

TABLE 2
LEVEL OF SERVICE DEFINITIONS FOR
STOP-CONTROLLED INTERSECTIONS

Level of Service	Average Total Delay (seconds/vehicle)
A	≤ 10.0
B	> 10.0 and ≤ 15.0
C	> 15.0 and ≤ 25.0
D	> 25.0 and ≤ 35.0
E	> 35.0 and ≤ 50.0
F	> 50.0

Source: Transportation Research Board, *Highway Capacity
Manual 2000*.

The Intersection Capacity Utilization (ICU) method of intersection analysis, per the City of Culver City guidelines, for analyzing signalized intersection conditions, was used to determine the intersection volume to capacity (V/C) ratio and corresponding level of service at each study intersection. A capacity of 1,600 vehicles per lane per hour and 2,880 for dual left-turn lanes was assumed in the capacity calculations in accordance with the guidelines. Table 1 defines the ranges of V/C ratios and corresponding levels of service for signalized intersections.

The Highway Capacity Manual (HCM) 2000 method for stop-controlled intersection analysis was used to determine the delay (in seconds) and corresponding level of service at the stop-controlled intersections. The intersection delay is defined as the average delay experienced by drivers at the intersection. Table 2 defines the ranges of delay and corresponding levels of service for unsignalized intersections.

Existing Levels of Service

The existing traffic volumes presented in Figure 2 for AM and PM peak hours, respectively, were used in conjunction with the level of service methodologies described above and the current intersection characteristics illustrated in Appendix B, to determine the existing operating conditions at the analyzed intersections.

Table 3 summarizes the results of the intersection capacity analysis for existing conditions at each of the four intersections in the study area. The table indicates the existing V/C ratio (or delay) during the morning and evening peak hours and the corresponding LOS at the study intersections. As indicated in the table, all four of the study intersections are currently operating at LOS B or better during both the morning and evening peak hours. LOS B, as defined in Table 1, indicates very good operations, while LOS A indicates excellent operations.

Capacity calculation worksheets for Existing (2007) Baseline conditions are provided in Appendix D of the report.

TABLE 3
EXISTING (2007) BASELINE INTERSECTION LEVEL OF SERVICE ANALYSIS

No.	Intersection	Existing (2007) Baseline Conditions			
		AM Peak Hour		PM Peak Hour	
		V/C or Delay	LOS	V/C or Delay	LOS
1.	Lafayette Place & Culver Boulevard	0.483	A	0.469	A
2.	Lafayette Place & Braddock Drive	12.7 sec	B	10.6 sec	B
3.	Irving Place & Culver Boulevard	0.583	A	0.575	A
4.	Irving Place & Braddock Drive	11.8 sec	B	8.1 sec	A

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EXISTING TRANSIT LINES

Four bus lines currently serve the study area. Three bus lines are operated by the Culver City Bus (CC) and one bus is operated by Los Angeles Department of Transportation (CE). These transit lines are described in the following section:

- CC Line 1 – Line 1 is a local east/west line that provides service from Venice through Culver City to West Los Angeles and travels primarily along Washington Boulevard in the vicinity of the study area. This line runs everyday, including holidays, at a peak frequency of approximately 12 minutes during peak commute hours. The western terminus is at the intersection of Main Street/Windward Circle in Venice. The eastern terminus is at the intersection of Fairfax Avenue/Washington Boulevard in West Los Angeles.
- CC Line 5 – Line 5 is a local east/west line that provides service from Venice High School on the west to Blair Hills on the east and travels primarily along Braddock Drive, Madison Avenue, and Culver Boulevard within the study area. This line runs Monday through Friday with service only available on school days during the morning and afternoon peak hours. Weekend and holiday service is not provided. The western terminus is at Venice High School. The eastern terminus is at intersection of La Cienega Boulevard/Rodeo Road in the Blair Hills neighborhood of Culver City.
- CC Line 7 – Line 7 is a recently added local east/west line that provides service from Marina Del Rey to Culver City and travels primarily along Culver Boulevard within the study area. This line runs Monday through Saturday at a frequency of approximately 40 minutes. Service on Sundays and holidays is not provided. The western terminus is at Fisherman's Village in Marina Del Rey. The eastern terminus is at the intersection of Culver Boulevard/Venice Boulevard in Culver City.
- LACE 437 - Line 437 is a commuter express east/west line that provides service from Downtown Los Angeles to Venice and travels primarily along Culver Boulevard within the study area. This line runs Monday through Friday at a frequency of 25 minutes during peak commute hours. The western terminus is at the intersection of Pacific Avenue and Washington Boulevard in Venice. The eastern terminus is at the intersection of San Pedro Street and Temple Street Drive in Los Angeles.

III. FUTURE YEAR 2008 TRAFFIC PROJECTIONS

In order to properly evaluate the potential impact of the proposed project on the local street system, estimates of the Future Year 2008 traffic volumes both with and without the project were developed. The Future Year 2008 without the project was first developed including estimates for background growth in area-wide trip making and trips generated by future developments in the vicinity of the study area. The Future (2008) without project traffic represents the cumulative base conditions. The traffic generated by the proposed project was then estimated and assigned separately to the street system. The addition of the project traffic and the cumulative base traffic represents the Future Cumulative (2008) Plus Project conditions. Each of these future traffic scenarios is further described in this chapter.

