URBAN CROSSROADS

41 Corporate Park | Suite 300 | Irvine, CA 92606 | (949) 660-1994
www.urbanXroads.com

November 10, 2016

Ms. Kathleen Bonesz
Ridge Development Company
2211 Michelson Drive, Suite 650
Irvine, CA 92612

SUBJECT: RIDGE SAN BERNARDINO ONE TRIP GENERATION EVALUATION

Dear Ms. Kathleen Bonesz:

This letter documents the Trip Generation Evaluation prepared for the proposed Ridge San Bernardino One development ("Project"), which is located south of Cajon Boulevard and on either side of Palm Avenue/Institution Road in the City of San Bernardino.

PROJECT DESCRIPTION

The Project evaluated in the Ridge San Bernardino One Traffic Impact Analysis (November 2016) is proposed to consist of a total of 711,751 square feet (sf) of high-cube warehouse/distribution center use, with 325,920 sf within Building 1 (B-1) and 385,831 sf within Building 2(B-2). It is our understanding that Building 2 is proposed to increase in square footage from 385,831 sf to 400,000 sf.

PROJECT TRIP GENERATION

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development. The trip generation rates used for this assessment are based upon information collected by the Institute of Transportation Engineers (ITE) as provided in their Trip Generation manual (9th Edition, 2012). The ITE Trip Generation manual is a nationally recognized source for estimating site specific trip generation.

Consistent with the Traffic Study, the High-Cube Warehouse/Distribution Center land use (ITE Land Use Code 152) has been utilized for the purposes of this trip generation evaluation in conjunction with the South Coast Air Quality Management District's (SCAQMD) recommended vehicle mix. Trip generation for Building B-2 is shown on Table 1. As shown in Table 1, the proposed Building B-2 is estimated to generate a net total of 1,105 passenger-car-equivalent (PCE) trip-ends per day on a typical weekday with approximately 66 net AM PCE peak hour trips and 75 net PM PCE peak hour trips. The Project trip generation in actual vehicles is provided on Table 2 for informational purposes. In comparison to the trips evaluated in the traffic study, the 400,000 sf Building B-2 is proposed to generate 39 additional PCE trip-ends per day with 3 additional PCE AM peak hour trips and 2 additional PCE PM peak hour trips.

Changes to peak hour intersections at the study area intersection is not anticipated to vary from the results previously identified in the Traffic Study.

If you have any questions, please contact me directly at (949) 336-5982.

Respectfully submitted,

URBAN CROSSROADS, INC.

Charlene So

Charlene So, PE
Senior Transportation Engineer

Table 1

Project Trip Generation Summary (PCE)

Land Use	Units[2]	ITE LU Code	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Trip Generation Rates[1]									
High-Cube Warehouse[3,4]	TSF	152	0.076	0.034	0.110	0.037	0.083	0.120	1.680
Passenger Cars			0.055	0.025	0.080	0.025	0.055	0.080	1.040
2-Axle Trucks (PCE = 2.0)			0.009	0.004	0.013	0.005	0.012	0.018	0.282
3-Axle Trucks (PCE = 2.5)			0.009	0.004	0.013	0.005	0.012	0.018	0.283
4-Axle+ Trucks (PCE = 3.0)			0.037	0.017	0.054	0.022	0.050	0.072	1.158

Land Use	Quantity	Units[2]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Trip Generation Summary									
High-Cube Warehouse 1 (B-1)	325.920	TSF							
Passenger Cars:			18	8	26	8	18	26	339
Truck Trips:									
2-axle:			3	1	4	2	4	6	92
3-axle:			3	1	4	2	4	6	92
4+-axle:			12	5	17	7	16	23	377
- Net Truck Trips (PCE)[4]			*18*	*7*	*25*	*11*	*24*	*35*	*561*
BUILDING 1 TOTAL NET TRIPS (PCE)[4]			***36***	***15***	***51***	***19***	***42***	***61***	***900***
High-Cube Warehouse 2 (B-2)	400.000	TSF							
Passenger Cars:			22	10	32	10	22	32	416
Truck Trips:									
2-axle:			4	2	6	2	5	7	113
3-axle:			4	2	6	2	5	7	113
4+-axle:			15	7	22	9	20	29	463
- Net Truck Trips (PCE)[4]			*23*	*11*	*34*	*13*	*30*	*43*	*689*
BUILDING 2 NET TRIPS (PCE)[4]			***45***	***21***	***66***	***23***	***52***	***75***	***1,105***
TOTAL NET TRIPS (PCE)[4]			***81***	***36***	***117***	***42***	***94***	***136***	***2,005***
TOTAL NET TRIPS (PCE)[4]			***79***	***35***	***114***	***42***	***92***	***134***	***1,966***
Variance (Proposed - Traffic Study)			***2***	***1***	***3***	***0***	***2***	***2***	***39***

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Ninth Edition (2012).

