

May 26, 2021 W.O. No. 2021-2937

City of Spokane Department of Engineering Services 801 W. Spokane Falls Boulevard Spokane, WA 99201

Attn: Inga Note, P.E., Engineering Services

Re: Green Gables Learning Center 4504 S. Freya Street Traffic (Trip) Generation and Distribution Letter Parcel # 34032.5301 34032.5305 34032.5304 34032.5302 34032.5303

Dear Inga,

The purpose of this document is to provide a Trip Generation and Distribution Letter (TGDL) for the proposed Green Gables Learning Center to be located at 4504 S. Freya Street as shown on Figure 2, Preliminary Site Plan. This letter will follow the standards for doing Trip Generation and Distribution Letters as required by the City of Spokane and the Institute of Transportation Engineers (ITE).

PROJECT DESCRIPTION

The project proposes to develop five (5) parcels on approximately $0.97\pm$ acres of land into a daycare facility the existing 1,824 single-family residence is proposed to remain and be converted into the main building with reception and an office, with an additional 7,500-sf building located to the west of the existing house. The day care facility is proposed to include a total of 9,324-sf. All existing outbuilding(s) are proposed to be removed. The site is also covered with landscaping, field grass and trees. The proposed daycare facility is proposed to be licensed for 125 students, as discussed in the preliminary development meetings. The project proposes to utilize the existing driveway and add a connecting parking lot to the east of the house. The existing driveway accesses Freya Street

VICINITY / SITE PLAN

The site is currently zoned as Residential Single Family (RSF). The subject property is located in a portion of the NW ¼ of Section 03, T. 24 N., R. 43 E., W.M. within the City of Spokane, Washington. The parcel numbers for the site are 34032.530, 34032.5305, 34032.5304 34032.5302, and 34032.5303. The surrounding areas are zoned as Residential Single Family (RSF). A vicinity map is included as Figure 1, along with a preliminary plat as Figure 2.

21 South Pines Rd. • Spokane Valley, WA 99206 PO Box 1566 • Veradale, WA 99037 Phone 509-893-2617 • Fax 509-926-0227 • WhippleCE.com • Info@WhippleCE.com Civil Structural Traffic Survey Landscape Architecture and Entitlements Green Gables Learning Center Trip Generation and Distribution Letter May 26, 2021 Page 2

TRIP GENERATION AND DISTRIBUTION

Trip Types

The proposed land use is a childcare institutional use; ITE has developed data regarding various trip types that all developments experience. These are found in several places, however, for this analysis the *Trip Generation Manual 10th Edition* as well as the *Trip Generation Handbook* were used to develop the criteria for this analysis.

Generally, all existing and proposed developments will be made up of one or more of the following four trip types: new (destination) trips, pass-by trips, diverted trips, and shared (internal trips). In order to better understand the trip types available for land access a description of each specific trip type follows.

New (Destination) Trips - These types of trips occur only to access a specific land use such as a new retail development or a new residential subdivision. These types of trips will travel to and from the new site and a single other destination such as home or work. This is the only trip type that will result in a net increase in the total amount of traffic within the study area. The reason primarily is that these trips represent planned trips to a specific destination that never took trips to that part of the City prior to the development being constructed and occupied. This project will develop new trips.

Pass-by Trips - These trips represent vehicles which currently use adjacent roadways providing primary access to new land uses or projects and are trips of convenience. These trips, however, have an ultimate destination other than the project in question. They should be viewed as customers who stop in on their way home from work. An example would be on payday, where an individual generally drives by their bank every day without stopping, except on payday. On that day, this driver would drive into the bank, perform the prerequisite banking and then continue on home. In this example, the trip started from work with a destination of home, however on the way, the driver stopped at the grocery store/latte stand and/or bank directly <u>adjacent</u> to their path. Pass-by trips are most always associated with commercial/retail types of development along major roadways. Therefore, for this project pass-by trips <u>will not</u> be considered.

Diverted (Linked) Trips - These trips occur when a vehicle takes a different route than normal to access a specific facility. Diverted trips are similar to pass-by trips, but diverted trips occur from roadways, which do not provide direct access to the site. Instead, one or more streets must be utilized to get to and from the site. For this project, <u>no</u> diverted trips are anticipated.