CUMULATIVE (2008) BASE TRAFFIC PROJECTIONS

The Cumulative (2008) Base traffic projections reflect growth in traffic from two primary sources: Firstly, the background or ambient growth to reflect the effects of overall area-wide regional growth both within and outside the study area; and secondly, from traffic generated by specific cumulative projects located within, or in the vicinity of, the study area. Each of these components is described below.

Area-wide Ambient Traffic Growth

The traffic in the vicinity of the study area has been estimated to increase at a rate of about 1% per year. Future increases in background traffic volumes due to regional growth and development are expected to continue at this rate. With the assumed completion date of 2008, the existing 2007 traffic volumes were adjusted upward by a factor of 1% to reflect this area-wide regional growth.

Cumulative Project Traffic Generation and Assignment

As indicated, the second potential source of traffic growth in the study area is that expected from other future development projects in the vicinity. These "cumulative projects" are those developments that are planned and expected to be in place within the same timeframe as the Proposed Project. Data describing cumulative projects in the area was solicited from the City of Culver City. Sixty cumulative projects from the City of Culver City, City of Los Angeles and County of Los Angeles were identified within the study area. The related projects included in this study are described in Table 4. The locations of these projects are shown in Figure 3.

The trip generation estimates for the related projects were based on different sources including rates from recently completed traffic studies for projects in Culver City and trip generation rates contained in the Institute of Traffic Engineers (ITE), Trip Generation Informational Report, 7th Edition. These rates are provided in Appendix E. The trip generation estimates for the related projects is shown in Table 5. As summarized in Table 5, the cumulative projects are expected to generate approximately 65,176 daily trips, of which 5,857 trips would occur during the morning peak hour and 6,581 trips would occur during the evening peak hour.

The geographic distribution and the traffic assignment of the cumulative projects were performed. The results are shown in Figure 4. These related projects' traffic estimates were added to the existing plus ambient growth traffic to obtain the Cumulative (2008) Base traffic volumes. Figure 5 provides the Cumulative (2008) Base traffic volumes at each of the analysis intersections during both AM and PM peak hours. These volumes represent Future Cumulative (2008) without project base conditions.

It is worth noting that two major projects in the area are anticipated to be constructed beyond the timeframe of the proposed project. The first project is the Metro Rail Mid-City/Exposition Light Rail Transit (LRT) Project that is anticipated to be completed by June 2010. This project is an extension of the 62-station Metro Rail System. As proposed, the first phase of this LRT project would construct a 9.6-mile line extending along the Metro-owned Exposition right-of-way from the existing Metro Rail Station at 7th Street/Metro Center in downtown Los Angeles to Robertson Boulevard/Washington Boulevard in the City of Culver City. Construction of the

project began in 2006. As summarized in the *Mid-City/Westside Transit Draft Environmental Impact Statement/Environmental Impact Report*, April 2001, this project would decrease total daily vehicle trips by approximately 20,500 countywide.

The other major project is the Washington-National Specific Plan Project. The Phase 1 of this project is anticipated to be constructed by 2012. The project includes 1,950 dwelling units, 244,200 square feet of retail use, and 164,000 square feet of office use.

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TABLE 4
LIST OF RELATED PROJECTS [1]

