

Appendices

Appendix I2: VMT Memorandum

Appendices

This page intentionally left blank.

TECHNICAL MEMORANDUM

To: Nicole Vermilion
PlaceWorks

Date: April 21, 2022

From: Richard E. Barretto, P.E., Principal
Zawwar Saiyed, P.E., Associate Principal
Shane Green, P.E., Senior Transportation Engineer
Linscott, Law and Greenspan, Engineers

LLG Ref: 2.19.4099.1

***Vehicle Miles Traveled (VMT) Screening Assessment for
The Brea Mall Mixed-Use Project***

Subject: Brea, California

Engineers & Planners
Traffic
Transportation
Parking

**Linscott, Law &
Greenspan, Engineers**

2 Executive Circle
Suite 250
Irvine, CA 92614
949.825.6175 T
949.825.5939 F
www.llgengineers.com

Pasadena
Irvine
San Diego
Woodland Hills

Linscott, Law & Greenspan, Engineers (LLG) is pleased to submit this Vehicle Miles Traveled (VMT) Screening Assessment for the proposed Brea Mall Mixed-Use Project (herein after referred to as “Project”) in the City of Brea, Orange County, California. This Technical Memorandum presents a comparison of the Project’s anticipated VMT generation characteristics against the City of Brea screening criteria to determine if the Project is likely, or conversely unlikely, to have a VMT impact and if additional study is required. It should be noted that the approach and methodology outlined in this Technical Memorandum is consistent with the *City of Brea Transportation Impact Analysis (TIA) Guidelines (dated September 2020)*, which provides additional detail on the language and analysis procedures described in this Technical Memorandum.

The following sections of this Technical Memorandum summarizes the Project description, presents the City of Brea’s VMT screening criteria, analysis methodology and thresholds, and Project VMT.

PROJECT DESCRIPTION

The Brea Mall is an existing regional shopping center that is located in the City of Brea in northeast Orange County. The Brea Mall is located west of the State Route 57 (SR-57) Freeway and is generally bound by State College Boulevard to the east, Imperial Highway (State Route 91) to the south, Randolph Avenue to the west, and Birch Street to the north. **Figure 1** presents a vicinity map for the Project site. **Figure 2** presents an existing aerial of the Project site.

Existing Land Uses and Entitlements

The existing Brea Mall currently encompasses 1,291,433 square feet (SF) of Gross Leasable Area (GLA), of which 1,210,438 SF of GLA is occupied and consists of several major department stores and a central core of a mixture of retail shops and restaurant/food uses. Surrounding the retail core are several free-standing retail structures along the Brea Mall Circle, including the Olive Garden, Red Lobster, The Cheesecake Factory, and BJ’s Restaurant.

Philip M. Linscott, PE (1924-2000)
William A. Law, PE (1921-2018)
Jack M. Greenspan, PE (Ret.)
Paul W. Wilkinson, PE (Ret.)
John P. Keating, PE
David S. Shender, PE
John A. Boarman, PE
Clare M. Look-Jaeger, PE
Richard E. Barretto, PE
Keil D. Maberry, PE
Walter B. Musial, PE
Kalyan C. Yellapu, PE

As with any regional shopping center, the mall experiences periodic transitions in tenants and occupancy. The Sears department store, which is designated for demolition, was vacated in April 2018. However, currently first floor of the Sears department store has been re-occupied by Q's fashion retail store; the second floor of the Sears department store totaling 80,995 SF of GLA is currently still vacant.

Proposed Project Development

The proposed Project consists of the redevelopment of 15.0 acres in the southwest portion of the Brea Mall property that includes the Sears parcel and adjoining transition areas adjacent to Nordstrom and Macy's. The proposed Project involves demolishing the former Sears department store and associated auto center (161,990 SF) and approximately 7.5 acres of surface parking to allow for the development of a mix of uses including retail, new restaurants, for-rent residential apartment, a resort-type fitness center, and a public gathering space (large "central green" plaza). The total conceptual limit of disturbance for the proposed Project to the existing Brea Mall site is approximately 15.0 acres.

