

MEMORANDUM

DATE: November 12, 2014

TO: Kurt Seemann, P.E.
City of Redmond

FROM: Jeff Schramm
TENW

SUBJECT: Level 1 Traffic Assessment and Concurrency Application
Terrene Residential – Rose Hill, Redmond
TENW Project No. 4979

This memorandum summarizes the preliminary traffic information for the proposed Terrene residential development on Rose Hill, which includes a project description, trip generation estimate, and transportation concurrency application.

Project Description

The site of the proposed Terrene residential project is located on the east side of 132nd Ave NE just south of NE 111th Court in the City of Redmond, as shown in the vicinity map on **Attachment A**. The project would include the development of up to 22 single-family homes. The existing site currently includes 4 single-family homes, all of which will be removed with the project. Vehicular access to the site would be provided by a single access road onto 132nd Ave NE as shown on the preliminary site plan in **Attachment B**. Plat construction would be in 2016 with an anticipated year of occupancy in 2017.

Trip Generation

The weekday daily, AM and PM peak hour trip generation calculations for the proposed and existing uses were based on trip equations/rates published in the Institute of Transportation Engineers (ITE) *Trip Generation* manual, 9th edition. The resulting net new weekday daily, AM and PM peak hour trips are summarized in **Table 1**. A detailed trip generation estimate is included in **Attachment C**.

Table 1
Terrene Residential – Trip Generation Summary

Time Period	Net New Trips Generated		
	In	Out	Total
Weekday Daily	103	104	207
Weekday AM Peak Hour	5	17	22
Weekday PM Peak Hour	13	8	21

As shown in **Table 1**, the Terrene residential development is estimated to generate 207 net new weekday daily trips with 22 net new trips occurring during the weekday AM peak hour (5 in, 17 out) and 21 net new trips during the weekday PM peak hour (13 in, 8 out).

Transportation Concurrency

A transportation concurrency application and Mobility Unit calculation is included in **Attachment D**.

Next Steps

Upon your review of our trip generation estimates, please let us know if you need any additional information regarding the project.

If you have any questions, please feel free to contact me at (425) 250-0581 or schramm@tenw.com.

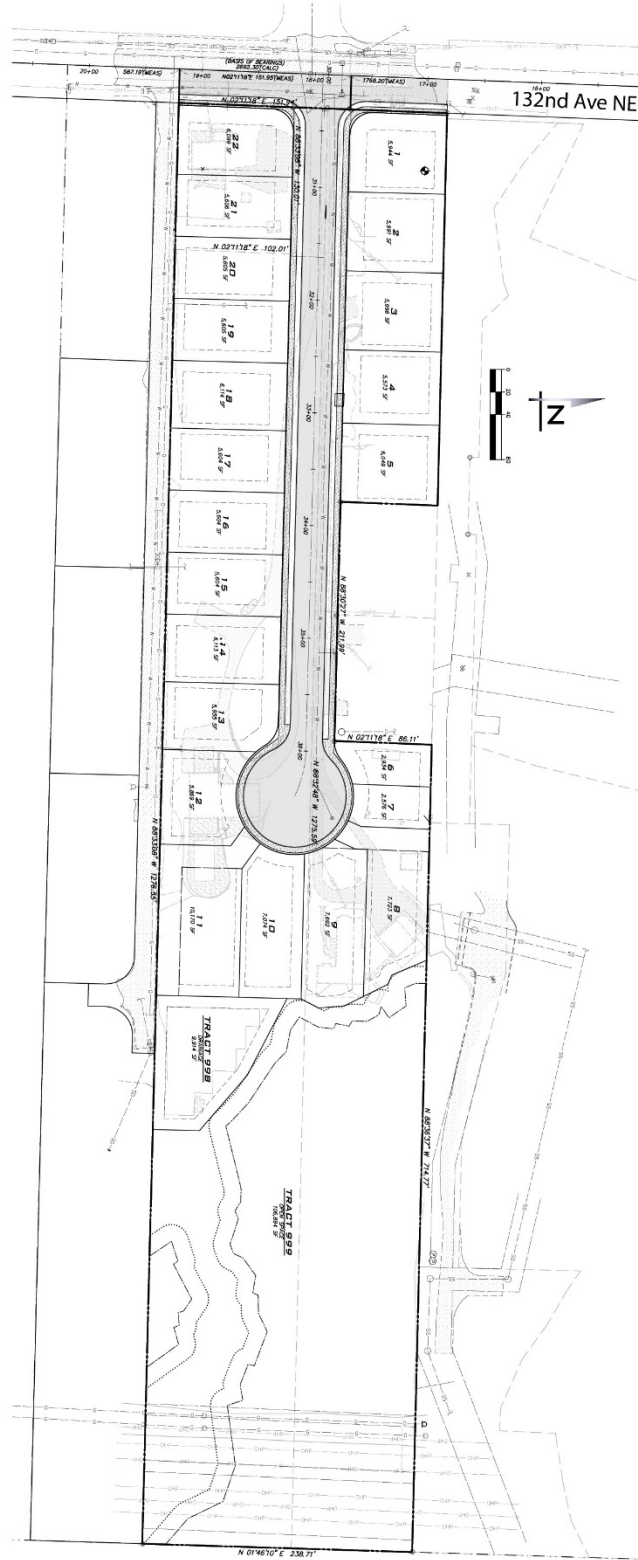
cc: Andy Chow, City of Redmond
Mike Walsh, Terrene Ventures
Jeff Haynie, P.E. Principal TENW

