

Letter I511

July 8, 2014

To: Mark Slovick, Project Manager
County of San Diego Planning and Development Services
5510 Overland Avenue, Suite 310
San Diego, CA 92123
Mark.Slovick@sdcounty.ca.gov
[\(858\) 495-5172](tel:(858)495-5172)

Subject: Revised DEIR Public Comments Regarding Traffic Impact Study, and DEIR Chapter 2.3 Traffic Impacts, Lilac Hills Ranch General Plan Amendment and Specific Plan PDS2012-3800-12-001(GPA), PDS2012-3810-12-001 (SP).

Dear Mr. Slovick:

Attached in Attachment 1 are the August, 2013 Public Comments regarding Lilac Hills Ranch Traffic Impact Study Issues.

The REIR factually did not directly respond to each of the items and failed to adequately respond to the issues raised in this letter.

For example, specific questions were asked regarding Trip Generation, and were not directly and completely answered in the RDEIR Traffic Impact Study.

Specifically, the REIR did not provide an answer to the questions raised on every questioned element of the attached Traffic Impact Study Comment letter.

Published County policies and specific assurance from County Staff have clearly stated that all August 2013 DEIR comments if resubmitted, will be responded to. Therefore, respond to each specific issue raised in the attached letter as part of the County's Response to Public Comments for the revised DEIR.

Sincerely,



Mark Jackson
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Attachment

I511-1a

I511-1a This is an introductory comment. Detailed responses follow below.

Darnell & Associates, Inc.

TRANSPORTATION PLANNING & TRAFFIC ENGINEERING

August 16, 2013

Mr. Mark Jackson
9550 Covey Lane
Escondido, CA 92026

D&A Ref. No: 130703

RE: Review of the Lilac Hills Ranch Development (LHR) in the unincorporated Valley Center area Traffic Impact Study (TIS) and Traffic/Transportation Sections of the DEIR for the project.

Dear Mr. Jackson:

In accordance with your authorization, I have reviewed the Traffic Impact Study prepared by Chen Ryan & Associates dated June 28, 2013 and subchapter 2.3 Transportation Traffic of the DRAFT Environmental Impact Report prepared by Recon Environmental, Inc. dated July 3, 2013.

OVERVIEW

The Accretive Group, the project proponent proposes an amendment to the County of San Diego General Plan to develop lilac Hills Ranch, which encompasses 608 acres in the westernmost portion of the Valley Center Community Plan (VCCP) and the Bonsall Community Plan (BCP). The project proposes to amend the County's General Plan to permit the development of 90,000 square feet of Commercial, Office and Retail space, 50 Room Country Inn, 903 Single Family Detached Homes, 164 Single Family Attached Homes, 211 Residential Units within the mixed use areas, 468 Single Family Detached Age-Restricted Residential Units within a Senior Citizens neighborhood including a Senior Community Center, Group Residential and Group Care Facility, a Dementia Care Facility, Civic Facilities and Public and Private Parks.

Development of the proposed project will reportedly result in the trip generation of 19,428 Daily trips, 1,663 AM peak hour trips and 1,829 PM peak hour trips to be added to the surrounding roadways and intersections.

Chapter 4.4 of the Draft EIR for the project identifies that development consistent with the County's General Plan would allow 110 Single Family Dwelling Units and would preserve 257 acres of open space. Development in accordance with the existing General Plan would result in 1,320 ADT's to be added to the surrounding street system (See Section 4.4.2.3 Transportation Traffic of the DEIR).

Comparison of the existing General Plan development of 1,320 ADT's to the proposed 19,428 ADT's shows that the proposed project would generate 14.7 times more traffic than the approved General Plan.

I511-1b

I511-1b The comment is an introduction to comments that follow. No further response is required.

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RESPONSE

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The recently adopted Mobility Element of the County's General Plan does not include the section of New Road 3 from Highway 395 to West Lilac Road. The deletion of the section of New Road 3 changed the classification of Highway 395 to a four-lane Boulevard with a LOS "D" Capacity = 25,000 ADT and West Lilac Road from Highway 395 to New Road 3 to a Light Collector 2.2C, with intermittent turn-lanes with a LOS "D" Capacity of 13,500 ADT.

1511-2

West Lilac Road is the primary access road serving the project. Secondary access to/from the project site is proposed to be provided by Covey Lane between West Lilac Ranch Road and Mountain Ridge Road extending north from Circle R. Drive to connect to West Lilac Ranch Road. Both Covey Lane and Mountain Ridge Road are private roads and do comply with the County Design Standards.

1511-3

The following are my comments on the Traffic Study, General Plan consistency and applicant's requested Design Exceptions to the County's Road Standards.

LILAC HILLS RANCH (LHR)

Comments on the Chen Ryan & Associates Traffic Study dated June 28 2013.

1. Trip Generation:

In reference to Table 4.8 on Page 52 of the Traffic Impact Study (TIS):

In Summary, the LHR TIS calculates 19,428 Average Daily Trips using inappropriate trip generation rates as listed below. A fair and reasonable estimate of traffic volume using SANDAG's Guide for Vehicular Traffic Generation Rates is 21,744 ADT, an 11.9 % increase in ADT volume.

1511-4

- As suggested in SANDAG's Guide for Vehicular Traffic Generation Rates, a daily rate of 40 vehicular trip ends per 1,000 sq. ft. is used for the "Specialty/Strip Commercial" category. There would be 61,500 sq. ft. of space devoted to this category, resulting in a total of 2,460 daily vehicular trip ends. The term "Specialty/Strip Commercial" is not used, however, on Page 40 of the TIS. Rather, the description given is "local serving, small scale, and boutique style specialty retail." Based on the amount of proposed space and the inclusion of "local serving" in the description, a trip generation rate of 120 daily vehicular trips per 1,000 sq. ft. should have been used in the TIS. The rate of 120 daily vehicular trips per 1,000 sq. ft., per SANDAG, would be applicable to "Neighborhood Shopping Center" and would include "usually, grocery & drugstore, cleaners, beauty and barber shop, & fast food services." This type of businesses would appear to be well-suited for a community at a location such as Lilac Hills Ranch. The lack of such essential services would necessitate travel of five or more miles to a grocery store.

1511-2 The comment provides factual background information, but does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise an environmental issue with respect to the FEIR, no further response is required.

1511-3 The comment restates information contained in the FEIR, but does not raise an environmental issue within the meaning of CEQA. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise an environmental issue with respect to the FEIR, no further response is required.

1511-4 Subsequent to submittal of the comment, the referenced Traffic Study dated June 28, 2013 was revised, in part, to address this and other comments contained in the letter. The revised study, Lilac Hills Ranch Traffic Impact Study (June 3, 2014) (TIS), is provided in full in Appendix E to the FEIR.

The proposed project would include 90,000 square feet of commercial, office, and retail uses. (FEIR, Chapter 1.0, Project Description.) These uses would be provided primarily in the Town Center, with additional, though limited, space provided in smaller Neighborhood Centers. (FEIR, Chapter 1.0.) Specific to the commercial/retail uses, allowable uses within the Town Center include neighborhood-serving commercial uses that would include a general store and specialty retail shops and services. (Lilac Hills Ranch Specific Plan [June 2014], p. III-67.) As explained in Section 4.3.1 of the TIS:

In analyzing the potential impacts associated with the proposed project, the Lilac Hills Ranch TIS utilized a trip generation rate referred to as "Specialty Retail/Strip Commercial" ("SR/SC") for the future commercial/retail uses. The SR/SC rate is 40 vehicle trips per thousand square feet. This rate was derived utilizing SANDAG's Guide to Vehicular Traffic Generation Rates for the San Diego Region (April 2002).

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	<p>I51I-4 (cont.)</p> <p>SANDAG describes the SR/SC type of commercial use in its 9/18/07 land use definitions as “tourist or specialty commercial shopping areas such as Seaport Village, Marina Village, Ferry Landing at Coronado, Bazaar del Mundo, Flower Hills, Glasshouse Square, The Lumberyard, Park Plaza at the Village, Promenade, Belmont Park, Del Mar Plaza.” (http://www.sandag.org/resources/maps_and_gis/gis_downloads/downloads/codes/Land_Use_Definitions.html). Importantly, however, although some of the illustrative examples include “tourist” areas, which differ from the uses proposed as part of the Lilac Hills Ranch project, the majority of the shopping areas listed by SANDAG include high traffic generating land uses, including sit down high turnover restaurants that would generate 160 [average daily trips] ADT/1,000 [square feet] SF, fast food restaurants that would generate 700 ADT/1,000 SF, and convenience market (7-Eleven) that would generate 700 ADT/1,000 SF, as well as a variety of other different businesses such as a small general market.</p> <p>Despite a number of high traffic generating land uses, SANDAG has assigned a trip rate of 40 ADT/1,000 SF for these types of commercial uses, as opposed to rates of over 100 ADT/1,000 SF that otherwise would apply. However, while the SR/SC rate appears low relative to restaurant or grocery store trip rates, the lower rate accounts for the fact that each use is located within walking distance of other uses. That is the essence of each of the specialty commercial shopping areas SANDAG listed as examples in describing the rate – one vehicle trip to Seaport Village or Flower Hill, for example, would potentially enable the driver to visit a half dozen different businesses without generating additional vehicle trips, thereby substantially reducing the number of trips that otherwise would be generated if these uses were situated in different locations requiring a separate trip to each location.</p> <p>Similarly, Lilac Hills Ranch is to be developed into a pedestrian oriented self-sustainable community in which all of the residential units would be located within one-half-mile of the community serving commercial areas, and the commercial areas would include multiple businesses. This plan would similarly promote walking and cycling, and the related reduction of vehicular travel.</p>
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LETTER

RESPONSE

	<p>I51I-4 (cont.)</p> <p>Overall, because the project does not propose the type of high traffic generating, high turnover type land uses that in part characterize the commercial uses utilized by SANDAG in calculating the 40/1,000 SF SC/SR rate, the proposed project land uses are expected to generate less traffic than what the SANDAG defined commercial uses would generate (as described above) and therefore the SR/SC rate is the most appropriate for this analysis as it accounts for the worst case scenario of high-turnover commercial uses that generate high traffic volumes.</p> <p>To illustrate the propriety of use of the 40/1,000 SF trip generation rate for the Lilac Hills Ranch commercial/retail uses, the project traffic engineer worked with SANDAG to conduct a new select zone assignment that replaced 25,000 SF of space analyzed in the TIS at the SR/SC rate of 40/1,000 SF with a “supermarket” trip rate of 150/1,000 SF, which is the rate typically applied to high traffic, large-scale grocery stores such as Von’s or Ralph’s. And, in response to comments submitted on the originally circulated Draft EIR, the new select zone assignment also replaced 28,500 SF of single-tenant office space analyzed in the TIS at a rate of 14/1,000 SF with 28,500 SF of space analyzed at the “standard commercial office” trip rate of 20/1,000 SF. All other land uses, amounts and trip rates utilized were unchanged from those in the TIS. The purpose of the analysis was to determine whether use of these higher trip generation rates for these two use types would alter the results of the analysis presented in the TIS.</p> <p>The results of the analysis showed that the two alternative land uses would result in a higher internal capture rate and lower external rate than resulted in the TIS, which reflects the higher attraction rate (i.e., a supermarket would “attract” a higher percentage of residential trips than any other type of retail, keeping more of these trips internal to the site) attributable to a “supermarket” use than “specialty retail/strip commercial” uses. This increased internal capture, in turn, resulted in the number of external trips being almost identical to the number that would be generated under the land uses and corresponding trip rates utilized in the TIS. Therefore, the conclusions reached in the TIS would not change even if different trip rates had been utilized for the proposed uses. (TIS, pp. 68-73.)</p>
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If the more relevant rate of 120 per 1,000 sq. ft. had been used, the result would have been 7,380 daily vehicular trip ends, instead of 2,460 resulting in 21,704 daily trips, likely resulting in significant impacts beyond those identified in the TIS.

The attached Table A (see pg. 4) presents the increase in project traffic.

- A rate of 14 daily vehicular trip ends per 1,000 sq. ft. is used for the office category. Per SANDAG, this rate applies to "Single Tenant Office." The rate for "Standard Commercial Office, less than 100,000 sq. ft.," is 20 per 1,000 sq. ft. In a setting such as Lilac Hills Ranch, office space would likely be needed for such businesses as insurance agencies, real estate agents, financial brokerages, and similar tenants that would individually require much less space than the 28,500 sq. ft. that is proposed. Another possible use would be for doctors' or dentists' offices, with a SANDAG rate of 50 per 1,000 sq. ft. In view of these considerations, the use of 14 daily vehicular trip ends per 1,000 sq. ft. in the TIS is not appropriate. A rate of 20 per 1,000 sq. ft. should have been used in the TIS because it would have been more representative of the likely mix of office uses in Lilac Hills Ranch.

The more relevant rate of 20 per 1,000 sq. ft. had been used; the result would have been 580 daily vehicular trip ends, instead of 399, likely resulting in impacts beyond those identified in the TIS.

2. Internal Trips:

The LHR TIS Internal Trip Generation calculations are flawed and overstate the internal trip capture. The fundamental errors enumerated below substantiate that external traffic flows have been understated in the LHR TIS. The additional external vehicle traffic will compound the already marginal road conditions that exist on Covey Lane and Mountain Ridge Private Roads, as well as all other Project Access points to West Lilac and Circle R Public Roads, and the entire Road Network that services the area. The Traffic Study needs to be corrected to reflect these changes.