Based on a review of the description of the retail component of the proposed Project, up to 247,415 SF of additional retail space, inclusive of a 50,000 SF sporting goods store and a 128,000 SF health club will be constructed. The residential component of the proposed Project (Option 1), which would be developed south of the Nordstrom's parking structure, includes the development of a seven-story, 441,027 SF apartment podium with up to 383 apartment homes consisting of 28 studio units, 215 one-bedroom units and 140 two-bedroom units.

Table 1 provides the Project development summary. A review of **Table 1** indicates that upon completion of the Project, Brea Mall will have total GLA of 1,376,858 SF and a 383 unit apartment community. **Figure 3** presents the conceptual site plan for the Project, prepared by the architecture and design firm AO.

PROJECT SCREENING CRITERIA

Project screening is used to determine if a project will be required to conduct a detailed VMT analysis. The following section discusses the various screening methods outlined in the *City of Brea Transportation Impact Analysis (TIA) Guidelines (dated September 2020)*, and outlines whether the Project will screen-out of further analysis, either in its entirety, or partially based on individual land uses. Project components that screen-out are assumed to have no significant impact on transportation.

Step 1: Transit Priority Area (TPA) Screening

The *City of Brea Transportation Impact Analysis (TIA) Guidelines* (dated September 2020) states that:

Projects located within a TPA may be presumed to have a less than significant impact absent substantial evidence to the contrary. This presumption may NOT be appropriate if the project:

1. Has a Floor Area Ratio (FAR) of less than 0.75;
2. Includes more parking for use by residents, customers, or employees of the project than required by the City;
3. Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the City of Brea, with input from the Southern California Association of Governments [SCAG]); or
4. Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

Transit Priority Area (TPA) Assessment

TPA's are defined as a ½ mile area around an existing major transit stop or an existing stop along a high-quality transit corridor. Major transit stop means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. HQTAs are defined as a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

The existing Brea Mall includes the Brea Mall Transit Center, located on the eastern portion of the site. The transit routes that serve the Brea Mall Transit Center and their estimated arrival times for the both the AM peak hour and PM peak hour are listed below:

Transit Route	Direction	AM Peak Hour Arrival Times	PM Peak Hour Arrival Times
OCTA Route 57	Northbound	7:14, 7:29, 7:44	5:01, 5:25, 5:49
	Southbound	7:03, 7:18, 7:33, 7:42	5:21, 5:45
OCTA Route 129	Eastbound	7:27	5:06, 5:56
	Westbound	7:50	5:35
OCTA Route 143	Eastbound	--	5:55

	Westbound	7:07	4:58
OCTA Route 153	Northbound	7:11	5:01
	Southbound	7:28	5:13
OCTA Route 213	Northbound	--	5:47
	Southbound	--	--
Foothill Transit Route 286	Northbound	7:05	5:05
	Southbound	7:57	5:52

Based upon the transit service routes and frequencies outlined above, it is hereby determined that the Brea Mall Transit Center meets OPR's definition of a major transit stop and thus can be considered a TPA.

Floor Area Ratio (FAR) Assessment

Floor Area Ratio (FAR) is the relationship between the total amount of usable floor area of a development and the total area of the development lot.

Proposed Project

As described previously, the commercial component of the proposed Project is comprised of 247,415 SF of retail. The 383 unit apartment building will be five levels consisting of 441,027 SF of residential space over four levels of structured parking (two subterranean and two podium levels) totaling 421,355 SF that will provide parking for both the residential and health club uses. This results in a total development of 1,109,797 SF. Based on the conceptual limit of disturbance of 15.0 acres (equivalent to 653,400 SF) to the existing Brea Mall site, the FAR for the proposed Project can be calculated as follows:

$$\text{Project FAR} = \frac{1,109,797 \text{ SF}}{653,400 \text{ SF}} = 1.698$$

Based on the above calculation, it can be determined that the proposed Project has a FAR greater than 0.75.

