Whipple Consulting Engineers, Inc.

Parcel No. 34031.9012

February 26, 2026
W.O. No. 2025-3985

City of Spokane
808 W. Spokane Falls Blvd
Spokane, WA 99201-3343

Attn: Inga Note

Re: **Freya Apartments Phase 2, Residential Development**
4911 S. Freya St., Spokane, WA
Trip Generation & Distribution Letter

Dear Inga,

This Trip Generation and Distribution Letter (TGDL) is for a proposed multi-family development located at 4911 S. Freya Street in the City of Spokane. This letter will establish the anticipated trip generation and distribution for the proposed development as shown on Figure 2, Preliminary Site Plan. This report will follow the standards for traffic generation and distribution letters as required by the City of Spokane and the Institute of Transportation Engineers.

PROJECT DESCRIPTION

The project proposes to develop 2.78 acres +/- of one parcel located at 4911 S. Freya Street, into a 29-unit multi-family apartment complex with one parking area that connects to the Farm Apartments project. The property is currently developed with 1 existing single-family residence that will remain on the property. Access to/from the site will be via Freya Street. The approximate build out year is 2026. Please see Figure 2, Preliminary Site Plan.

VICINITY / SITE PLAN

The subject properties are located on a portion of the NE ¼ of Section 3, T24N R43E W.M., within the City of Spokane, Washington. The parcel number for the subject property is 34031.9012. The surrounding area consists of residential areas to the north, east, west, and south.

TRIP GENERATION AND DISTRIBUTION

Trip Types

The proposed land use is residential. 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 12th 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 adjacent 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 will not 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, no diverted trips are anticipated.

Shared Trips - These are trips which occur on the site where a vehicle/consumer will stop at more than one place on the site. For example, someone destined for a certain shop at a commercial site may stop at a bank just before or after they visit the shop that they went to the site to visit. This trip type reduces the number of new trips generated on the public road system and is most commonly used for commercial developments. Therefore, no shared trips were considered.

Trip Generation Characteristics

As noted earlier, trip generation rates for the AM and PM peak hours are determined by the use of the *Trip Generation Manual, 12th 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.

Proposed Land Use

For the proposed 29 multi-family units, Land Use Code (LUC) 220 Multifamily (Low-Rise) was used to establish the number of 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.

Table 1 - Trip Generation Rates for LUC # 220 Multifamily Housing (Low-Rise)

No. of Dwelling Units	AM Peak Hour			PM Peak Hour		
	Vol. per Fitted Curve	Directional Distribution		Vol. per Fitted Curve	Directional Distribution	
		24% In	76% Out		62% In	38% Out
29	23	6	17	21	13	8

Average Daily Trip Ends (ADT)		Average Rate Equations (Adj. Street):	Fitted Curve Equations (Adj. Street):
Units	Fitted Curve	AM: T = 0.41* x = 12 PM: T = 0.52* x = 15 ADT: T = 6.21* x = 180 T = Trips/units, x = Dwelling Units	AM: T = 0.35 (x) + 12.93 = 23 PM: T = 0.48 (x) + 7.35 = 21 ADT: T = 5.63 (x) + 120.45 = 284 T = Trips/units, x = Dwelling Units
29	284		

As shown in Table 1, the land use is anticipated to generate 23 trips in the AM peak hour with 6 trips entering the site and 17 trips exiting the site. In the PM peak hour, the land use is anticipated to generate a total of 21 trips, with 13 trips entering the site and 8 trips exiting the site. The land use is anticipated to generate a total of 284 average daily trip ends to/from the site.

TRIP DISTRIBUTION

As shown on the Preliminary Site Plan, the property will be accessed by Freya Street. It is anticipated that the trips of the site will generally use the following roadways:

Freya Street is a north-south, two-way, two-lane urban principal/minor arterial and urban major collector that extends north from 65th Avenue to Trent Avenue. Freya Street is an urban minor arterial from Hartson Avenue to 42nd Avenue and an urban major collector from the Palouse Highway to 65th Avenue. Freya Street generally serves residential and mixed-use commercial land uses. Freya Street is the primary route from the Palouse Highway to 37th Avenue which connects to Thor Street which is a major arterial on and off of the South Hill. The speed limit on Freya Street is 25 MPH and 30 MPH within the City of Spokane.

Palouse Highway is generally an east-west two-way, two-lane urban principal/minor and rural major arterial that extends east from Regal Street through Freya Street and 57th Avenue before

curving south through 65th Avenue, Rural Route 3, Willow Springs Road, and Valley Chapel Road before curving east through Weger Road, Dunn Road, Sands Road, Madison Road, and Darknell Road before terminating at State Route 27. Palouse Highway serves residential, commercial and rural land uses. The speed limit on Palouse Highway within the study area is 35 MPH.

44th Avenue is an east-west, two-way, two-lane, urban major collector that extends east from Crestline Street through Altamont Street, Cook Street, and Regal Street before terminating at Freya Street. 44th Avenue serves residential and commercial land uses. The speed limit on 44th Avenue within the study area is 25 MPH.