[2] TSF = thousand square feet

[3] Vehicle Mix Source: Total truck percentage source from ITE Trip Generation manual. Truck mix (by axle type) source from SCAQMD.

AM peak hour = 72.7% passenger cars, 6.01% 2-Axle trucks, 4.83% 3-Axle trucks, 16.46% 4-Axle trucks

PM peak hour = 66.7% passenger cars, 7.33% 2-Axle trucks, 5.89% 3-Axle trucks, 20.08% 4-Axle trucks

ADT = 61.9% passenger cars, 8.38% 2-Axle trucks, 6.74% 3-Axle trucks, 22.98% 4-Axle trucks

[4] PCE rates are per SANBAG.

Table 2

Project Trip Generation Summary (Actual Vehicles)

Land Use	Units[2]	ITE LU Code	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Trip Generation Rates[1]									
High-Cube Warehouse[3]	TSF	152	0.076	0.034	0.110	0.037	0.083	0.120	1.680
Passenger Cars			0.055	0.025	0.080	0.025	0.055	0.080	1.040
2-Axle Trucks			0.005	0.002	0.007	0.003	0.006	0.009	0.141
3-Axle Trucks			0.004	0.002	0.005	0.002	0.005	0.007	0.113
4-Axle+ Trucks			0.012	0.006	0.018	0.007	0.017	0.024	0.386

Land Use	Quantity	Units[2]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Trip Generation Summary									
High-Cube Warehouse 1 (B-1)	325.920	TSF							
Passenger Cars:			18	8	26	8	18	26	339
Truck Trips:									
2-axle:			1	1	2	1	2	3	46
3-axle:			1	1	2	1	2	3	37
4+-axle:			4	2	6	2	5	7	126
- Net Truck Trips (Actual Trucks)[4]			*6*	*4*	*10*	*4*	*9*	*13*	*209*
BUILDING 1 TOTAL NET TRIPS (Actual Vehicles)[5]			***24***	***12***	***36***	***12***	***27***	***39***	***548***
High-Cube Warehouse 2 (B-2)	400.000	TSF							
Passenger Cars:			22	10	32	10	22	32	416
Truck Trips:									
2-axle:			2	1	3	1	2	3	56
3-axle:			1	1	2	1	2	3	45
4+-axle:			5	2	7	3	7	10	154
- Net Truck Trips (Actual Trucks)[4]			*8*	*4*	*12*	*5*	*11*	*16*	*255*
BUILDING 2 (Actual Vehicles)[5]			***30***	***14***	***44***	***15***	***33***	***48***	***671***
TOTAL NET TRIPS (Actual Vehicles)[5]			***54***	***26***	***80***	***27***	***60***	***87***	***1,219***
Total Net Trips (Traffic Study)			***53***	***26***	***79***	***27***	***58***	***85***	***1,196***
Variance (Proposed - Traffic Study)			***1***	***0***	***1***	***0***	***2***	***2***	***23***

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Ninth Edition (2012).

[2] TSF = thousand square feet

[3] Vehicle Mix Source: Total truck percentage source from ITE Trip Generation manual. Truck mix (by axle type) source from SCAQMD.

AM peak hour = 72.7% passenger cars, 6.01% 2-Axle trucks, 4.83% 3-Axle trucks, 16.46% 4-Axle trucks

PM peak hour = 66.7% passenger cars, 7.33% 2-Axle trucks, 5.89% 3-Axle trucks, 20.08% 4-Axle trucks

ADT = 61.9% passenger cars, 8.38% 2-Axle trucks, 6.74% 3-Axle trucks, 22.98% 4-Axle trucks

[4] Vehicle Mix Source: Total truck percentage source from ITE Trip Generation manual. Truck mix (by axle type) source from SCAQMD for high-cube warehouse use and from the City of Fontana Truck Trip Generation Study for warehousing and general light industrial uses.

[5] TOTAL NET TRIPS (Actual Vehicles) = Passenger Cars + Net Truck Trips (Actual Trucks).