In reference to Table 4.9 on Pages 54 and 55 of the TIS:

The calculation of internal trips for the AM peak hour and for the PM peak hour is fundamentally flawed. By definition for a trip to be internal, both the origin and destination of the trip must be within the project. Therefore, the number of internal trip origins in the AM peak hour must equal the number of internal trip destinations in the AM peak hour. Likewise, the number of internal trip origins in the PM peak hour must equal the number of internal trip destinations in the PM peak hour. As an example, if there are 150 internal trip origins in the AM peak hour, but only 100 internal trip destinations are available, there can be only 100 internal trips. The remaining 50 origins cannot be internal, and would necessarily need to have external destinations.

I511-4
 cont.

I511-5

I511-6

I511-5 As explained in the preceding response to comment, subsequent to submittal of the comment, the referenced Traffic Study dated June 28, 2013 was revised, in part, to address this comment. The revised study, Lilac Hills Ranch Traffic Impact Study (June 3, 2014) (TIS), is provided in full in Appendix E to the FEIR. Further explanation of use of the single tenant office rate is provided in Section 4.3.1 of the TIS.

In analyzing the potential impacts associated with the proposed project, the Lilac Hills Ranch TIS utilized a trip generation rate referred to as "Single Tenant Office" for the proposed office uses. The single tenant office rate is 14 vehicle trips per thousand square feet. This rate was derived utilizing SANDAG's Guide to Vehicular Traffic Generation Rates for the San Diego Region (April 2002).

The proposed project would include single tenant offices and flex-office space such as Co-merge. (FEIR Chapter 1.0, Project Description.) Co-merge/co-working office spaces provide an official work space for telecommuters, start-ups, consultants, small businesses, and non-profits. These spaces offer a variety of amenities, including but not limited to official mailing addresses and mail boxes, phone routing and event spaces.

Phone interviews were conducted on March 3, 2014 with seven co-merge/co-working office spaces in the San Diego region. The locations included downtown San Diego, Sorrento Valley, Mission Valley, and Carlsbad, with square footage ranging from approximately 4,000 to 18,000 square feet.

As shown in the TIS, there are roughly 4 people per thousand square feet of office space in the respondent locations. *ITE Trip Generation Manual, 9th Edition* includes a trip generation rate per employee for general office uses (see Appendix J), and this rate is 3.32 per employee. With an average of 4 people per one thousand square feet as determined based on other similar uses, a trip generation rate of 13.3 trips per thousand square feet was derived for co-merge/co-working office space. This rate of 13.3 is less than the rate of 14, which is the rate utilized in the TIS for impact assessment.

Land use Category	Table 4.8 in TIS	Daily Vehicular Trips Appendix F	Difference
Residential Uses			
Single Family	9,030	6,240	-2,790
Multi Family	2,250	1,764	-486
Senior Community	1,872	2,025	153
Assisted Living	500	506	6
Residential Subtotal	13,652	10,535	-3,117
Non-Residential Uses			
Specialty/Strip Commercial	2,460	7,380	4,920
Office	399	580	181
B&B/Inn	450	502	52
Church	321	434	113
K-5 School	909	1,183	274
6-8 School (a)	185		-185
Recreation Center (a)	915		-915
Neighborhood/County Park (a)	119		-119
Water Reclamation (a)	14		-14
Recycling Center	4	18	14
LH YMCA (b)		601	601
LH Active Park (b)		482	482
Other Public Service (b)		29	29
Non-Residential Subtotal	5,776	11,209	5,433
TOTAL	19,428	21,744	2,316
(a) Not used in SANDAG Model			
(b) Not used in TIS			
Increase of 11.9%			

I511-6 Preliminarily, as noted in the preceding responses, subsequent to submittal of the comment, the Traffic Study dated June 28, 2013 referenced in the comment was revised, in part, to address this comment. The table referenced in the comment, Table 4.9, has been re-numbered as Table 4.8 in the revised TIS.

According to the ITE Trip Generation Manual (Appendix D, page 147), the internal capture rate is the percentage reduction applicable to the trip generation estimates for individual land uses within a multi-use site, so that the analyst can account for internal trips at the site. These reductions are applied externally to the site (i.e., at entrances, at adjacent intersections, and on adjacent roadways).

Based upon the nationally accepted definition above, a flat internal capture percentage was applied to the total number of trips generated by the individual land uses within the project. The internal capture rate was based upon common practice by assessing potential internal capture rates of each of the proposed land uses (i.e., residential with a 10 percent internal capture rate, commercial with a 50 percent internal capture rate, etc.), as well as comparison to both the SANDAG select zone model and the ITE Multi-Use Trip Generation Calculation. The SANDAG select zone model documented a 28.8 percent internal capture and the ITE Multi-Use Trip Generation Calculation resulted in a 22.2 percent internal capture. Please see Attachment A to this response for the ITE Multi-Use Trip Generation Calculation. Both percentages are higher than the conservative 22 percent internal capture assumed by the project.

While it is true that the number of trip origins has to equal the number of trip destinations, the number of trip productions does not have to equal the number of trip attractions. The figure below displays an example of what is known as trip chaining or pass by trips, when a single trip reaches one or multiple additional attractions before its final destination. Trip chaining, particularly in multi-use developments, can result in an imbalance between the number of internal and external productions and attractions while maintaining a balance between the number of internal and external trip origins and destinations.

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The methodology used in the TIS to estimate internal trips is fundamentally flawed because it results in an unequal number of origins and destinations in each peak hour. Table 4-9 indicates that in the AM peak hour there would be 261 "in" and 231 "out" trips, or origins and destinations, respectively. For the PM peak hour there would be 207 "in" and 189 "out" trips. Since the "in" (trip destination) and "out" (trip origin) numbers are not equal, adjustments are needed.

The revised estimates for internal trips are lower compared to the TIS, by 106 trips in the AM peak hour and 38 trips in the PM. Accordingly, external trips are underestimated in the TIS. Use of the correct peak hourly external trip numbers in the TIS, could have revealed additional impacts, beyond those identified in the TIS.

3. SANDAG Estimate of Internal Trips:

In reference to Page 53 of the TIS and Appendix F:

The 28.8% of internal trips attributed to the SANDAG model run (Page 53 of the TIS) is faulty because the model inputs are faulty. Table A attached presents a comparison of the vehicular trips estimated in Table 4.8 of the TIS (19,248 total daily vehicular trips), compared to the data presented in Appendix F (18,849 total daily vehicular trips). While the total numbers are reasonably close, there are large differences in the estimates for individual land use categories, as documented in Table A. Table A is showing a total of 21,7444 daily trips. In general, the trips for the residential categories are underestimated in the SANDAG model, while the commercial and office categories are overestimated. Since residential uses are typically considered trip productions in the model while commercial and office uses are considered to be trip attractions, the model estimate of internal trips is based, incorrectly, on a much higher number of potential internal attractions. The internal trip calculations need to be revised and the analysis corrected.

4. Roadway Capacity Assumptions under Existing Conditions:

In reference to Table 3.1 on Pages 28 through 30 and text on Pages 19 through 22:

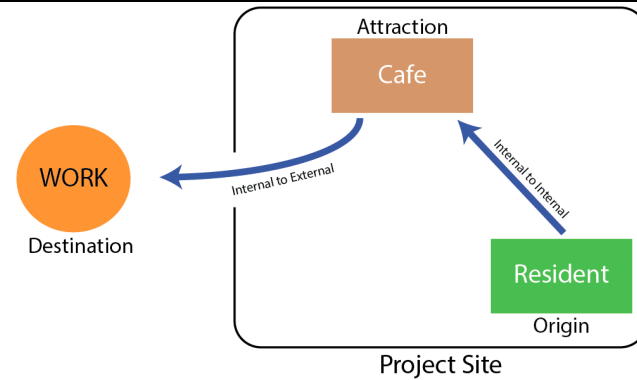
The Level of Service calculations in the TIS are flawed and need to be corrected to reflect the correct project internal trip capture and capacity of each road.

The daily roadway capacity assumptions for existing conditions are based on the incorrect premise that the roadways are built to the full design standards of the applicable classification. In Table 3.1 the Level of Service (LOS) D threshold for 2-lane facilities without a two-way left turn lane is assumed to be either 8,700 or 10,900 with the exception of Valley Center Road and Miller Road (assumed to be 13,500 and 8,000, respectively). There is no indication in the TIS that, in fact, West Lilac Road Circle R Drive, Lilac Road, Old River Road, and other roadways, are not built with the appropriate design features, such as paved shoulder width, sight distance, design speed, curve radii, pavement thickness etc.

I511-6
cont.

I511-7

I511-8



However, in response to the comment, Table 4.8 of the revised TIS was revised to clarify the distinction between internal and external trips.

I511-7 The following is a comparison of the land uses proposed by the project, and the land uses that were modeled as part of the traffic analysis.

Proposed project land uses:

- 903 Single-Family Units
- 375 Multi-Family Units
- 61,500 SF of Specialty Commercial
- 468 Senior Community Units
- 200 beds of Congregate Care / Assisted Living
- 28,500 SF of Office
- 50 rooms Bed and Breakfast
- 10.7 acres Church
- 1 Elementary School
- 1 Middle School
- 40,000 SF Recreation Center
- 23.8 acres of Neighborhood Park
- 2.4 acres Water Reclamation Plant
- 0.6 acre Recycling Center

LETTER

RESPONSE

	<p>I51I-7 (cont.)</p> <p>Modeled land uses:</p> <ul style="list-style-type: none">• 903 Single-Family Units• 375 Multi-Family Units• 468 Senior Single-Family Units• 69,000 SF of Special Commercial• 200 beds of Congregate Care• 4.8 acres of Office• 50 rooms Bed and Breakfast• 10.7 acres Church• 1 Elementary School• 2.0 acres Recreation Center / YMCA• 23.8 acres of Active Park• 0.1 acre of Water Reclamation plan• 3.0 acres Recycling Center <p>As with all development projects, the proposed land use plan is often changed during the study process. In this case, minor land use changes were made after the SANDAG Select Zone modeling was conducted and it was determined by the licensed traffic consultants (Chen Ryan Associates) that these changes would not significantly affect the travel patterns and interactions among land uses. Hence, no remodeling was necessary. Furthermore, only project trip distribution, not the forecast volumes, was utilized in the TIS from the Select Zone Assignment. The SANDAG internal capture rate of 28.8 percent was used only to confirm the calculated internal capture of 22.0 percent that was applied to the TIS.</p> <p>Please see Attachment B to this response for a comparison between the proposed project land uses internal capture rate and the modeled land uses internal capture rate.</p> <p>I51I-8 As noted in the preceding responses, subsequent to submittal of these comments, the Lilac Hills Ranch TIS was revised, in part, to address the comments provided in this letter. Specific to this comment, capacity reductions were applied to several roadways in the study area. Section 3.3 of the TIS contains a detailed explanation as to how the analysis takes into account the fact that the area roadways are not fully built to County standards. The following is an excerpt from the TIS:</p>
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The compliance of the existing roadways with the appropriate design standards should have been ascertained if these LOS traffic volume thresholds were used in the TIS. If the facilities are not built with the applicable standards, the LOS traffic volume threshold should have been reduced.

5. Interchange at I-15/SR-76:

In reference to Page 36:

The I-55/SR-76 Interchange is presently under construction and under the jurisdiction of Caltrans. Impacts and mitigation will require Caltrans concurrence.

Contrary to the statement at the bottom of the page, the ramp terminals at the interchange of I-15/SR-76 are signalized and should have been analyzed for all scenarios. Had they not been signalized, they should have been analyzed as stop-controlled intersections in the same way the interchanges at I-15/Old Highway 395 and I-15/Gopher Canyon Road were analyzed. The results should have been presented in Table 3.2 on Page 34, along with the other interchanges. The applicable analyses should have been performed for all future scenarios.

6. Project Access:

The TIS proposes an intersection with West Lilac Public Road (we shall refer to it as Access Point X) for which there is no road or intersection design disclosure or traffic analysis provided.

For purposes of this discussion the project access point on West Lilac Road approximately mid-way between Main Street (Intersection 26) and Street F (Intersection) will be referenced as Access Point X. Please see Figure 1-3 on Page 4 of the TIS for the location of Access Point X and the circulation system it would serve.

In the TIS, the analysis assumes the presence of Access Point X (described in the previous paragraph), yet the intersection of West Lilac Road and Access Point X is not analyzed in any of the scenarios. Judging from the trip distribution percentages presented in Section 5 of the TIS, Access Point X would accommodate 20 to 40 % of the project traffic. As an example, the information in Figure 4-10A indicates that about half of the traffic to/from Phase A would use Access Point X.

The intersection of West Lilac Road and Access Point X should have been analyzed and appropriate improvements, if any, should have been identified.

The TIS proposes an intersection with Lilac Hills Ranch Road at Covey Lane existing Private Road for which there is no road or intersection design disclosure or traffic analysis provided.

151I-8
cont.

151I-9

151I-10

151I-8 (cont.)

Roadway segment analysis is based on the comparison of average daily traffic (ADTs) to the County of San Diego's Roadway Segment Daily Capacity and Level of Service Standards. However, a number of roadways within the study area are not fully built to County public road standards. Although not required by the County of San Diego's Guidelines for Determining Significance and Report Format for Transportation and Traffic, a conservative approach was taken to reduce road capacities for purposes of this analysis.