Regal Street, within the study area, is a north-south, two-way, 2-, 3-, & 4-lane, urban minor arterial that extends south from 44th Avenue through 55th Avenue to 57th Avenue. Regal Street serves residential, commercial, and institutional land uses. The speed limit on Regal Street is 30 MPH within the City of Spokane and 35 MPH in Spokane County.

Considering many factors such as the surrounding transportation facilities, typical commuting patterns, existing development in the area, and Average Daily Traffic counts, traffic for the proposed development is anticipated as follows:

30% of trips are anticipated to travel to/from the north via Regal Street, 14% of trips are expected to travel to/from the south via Palouse Highway, 28% of trips are anticipated to travel to/from the south via Freya Street, 18% of trips are expected to travel to/from the north via Freya Street, and 10% of trips are expected to travel to /from the west via Palouse Highway. See Figures 3 & 4 for the AM & PM trip distribution.

Source: Spokane County ADT Counts

Existing Transit System

The site is approximately 0.6 miles from the nearest transit stop at 57th Avenue and Freya Street. The Moran Station Park and Ride is also approximately 0.6 miles away from the site.

Source: Spokane Transit Authority

Existing Pedestrian System

There is limited sidewalk along Freya Street near the project site. The project proposes to connect to the existing sidewalk shown in the pedestrian map.

Existing Bike System

The Moran Prairie Trail and a shared roadway bicycle route along Palouse Hwy are currently near the project site. There is also a bicycle lane along 57th Avenue. Please see the bike map.

Source: Spokane Regional Bike Map

TRAFFIC IMPACT FEE

A transportation impact fee for the City of Spokane has been considered here. The City of Spokane code has established transportation impact fees under Spokane Municipal Code Title 17 Chapter 17D.075. The proposed project is in the South Service Area and as such is subject to the current Impact Fee Schedule (2026). The impact fee rate is $1,283.57. 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
Multifamily	221	29	Dwelling Unit	$1,283.57	$37,223.53

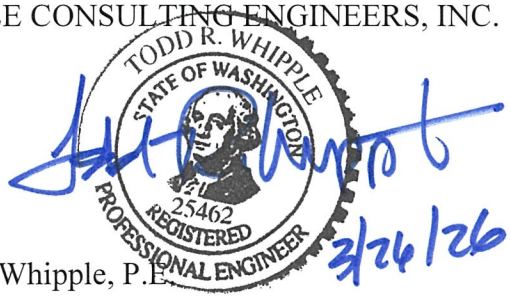
As shown in Table 2, the proposed project under the current fee schedule is anticipated to generate an impact fee of $37,223.53.

CONCLUSIONS AND RECOMMENDATIONS

It is anticipated that the proposed development will generate 23 trips in the AM peak hour and 21 trips in the PM peak hour. We believe that the proposed project will not generate more trips than the transportation system can handle. 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,
WHIPPLE CONSULTING ENGINEERS, INC.



Todd R. Whipple, P.E.

TRW/mtr

encl. Appendix (Vicinity Map, Preliminary Site Plan, Trip Distr. %)
cc: Sponsor
File

APPENDIX

1. Vicinity Map

2. Site Plan

3. AM Trip Distribution by Percentage

4. PM Trip Distribution by Percentage

5. ITE Web App. Graphs 12th Edition

6. City of Spokane Impact Fee Schedule (2026)

Query | Filter

DATA SOURCE: Trip Generation Manual, 12th Ed

SEARCH BY LAND USE CODE: 220

LAND USE GROUP: (200-299) Residential

LAND USE : 220 - Multifamily Housing (Low-Rise)

LAND USE SUBCATEGORY: Not Close to Rail Transit

SETTING/LOCATION: General Urban/Suburban

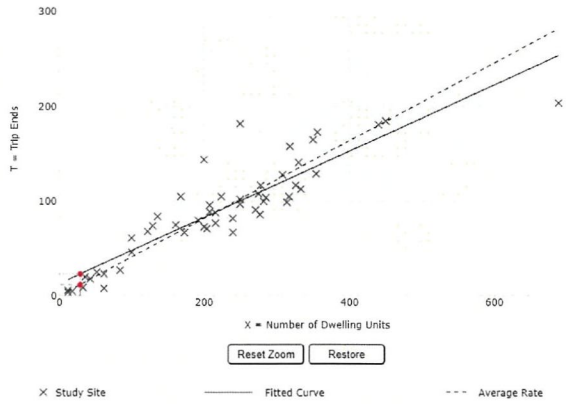
INDEPENDENT VARIABLE (IV): Dwelling Units

TIME PERIOD: Weekday, Peak Hour of Adjacent Stre

TRIP TYPE: Vehicle

ENTER IV VALUE TO CALCULATE TRIPS: 29 Calculate

Data Plot and Equation



DATA STATISTICS

Land Use:
Multifamily Housing (Low-Rise) - Not Close to Rail Transit (220) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 7 and 9 a.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
51

Avg. Num. of Dwelling Units:
219

Average Rate:
0.41

Range of Rates:
0.13 - 0.73

Standard Deviation:
0.10

Fitted Curve Equation:
T = 0.35(X) + 12.93

R^2:
0.81

Directional Distribution:
24% entering, 76% exiting

Calculated Trip Ends:
Average Rate: 12 (Total), 3 (Entry), 9 (Exit)
Fitted Curve: 23 (Total), 6 (Entry), 17 (Exit)

