

**BLACKLAND PRAIRIE CONSERVATORY AND ATELIER
TRAFFIC MANAGEMENT PLAN, Z156-225
APRIL 2016**

INTRODUCTION

The Blackland Prairie Conservatory and Atelier will be located on the north side of McCree Road at 9949 McCree Road, Dallas, Texas 75238. This school is proposed to open in August 2016 with an initial enrollment of 30 to 35 students. At full enrollment, which is projected to be reached in 2020, the school will have 90 students in grade levels from Kindergarten to 6th grade.

OVERVIEW

Blackland Prairie Conservatory and Atelier will be located on the north side of McCree Road as shown in **Figure 1**.

McCree Road – Bordering the school to the south, this is a two-lane roadway. McCree Road is not classified in the City of Dallas Thoroughfare Plan. The posted speed limit is 30 mph.

Figure 2 shows the proposed site plan. The campus will be served by two driveways along McCree Road. However, access will only be allowed via the west driveway location during drop off and pick-up times.

At maximum enrollment, Blackland Prairie Conservatory and Atelier will serve 90 students in Kindergarten to 6th grade. Daily start and end times are identified in **Table 1**. This table assumes full enrollment of the school.

Table 1: Projected Student Dismissal Numbers

Grade Level	Start Time	End Time	Percent of Enrollment Dismissed	# of Students
Kindergarten	8:45 AM	3:10 PM	40%	36
1st – 6th	8:30 AM	3:20 PM	60%	54
Total			100%	90

CITY OF DALLAS PARKING STANDARDS

Section 51.A-4.204 of the City of Dallas *Development Code* defines the parking requirements for institutional and community services. The City of Dallas code requires 1.5 parking spaces for each kindergarten/elementary school classroom. With 5 classrooms for Blackland Prairie Conservatory and Atelier, 8 parking spaces would be required for school use. Based on the site plan shown in **Figure 2**, the parking total of 97 spaces exceeds the City of Dallas requirements.