Attachments: A. Vicinity Map
B. Preliminary Site Plan Concept
C. Trip Generation Estimate
D. Transportation Concurrency Application



Attachment A: Vicinity Map





Attachment B: Preliminary Site Plan

ATTACHMENT C

Trip Generation Calculations

DAILY									
Land Use	Units		ITE LUC ¹	Directional Split		Trip Rate Total	Trips Generated		
				In	Out		In	Out	Total
Proposed Use									
Single-Family	22	Dwelling Units	210	50%	50%	Equation	130	131	261
Less Existing Use									
Single-Family	4	Dwelling Units	210	50%	50%	Equation	-27	-27	-54
Net New Weekday Daily Trips Generated =							103	104	207
AM PEAK HOUR									
Land Use	Units		ITE LUC ¹	Directional Split		Trip Rate Total	Trips Generated		
				In	Out		In	Out	Total
Proposed Use									
Single-Family	22	Dwelling Units	210	25%	75%	Equation	6	19	25
Less Existing Use									
Single-Family	4	Dwelling Units	210	25%	75%	0.75	-1	-2	-3
Net New AM Peak Hour Trips Generated =							5	17	22
PM PEAK HOUR									
Land Use	Units		ITE LUC ¹	Directional Split		Trip Rate Total	Trips Generated		
				In	Out		In	Out	Total
Proposed Use									
Single-Family	22	Dwelling Units	210	63%	37%	Equation	17	10	27
Less Existing Use									
Single-Family	4	Dwelling Units	210	63%	37%	Equation	-4	-2	-6
Net New PM Peak Hour Trips Generated =							13	8	21

Notes:

¹ Institute of Transportation Engineers, *Trip Generation Manual*, 9th Edition, 2012 Land Use Codes.

ATTACHMENT D

Transportation Concurrency Application

CITY OF REDMOND TRANSPORTATION CONCURRENCY APPLICATION

This application provides the City of Redmond with the information needed to issue a certificate of concurrency for a development. Please complete the entire form and return it to the Redmond Engineering Services Division. After agreement is reached on the mobility unit demand for a development based on the land use type, size of development and table on the back of this application, the City will, if necessary, determine if enough mobility unit supply is available to issue a certificate of concurrency. If determining the mobility unit demand for a development requires an independent calculation a fee for the review will be required, payable at the City Hall Permit Center.