Query | Filter

DATA SOURCE: Trip Generation Manual, 12th Ed

SEARCH BY LAND USE CODE: 220

LAND USE GROUP: (200-299) Residential

LAND USE : 220 - Multifamily Housing (Low-Rise)

LAND USE SUBCATEGORY: Not Close to Rail Transit

SETTING/LOCATION: General Urban/Suburban

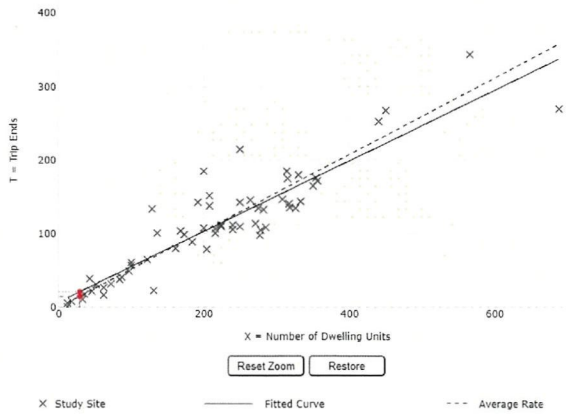
INDEPENDENT VARIABLE (IV): Dwelling Units

TIME PERIOD: Weekday, Peak Hour of Adjacent Stre

TRIP TYPE: Vehicle

ENTER IV VALUE TO CALCULATE TRIPS: 29 Calculate

Data Plot and Equation



DATA STATISTICS

Land Use:
Multifamily Housing (Low-Rise) - Not Close to Rail Transit (220) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
61

Avg. Num. of Dwelling Units:
215

Average Rate:
0.52

Range of Rates:
0.08 - 1.04

Standard Deviation:
0.13

Fitted Curve Equation:
T = 0.48(X) + 7.35

R^2:
0.83

Directional Distribution:
62% entering, 38% exiting

Calculated Trip Ends:
Average Rate: 15 (Total), 9 (Entry), 6 (Exit)
Fitted Curve: 21 (Total), 13 (Entry), 8 (Exit)

Query | Filter

DATA SOURCE: Trip Generation Manual, 12th Ed

SEARCH BY LAND USE CODE: 220

LAND USE GROUP: (200-299) Residential

LAND USE : 220 - Multifamily Housing (Low-Rise)

LAND USE SUBCATEGORY: Not Close to Rail Transit

SETTING/LOCATION: General Urban/Suburban

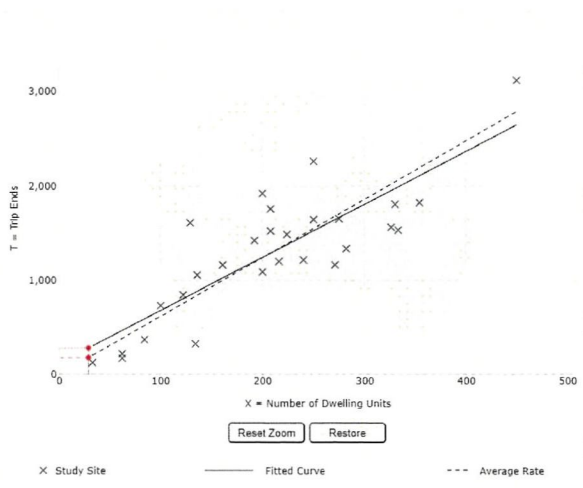
INDEPENDENT VARIABLE (IV): Dwelling Units

TIME PERIOD: Weekday

TRIP TYPE: Vehicle

ENTER IV VALUE TO CALCULATE TRIPS: 29 Calculate

Data Plot and Equation



DATA STATISTICS

Land Use:
Multifamily Housing (Low-Rise) - Not Close to Rail Transit (220) Click for Description and Data Plots