Figure 1: Vicinity Map

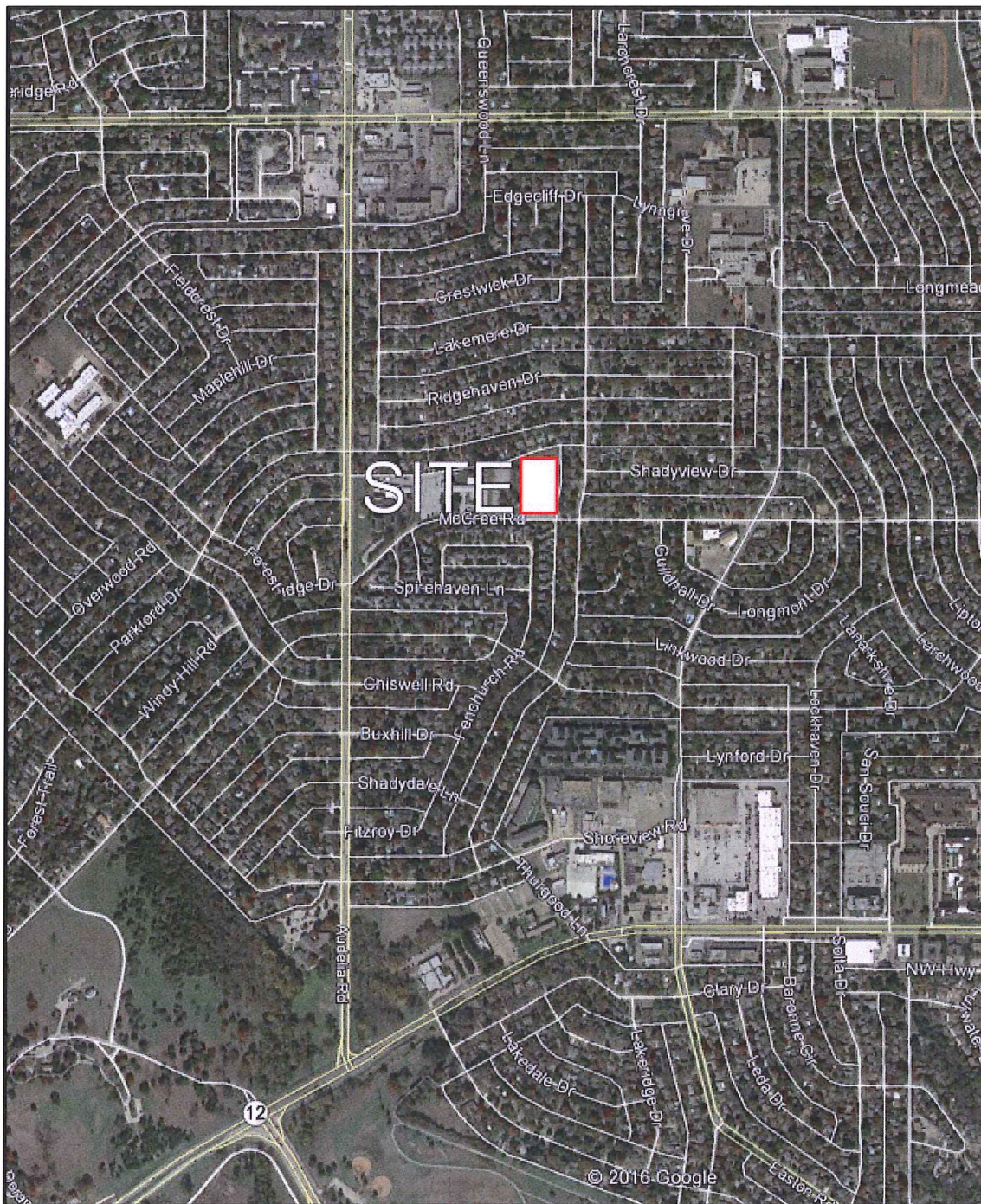
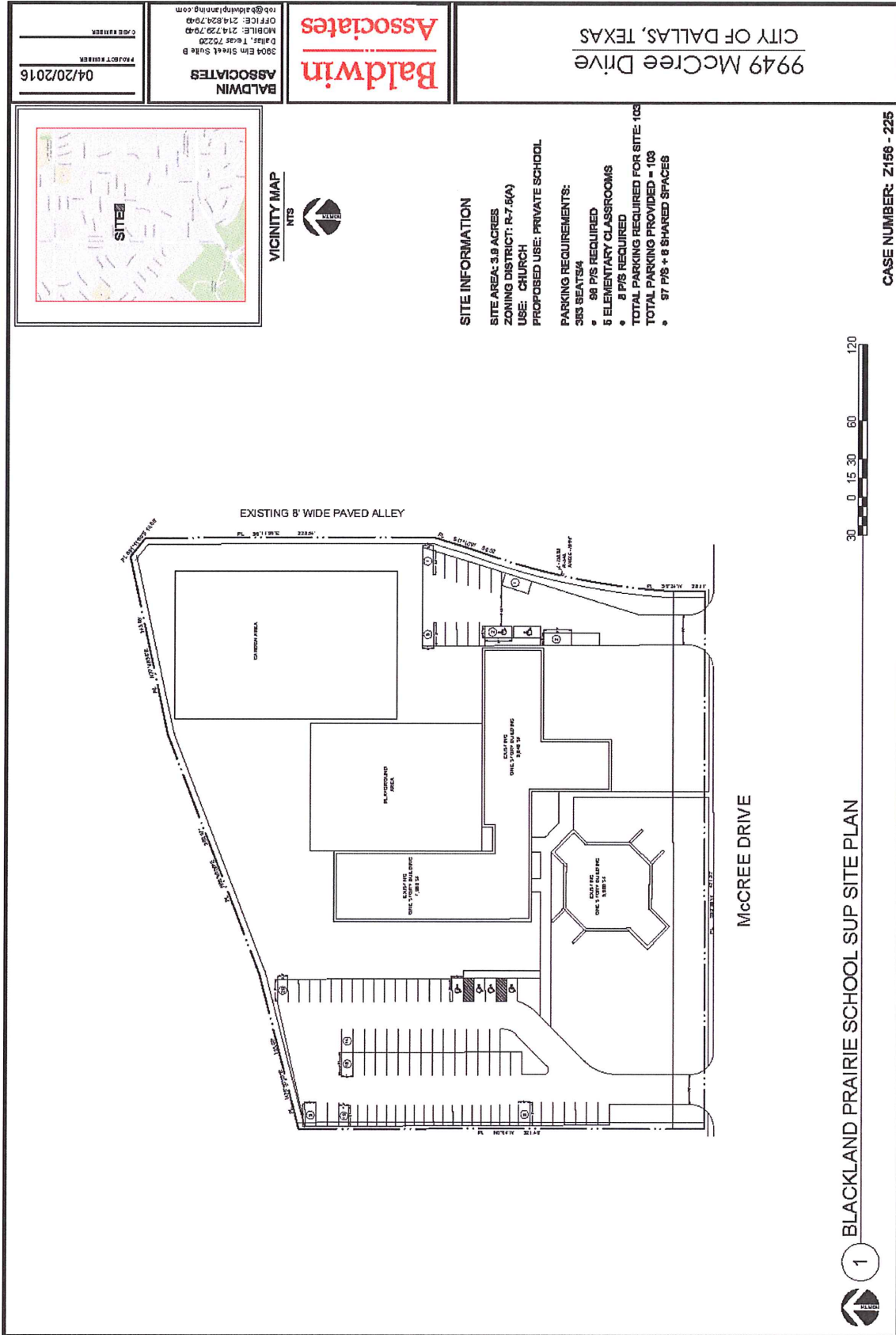