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Trip Generation Characteristics for Proposed Project

As noted earlier, trip generation rates for the AM and PM peak hours are determined by the use of the *Trip Generation Manual*, *10th Edition* published by the Institute of Transportation Engineers (ITE). The purpose of the *Trip Generation Manual* is to compile and quantify empirical data into trip generation rates for specific land uses within the US, UK and Canada.

For the proposed 4 new residential units, Land Use Code (LUC) #565, Day Care Center, was used to establish the number of potential trips generated by the proposed land use. The trip generation rates and the anticipated number of AM & PM peak hour trips, for the proposed land use are shown in Table 1.

	AN	A Peak Ho	ur	PM Peak Hour			
Students	Fitted	Directional Distribution		Fitted	Directional		
	Curve			Curve	Distribution		
		53% In	47% Out		47% In	53% Out	
125	91	48	43	90	42	48	
Average	Fitted Curve Equation						
Students	Fitted Curv	e	ADT	AM - T = 0.66(X) + 8.42			
125		/03		PM - Ln(T) = 0.87 Ln(X) + 0.29			
125			T75	ADT - T = 3.56(X) + 47.23			

Table 1 - Trip Generation Rates for LUC #565– Day Care Center (Fig. 3)

As shown in Table 1, the proposed land use is anticipated to generate 91 trips in the AM peak hour with 48 trips entering the site and 43 trips exiting the site. In the PM peak hour, the proposed land use is anticipated to generate 90 trips with 42 trips entering the site and 48 trips exiting the site. The proposed land use is anticipated to generate 493 average daily trips to/from the project.

TRIP DISTRIBUTION

As shown on the preliminary site plan, the site will be accessed via Freya Street (Please see Figure 2 Site Plan). A description of the anticipated roadway used by the development is provided here.

Freya Street is a north-south, two-way, 2-lane urban principal arterial that serves the Valley floor and the South Hill and connects with 8 arterials. Freya Street extends south from Mission Avenue to 65th Avenue. Freya Street serves generally commercial and residential uses. The posted speed limit on Freya Street within the study area is 35 MPH.

Considering many factors such as the surrounding transportation facilities, typical commuting patterns, and existing development in the area, traffic for the proposed development is anticipated as follows: 60% of the trips are anticipated to go to/from the north via Freya Street and 40% of the trips are anticipated to go to/from the south via Freya Street. Please see Figure 3, Project Trip Distribution.

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TRAFFIC IMPACT FEE

The City of Spokane municipal code has established transportation impact fees under Spokane Municipal Code Title 17 Chapter 17D.030. The proposed project is within the South Service Area and as such is subject to the current Impact Fee Schedule. Table 2 calculates the anticipated impact fee for the proposed project.

Table 2 – Proposed Land Use Impact Fee

Land Use	LUC	Quantity	Unit of Measure	Fee per unit	Fee
LUC # 565 Day Care	565	9,324	Sq Ft	5.51	\$51,375.24

As shown in Table 2, the proposed project under the current fee schedule is anticipated to generate an impact fee of \$51,375.24.

CONCLUSIONS AND RECOMMENDATIONS

It is anticipated that this project will generate 91 AM peak hour trips and 90 PM peak hour trips. Based upon the number of anticipated trips, and the distribution of those trips on city collectors, we believe that while the proposed project will generate trips on the transportation system, that those trips will have a minimal impact on the transportation system. Therefore, we recommend that the project pay the City of Spokane Traffic Impact Fee as allowed by the current code at the time of building permit, and that the project should be allowed to move forward without further traffic analysis.

Should you have any questions related to this document please do not hesitate to call at (509)893-2617.

Sincerely, ODD R. WHIPP CONVASHINGTON Todd R. Whipple, P. BONALENGTHER G 21 21 President

TRW/bng

encl. Appendix (Vicinity Map, Site Plan, Trip Dist %, Impact Fee Schedule) cc: Sponsor

File

APPENDIX

1. Vicinity Map

2. Preliminary Site Plan

3.AM Trip Distribution

4.PM Trip Distribution







