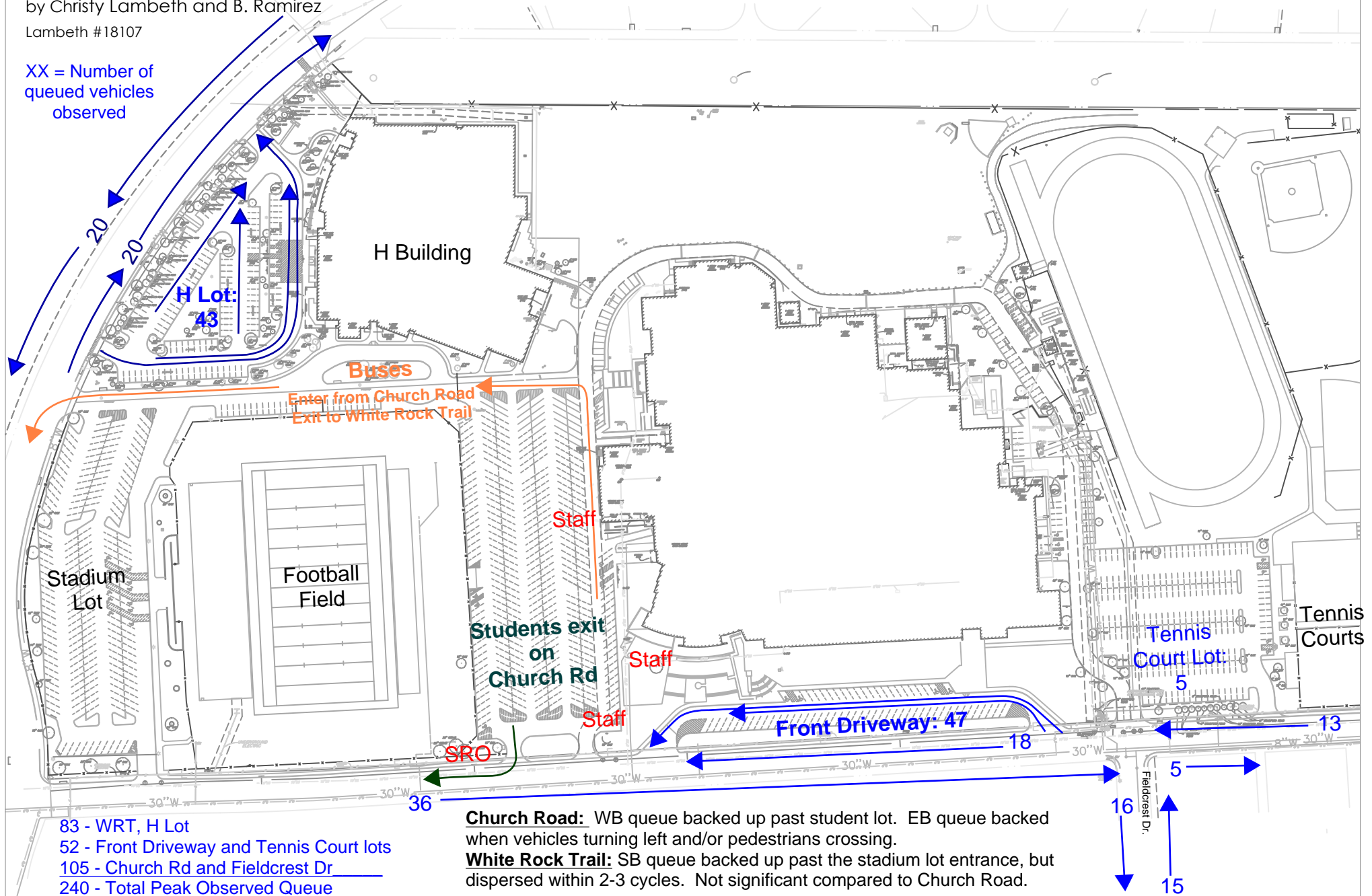
19. **CITY:** A midblock crosswalk should be installed on Church Road west of the front parking lot exit.
It is Lambeth’s opinion that this would be an ideal location for LHHS art students to create an artistic crosswalk to enhance the connection between the LHHS and the recreation center, with approval of design from the City of Dallas and working with the City to install.
20. An SRO or LHHS staff should guide students crossing Church Road at the new midblock and Fieldcrest Drive crosswalks so that the students cross in groups to help lessen the vehicular queues on Church Road.
21. The sidewalk south of the H-Building parking should be extended and connect to a new crosswalk to the stadium parking lot.
22. **CITY:** It should be noted that there are no sidewalks on White Rock Trail between Church Road and Covemeadow Drive.

Lake Highlands High School Traffic Observations

Observed Aug 22, 2018 - Sept 4, 2018
by Christy Lambeth and B. Ramirez
Lambeth #18107



XX = Number of
queued vehicles
observed



Parking Analysis for TMP:

Parking Rate (Spaces/Classroom, Based on 2nd Week Observation):	4.9
Future Number of Classrooms	148
Projected Future Parking Demand (spaces):	725
Total Planned Parking Spaces on-site:	998
Surplus Spaces Not Used for Parking:	273
Parking Spaces Planned to be Used for Queue:	213
Surplus Spaces Available After Projected Parent Parking for Student Pick-up:	60

Data for 4.9 spaces/classroom parking rate obtained from LHHS parking analysis (peak parking demand excluding first week of school).

Students were not required to have parking permits when parking observations were conducted; therefore, parking demand noted is higher than actual demand is expected to be.

LHHS Stadium Parking
Lot Driveway

LHHS Student Parking
Lot Exit

LHHS Front
Driveway Exit



Contact Information

Lake Highlands High School

Lake Highlands North Recreation Center

Contact information is provided for quick reference to recreation center in case high school students are parking in recreation center parking lots.

Lake Highlands High School

Dr. Eldridge Moore, Assistant Principal

eldridge.moore@risd.org

469.593.1410

Sherry Hicks, Executive Assistant for Principal, Dr. Delich

sherry.hicks@risd.org

469.593.1005

Lake Highlands North Recreation Center

Yolanda Carter, Manager

yolanda.carter@dallascityhall.com

O: 214.670.7793 | O: 214.670.6182

Christy Lambeth visited the Lake Highlands recreation center to obtain a copy of the aquatic center site plan for LHHS's reference and met Ms. Yolanda Carter, the recreation center's manager. Ms. Carter is concerned about students parking in the recreation center's parking lots. To assist, Christy provided her this LHHS contact sheet as well as informed LHHS.