In order to determine the amount of capacity reduction to use in the analysis, several factors were considered. Most important, all of the roads considered for capacity reductions provide one lane in each direction and the number of lanes is the best indication of capacity. In terms of reduced shoulder width, since the shoulder is outside the traveled way, is rarely utilized by drivers, and the fact that the reduced shoulder width is present on only a small portion of the study roadways, a large capacity reduction would not occur. In terms of minimum curve radii, since the curves are only present on a small portion of the study roadways, a large capacity reduction would be inappropriate.

Based on a field and aerial review and analysis of the County roadway standards, a 10 percent capacity relation was applied to several area roadways. See TIS Table 3.1.

151I-9

The commenter is correct that the ramp terminals at the interchange of I-15/SR-75 are signalized. The commenter is referencing the prior traffic study that has since been updated. The Lilac Hills Ranch project would contribute 47/58 and 37/36 peak hour trips (AM/PM) to the ramp intersection of I-15 SB Ramps/SR-76 and I-15 NB Ramps/SR-76. Since the I-15/SR-76 interchange is under Caltrans' jurisdiction, the Caltrans Guide for the Preparation of Traffic Impact Studies (December 2002) was utilized in determining whether the ramp intersections should be included within the proposed Lilac Hills Ranch project study area. Under the Caltrans Guide, a state facility should be included as part of a project's study area if it meets any of the conditions below:

1. The project would add over 100 peak hour trips to a State Highway facility.

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Lilac Hills Ranch Road (LHRR) is the major internal north/south roadway for the proposed LHR subdivision. LHRR is the route to access the LHR Project's Secondary Access Roads, the existing Covey Lane and Mountain Ridge Private Roads.

Aceretive has provided NO DETAIL of the Road Design for Covey Lane and/or the Intersection of LHRR and Covey Lane. These are the secondary access roads for compliance with the county's consolidated fire code!

This intersection's design is not disclosed whatsoever and raises two fundamental Traffic and Road Design issues:

1. Site review of the intersection indicates there is inadequate sight distance line and other design considerations that indicate the intersection do not meet County Road Standards.
2. By not disclosing the design details of the LHRR/Covey Lane intersection:
 - a. Environmental Impacts are impossible to assess.
 - b. Conformance to the County of San Diego Road Standards is impossible to assess.

7. Roundabouts:

The presence of roundabouts at the intersections of West Lilac Road/Main Street, West Lilac Road/O Street, and Main Street/C Street is assumed starting with Phase A of project development (Please see Table 5.2, Pages 95 through 98, Intersections 26, 27, and 31). Yet, the roundabouts are not included in any of the "Impact and Mitigation Summary" Tables, starting with Table 5.6 on Page 103 of the TIS.

The roundabouts should be in place before the issuance of the first Certificate of Occupancy in Phase A, and the developer responsibility should be clearly stated. The design speed and the right-of-way requirements for the roundabouts should be identified. It is not clear in the TIS if the roundabouts are going to be located entirely on Lilac Hills Ranch property. These matters should be specifically addressed in the mitigation section of the DEIR and/or FEIR, and should not be deferred for subsequent determination.

8. Mitigation Measures:

The following are comments on the adequacy of the mitigation measures and need to establish thresholds for compliance.

- Table 5.6 on Page 103 identifies no improvements for Phase A of the project. As stated earlier, roundabouts at the intersections of West Lilac Road/Main Street, West Lilac Road/O Street, and Main Street/C Street should have been specified as improvements to be in place before the issuance of the first Certificate of Occupancy.
- Table 5.13 on Page 122 refers to "Phase 4" for the two recommended improvements for Phase B, but the TIS does not explain what Phase 4 represents; nor do the TIS explain how the number 363 EDU was determined.

I511-10
 cont.

I511-11

I511-12

I511-13

I511-8 (cont.)

2. The project would add 50 to 100 peak hour trips to a State Highway facility – and the affected State highway facilities are experiencing a noticeable delay; approaching unstable traffic flow conditions (LOS "C" or "D").
3. The project would add 1 to 49 peak hour trips assigned to a State Highway facility – the following are examples that may require a full TIS or some lesser analysis:
 - a. Affected State Highway facilities experiencing significant delay; unstable or forced traffic flow conditions (LOS "E" or "F").
 - b. The potential risk for a traffic incident is significantly increased (i.e., congestion related collisions, non-standard sight distance considerations, increase in traffic conflict points, etc.).
 - c. Change in local circulation networks that impact a State Highway facility (i.e., direct access to State Highway facility, a non-standard highway geometric design, etc.).

In this case, analysis of the interchange shows that LOS A is calculated (see Attachment C to these responses). Because LOS A is calculated, Caltrans does not require an analysis of the interchange since the project would add less than 100 peak hour trips to the facility.

I511-10 Access Point X (Birdsong Drive) is a gated emergency access only, and the proposed project will not access this road unless there is an emergency. Therefore, the Birdsong Drive and W. Lilac Road intersection was not analyzed. Hence, any percentages shown along W. Lilac Road, between Intersections #26 and #31 indicate through project traffic only.

As to the intersection of Lilac Hills Ranch Road/Covey Lane, the intersection is a private intersection internal to the project site. As per common practice, intersections of two private roadways, internal to a project site, are not analyzed as part of the TIS. This is because the internal roadways do not impact the public roadway system, which is the primary focus of the TIS. In addition, the intersection is located within a future phase that would require detailed engineering plans and studies prior to approval and construction.

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	<p>I51I-10 (cont.) Nonetheless, TIS Section 7.2 addresses on-site circulation and includes analysis of the Lilac Hills Ranch Road/Covey Lane intersection as an All-Way Stop Controlled intersection. (TIS, pp. 290-296.) The TIS includes a figure displaying the intersection geometrics and peak hour volumes. A corresponding table displays the intersection delay and LOS under project build-out conditions. The table shows that the intersection would operate at LOS A during both the AM and PM peak hours. As to road standards, all project roads will be conditioned to conform with applicable County road standards except where a Design Exception has been requested.</p> <p>I51I-11 The proposed roundabouts noted in the comment will be included as a project feature and are not intended to mitigate any specific project related impacts. The roundabouts will be designed in compliance with County and engineering standards.</p> <p>I51I-12 Please see response to comment I51I-11.</p> <p>I51I-13 As displayed in Table 4.1 of the TIS, Phase 4 consists of 171 senior housing units, 200 assisted living units (beds), and a 3.7-acre neighborhood park. Please refer to TIS Appendix H for a diagram of the individual project phases and their locations.</p> <p>As noted in Appendix N of the TIS, the 363 EDU trigger is based on the number of peak hour trips that the project could generate before causing an unacceptable LOS and/or increase delay to a significant level at the intersections identified to be impacted by the project phase (critical number of trips). The number of EDU that could be developed prior to triggering these impacts was derived by dividing the critical number of trips by the number of peak hour trips an average dwelling unit within the projected phase is anticipated to generate.</p>
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- Table 5.21, Page 141, recommends that West Lilac Road between Old Highway 395 and Main Street be improved to 2.2C standards by 929 EDU or 9,298 project ADT's in Phase C. As stated earlier for Phase B, the TIS does not explain what Phase 4 represents; nor does the TIS explain how the number 929 EDU was determined. Also, a limit of 9,298 ADT would allow the development of all of the residential uses (except assisted living) through Phase D, without the development of any of the non-residential uses in Phase D or earlier, resulting in 8,952 ADT (Please refer to Table 4.7). Since the stated goal is for the project to achieve a mix of residential and non-residential uses, this threshold is not in the best interests of the County or the residents of Lilac Hills Ranch. The threshold should be defined in a different way, such that the developer is encouraged, or forced to, bring in non-residential uses in parallel with the residential uses. The same comments apply to the timing of the signalization of the intersection of Old Highway 395/ West Lilac Road, albeit with a different threshold.
- On Page 123 of the TIS and in Table 5.14 on Pages 128 through 130, direct impacts are identified for Phase C on Gopher Canyon Road (between East Vista Way and the I-15 Southbound ramps) and on East Vista Way (between Gopher Canyon Road and Osborne Street). Table 5.21, Page 141, however, does not recommend any improvements for these roadway segments. The rationale for not recommending improvements includes, among other things, "Rural community character," "Minimal project trips added" and "Distance from project site." This rationale is not very convincing because the "No Project" or "Much Lower Intensity Project" alternatives would be more compatible with the ambient rural community character and would result in no or much fewer trips. The TIS should have identified the necessary improvements and should have left it to policy-makers to decide whether the improvements to mitigate direct project impacts should be required of the developer or waived. Without any improvement recommendations, policy-makers have no frame of reference to make an informed decision.
- In Table 5.29 on Page 160, no improvements on Gopher Canyon Road (between East Vista Way and the I-15 Southbound ramps) and on East Vista Way (between Gopher Canyon Road and Osborne Street) are recommended for Phase D, even though, as in the case of Phase C, direct impacts have been identified. The same rationale as for Phase C, and equally as faulty, has been used not to recommend any improvements. As in the case of Phase C, the improvements should have been identified and the decision to accept or waive them should have been left to the policy-makers.

151I-14

151I-15

151I-16

151I-14 As noted in the prior response, as displayed in Table 4.1 of the TIS, Phase 4 consists of 171 senior housing units, 200 assisted living units (beds), and a 3.7-acre neighborhood park. Phase C (or Phase 1 + 4 + 2) consists of a total of 546 SF units, 270 MF units, 171 senior housing units, 200 beds of assisted living units, 55 ksf of commercial space, 25 ksf of office space, a 50-room Bed and Breakfast, 9.7 acres of Park, and a 0.6 acre recycling center. Please see TIS Appendix H for a diagram of the individual project phases and their locations.

As noted in Appendix N of the TIS, the 929 EDU (9,298 ADT) threshold is based on the number of daily trips the project would contribute to West Lilac Road, between Old Highway 395 and Main Street, that would result in the road exceeding its functional capacity. In other words, the 930 EDU would trigger the need for West Lilac Road to be improved to the 2.2C road standard. The number of EDUs that could be developed prior to triggering these impacts was derived by dividing the number of project trips making the critical movement by the number of peak hour trips an average dwelling unit within the projected phase is anticipated to generate. The critical movement is the movement where the project adds trips and causes the intersection to fail; for example, in the case of the intersection of West Lilac Road and Old Highway 395, the critical movement is the westbound left-turn lane. This method and its associated calculations are documented in Appendix AC of the TIS.

The mitigation trigger of 9,298 ADT was determined based upon the roadway capacity threshold as documented in the TIS and the County of San Diego Traffic Impact Study Guidelines. Since the TIS did not assume any internal capture for the interim years, not having any non-residential land use does not affect the mitigation threshold. Additionally, as documented in Table 4.3, the project would construct a majority of the non-residential land uses by Phase C, rather than at build-out, as noted in the comment.

The same response applies to the timing of the signalization of the intersection of Old Highway 395/West Lilac Road, albeit with a different threshold.

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In Table 5.29, continued on Page 161, the threshold for the signalization at Old Highway 395/Circle R Drive refers to Phases 4 and 5, which are not explained in the TIS.

I511-17

- In Table 5.30 on Pages 167 through 169, and on Page 177, direct impacts are identified in Phase 5 (Buildout of Project) on Gopher Canyon Road (between East Vista Way and the I-15 Southbound ramps), on East Vista Way (between SR-76 and Gopher Canyon Road) and on East Vista Way (between Gopher Canyon Road and Osborne Street). However, in Table 5.36 on Page 179, the same rationale as for Phases C and D, and equally as faulty, has been used not to recommend any improvements. As in the case of Phases C and D, the improvements should have been identified and the decision to accept or waive them should have been left to the policy-makers.

I511-18

- In Table 6.9 on Page 226, it is recommended that Gopher Canyon Road (Between East Vista Way and the I-15 Southbound ramps) be improved to 4.1A per the Mobility Element because of a cumulative impact. The existing traffic on this roadway segment is 15,310 vehicles per day (vpd). The cumulative projects would add 370 vpd and the proposed Lilac Hills Ranch project would add 580 vpd, for a total of 16,260 vpd, resulting in LOS F, properly identified as a cumulative impact.

I511-19

When the Lilac Hills Ranch traffic (at project buildout) was added to existing traffic the total was 15,890, resulting in LOS E and a direct impact was correctly identified (Please see Table 5.30 on Pages 167 through 169). However, no improvements were recommended because of among other reasons "Rural Community Character." Yet, under cumulative conditions a widening to 4 lanes is recommended, even though the cumulative projects collectively would add less traffic (total of 370 vpd for all cumulative projects combined) than the proposed project (580 vpd). No reason is given as to why "Rural Community Character" would no longer be an issue.

9. Traffic Volumes on Mountain Ridge Road and Covey Lane:

My evaluation of the traffic volumes based on revised trip generation and internal hip capture lead to the conclusion that both roadways traffic volumes will exceed the County's 2,500 ADT. Threshold for private roads and will require additional improvements.

	LHR TIS ADT (1)	Assessed ADT
Covey Lane (Private Road):	1,110	Over 2,500
Mountain Ridge Road (Private Road):	2,220	Over 2,500

I511-20

(1) Values are from the LHR TIS Table 7-1

I511-15 As noted in prior responses, subsequent to submittal of the comments, the Lilac Hills Ranch TIS was revised, in part, in response to the comments. In this regard, the study was revised and mitigation measures are now recommended for both segments listed in the comment (Gopher Canyon Road and E. Vista Way). See revised TIS, pp. 130-131 [Gopher Canyon Road between E. Vista Way and I-15 SB Ramps] and p. 173 [E. Vista Way between Gopher Canyon and Osborne]. See also TIS Table 10.5.

I511-16 As noted in response to comment I511-15, the traffic study has been revised to address this comment. Mitigation measures are now recommended for both segments listed in the comment.