Independent Variable:
Dwelling Units

Time Period:
Weekday

Setting/Location:
General Urban/Suburban

Trip Type:
Vehicle

Number of Studies:
28

Avg. Num. of Dwelling Units:
208

Average Rate:
6.21

Range of Rates:
2.46 - 12.50

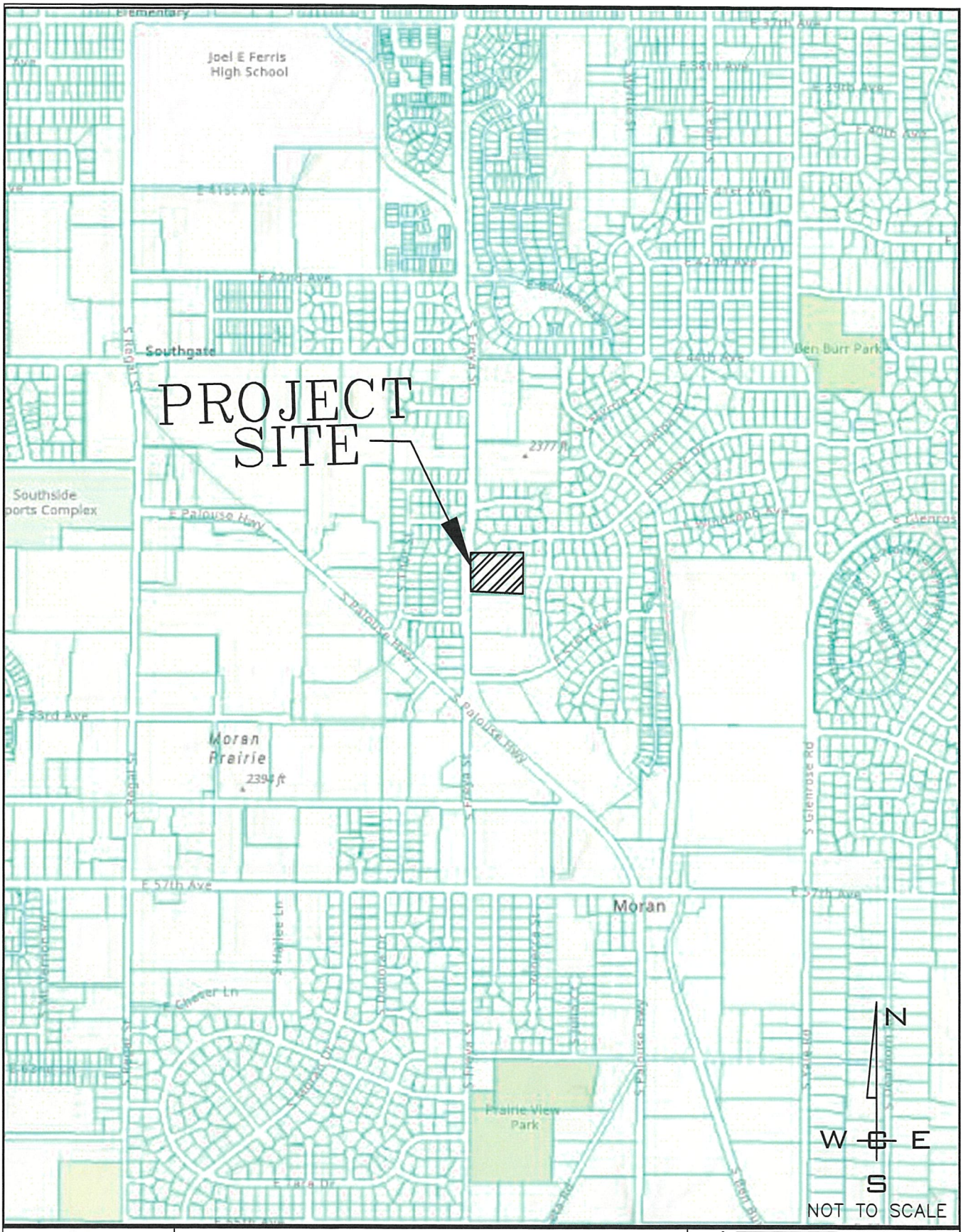
Standard Deviation:
1.87

Fitted Curve Equation:
T = 5.63(X) + 120.45

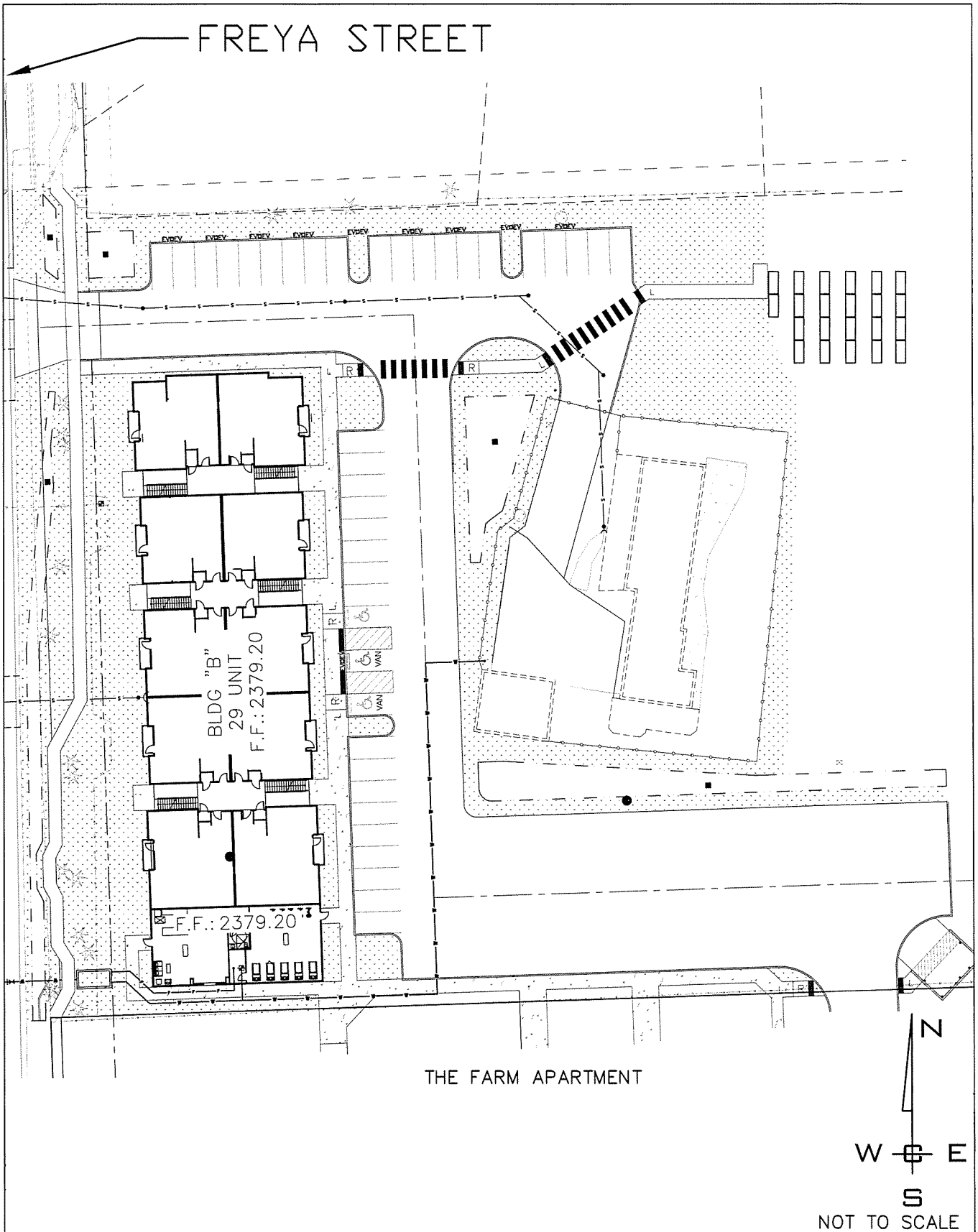
R^2:
0.70

Directional Distribution:
50% entering, 50% exiting

Calculated Trip Ends:
Average Rate: 180 (Total), 90 (Entry), 90 (Exit)
Fitted Curve: 284 (Total), 142 (Entry), 142 (Exit)



PROJ #: 25-3985 DATE:02/25/2026 DRAWN: MTR APPROVED: TRW	TRIP GENERATION AND DISTRIBUTION FREYA APARTMENTS PHASE 2 4911 S. FREYA STREET SPOKANE, WASHINGTON	WCE WHIPPLE CONSULTING ENGINEERS CIVIL AND TRANSPORTATION ENGINEERING 21 S. PINES ROAD SPOKANE VALLEY, WASHINGTON 99206 PH: 509-893-2617 FAX: 509-926-0227
FIGURE 1	VICINITY MAP	



PROJ #: 25-3985 DATE:02/25/2026 DRAWN: MTR APPROVED: TRW	**TRIP GENERATION AND DISTRIBUTION** **FREYA APARTMENTS PHASE 2** **4911 S. FREYA STREET** **SPOKANE, WASHINGTON**	WCE WHIPPLE CONSULTING ENGINEERS CIVIL AND TRANSPORTATION ENGINEERING 21 S. PINES ROAD SPOKANE VALLEY, WASHINGTON 99206 PH: 509-893-2617 FAX: 509-926-0227
FIGURE 2	**PRELIMINARY SITE PLAN**	