Figure 2: Site Plan



TRIP GENERATION

To develop trip rates for the Blackland Prairie Conservatory and Atelier, the number of vehicle trips generated by the private school and the directional splits were initially calculated based on information presented in ITE's *Trip Generation Manual, Ninth Edition*. The trip generation equations, directional splits and the numbers of trips generated by the proposed school at full enrollment are provided in **Table 2**.

Table 2: ITE Trip Generation Rates

Land Use	ITE Code	Equations ¹					
		AM Peak Hour			School PM Peak Hour		
Private School (K-8)	534	$T = 0.90(X) + 3.01$			$T = 0.61(X) - 4.70$		
		Directional Splits ²					
		AM Peak Hour			School PM Peak Hour		
		55 / 45			47 / 53		
		Estimated Trip Generation (90 students)					
		AM Peak Hour			School PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
		46	38	84	24	26	50

¹T = Trip Ends; X = Number of Students
²XX / YY = % entering vehicles / % exiting vehicles

QUEUING & PARKING ANALYSIS

The primary goal of the evaluation of the traffic circulation for the school is to minimize the impact on the adjacent public streets and to avoid queues on public roadways. At the Blackland Prairie Conservatory and Atelier, parents will be required to park and escort children during both drop-off and pick-up. No queuing of vehicles for pick-up or drop-off will be permitted. The proposed circulation plan will be the same for the morning drop-off periods (8:30 & 8:45 AM) and afternoon pick-up periods (3:10 & 3:20 PM). **Figure 3** shows the proposed circulation during drop-off and pick-up.

To determine the maximum accumulation of vehicles on site, a maximum parking requirement for pick-up/drop-off operations of one (1) parking space per five (5) students was assumed based on previous studies at other private schools. Under these assumptions, **Table 3** summarizes the projected number parking spaces needed for each dismissal period.

Table 3: Projected Queuing and Parking Space Demand by Dismissal Time

Dismissal Time	Percent of Enrollment Dismissed	Students	Queuing*		Parking Space Demand [vehicles]
			Feet	Vehicles	
3:10 PM	40%	36	0	0	8
3:20 PM	60%	54	0	0	11
Total	100%	90	---	---	---

* No queuing of vehicles for pick-up or drop-off will be permitted.

As shown by Figure 3 and Table 3, with 80 on-site parking spaces provided for use during drop-off and pick-up, the site is predicted to be able to store the vehicles during each of the dismissal periods. In the western parking lot (which will be used exclusively for parents), the 80 spaces can be used as follows: 11 for drop-off/pick-up operations (Table 3 maximum) and 69 for overflow parking if needed.