I511-17 Please refer to TIS Tables 4.1, 4.2, and 4.3 for all project phasing data, as well as Appendix H for a diagram of the individual project phases and their locations.

I511-18 As noted in response to comment I511-15, the traffic study has been revised to address this comment. Mitigation measures are now recommended for both segments listed in the comment.

I511-19 As noted in prior responses, subsequent to submittal of the comments, the Lilac Hills Ranch TIS was revised, in part, in response to the comments. In this regard, the traffic study was revised to recommend improvements at the Gopher Canyon Road/East Vista Way intersection to mitigate the direct project impact on the Gopher Canyon Road segment. (TIS, pp. 130-131.) The "rural community character" discussion has been removed from the traffic study.

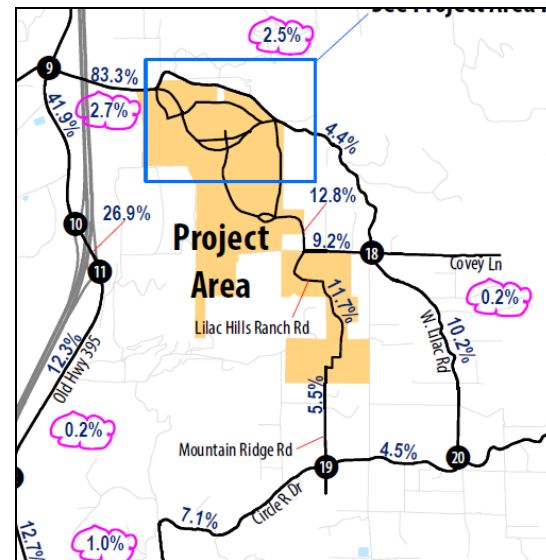
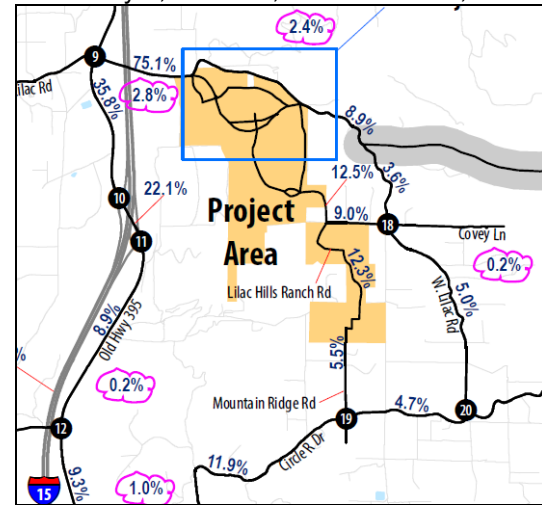
I511-20 Please see response to comments I511-4 through I511-7 above regarding the TIS trip generation rates and internal capture analysis.

As to the forecast traffic volumes on Mountain Ridge Road and Covey Lane, both would be less than the County's 2,500 ADT threshold:

Mountain Ridge Road: As documented in Section 7.0 of the TIS, Mountain Ridge Road would be gated and would provide access only for the senior community and assisted living south of Covey Lane, as well as the neighborhood park and the institutional (church) site. Thus, the majority of the project trips would not have access to Mountain Ridge Road. As shown in TIS Table 7.4, Mountain Ridge Road is forecasted to carry approximately 1,190 ADT under the horizon year plus project build-out condition.

1511-20 (cont.)

Covey Lane: As documented in Table 7.4 of the TIS, Covey Lane is forecasted to carry 1,390 ADT, less than the 2,500 ADT capacity



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10. Independent Analysis of Traffic Volume on Mountain Ridge and Covey Lane Secondary Access Roads:

As described on Page 240 of the TIS, the traffic volume forecasts for the horizon year were developed using a hybrid methodology. With the hybrid methodology, the SANDAG Series 12 model forecasts (for 2050) were used for freeways, and the County General Plan (based on SANDAG Series 10 for 2030) traffic volume forecasts were used as the starting point for traffic volume forecasts for Mobility Element Roadways (MER). These base (starting point) traffic volumes were used to develop traffic volume forecasts for other horizon year scenarios. The "Selected Zone" analyses for the proposed Lilac Hills Ranch project were based on the Series 12 model.

In the TIS, there are flaws in the application of the hybrid methodology, and the hybrid methodology itself introduces certain inconsistencies. Because of the flaws in the application and the inconsistencies inherent in the hybrid methodology, the horizon year traffic volume forecasts in the TIS are not reliable.

10a. Flaws in the application of the Hybrid Methodology:

Assuming for purposes of this discussion that the hybrid methodology does not have any inconsistencies, even though it does (see discussion below) there are flaws in the application of the methodology, discussed in the following bulleted paragraphs.

- Figure 9-2, on Page 245 of the TIS, presents "Roadway Average Daily Traffic Volumes-Horizon Year Base Conditions with Road 3". The traffic volume forecasts in Figure 9-2 do not match the traffic volumes shown in the SANDAG Model plot "County of San Diego GP Update EIR-2030 Planning Commission Recommended LOS and Volume Plot - Valley Center Area - 2030 Proposed Network, Model Run 09/03/10, Without Road 3A.

Examples of discrepancies (between Figure 9-2 and the GP Plot) in forecast daily traffic volume (not an all-inclusive list) are:

Location	Figure 9-2	GP Plot
W. Lilac Road, east of Old Highway 395	8,110	11,400
Circle R Drive, east of Old Highway 395	6,640	6,100
Old Castle Road, east of Old Highway 395	7,780	12,600
Old Highway 395, north of W. Lilac Road	13,790	16,500
Old Highway 395, south of W. Lilac Road	19,520	20,800
Old Highway 395, south of I-15 NB Ramps	13,960	14,300
W. Lilac Road, north of Circle R Drive	1,130	1,900

I511-21

I511-22

I511-21 The TIS utilized the appropriate traffic distribution methodology to forecast traffic volumes. The hybrid methodology was developed in coordination with SANDAG and Caltrans. Please see Attachment C to this response for additional documentation of the modeling approach.

I511-22 As noted in prior responses, subsequent to submittal of the comments, the original traffic study was revised, in part, to address the comment. In the original traffic study, approximately 80 percent of the total land uses in Traffic Analysis Zones (TAZ) 157 and 183 were replaced by the proposed Lilac Hills Ranch project. However, it was later determined that under the General Plan Update (GPU) only 110 dwelling units (DU) could be built within the LHR project site, thereby resulting in an over estimation of the reductions assumed in the original TIS. As a result, the Horizon Year was reanalyzed in the revised TIS consistent with the 110 DU GPU. The revised TIS was analyzed with the correct base year volume and land use. Please see Chapter 9 of the revised TIS for additional information responsive to the comment.

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No explanation for these discrepancies is provided in the TIS. The GP plot forecasts are generally higher than those in Figure 9-2. Therefore, whatever "smoothing" or "averaging" process was used for the adjustments, the net effect would be understatement of project impacts in the horizon year. A very clear example is W. Lilac Road. The GP Plot presents forecasts at two locations between Old Highway 395 and Main Street: 11,400 and 11,000. There is no justification for using 8,100 vehicles per day (vpd) as the base forecast in Figure 9-2 or in Table 9-1 on Page 242 in the TIS.

- Since the forecasts in Figure 9-2 are used as the base for estimating traffic volumes for other scenarios, the effect is carried forward throughout the horizon year analyses.

- Figure 9-3, on Page 249 of the TIS, presents "Roadway Average Daily Traffic Volumes - Horizon Year Base Plus Project Conditions with Road 3". In Figure 9-3 and in Table 9-3 on Page 251, the traffic volume forecast for W. Lilac Road between Old Highway 95 and Main Street is given as 18,990 vpd, just below the LOS E volume threshold of 19,000. If the correct base of 11,400 vpd had been used instead of the incorrect base of 8,110 vpd, the total traffic volume forecast would have been 22,200 vpd, resulting in LOS F.

- Figure 9-4, on Page 267 of the TIS, presents "Roadway Average Daily Traffic Volumes - Horizon Year Base Conditions without Road 3". In Figure 9-4 and in Table 9-7 on Page 263, the traffic volume forecast for W. Lilac Road between Old Highway 95 and Main Street is given as 1,870 vpd. Compared to the incorrect base of 8,110 vpd for this roadway segment, the difference of 6,240 vpd is attributable to route diversions due to the removal of Road 3. If then the reduction of 6,240 vpd is applied to the correct base of 11,400 vpd, the correct base traffic volume forecast for this condition would be 5,160 vpd. Since no explanation is presented about how the diversions were calculated, the validity of the numbers in this figure cannot be ascertained.

- In Figure 9-4, on Page 267 of the TIS, the traffic volume forecast of 5,030 vpd on W. Lilac Road just east of the project does not make sense because the traffic volume on Covey Lane is 200 vpd and the traffic on W. Lilac Road south of Covey Lane is 2,730 vpd. These two combined represent less than 3,000 vpd. So where is the rest coming from that makes up the forecast of 5,030 vpd?

- Figure 9-5, just before Page 268 of the TIS, presents "Roadway Average Daily Traffic Volumes - Horizon Year Base Plus Project Conditions without

Road 3". In Figure 9-5 and in Table 9-9 on Page 269, the traffic volume forecast for W. Lilac Road between Old Highway 95 and Main Street is given as 13,370 vpd, resulting in LOS D. If the correct base of 5,160 vpd had been used instead of the incorrect base of 1,870 vpd, the total traffic volume forecast would have been 16,660 vpd, resulting in LOS E (instead of LOS D as Chen Ryan reports), indicating a traffic impact.

I511-22
cont.

I511-23

I511-24

I511-25

I511-26

I511-23 Please see response to comment number 22.

I511-24 Since the SANDAG Series 10 regional transportation model is no longer available, the rerouting of vehicular traffic under the "Without Road 3" scenarios was calculated by comparing the key study area roadway volumes from the following two Series 12 SANDAG regional models:

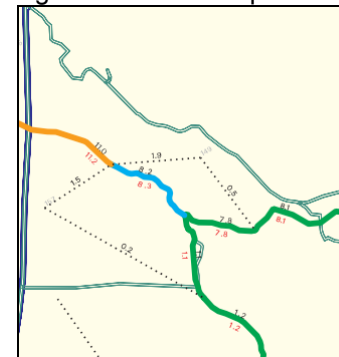
- Series 12 2050 with Road 3 with Project
- Series 12 2050 without Road 3 with Project

The effect of the Road 3 removal based on the above two models was applied to the Horizon Year Base traffic volumes.

Additionally, traffic from the Rancho Lilac project was also removed from the "without Road 3" scenarios since it would not be implemented because the property was purchased by SANDAG for mitigation and preserved within permanent open space. Please see TIS Section 9.0, General Plan Consistency Analysis, for additional information regarding the revised analysis.

I511-25 Please review TAZ 149 of the County of San Diego GP Update EIR-2030 Planning Commission Recommended LOS and Volume Plot - Valley Center Area - 2030 Proposed Network, Model Run 09/03/10, "Without Road 3A." The model includes 1,900 ADT added to W. Lilac Road from properties located northeast of W. Lilac Road. Adding this 1,900 ADT makes up the majority of the difference cited in the comment.

A screen shot of the daily traffic volumes generated by TAZ 149 in the County of San Diego General Plan update is provided below.



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10b. Inconsistencies in the Hybrid Methodology:

The planning horizon year for Series 12 is 2050. The County's General Plan, which the proposed project is seeking to amend, has a horizon year of 2030 and the traffic forecasts are based on the SANDAG Series 10 Regional Model. This difference in planning horizon years and the use of two different model Series introduces inconsistencies into the process of developing the horizon year forecasts in the TIS.

- The traffic forecasts for the freeways are based on Series 12 whereas the forecasts for the arterials are for 2030. There is no indication in the TIS that traffic volumes on surface streets in the vicinity of freeway interchanges were reviewed to ensure consistency with traffic on the freeway ramps. If the freeway ramp volumes are different in Series 10 and 12, adjustments on the surface streets would have been necessary. Since the Series 12 freeway volumes have been "calibrated" by SANDAG, the adjustments would need to be on the surface streets.
- County staff has indicated that SANDAG has used County General Plan full development land uses for both the Series 10 and Series 12 Model runs. However, there is no indication in the TIS that population and employment numbers by TAZ were compared to ensure that they are consistent. Since the TIS is going to be used to amend the Mobility Element (deletion of Route 3, changes in classification of some roads) in addition to assessing the traffic impacts of the proposed Lilac Hills Ranch project, it is essential that the TIS is using the correct tool (s) for the analysis.
- There is no indication in the TIS whether the Series 12 socio-economic projections for the incorporated areas near the Bonsall and Valley Center Planning Areas were reviewed to ensure that they are not substantially different in Series 12 compared to Series 10. Since there is and will continue to be substantial traffic interaction between the unincorporated areas and the municipalities (Escondido, Vista, Oceanside) for such purposes as work, shopping, medical, college/university, recreation, and others, it would be necessary to make such reviews before confidence can be placed in the hybrid methodology.
- The traffic forecasts for the roadways in the vicinity of the proposed Lilac Hills Ranch project would be a function of the socio-economic data forecasts. The TIS should have investigated and documented appropriate information to ensure that the hybrid methodology would be appropriate for a General Plan Amendment that involves the removal of a Mobility Element roadway without thorough review and evaluation, the validity of the tool used in the analyses cannot be ascertained.
- The selected link analyses used for allocating horizon year project trips to the roadway network were based on the Series 12 model. For the reasons outlined above, the reliability of the selected link runs cannot be ascertained.