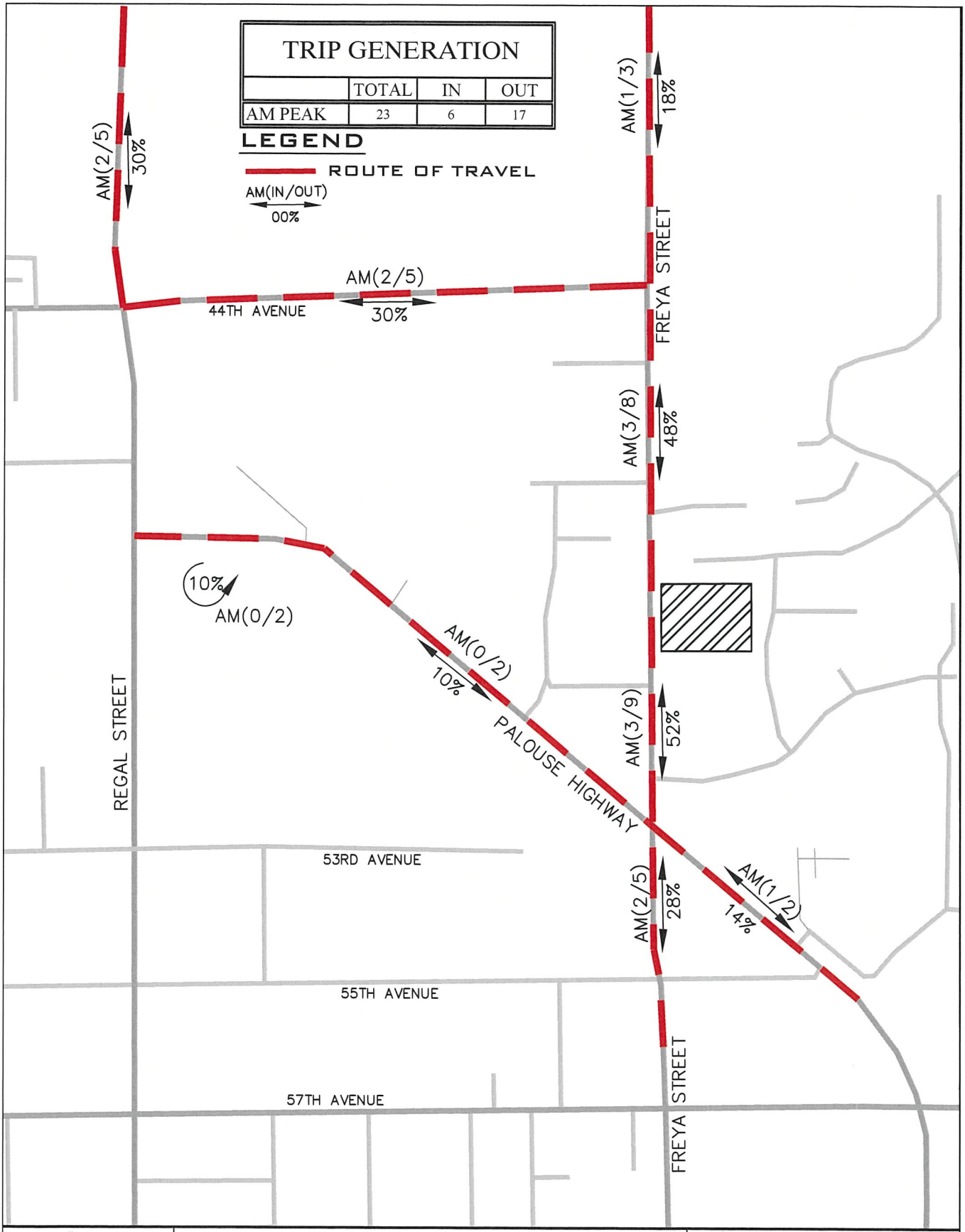


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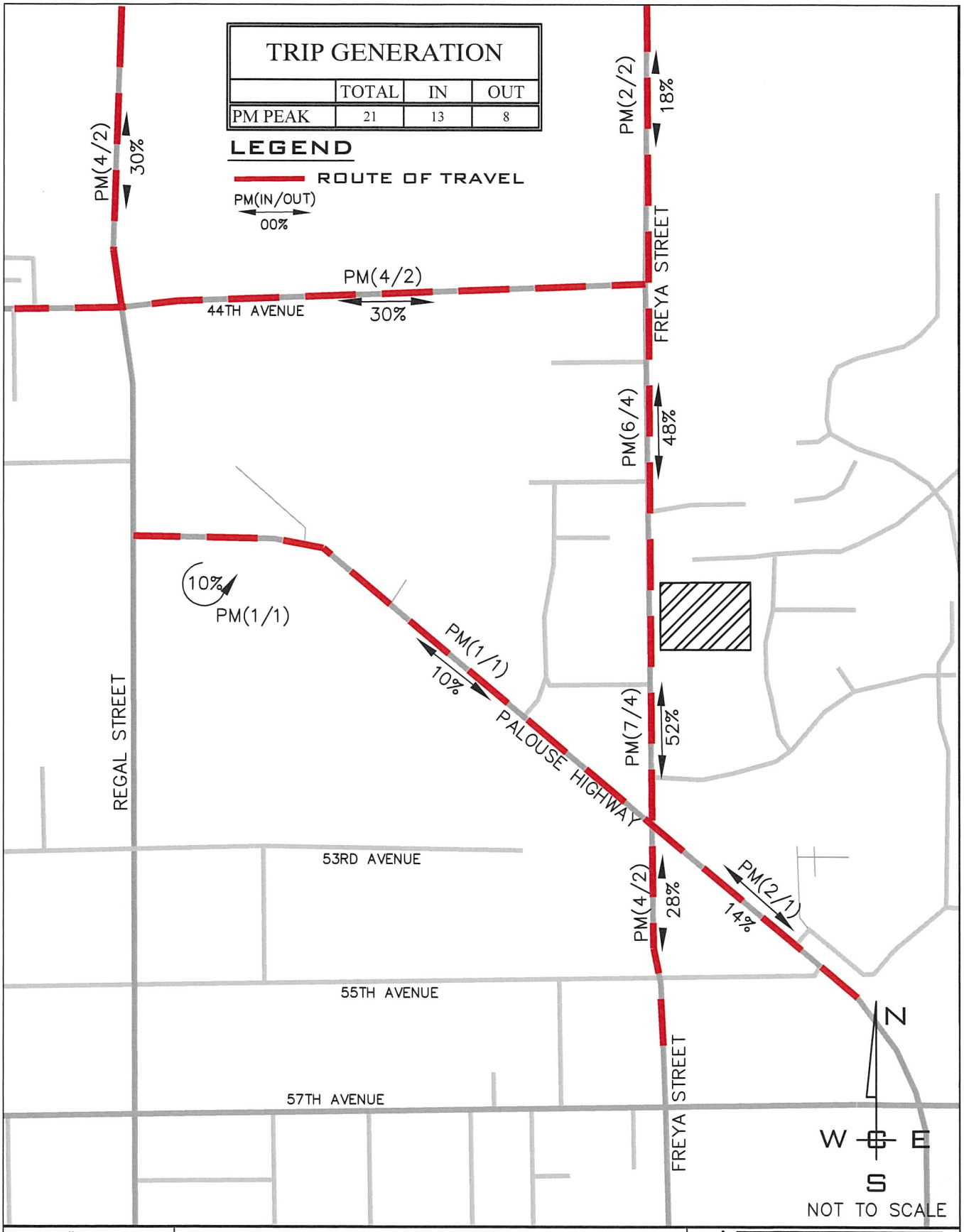
FIGURE 3	AM TRIP DISTRIBUTION	