2015-2016 PROPOSED OPERATION

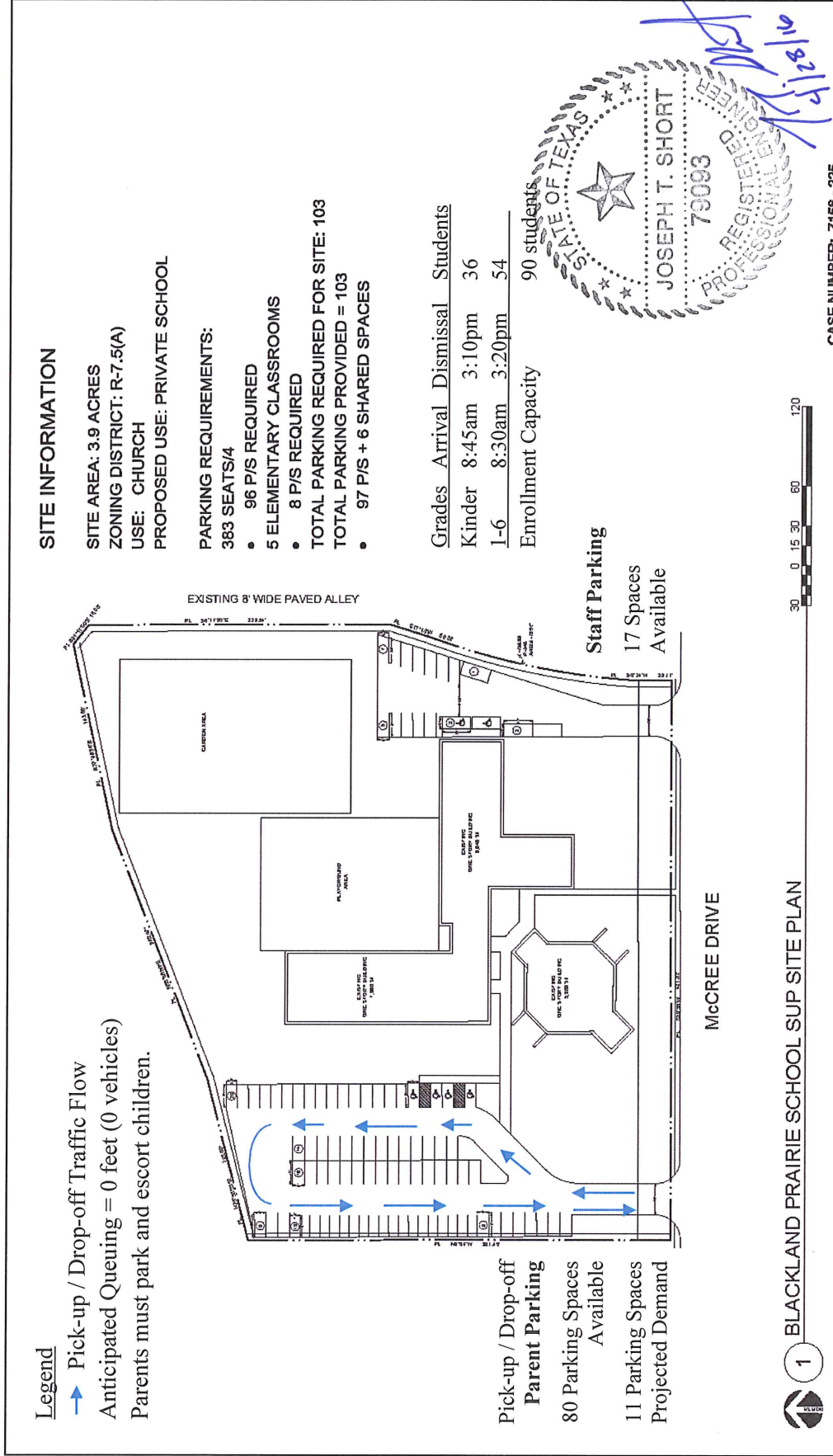
The arrival and dismissal traffic flow is expected to proceed as follows:

- Arrival Procedures
 - East driveway closed. All traffic will enter using the west driveway.
 - A counterclockwise movement is recommended. Parents will enter the west driveway, park in an open space, and escort their child(ren) to the school.
 - Parents will then exit the west driveway.
- Dismissal Procedures
 - East driveway closed. All traffic will enter using the west driveway.
 - A counterclockwise movement is recommended. Parents will enter the west driveway, park in an open space, and escort their child(ren) from the school.
 - Parents will then exit the west driveway.

Based on the vehicle queuing analysis conducted and the resulting Traffic Management Plan, I, Joseph T. Short, P.E. 79093, certify that the results indicate that no queuing of vehicles dropping off or picking up students at Blackland Prairie Conservatory and Atelier will extend onto City of Dallas rights-of-way as a result of internal queuing constraints. In order to ensure that all queuing of vehicles is completely accommodated on school property, Blackland Prairie Conservatory and Atelier administrative officials should implement the proposed Traffic Management Plan, monitor the operation on a continuing basis, and if any vehicle queuing should begin to occur on public right-of-way, take the necessary action to mitigate it. Only uniformed police officers should be allowed to direct and control traffic operating within the public right-of-way.



Figure 3: Circulation Plan



CASE NUMBER: Z156 - 225

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