I511-27

I511-28

I511-29

I511-30

I511-31

- I511-26 Please see response to comment I511-24 regarding use of the correct base.
- I51-27 Please see response to comment I511-21 regarding TIS use of the hybrid methodology and corresponding Attachment C to these responses.
- I511-28 The model assumes build-out of the land uses and calculates the traffic volumes accordingly. As long as the land uses are correct, it is not necessary to compare population and employment numbers to ensure consistency. Please see Attachment C to these responses for additional information responsive to the comment.
- I511-29 The model assumes build-out of the land uses and calculates the traffic volumes accordingly. As long as the land uses are correct, socio-economic data is irrelevant. Furthermore, the traffic models used for this TIS have been approved by both the County and Caltrans. Please see Attachment C to these responses.
- I51-30 The model assumes build-out of the land uses and calculates the traffic volumes accordingly. As long as the land uses are correct, socioeconomic data is irrelevant. Furthermore, the traffic models used for this TIS have been approved by both the County and Caltrans. Please see Attachment A to these responses for additional information responsive to the comment.
- I51-31 The SANDAG Series 12 model is the most up to date model available; thus, the Series 12 model was used to run the select zone analysis. The traffic models used for this TIS have been approved by both the County and Caltrans. Please see Attachment C to these responses for additional information responsive to the comment.

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In summary, the hybrid methodology used to prepare the horizon year traffic forecasts is not reliable because the process has inherent inconsistencies, because there were instances where the methodology was used incorrectly, and because thorough review, comparison, evaluation, and documentation of the two different model series is lacking. As a result, the traffic forecasts presented in the TIS are not reliable. A decision to make General Plan Amendments should be made using reliable forecasts developed with the appropriate tools.

151I-32

10c. Comments on Direct Impact Mitigation:

- The Mitigation of the LHR Direct Impacts has been identified as installing traffic signals at:
 - a) Old Highway 395 / W. Lilac Road intersection -signalized;
 - b) Old Highway 395 / Circle R Drive intersection -signalized;
 - c) I-15 SB Ramps / Gopher Canyon Road intersection -signalized; and
 - d) I-15 NB Ramps / Gopher Canyon Road intersection -signalized.

151I-33

Each of the above intersections needs to be assessed to identify the need to add turning lanes at each of the intersections.

ROAD STANDARD DESIGN EXEMPTION REQUESTS

11. The project proposes ten (10) Design Exceptions to County Road Standards. I have reviewed the Design Exceptions and have the following general comments and specific comments on each Design Exception. The approval of the Design Exceptions by the County needs to consider the safety and liability related to each request. The safety and liability related to the public roadways as well as the future residents within the Lilac Hills Ranch responsibility for the private roads. The following are my comments on each Design Exception request.

151I-34

1. West Lilac Road Bridge over I-15:

The proposed modification of the Bridge crossing over I-15 will require the approval of the California Department of Transportation (Caltrans) for compliance with design requirements and design exception procedures. Based on my experience with working on similar projects, any approval must come from Caltrans Headquarters in Sacramento. Therefore the approval of the Design Exception requested should not be approved until Caltrans concurrence is received.

2. West Lilac Road from the I-15 to Highway 395:

The amount of grading and necessary rights of way to accommodate the required improvements needs to be verified. The Design Exception also needs to be required to show the required improvements to include the addition of left turn lane on West Lilac Road at its intersection with Highway 395.

151I-35

151I-32 The comment summarizes the preceding comments 151I-21 to 151I-31. Please see the corresponding responses to comments 151I-21 to 151I-31.

151I-33 The implementation of additional turning lanes was considered as mitigation for the impacted intersections listed in the comment; however, it was determined that these intersections would operate at acceptable LOS without the need for additional turning lanes under Existing + Project conditions. See TIS Table 5.41 [I-15 SB & NB Ramps/ Gopher Canyon Road]; Table 5.15 [Old Hwy 395/W. Lilac Road and Old Hwy 395/Circle R Drive].

151I-34 The introductory comment is noted, and expresses the opinions of the commentator. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. The second part of the comment indicates that the proposed modification of the bridge crossing over I-15 will require the approval of Caltrans. However, as proposed, the design exception does not require Caltrans approval because the surface roadway is under the jurisdiction of the County and the County is responsible for maintaining the road in this location. Caltrans has jurisdiction over the actual bridge structure. If the project required alterations to the actual bridge structure (e.g. widening or reconfiguring), Caltrans approval would be required. As the proposed improvements and design exception in this location do not require alterations to the bridge, Caltrans concurrence on the design exception request is not required. Please see the revised TIS, pp. 4 to 13 for information regarding the proposed design exceptions.

151I-35 The comment is noted, and expresses the opinions of the commentator. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise an environmental issue with respect to the FEIR, no further response is required. Please see the revised TIS, pp. 4 to 13 for information regarding the proposed design exceptions.

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3. West Lilac Road from the Project Boundary to the I-15 Bridge:

The proposed Design Exception proposes the reduction in the shoulder area from 8 feet to 6 feet and placement of a retaining wall on the northside of Lilac Hills Ranch Road to provide a 2 foot separation from the curb and gutter. Both of these conditions need to be assessed by the County regarding safety and liability to not provide sidewalk/parkway on the northside of the road in the reduced shoulder areas.

151I-36

4. West Lilac Road from the westerly roundabout to the northerly boundary:

The justification for this Design Exception is that the ADT is very low. This is not true. The ADT with the project will be over 12,000.

151I-37

5. West Lilac Road (Along the North Project Boundary Modified 2.2F Section):

The proposed cross section is unclear. As a minimum the required minimum of 28 feet of pavement should be constructed. It is recommended that the alignment of Lilac Hills Ranch Road be reviewed to keep the required travel lanes and shoulder by moving the roadway to the south.

151I-38

6. West Lilac Road (East of the Easterly Roundabout) Modified 2.2F Section:

The construction of the Roundabout is proposed for traffic calming. The alignment of West Lilac Road and the Roundabout should be placed to not require any Design Exception.

151I-39

7. Reduced Design Speed on Mountain Ridge Road:

The County of San Diego Private Road Standards requires a vertical design speed of 30 MPH. The request to reduce the vertical speed to 15 MPH should only be considered after the applicant has designed the required improvements and contacted the affected property owners to obtain the necessary rights of way. With full development of the project we estimate the traffic on Mountain Ridge Road to exceed 2,500 ADT and require construction pursuant to the County's Public Road Standards.

151I-40

8. Mountain Ridge Road at Circle "R" Drive Taper:

The intersection Taper is a small problem. The existing alignment of Circle "R" Drive which is not within the existing road easement needs to be resolved first. If the existing road is to remain outside its dedicated rights of way, the applicant/County needs to determine the recommended ultimate location of Circle "R" Drive.

151I-41

9. Street C Modified Section:

The request to reduce the vertical design speed to 20 MPH from 25 MPH needs to be clarified and identify for the limits of the design speed reduction as well as the impact on the remainder sections of Street C.

151I-42

151I-36 The County has verified the amount of grading and rights of way needed to accommodate the required improvements. Additionally, the design exception for this section of West Lilac Road only affects the parkway width (the walkable portion of the right-of-way) and the north side shoulder. The design exception does not affect the pavement width of travel lanes or turn lanes. The project would include a signalized intersection with turn lane(s) at the West Lilac Road and Highway 395 intersection constructed to County standards without design exceptions. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise an environmental issue with respect to the FEIR, no further response is required. Please see the revised TIS, pp. 4 to 13 for information regarding the proposed design exceptions.

151I-37 The requested design exception is a reduction in design speed from 40 mph to 25 mph as the road enters the proposed roundabout; the justification relates to the operating speed of the proposed roundabout. (TIS, p. 8.) Please see the revised TIS, pp. 4 to 13 for information regarding the proposed design exceptions.

151I-38 The comment is noted, and expresses the opinions of the commentator. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise an environmental issue with respect to the FEIR, no further response is required. Please see the revised TIS, pp. 4 to 13 for information regarding the proposed design exceptions.

151I-39 The comment is noted, and expresses the opinions of the commentator. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise an environmental issue with respect to the FEIR, no further response is required. Please see the revised TIS, pp. 4 to 13 for information regarding the proposed design exceptions.

LETTER

RESPONSE

	<p>151I-40 The comment is noted, and expresses the opinions of the commentator. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise an environmental issue with respect to the FEIR, no further response is required. Please see the revised TIS, pp. 4 to 13 for information regarding the proposed design exceptions.</p> <p>151-41 The comment is noted, and expresses the opinions of the commentator. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise an environmental issue with respect to the FEIR, no further response is required. Please see the revised TIS, pp. 4 to 13 for information regarding the proposed design exceptions.</p> <p>151I-42 The comment is noted, and expresses the opinions of the commentator. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise an environmental issue with respect to the FEIR, no further response is required. Please see the revised TIS, pp. 4 to 13 for information regarding the proposed design exceptions.</p>
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LETTER

RESPONSE

Mr. Mark Jackson
August 16, 2013
Page 15

10. Street E – Modification Section:

The request to reduce the vertical design speed to 20 MPH from 25 MPH needs to be clarified and identify the limits of the design speed reduction as well as the impact on the remainder sections of Street E.

I511-43

12. Cumulative Projects

Review of Table 6.1 Cumulative Projects Page 191 Map Key #123 Orchard Run Major Subdivision (296 Lots) is identified as withdrawn. The Orchard Run Project is a valid project and needs to be included. The addition of this project will add significant volume traffic to West Lilac Road.

I511-44

In addition to the Orchard Run Project, recent Indian Casino Projects need to be included in the cumulative analysis.

13. Traffic Impact Fee

The Traffic Study and DEIR identify the payment of the County Traffic Impact Fee (TIF) to mitigate the projects cumulative impacts. Since the current TIF did not include the LHR in its analysis, the project needs to be conditioned to update the County TIF prior to issuance of building permits.

I511-45

At the time the DEIR and/or revised Traffic Study is completed I reserve the right to review and provide additional comments based on the recirculated DEIR and/or Final EIR for the project.

I511-46

Please feel free to contact our office should you have any questions.

Sincerely,
DARNELL & ASSOCIATES, INC.

Bill E. Darnell, P.E.
RCE: 22338

August 16, 2013
Date

BED/jam
130703 COMMENTS ON LILAC HILLS RANCH TIS 8-15-13

I511-43 The comment is noted, and expresses the opinions of the commentator. The comment will be included as part of the record and made available to the decision makers prior to a final decision on the proposed project. However, because the comment does not raise an environmental issue with respect to the FEIR, no further response is required. Please see the revised TIS, pp. 4 to 13 for information regarding the proposed design exceptions.

I511-44 As documented in TIS Table 6.1, on pages 232 and 234 respectively, both the Pala and Pauma Casino Projects were included as part of the cumulative impact analysis.

There was a text error in Table 6.1, revised Map Key #123 (page 240 of the TIS). In fact, the Orchard Run Project was included as part of the SANDAG Series 12 Year 2020 Regional Model. Please see Attachment D of this comment letter for documentation of the Orchard Run project, which was included as part of the cumulative model and was accounted for under the Existing + Cumulative + Project condition. As shown in Attachment D, the Orchard Run project was included in TAZ # 364 and TAZ 386. The increase of 325 Single Family dwelling units in both TAZ by the year 2020 is a very conservative estimate for the Orchard Run project. Hence, the cumulative traffic analysis is correct.

I511-45 Since the proposed project is seeking an amendment to the County of San Diego's General Plan, the proposed project will be required to update the County of San Diego's Transportation Impact Fee (TIF) Program. Through this process, the program fee calculations contained in the TIF program's nexus study will be updated to account for the General Plan land use and roadway network changes proposed by the project. With this required update, the TIF program will then accurately account for the proposed project land uses and identified cumulative transportation related impacts; therefore with the update, the projects cumulative transportation related impacts will be adequately accounted for and funded by the County of San Diego TIF program.

I511-46 The comment is noted.

Mr. Mark Jackson
August 16, 2013
Page 15

10. Street E - Modification Section:

The request to reduce the vertical design speed to 20 MPH from 25 MPH needs to be clarified and identify the limits of the design speed reduction as well as the impact on the remainder sections of Street E.

12. Cumulative Projects

Review of Table 6.1 Cumulative Projects Page 191 Map Key #123 Orchard Run Major Subdivision (296 Lots) is identified as withdrawn. The Orchard Run Project is a valid project and needs to be included. The addition of this project will add significant volume traffic to West Lilac Road.

In addition to the Orchard Run Project, recent Indian Casino Projects need to be included in the cumulative analysis.

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The Traffic Study and DEIR identify the payment of the County Traffic Impact Fee (TIF) to mitigate the projects cumulative impacts. Since the current TIF did not include the LHR in its analysis, the project needs to be conditioned to update the County TIF prior to issuance of building permits.

At the time the DEIR and/or revised Traffic Study is completed I reserve the right to review and provide additional comments based on the recirculated DEIR and/or Final EIR for the project.

Please feel free to contact our office should you have any questions.