Parking Assessment

To determine the number of parking spaces required for the proposed Project, the parking codes per *Section 20.08.040 Off-Street Parking and Loading* the City of Brea Municipal Code are as follows:

- **Shopping Centers:** five and one-half (5.5) spaces per 1,000 SF
- **Residential (2 or more dwelling units on one building site or lot):**

- ❑ Bachelor Unit: one and one-half (1.5) spaces per unit, of which one (1) space shall be located within a garage or three (3) sided carport
- ❑ One (1) Bedroom Unit: one and three-quarter (1.75) spaces per unit, of which one (1) space shall be located within a garage or three (3) sided carport
- ❑ Two (2) Bedroom Unit: two (2) spaces per unit, of which one (1) space shall be located within a garage or three (3) sided carport
- ❑ All Building Sites/Lots Containing Five (5) or More Units: two-tenths (0.2) guest parking space shall be provided for each dwelling unit, in addition to the required number of parking spaces stated above

Proposed Project

The City Code-based parking requirements for the proposed Project (Option 1) are presented below:

Project Description	Size	City of Brea Code Parking Ratio	Spaces Required
<u>Parking Requirement</u>			
▪ Shopping Center	247,415 SF	5.5 spaces per 1,000 SF	1,361
▪ Studio	28 Units	1.5 spaces per unit	42
▪ 1 Bedroom	215 Units	1.75 spaces per unit	375
▪ 2 Bedroom	140 Units	2 spaces per unit	280
▪ Guest	383 Units	0.2 spaces per unit	77
Parking Requirement:			2,135
<u>Proposed Parking Supply</u>¹			
▪ Parking Structure	421,355 SF	--	1,515
▪ Surface Stalls	--	--	89
Total Parking Supply:			1,604
Parking Surplus/Deficiency (+/-):			-531

As shown, direct application of the City Code parking ratios results in a total Code-based parking requirement of 2,135 spaces for the proposed Project. When compared against a proposed parking supply of 1,604 parking spaces, the proposed Project does not satisfy the City's parking requirements.

¹ Table 3-4a Brea Mall Surface and Structure Parking, Option 1, received December 2, 2021.

Sustainable Communities Strategy Assessment

The proposed Project is consistent with the applicable Sustainable Communities Strategy as directed by City staff.

Affordable Housing Assessment

Since the proposed Project does not include replacing existing affordable residential units, this criterion is not met.

Based on the above, the proposed Project can be determined to be located within a TPA. Therefore, it can be concluded that the proposed Project, based on City requirements, would be screened out from a VMT assessment and its VMT impacts are presumed to be less than significant.

Step 2: Low VMT Area Screening

Based on the *City of Brea Transportation Impact Analysis (TIA) Guidelines (dated September 2020)*, residential and office projects located within a low VMT-generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary as presented in *Attachment C Low VMT Area Map*.

Based on the above, the Project does not screen-out of further analysis since it is not located in a low VMT area per the Low VMT Area Map for the City of Brea.

Step 3: Project Type Screening

The *City of Brea Transportation Impact Analysis (TIA) Guidelines (dated September 2020)* states that:

- The following uses can be presumed to have a less than significant impact absent substantial evidence to the contrary as their uses are local serving in nature:
 - Local parks
 - Local-serving retail uses less than 50,000 square feet
 - Community institutions (public libraries, fire stations, local government)
 - Affordable, supportive, or transitional housing
 - Project generating less than 110 daily vehicle trips

Proposed Project

As outlined in **Table 2**, the proposed Project to replace existing Brea Mall retail and parking with additional commercial and residential uses is anticipated to result in a net addition in site generated traffic of approximately 3,159 trips on a typical weekday.

Based on the above, the proposed Project components do not screen-out since they do not fall within the categories listed above and they are anticipated to generate more than 110 daily vehicle trips