PROJ #: 25-3985 DATE:02/25/2026 DRAWN: MTR APPROVED: TRW	TRIP GENERATION AND DISTRIBUTION FREYA APARTMENTS PHASE 2 4911 S. FREYA STREET SPOKANE, WASHINGTON	WCE WHIPPLE CONSULTING ENGINEERS CIVIL AND TRANSPORTATION ENGINEERING 21 S. PINES ROAD SPOKANE VALLEY, WASHINGTON 99206 PH: 509-893-2617 FAX: 509-926-0227
FIGURE 4	PM TRIP DISTRIBUTION	

10/14/2025

2026 South District
Transportation Impact Fee Schedule

Effective January 1st, 2026

BASE RATE PER PM TRIP $2,813

Land Use	ITE Land Use Code	Unit of Measure	Fee per Unit
COST PER TRIP			
Residential			
Single Family Detached	210	dwelling	$3,093.74
Single Family Attached (duplex, townhouse)	215	dwelling	$1,875.99
Multi-Family 1-2 level	220	dwelling	$1,678.52
Multi-Family 3-10 level	221	dwelling	$1,283.57
ADU	-	dwelling	$1,283.57
Multi Family Low-Income (1-2 level	223	dwelling	$1,513.96
Assisted Living	254	bed	$627.86
Continuing Care Retirement Comm	255	dwelling	$497.06
Nursing Home	620	bed	$366.25
Commercial - Services			
Hotel (3 Levels or More)	310	room	$2,207.36
Hotel/Motel	320	room	$1,758.41
Movie Theater	444	sq ft/GFA	$6.37
Health Club	492	sq ft/GFA	$7.67
Day Care	565	sq ft/GFA	$15.62
Bank	912	sq ft/GFA	$17.09
Commercial - Institutional			
Elementary School	520	sq ft/GFA	$1.72
Middle School	522	sq ft/GFA	$1.19
High School	530	sq ft/GFA	$1.42
University/College	550	ASF	$1.88
Religious Institute	560	sq ft/GFA	$1.55
Library	590	sq ft/GFA	$10.32
Hospital	610	sq ft/GFA	$3.50
Commercial - Administrative Office			
Veterinary Clinic	640	sq ft/GFA	$14.34
General Office	710	sq ft/GFA	$4.90
Medical Office / Clinic	720	sq ft/GFA	$10.85
Office Park	750	sq ft/GFA	$4.87

Land Use	ITE Land Use Code	Unit of Measure	Fee per Unit
COST PER TRIP			
Commercial - Retail			
Free-Standing Discount Superstore	813	sq ft/GFA	$5.14
Specialty Retail Center	826	sq ft/GLA	$2.93
Hardware/Paint Store	816	sq ft/GFA	$5.24
Nursery/Garden Center	817	sq ft/GFA	$9.57
Shopping Center	820	sq ft/GLA	$4.38
Car Sales - New/Used	841	sq ft/GFA	$6.49
Tire Store	848	Service bay	$5,735.82
Supermarket	850	sq ft/GFA	$11.20
Convenience Market	851	sq ft/GFA	$25.36
Pharmacy	881	sq ft/GFA	$7.94
Furniture Store	890	sq ft/GFA	$0.43
Quick Lubrication Vehicle Shop	941	Service Bay	$9,343.66
Auto Parts & Service Center	943	sq ft/GFA	$7.03
Service Station/Minimart/Carwash	853	VFP	$9,655.90
Industrial			
Light Industry/High Technology	110	sq ft/GFA	$4.09
Heavy Industrial	120	sq ft/GFA	$2.87
Industrial Park	132	sq ft/GFA	$3.59
Manufacturing	140	sq ft/GFA	$3.08
Warehousing	150	sq ft/GFA	$1.35
Mini-Storage	151	sq ft/GFA	$0.69
Commercial - Restaurant			
Drinking Establishment	925	sq ft/GFA	$12.82
Quality Restaurant	931	sq ft/GFA	$12.33
High Turnover Restaurant	932	sq ft/GFA	$12.47
Fast Casual	-	sq ft/GFA	$20.75
Fast Food Restaurant	934	sq ft/GFA	$30.77
Coffee Shop with Drive-Thru	937	sq ft/GFA	$12.04

Notes:

Residential uses based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition
Other uses based on the ITE Trip Generation Manual, 9th Edition

Definitions:

VFP- Vehicle Fueling Positions (Maximum number of vehicles that can be fueled simultaneously)

GFA= Gross Floor Area

Single Family Attached (duplex, townhouse) = dwelling units with a common wall between units. Units separated by a ceiling are multi-family.