Sincerely,
DARNELL & ASSOCIATES, INC.
Bill E. Darnell
Bill E. Darnell, P.E.
RCE: 22338



Date 8/16/2013

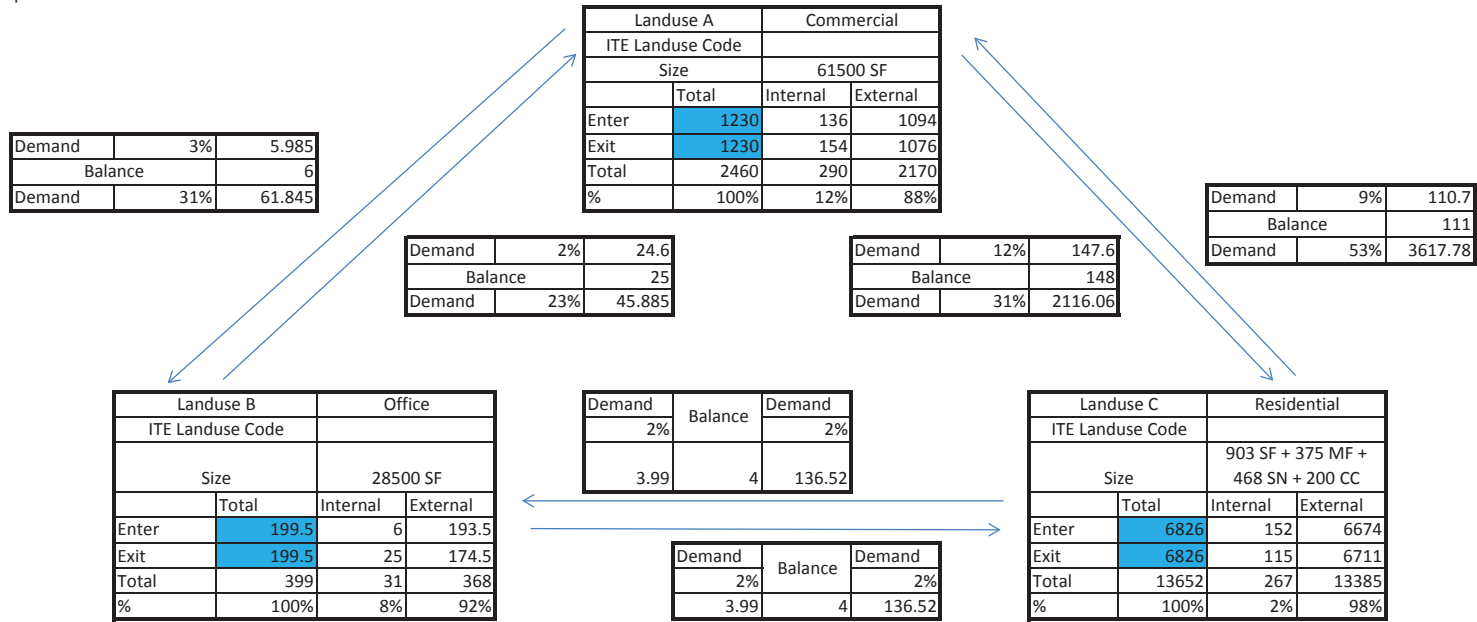
RE: 1000 COMMENTS ON LILAC HILLS RANCH TR 545-D

Attachment Darnell-A

ITE Multi-Use Trip Generation Calculation					
Primary Land Use	ADT	AM - In	AM - Out	PM - In	PM - Out
Residential (903 DU SF + 375 DU MF + 468 DU Senior Community + 200 Beds Congregate Care)	11,280	302	714	872	404
Commercial (61,500 SF)	2,460	44	30	111	111
Office (28,500 SF)	399	54	6	12	48
School (568 Elementary Students + 132 Middle School Students)	1,094	208	139	39	59
Recreation (40,000 SF Recreation Center + 23.8 Acres Park)	1,034	60	53	43	62
Church	321	10	6	13	13
Total Trips	16,588	1,625		1,787	
Total Internal Trips from Worksheet	3,683	581.5		398.5	
Internal Capture Percentage	22.2%	35.8%		22.3%	
Internal Capture Percentage used in TIS	22.00%	29.60%		21.60%	

ITE FIGURE 7.4 - Multi-Use Trip Generation Calculation

ADT

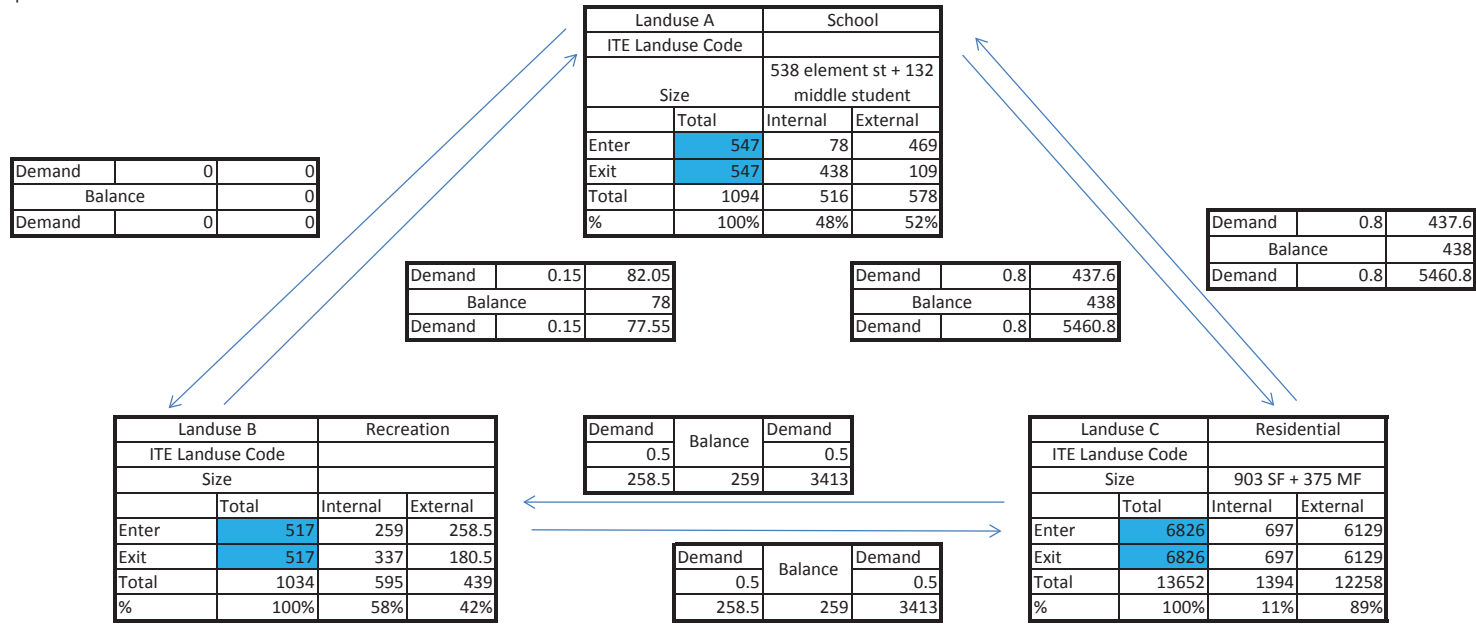


Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Total	
Enter	1230	199.5	6826	8255.5	
Exit	1230	199.5	6826	8255.5	
Total	2460	399	13652	16511	588
Single-Use Trip Gen. Est.	4920	798	27304	33022	2%

ITE FIGURE 7.4 - Multi-Use Trip Generation Calculation

ADT

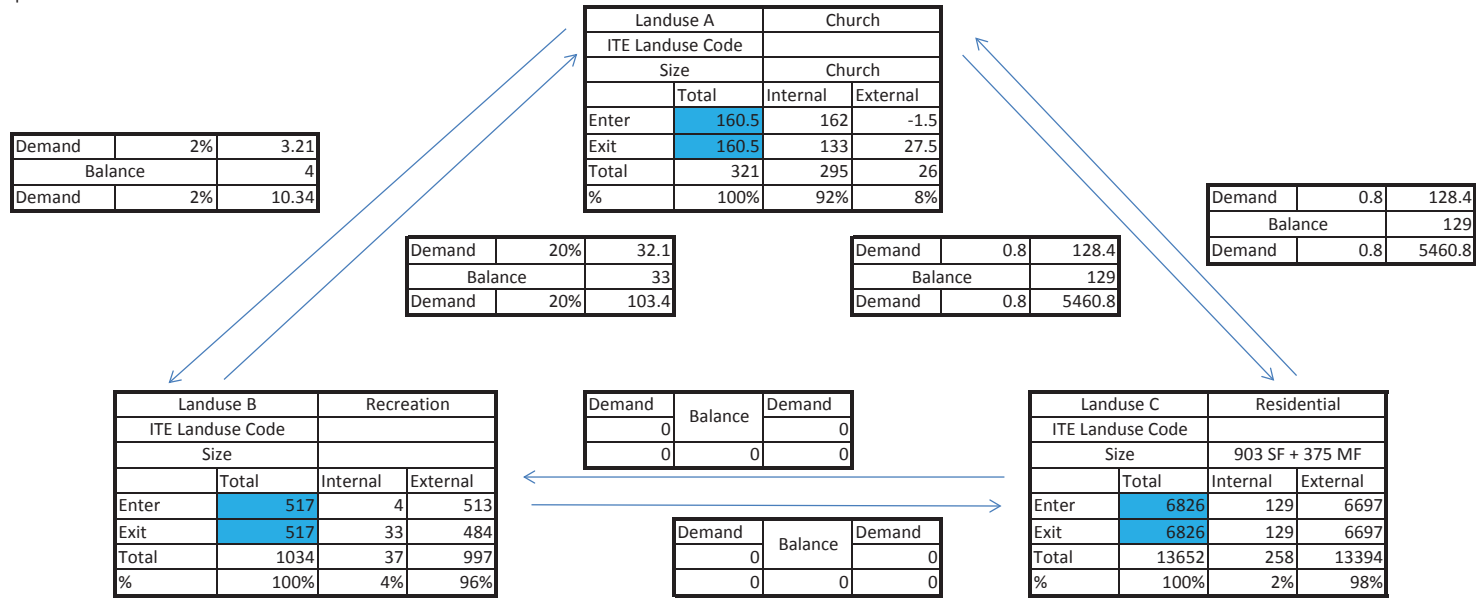


Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Total	
Enter	547	517	6826	7890	
Exit	547	517	6826	7890	
Total	1094	1034	13652	15780	2505
Single-Use Trip Gen. Est.	2188	2068	27304	31560	8%

ITE FIGURE 7.4 - Multi-Use Trip Generation Calculation

ADT

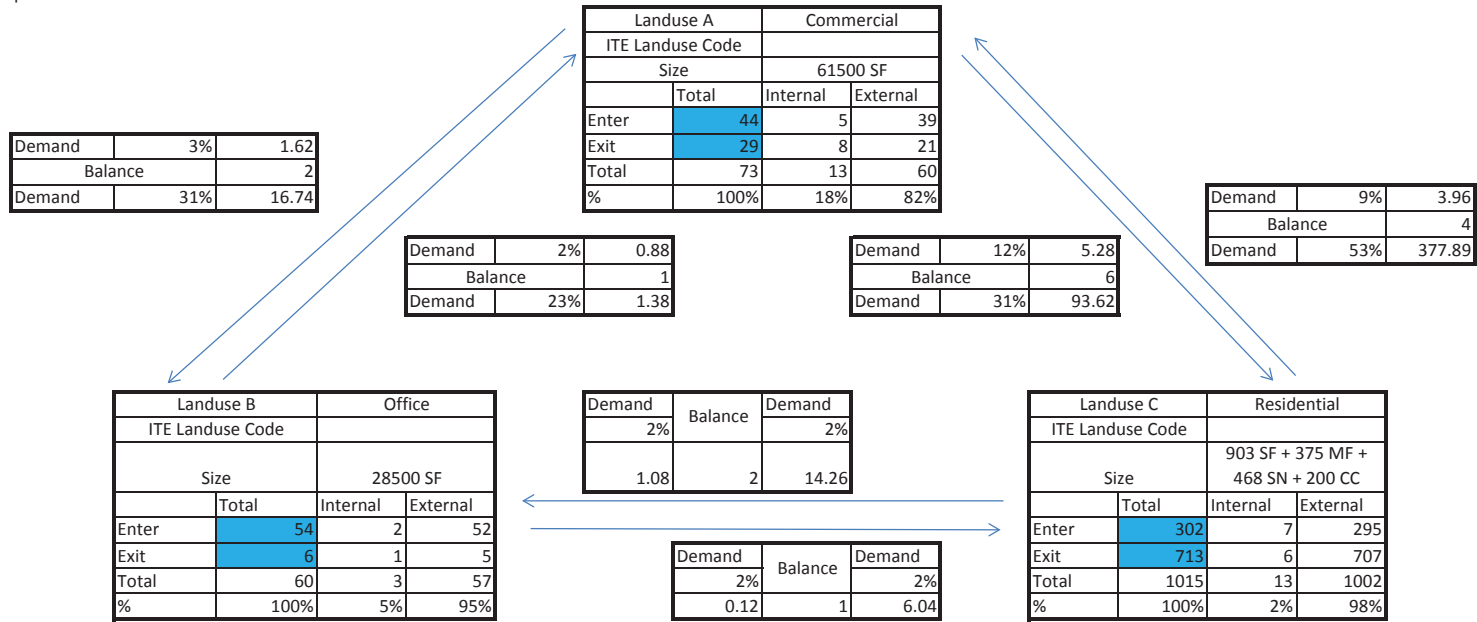


Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Total	
Enter	160.5	517	6826	7503.5	
Exit	160.5	517	6826	7503.5	
Total	321	1034	13652	15007	590
Single-Use Trip Gen. Est.	642	2068	27304	30014	2%