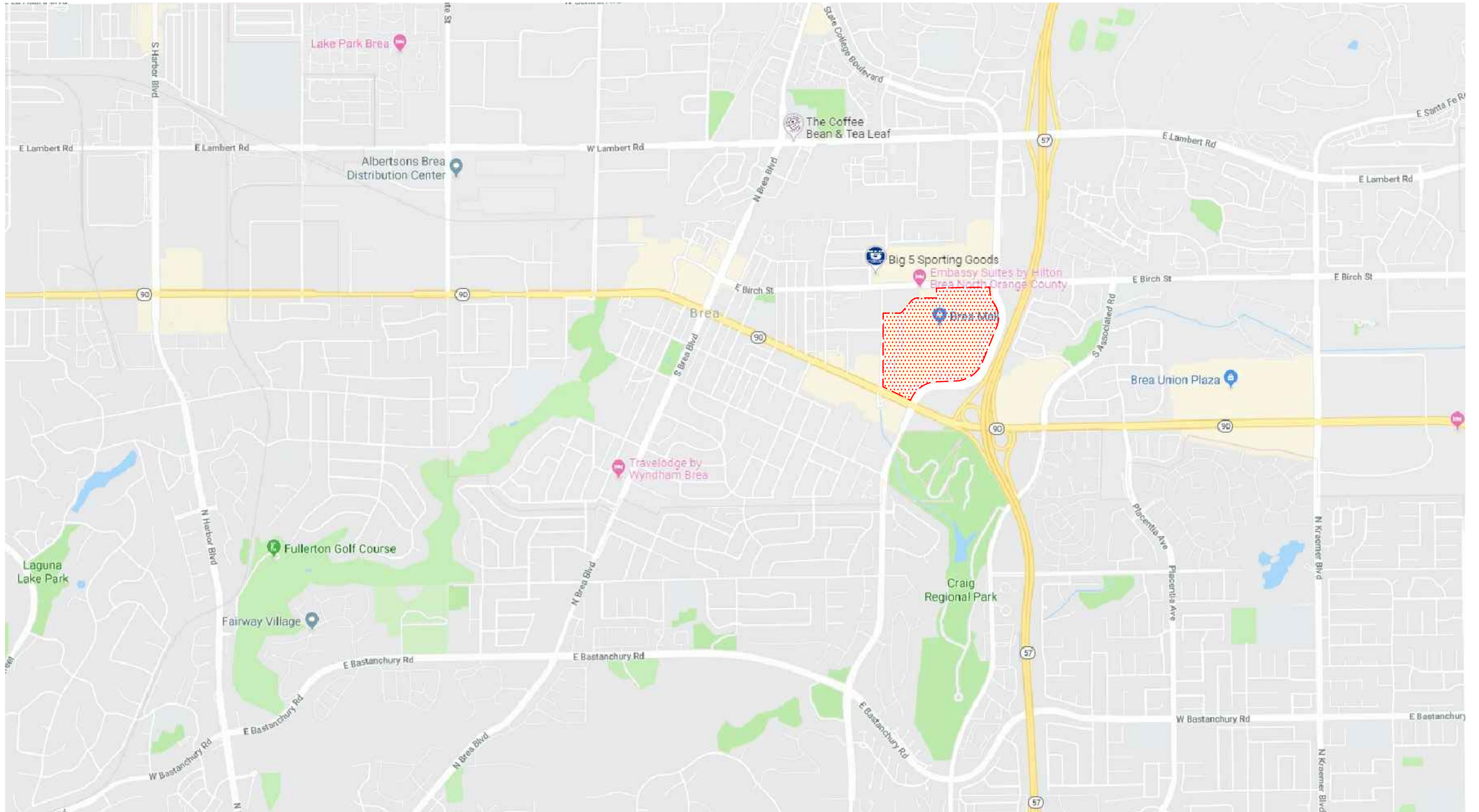
CONCLUSION

Consistent with the *City of Brea Transportation Impact Analysis (TIA) Guidelines (dated September 2020)* and based on the VMT methodology, criteria, guidelines, thresholds and results outlined in this Technical Memorandum, the proposed Project is located within a TPA. Therefore, in accordance with the City's guidelines, the proposed Project is assumed to have no significant CEQA related transportation impacts and thus no further VMT analysis is necessary or required.

* * * * *

We appreciate the opportunity to provide this Technical Memorandum. Should you have any questions regarding the memorandum, please contact us at (949) 825-6175.