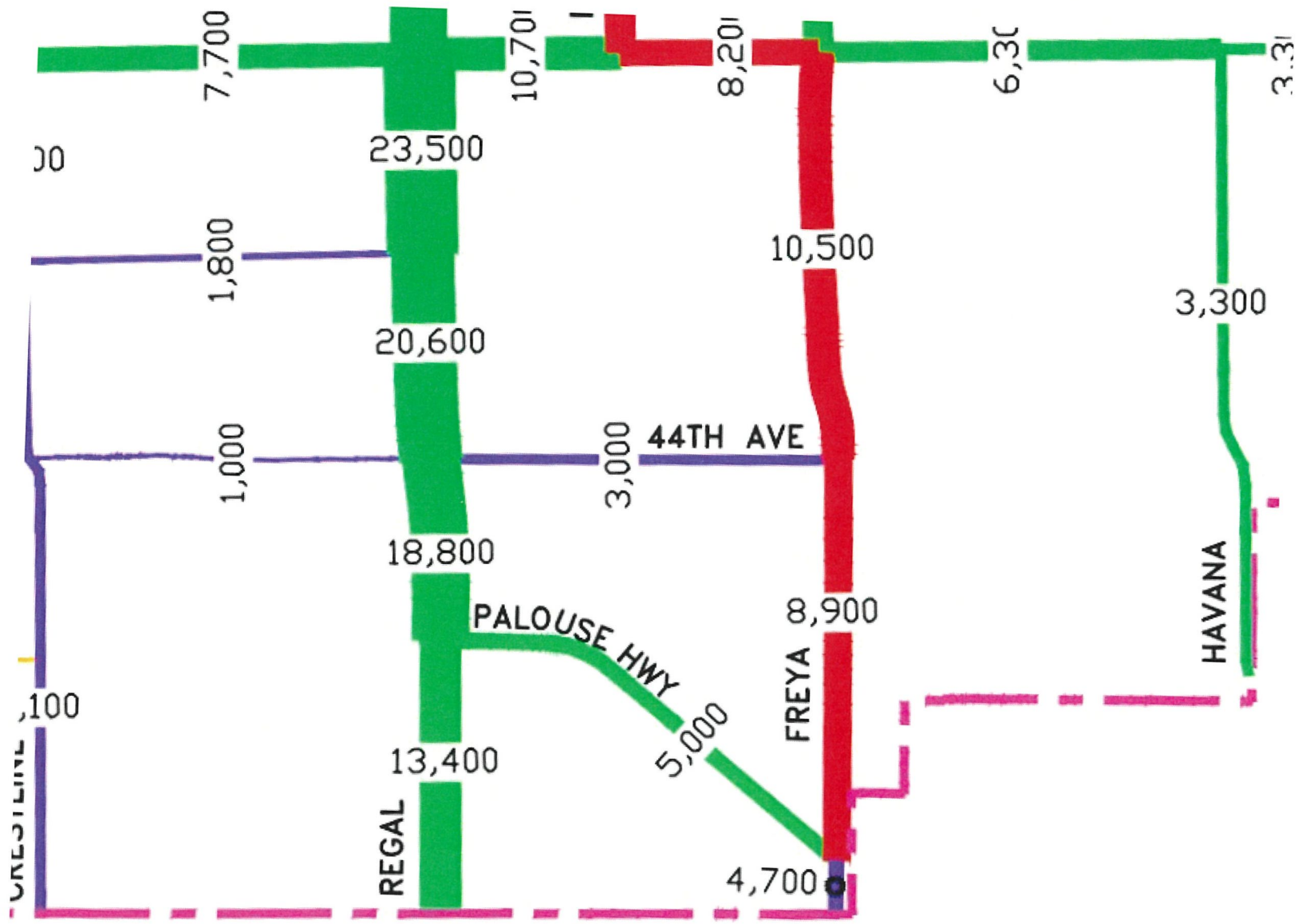
ASF= Assignable Square Feet (aka Net Assignable Area): the sum of all areas on all floors of a building assigned to, or available for assignment to, an occupant or specific use. It can be subdivided into Classroom, labs, offices, study facilities, special use, general use, support, health care, residential and unclassified. Areas defined

Drinking Establishment = contains a bar, serves alcohol and food, may have TV screens, pool tables, and other entertainment. Restaurants that specialize in food but also have a bar are considered High-Turnover Restaurants.

Quality Restaurant = duration of stay > 1 hour, not a chain, serves dinner and sometimes lunch, patrons wait to be seated, order from menu, pay after (Ex. Clinkerdagger, Anthony's, Luna)

High-Turnover Restaurant = duration of stay approx. 1 hour, often a chain restaurant, may be open 24 hours, patrons wait to be seated, order from menu (Ex. Applebee's, Denny's, Buffalo Wild Wings, The Onion, Twigs)

Fast Casual Restaurant = duration of stay < 1 hour, patrons order at counter and eat in the restaurant. Food is typically made to order. Most do not have a drive-through. (Ex. Chipotle, Panera Bread, Five Guys, Qdoba, Mod Pizza).


7,700
10,70
8,20
6,3
00
23,500
1,800
10,500
3,300
20,600
1,000
3,000
44TH AVE
18,800
8,900
PALOUSE HWY
FREYA
HAVANA
,100
5,000
13,400
REGAL
4,700