1. Applicant name and address: Terrene at RH 132nd, LLC
520 6th Street South
Kirkland, WA 98033
2. Property location:
 - a. Property address: 110xx 132nd Ave NE
 - b. Development name: Rose Hill Residential
 - c. Assessor's Parcel Number(s): 3426059093, 3426059046, 3426059087, 3426059100
3. Type of development permit to be requested: _____

	Land Use Type (ITE Land Use Code)	Development Units	Mobility Unit Rate (see table on back)	Mobility Unit Demand	Notes
Proposed	Single-Family (LUC 210)	22	2.42	53	
Total Proposed:				53	
Existing	Single-Family (LUC 210)	4	2.42	10	
Total Existing:				10	
Net New Mobility Unit Demand (Total Proposed minus Total Existing)				43	

Signature of Applicant: _____ Date: _____

For Official Use Only:

Mobility Unit Demand calculation reviewed: _____		_____	_____
	Initials	Date	
Concurrency certificate required: <input type="checkbox"/> Yes <input type="checkbox"/> No		Mobility Units available: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Application number: _____			

TABLE 1. Development Mobility Unit Calculator

Land Uses		ITE Land USE Code	Standard of Measure	Mobility Units/Land Use Unit			
				Downtown Urban Center	Overlake Urban Center	Rest of City	
Residential	Single Family	210	dwelling	1.98	2.05	2.42	
	Multiple Family	220	dwelling	1.39	1.44	1.7	
	Residential Suites	N/A	residential suite	0.85	0.88	1.04	
	Retirement Community	251	dwelling	0.64	0.66	0.78	
	Nursing Home	620	bed	0.52	0.54	0.63	
	Congregate Care/Asst Living	253	dwelling	0.4	0.41	0.49	
	Hotel/Motel	310	room	1.86	1.93	2.28	
Commercial	Services	Bank/Savings & Loan	912	sq ft/GFA	23.38	24.18	28.61
		Day Care	565	sq ft/GFA	17.81	18.42	21.8
		Library	590	sq ft/GFA	10.53	10.9	12.89
		Post Office	732	sq ft/GFA	16.19	16.75	19.82
		Service Station	944	fuel position	10.67	11.04	13.07
		Service Station/Minimart	945	fuel position	7.8	8.07	9.54
		Movie Theater	444,445	seat	0.11	0.12	0.14
		Carwash	947	stall	6.93	7.17	8.48
		Health Club/Racquet Club	492,493	sq ft/GFA	6.85	7.08	8.38
	Institutional	Elementary School	520	student	0.16	0.17	0.2
		High School	530	student	0.16	0.17	0.2
		Church/House of Worship	560	sq ft/GFA	1.06	1.09	1.3
		Hospital	610	sq ft/GFA	1.52	1.57	1.86
	Rest-aurant	Restaurant	931	sq ft/GFA	11.53	11.93	14.11
		Fast Food Restaurant	934	sq ft/GFA	31.41	32.49	38.45
	Retail Shopping Center	up to 99,999	820	sq ft/GLA	6.34	6.56	7.76
		100,000-199,999	820	sq ft/GLA	6.05	6.26	7.41
		200,000-299,999	820	sq ft/GLA	5.54	5.73	6.78
		300,000 and over	820	sq ft/GLA	5.34	5.52	6.53
		Supermarket	850	sq ft/GFA	13.68	14.15	16.74
		Convenience Market	851	sq ft/GFA	45.37	46.94	55.54
		Free Standing Discount Store	813, 815, 861, 863, 864	sq ft/GFA	4.51	4.66	5.52
		Miscellaneous Retail	820	sq ft/GFA	5.35	5.54	6.55
		Furniture Store	890	sq ft/GFA	0.52	0.54	0.64
		Car Sales - New/Used	841	sq ft/GFA	4.03	4.17	4.94
	Administrative Office	up to 99,999	710,715, 750	sq ft/GFA	6.58	6.81	8.06
		100,000-199,999	710,715, 750	sq ft/GFA	5.66	5.85	6.92
		200,000-299,999	710,715, 750	sq ft/GFA	4.94	5.11	6.04
		300,000 and over	710,715, 750	sq ft/GFA	4.63	4.79	5.67
		Medical Office/Clinic	720	sq ft/GFA	6.76	6.99	8.28
	Industrial	Light Industry/Manufacturing	110	sq ft/GFA	3.09	3.2	3.78
		Industrial Park	130	sq ft/GFA	2.71	2.8	3.31
Warehousing/Storage		150	sq ft/GFA	1.02	1.05	1.25	
Mini Warehouse		151	sq ft/GFA	0.61	0.63	0.74	

For uses with standard of measure in sq ft, mobility units are given per 1000 sq ft