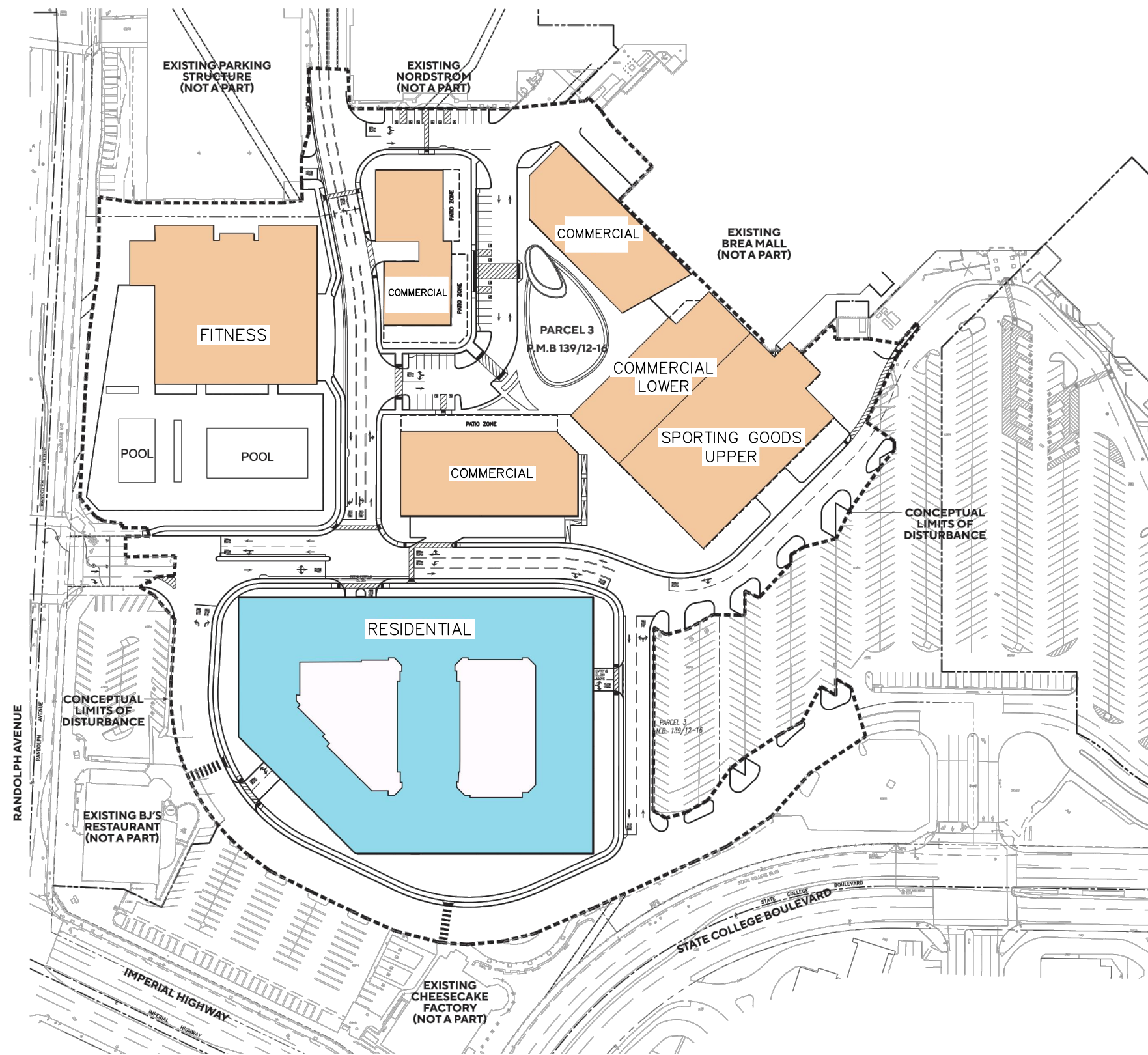
cc: File



n:\4000\2194099 - brea mall expansion & improvement, brea\mnt\6 - dwg\4099 f-1.dwg LDP 17:10:44 07-20-2021 li



n:\4000\2194099 - brea mall expansion & improvement, brea\mnt\6 - dwg\4099 f-2.dwg LDP 14:10:41 01-05-2022 lam