ITE FIGURE 7.4 - Multi-Use Trip Generation Calculation

AM PEAK

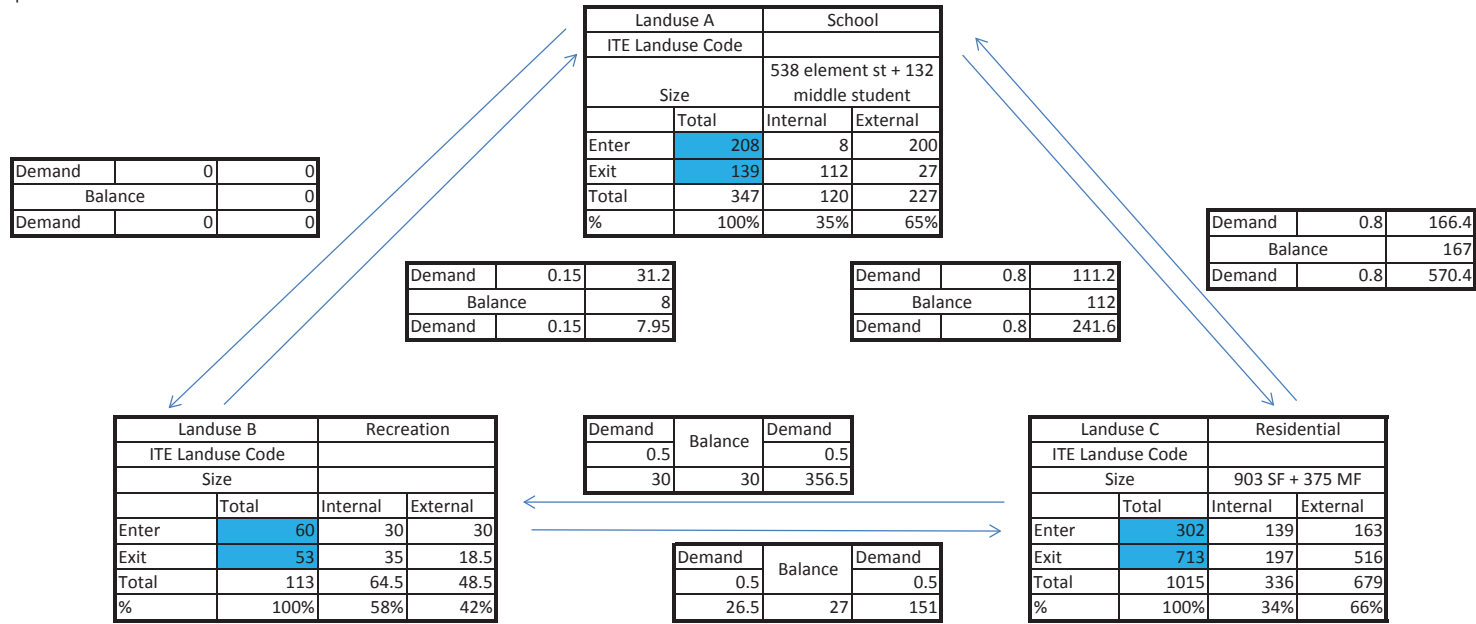


Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Total	
Enter	44	54	302	400	
Exit	29	6	713	748	
Total	73	60	1015	1148	29
Single-Use Trip Gen. Est.	146	120	2030	2296	1%

ITE FIGURE 7.4 - Multi-Use Trip Generation Calculation

AM PEAK

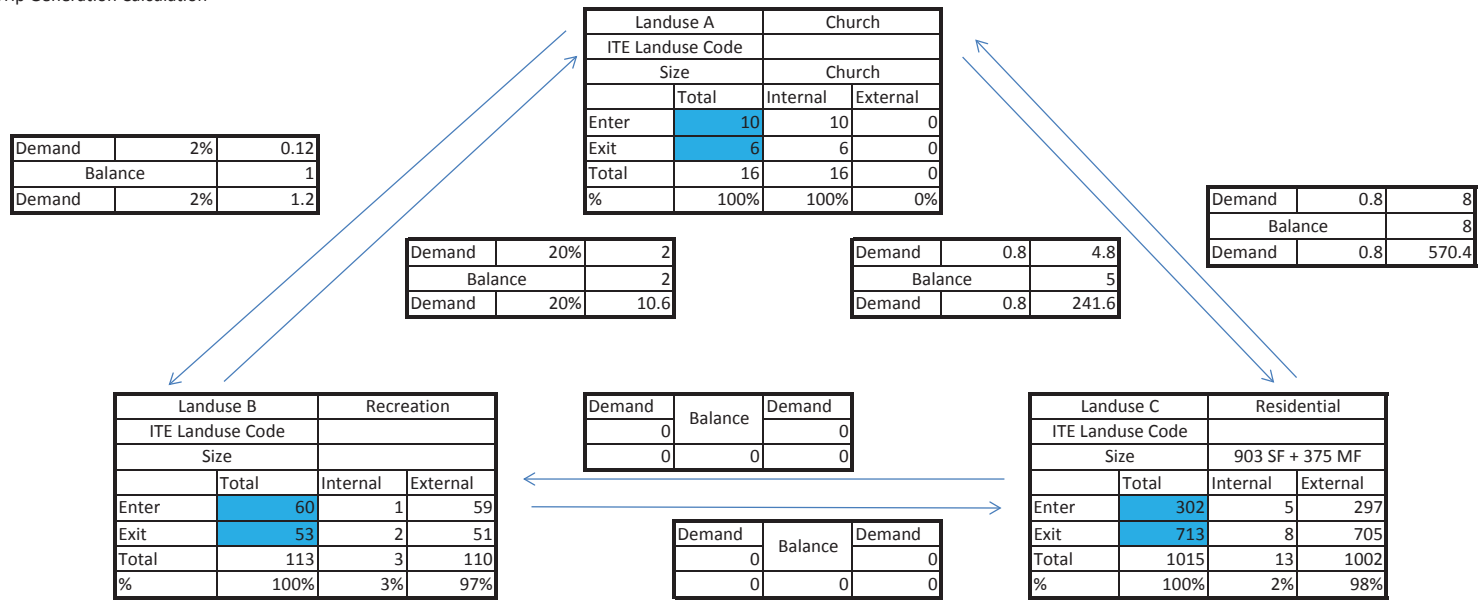


Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Total	
Enter	208	60	302	570	
Exit	139	53	713	905	
Total	347	113	1015	1475	520.5
Single-Use Trip Gen. Est.	694	226	2030	2950	18%

ITE FIGURE 7.4 - Multi-Use Trip Generation Calculation

AM PEAK

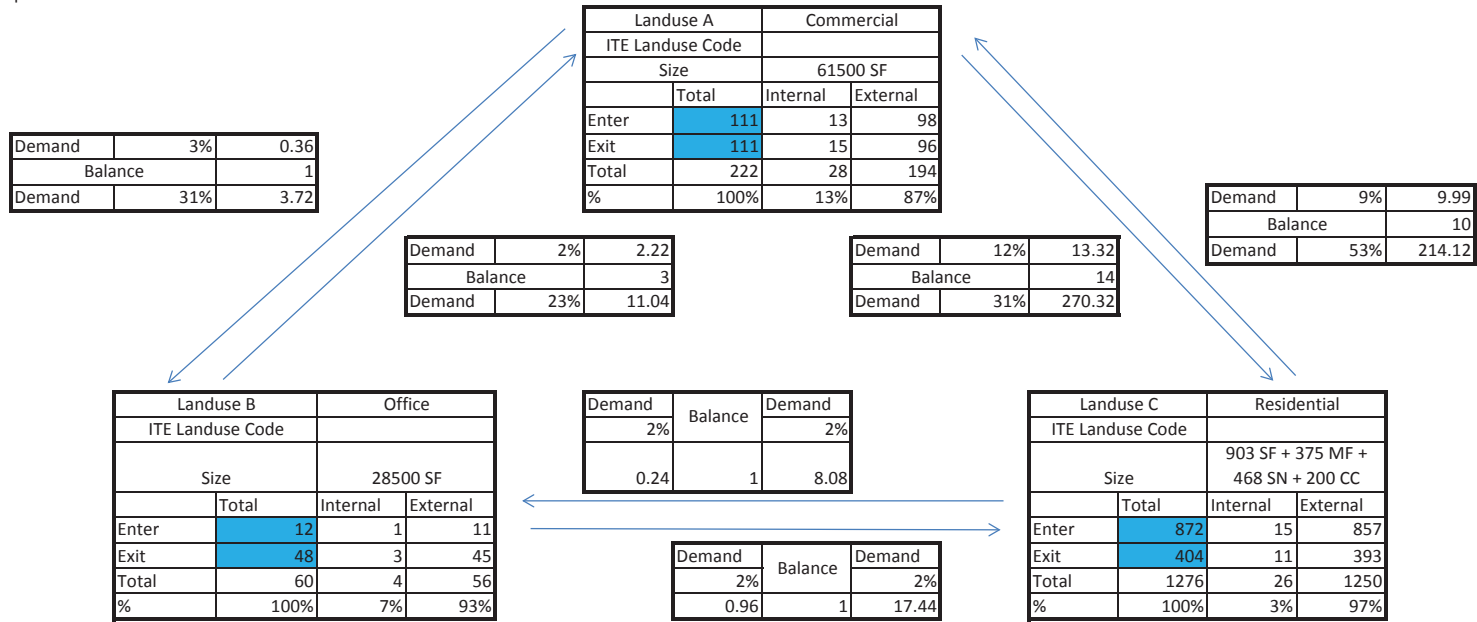


Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Total	
Enter	10	60	302	372	
Exit	6	53	713	772	
Total	16	113	1015	1144	32
Single-Use Trip Gen. Est.	32	226	2030	2288	1%

ITE FIGURE 7.4 - Multi-Use Trip Generation Calculation

PM PEAK

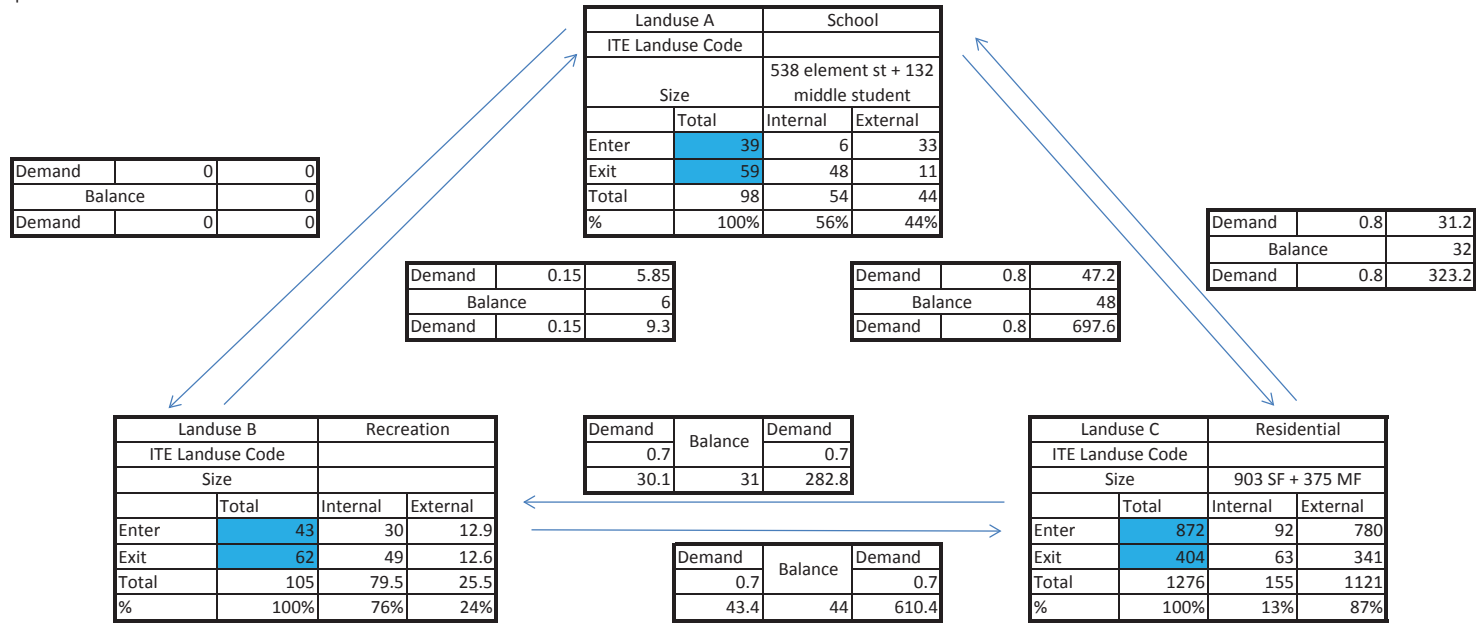


Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Total	
Enter	111	12	872	995	
Exit	111	48	404	563	
Total	222	60	1276	1558	58
Single-Use Trip Gen. Est.	444	120	2552	3116	2%

ITE FIGURE 7.4 - Multi-Use Trip Generation Calculation

PM PEAK

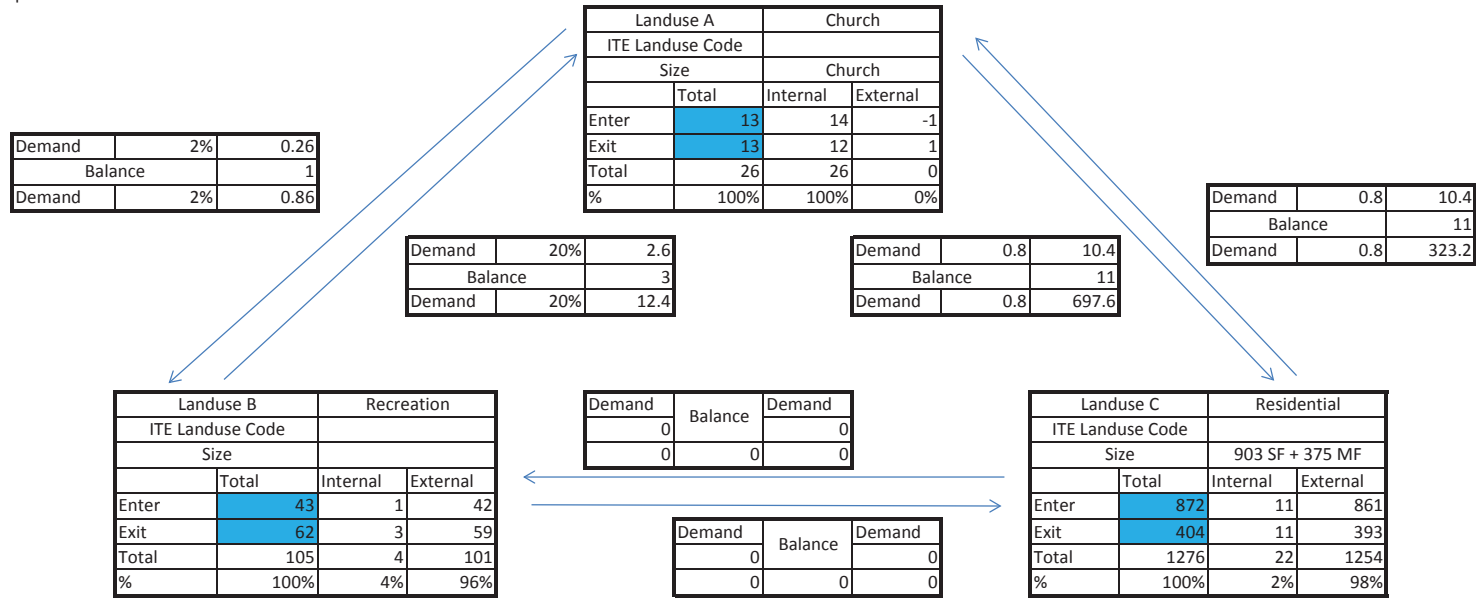


Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Total	
Enter	39	43	872	954	
Exit	59	62	404	525	
Total	98	105	1276	1479	288.5
Single-Use Trip Gen. Est.	196	210	2552	2958	10%

ITE FIGURE 7.4 - Multi-Use Trip Generation Calculation

PM PEAK



Net External Trips for Multi-Use Development

	Land Use A	Land Use B	Land Use C	Total	
Enter	13	43	872	928	
Exit	13	62	404	479	
Total	26	105	1276	1407	52
Single-Use Trip Gen. Est.	52	210	2552	2814	2%

Attachment Darnell-B

Landuse	Proposed Land Use	Modeled Land Use
Single Family	903 DU	903 DU
Multi-Family	375 DU	375 DU
Senior Community	468 DU	468 DU
Assisted Living	200 Beds	200 Beds
Specialty/Strip Commercial	61,500 SF	10.5 Acres
Office	28,500 SF	4.8 Acres
Country Inn / B&B	50 Rooms	50 Rooms
Church	10.7 Acres	10.7 Acres
Elementary School (K-5)	568 Students	1 Site
Middle School (6-8)	132 Students	0 Site
Recreation Center ¹	40,000 SF	2.0 Acres
Neighborhood/County Park	23.8 Acres	23.8 Acres
Water Reclamation	2.4 Acres	0.1 Acres
Recycling Center	0.6 Acres	3.0 Acres
Total Trips	19,428	18,849
External Trips	15,151	13,427
Internal Trips	4,278	5,422
Internal %	22.0%	28.8%

July 12, 2012

Mr. Nick Ortiz
County of San Diego
Department of Public Works
Transportation Planning Section
(858) 694-2410

SUBJECT: Lilac Hills Ranch – Approach to Traffic Forecast Modeling

Dear Nick:

The purpose of this letter is to document the traffic forecast modeling approach as per our recent meetings with County staff (7/6/2012) and Caltrans (7/12/2012).

Lilac Hills Ranch is a mixed use master planned community consisting of 1,746 dwelling units, a neighborhood-serving commercial village center, a congregate care facility, a school, a recreation center, various parks, a church, a bed and breakfast, a residential recycling drop-off/ buyback facility, and a green waste drop-off site. The project is generally located in the Valley Center Community Planning Area, and approximately ¼ mile east of Interstate 15 in the vicinity of the OldHwy395 Interchange.

As part of the traffic study, a horizon year analysis and SANDAG traffic model are required. The current Series 12 regional transportation model is in the process of being calibrated at the community plan level for the unincorporated County of San Diego and is estimated to take a few more months for model calibration and validation. The current Series 12 model, yet to be calibrated or validated, has been found to be forecasting roadway average daily traffic (ADT) volumes significantly different from those illustrated in the recently adopted General Plan Update Mobility Element (Series 10). Unfortunately, the Series 10 County GPU Model is no longer available for our use. In the intent to utilize the best available and defensible data for the CEQA-level traffic analysis, we are proposing the following approach:

County Facilities

- Utilize Series 10 GPU 2030 model forecast ADT as a starting point (as used in the County's GPA)
- Conduct a select zone assignment for the proposed Lilac Hills Ranch project in Series 12 and this will provide trip distribution and assignment, as well as the potential study area. The adopted GPU land use and network will be reflected in this model.
- Compare the trip generation between the adopted and proposed land uses for the subject TAZ.
- The delta of the trip generation along with the proposed project distribution will be used to derive the 2030 ADTs with the proposed project.

Caltrans Facilities

- Utilize Year 2050 of the Series 12 Regional Model as adopted along with the 2050 RTP. While this regional model is not calibrated at the arterial and local levels, it is calibrated and approved for use at the state facility level. Caltrans staff feel that this will be the most appropriate model to use for Caltrans facilities.
- The delta of the trip generation (between the adopted and proposed land uses for the subject TAZ) along with the proposed project distribution (from Series 12 Select Zone Assignment) will be used to derive horizon year with proposed project freeway/state highway segment ADTs.

Please feel free to contact me with any questions and/or comments. And please forward this letter to Maurice Eaton and Jacob Armstrong at Caltrans for confirmation. Thank you!

Sincerely,



Monique Chen, PE
Principal

Cc: Everett Hauser, County of San Diego
Mark Slovick, County of San Diego
Jacob Armstrong, Caltrans
Maurice Eaton, Caltrans
Randy Goodson, The Accretive Group of Companies
Jon Rilling, The Accretive Group of Companies

Attachment D

Orchard Run Land Use – Cumulative Conditions

The purpose of this document is to document the land use assumption for the Orchard Run Project under the Cumulative conditions. The Orchard Run project which is a part of both TAZ 364 and TAZ 386 in the unincorporated area of San Diego County was included as part of the SANDAG Series 12 Year 2020 Regional Model. This model was then used to develop the “Existing + Cumulative + Project” conditions.


Tables 1 and 2 display the land use for the Orchard Run project under the Base Year 2008 (Existing Conditions) for TAZ 364 and 386, respectively.

**TABLE 1
TAZ 364 LAND USE
BASE YEAR 2008 – EXISTING CONDITIONS**

<p align="center"><u>Final 2050 Regional Transportation Plan</u> San Diego Regional Traffic Forecast Information Center Trip Generation and Land Use by Zone - Year: 2008 Traffic Analysis Zone: 364</p>						
Land Use Code	Description	Type	Amount	Person Trips	Vehicle Trips	
101	SINGLE FAMILY	du	66	755	547	
4112	RIGHT-OF-WAY	acre	1.8	0	0	
8001	ORCHARDS OR VINEYARD	acre	181.6	23	18	

Source: SANDAG Series 12 Regional Model, August 2012

**TABLE 2
TAZ 380 LAND USE
BASE YEAR 2008 – EXISTING CONDITIONS**

<p align="center"> <u>Final 2050 Regional Transportation Plan</u> San Diego Regional Traffic Forecast Information Center Trip Generation and Land Use by Zone - Year: 2008 Traffic Analysis Zone: 386</p>						
Land Use Code	Description	Type	Amount	Person Trips	Vehicle Trips	
101	SINGLE FAMILY	du	15	173	125	
102	MULTI-FAMILY	du	0	0	0	

Source: SANDAG Series 12 Regional Model, August 2012

As shown in Tables 1 and 2, the sum of Single Family (SF) dwelling units under existing conditions is 81 SF units with the majority of the land use dedicated to Orchards and Vineyard.

Tables 3 and 4 display the land use for the Order Run project under the Cumulative conditions for both TAZ 364 and 386 respectively.

**TABLE 3
TAZ 364 LAND USE
CUMULATIVE CONDITIONS**

<u>Final 2050 Regional Transportation Plan</u>						
San Diego Regional Traffic Forecast Information Center						
Trip Generation and Land Use by Zone - Year: 2020						
Traffic Analysis Zone: 364						
Land Use Code	Description	Type	Amount	Person Trips	Vehicle Trips	
101	SINGLE FAMILY	du	326	3,642	2,639	
4112	RIGHT-OF-WAY	acre	1.8	0	0	
8001	ORCHARDS OR VINEYARD	acre	0.4	0	0	

Source: SANDAG Series 12 Regional Model, August 2012

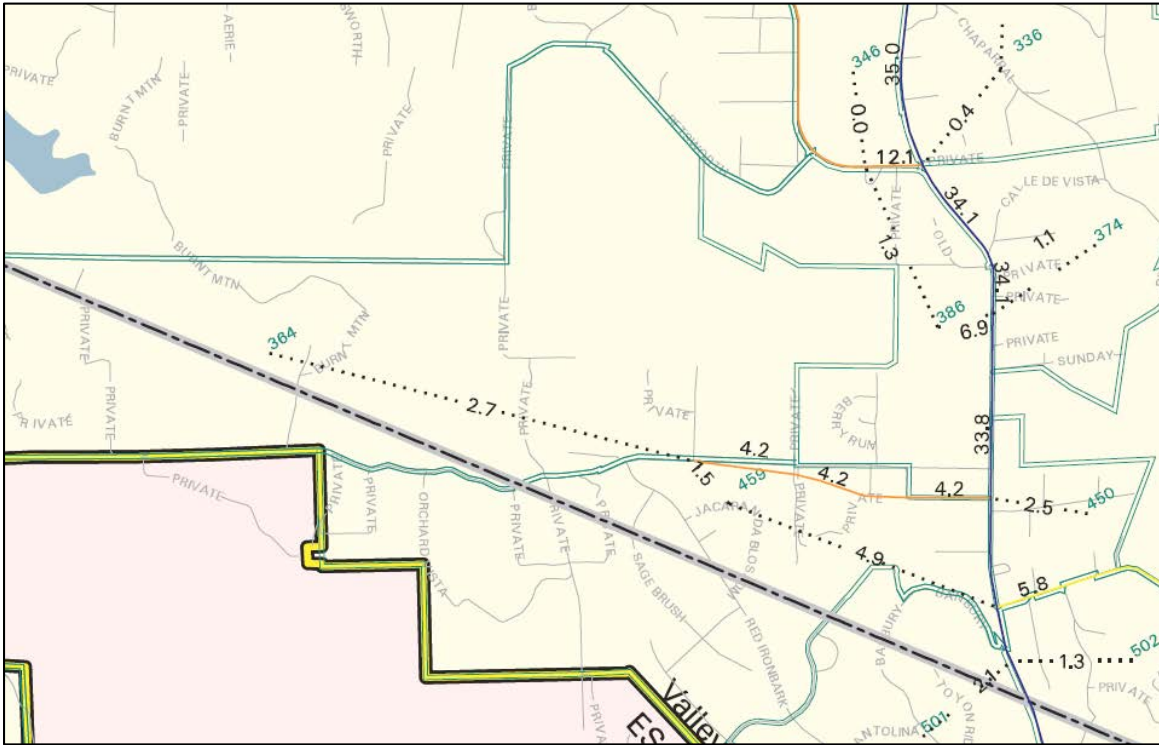
**TABLE 4
TAZ 380 LAND USE
CUMULATIVE CONDITIONS**

<u>Final 2050 Regional Transportation Plan</u>						
San Diego Regional Traffic Forecast Information Center						
Trip Generation and Land Use by Zone - Year: 2020						
Traffic Analysis Zone: 386						
Land Use Code	Description	Type	Amount	Person Trips	Vehicle Trips	
101	SINGLE FAMILY	du	80	902	648	
102	MULTI-FAMILY	du	0	0	0	

Source: SANDAG Series 12 Regional Model, August 2012

As shown above in Tables 3 and 4, the sum of SF units in both TAZ 364 and TAZ 386 is 406 SF units by the Year 2020, which is an increase of at least 325 SF units by the Year 2020. This increase in SF and decrease in Orchard or Vineyard Land Use resulted in additional traffic on the surrounding roadway network as shown in **Figure 1** below.

FIGURE 1
SANDAG SERIES 12 REGIONAL MODEL WITH CUMULATIVE PROJECTS
CUMULATIVE CONDITIONS



Source: SANDAG Series 12 Regional Model with Cumulative Projects, August 2012

The increase in traffic on the surrounding roadway network was accounted for during the development of the Cumulative conditions traffic volumes.