SOURCE: ARCHITECTURE AND DESIGN FIRM AO

TABLE 1
PROPOSED PROJECT DEVELOPMENT SUMMARY
BREA MALL MIXED-USE PROJECT, BREA

Land Use/Project Description	Development Totals
<u>Existing Occupied Brea Mall:</u>	
▪ Existing Occupied Mall	1,210,438 SF GLA
<u>Existing Occupied Brea Mall + Vacancy:</u>	
▪ Existing Occupied Mall	1,210,438 SF GLA
▪ Vacant Second Story Sears Tenant	<u>80,995 SF GLA</u>
<i>Fully Occupied Brea Mall</i>	<i>1,291,433 SF GLA</i>
<u>Existing Occupied Brea Mall + Proposed Project:</u>	
▪ Existing Occupied Mall	1,210,438 SF GLA
▪ Existing Occupied Mall to be Demolished	-80,995 SF GLA
▪ Proposed Project Commercial ²	
○ Sporting Goods	50,000 SF GLA
○ Fitness Center	128,000 SF GLA
○ Non-Anchor Mall Retail	<u>69,415 SF GLA</u>
<i>Existing Occupied Brea Mall + Proposed Project Subtotal</i>	<i>1,376,858 SF GLA</i>
▪ Proposed Project Multifamily Homes ³	
○ Studio	28 Units
○ 1 Bedroom	215 Units
○ 2 Bedroom	<u>140 Units</u>
<i>Proposed Residential</i>	<i>383 Units</i>

² Table 3-2 Brea Mall Mixed Use Project Land Use Summary, received December 2, 2021.

³ Table 3-3a Residential Building A Summary, received December 2, 2021.

TABLE 2
PROJECT TRAFFIC GENERATION RATES AND FORECAST⁷
BREA MALL MIXED-USE PROJECT, BREA

ITE Land Use Code/ Project Description	Weekday							Saturday			
	Daily 2-Way	AM Peak Hour			PM Peak Hour			Daily 2-Way	MD Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total		Enter	Exit	Total
<u>Trip Generation Factors:</u> • 221: Multifamily Housing (Mid-Rise) (TE/DU) ⁸ • 820: Shopping Center (TE/TSF GLA) • Health Club (TE/TSF) ¹⁰	5.44 Eq. ⁹ 27.44	26% 62% 1.02	74% 38% 0.51	0.36 Eq. ⁹ 1.53	61% 48% 1.85	39% 52% 0.97	0.44 Eq. ⁹ 2.83	4.91 Eq. ⁹ 26.35	49% 52% 1.04	51% 48% 1.79	0.44 Eq. ⁹ 2.83
<u>Existing Occupied Brea Mall:</u> • Existing Shopping Center (1,210,438 SF) Pass-by Reduction ¹¹ <i>Existing Occupied Brea Mall Subtotal</i>	32,766 <u>-3,277</u> 29,489	469 <u>-23</u> 446	288 <u>-15</u> 273	757 <u>-38</u> 719	1,651 <u>-165</u> 1,486	1,788 <u>-179</u> 1,609	3,439 <u>-344</u> 3,095	41,824 <u>-4,182</u> 37,642	2,308 <u>-231</u> 2,077	2,130 <u>-213</u> 1,917	4,438 <u>-444</u> 3,994
<u>Existing Occupied Brea Mall + Vacancy:</u> • Fully Occupied Shopping Center (1,291,433 SF) ¹² Pass-by Reduction ¹¹ <i>Fully Occupied Brea Mall Total</i>	34,241 <u>-3,424</u> 30,817	494 <u>-25</u> 469	303 <u>-15</u> 288	797 <u>-40</u> 757	1,732 <u>-173</u> 1,559	1,876 <u>-188</u> 1,688	3,608 <u>-361</u> 3,247	43,537 <u>-4,354</u> 39,183	2,429 <u>-243</u> 2,186	2,242 <u>-224</u> 2,018	4,671 <u>-467</u> 4,204
<u>Existing Occupied Brea Mall + Proposed Project:</u> • Proposed Shopping Center (1,248,858 SF) ¹³ Internal Capture ¹⁴ <i>Proposed Shopping Center Subtotal</i> Pass-by Reduction ¹¹ <i>Proposed Shopping Center Subtotal</i> • Proposed Health Club (128,000 SF) • Proposed Residential (383 DU) Internal Capture ¹⁴ <i>Proposed Residential Subtotal</i>	33,469 <u>-934</u> 32,535 <u>-3,254</u> 29,281 3,512 2,084 <u>-917</u> 1,167	481 <u>-1</u> 480 <u>-24</u> 456 131 36 <u>-1</u> 35	295 <u>-1</u> 294 <u>-15</u> 279 65 102 <u>-1</u> 101	776 <u>-2</u> 774 <u>-39</u> 735 196 138 <u>-2</u> 136	1,690 <u>-28</u> 1,662 <u>-166</u> 1,496 237 103 <u>-47</u> 56	1,830 <u>-48</u> 1,782 <u>-178</u> 1,604 125 66 <u>-28</u> 38	3,520 <u>-76</u> 3,444 <u>-344</u> 3,100 362 169 <u>-75</u> 94	42,642 <u>-842</u> 41,800 <u>-4,180</u> 37,620 3,373 1,881 <u>-827</u> 1,054	2,365 <u>-37</u> 2,328 <u>-233</u> 2,095 133 83 <u>-38</u> 45	2,184 <u>-39</u> 2,145 <u>-214</u> 1,931 229 86 <u>-36</u> 50	4,549 <u>-76</u> 4,473 <u>-447</u> 4,026 362 169 <u>-74</u> 95
<i>Existing Occupied Brea Mall + Proposed Project Total</i>	33,976	622	445	1,067	1,789	1,767	3,556	42,060	2,274	2,210	4,484
Net Trip Generation (Existing Occupied Brea Mall + Proposed Project) - (Existing Occupied Brea Mall + Vacancy)	3,159	153	157	310	230	79	309	2,877	88	192	280

Notes:
TE/DU = Trip End per Dwelling Unit
TE/TSF GLA = Trip End per Thousand Square Feet Gross Leasable Area
TE/TSF = Trip End per Thousand Square Feet

⁷ Source: *Trip Generation*, 10th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2017).
⁸ Mid-Rise Multifamily Housing consists of buildings that are between 3 and 10 levels.
⁹ Trip Generation rates based on the following equations:
▪ Weekday Daily: Ln(T) = 0.68Ln(X) + 5.57
▪ Weekday AM Peak Hour: T = 0.50(X) + 151.78
▪ Weekday PM Peak Hour: Ln(T) = 0.74Ln(X) + 2.89
▪ Saturday Daily: Ln(T) = 0.62Ln(X) + 6.24
▪ Saturday Peak Hour of Generator: Ln(T) = 0.79Ln(X) + 2.79
¹⁰ Source: *Northshore Mall Redevelopment Traffic Impact and Access Study*, prepared by vhb, dated April 2018. As there is no Sunday Daily and Sunday Midday peak hour empirical rates available, Saturday Daily and Saturday Midday peak hour empirical rates have been applied.
¹¹ The pass-by trip reductions applied to retail trips are 10% for Weekday Daily, 5% for Weekday AM peak hour, 10% for Weekday PM peak hour, 10% for Saturday Daily, 10% for Saturday Midday peak hour, 10% for Sunday Daily, and 10% for Sunday Midday peak hour.
¹² The fully occupied Brea Mall includes the existing 1,210,438 SF of occupied mall and 80,995 SF of second floor Sears vacancy.
¹³ The proposed Brea Mall includes the existing 1,210,438 SF of occupied mall, 80,995 SF of the occupied first floor of the Sears building to be demolished, and 119,415 SF of additional commercial.
¹⁴ Consistent with the *Trip Generation Handbook*, published by ITE (2017), Project trip generation was adjusted to account for internal capture between the retail and residential components of the Project. As there is no Saturday or Sunday internal capture worksheets available, Weekday Daily and Weekday PM peak hour calculations have been applied to Saturday Daily, Saturday Midday peak hour, Sunday Daily, and Sunday Midday peak hour.