Map No.	Project	Location	Description
City of Culver City			
1	Mixed Use Development	10100 Culver Bl	59 condominium units and 8,200 GSF of commercial
2	Sony	10202 Washington Bl	49,516 GSF addition to Stage 6; converting to office
3	Sony	10202 Washington Bl	Approved to build 986,000 GSF of office, post-production, stage, and support uses until 2026
4	Live/ work lofts	10839 Washington Bl	3 Live/ Work units and parking for 12 cars
5	Veterinary Clinic	11182 Culver Bl	7,000 GSF veterinary clinic with caretaker unit
6	Mixed Use Development	11281 Washington Pl	17,500 GSF mixed use project w/ retail and residential.
7	Culver City Muffler	11333 Washington Bl	2,500 GSF Muffler Shop
8	FAYNSOD	11501-11509 Washington Bl	Mixed Use: 3 Retail & 3 Apts.
9	The Olson Co. Mixed Use	12337-12449 Washington Bl	Mixed-use project consisting of 13,340 GSF of commercial and 80 residential units.
10	West- Culver Lofts	12801-23 Washington Bl	24 units; 12 live/work, and 12 residential lofts
11	Commercial & Retail Development	13322 Washington Bl	4,257 GSF commercial
12	Encore	13424-13464 Washington Bl	36,000 GSF retail, 71 residential units
13	Live/ work units	13340 Washington Bl	41 unit condominium development with 8 live/work condominium units in Culver City and 35 Units in LA
14	Westfield Fox Hills Mall Expansion	200 Fox Hills Mall	293,786 GSF retail and 427 parking spaces
15	Echo Horizon School Expansion	3430 McManus Av	Expansion of 5,935 GSF to accommodate 40 additional students
16	Distribution & Warehouse	3434 Wesley St	10,500 GSF of office, warehouse, & distribution
17	Office Bldg.	3505 Hayden Av	151,000 GSF
18	Huron Townhouses	3823-3833 Huron Av	15 new townhouses, demo 3 existing
19	Condominiums	3838 Tilden Av	4 condominium units
20	Condominiums	3846 Bentley Av	4 condominium units
21	Condominiums	3873 Bentley Av	Two condominium air lots; TPM, CE
22	Condominium Conversion	3910 Girard Av	7 condominium units
23	Condominiums	3915 Bentley Av	4 condominium units
24	Park Century School	3939 Landmark St	Conversion of industrial space to school use and additional 8,950 GSF.
25	Hampton Inn	3954 Sepulveda Bl	77-unit hotel
26	Four unit condominium	3972 Tilden Av	4 condominium units
27	Four unit condominium	4014 Van Buren Pl	4 condominium units
28	Four unit condominium	4025 Wade St	4 condominium units
29	Condominiums	4047 Lincoln Av	4 condominium units
30	Grandview Palms	4061 Grandview Bl	62,737 GSF multi-unit care facility
31	TTM, Eight Unit Condo	4067/4073 Lincoln Av	8 unit residential, 2,000 GSF; 20 parking spaces provided
32	TPM, Condominiums	4122/26 Lincoln Av	Two 2-unit condominiums, 2,097 GSF proposed unit; 14 parking spaces provided
33	4227 Ince Blvd.	4227 Ince Bl	6 condominium units on a 3 lot subdivision
34	Office & Retail Bldg.	4447 Sepulveda Bl	9,000 GSF
35	Chevron Gas Station	5975 Centinela Av	3,314 GSF Gas Station
36	Fire Station No. 3	6030 Bristol Pkwy	Two-story, 12,158 GSF fire station
37	Office & Retail Bldg.	700-701 Corporate Pointe	240,612 GSF office; 4,242 GSF retail
38	Symantec Office Multiphase Dev.	800-900 Corporate Pointe	550,000 GSF office, research/development, parking
39	Conjunctive Points Theater Complex	8511 Warner Dr	101,551 GSF of office space; 31,110 GSF of retail; 18,076 GSF of restaurant; 3 theaters with total capacity of 3,100 seats; and 1,479 parking spaces.
40	Public Storage Expansion	8512 National Bl	Addition of 71,570 GSF to an existing public storage facility
41	Max Leather AUP	8533 Washington Bl	3,763 GSF additional manufacturing
42	Mixed Use Development	8601-8637 Washington Bl	26,000 GSF office/residential
43	Surfas Restaurant Supplies	8777 Washington Bl	Reoccupy a 14,856 GSF bldg. w/ retail and take-out food service
44	SPE Television Bldg. (Higuera/Ince)	9050 Washington Bl	27,000 GSF office
45	Culver City Transfer Station	9255 Jefferson Bl	Increased throughput from 500 to 1,056 tons per day.
46	Parcel B	9300 Culver Bl	115,108 GSF of office, restaurant, and retail space.
47	Culver Studios Expansion	9336 Washington Bl	Addition of approximately 50,000 GSF of office and one parking structure. Demo of smaller buildings.
48	Office Building	9343 Culver Bl	4 story office building (16,821 GSF) with ground floor retail or restaurant. Demolish existing commercial building.

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TABLE 4 (continued)
LIST OF RELATED PROJECTS [1]

Map No.	Project	Location	Description
49	Inspired Ventures	9599 Jefferson Bl	40,000 GSF offices
50	Weinstock	9650 Lucerne Av.	6 unit condo, tentative track map and site plan review
51	Culver City Dog Park	9910 Jefferson Bl	1-acre dog park
52	Skateboard Park	9910 Jefferson Bl	12,000 SF
53	Baldwin Hills Scenic Overlook Park	Hetzler Rd	10,300 GSF visitor center, passive recreation area
54	Mixed Use	13365 Washington Bl	4,000 GSF ground floor retail and 19 units
55	Apartment Project	4210 Duquesne Av	8 apartment units
56	Spartan Supply Co.	9919 Jefferson Bl	18,420 SF roofing materials and distribution facility
57	9900 Culver	9900 Culver Bl	23 condominium units and 4,700 SF retail
City of Los Angeles			
58	MTA Division 6 - West Los Angeles Transit Center	Jefferson Bl	Transportation Center for operations and maintenance facility for up to 175 MTA buses and associated administrative staff
County of Los Angeles			
59	West Los Angeles College Master Plan Project	Overland Av/ Freshman Dr	Proposed Master Plan for the College to increase the student enrollment from current 10,312 to 18,904 by year 2022; anticipated enrollment growth through 2015 used for trip generation for purposes of this study
60	Baldwin Hills Regional Park Master Plan Project	La Cienega Bl/La Brea/Stocker St	Development of a 1,400-acre park

Notes:

[1] List of related projects provided by the City of Culver City.

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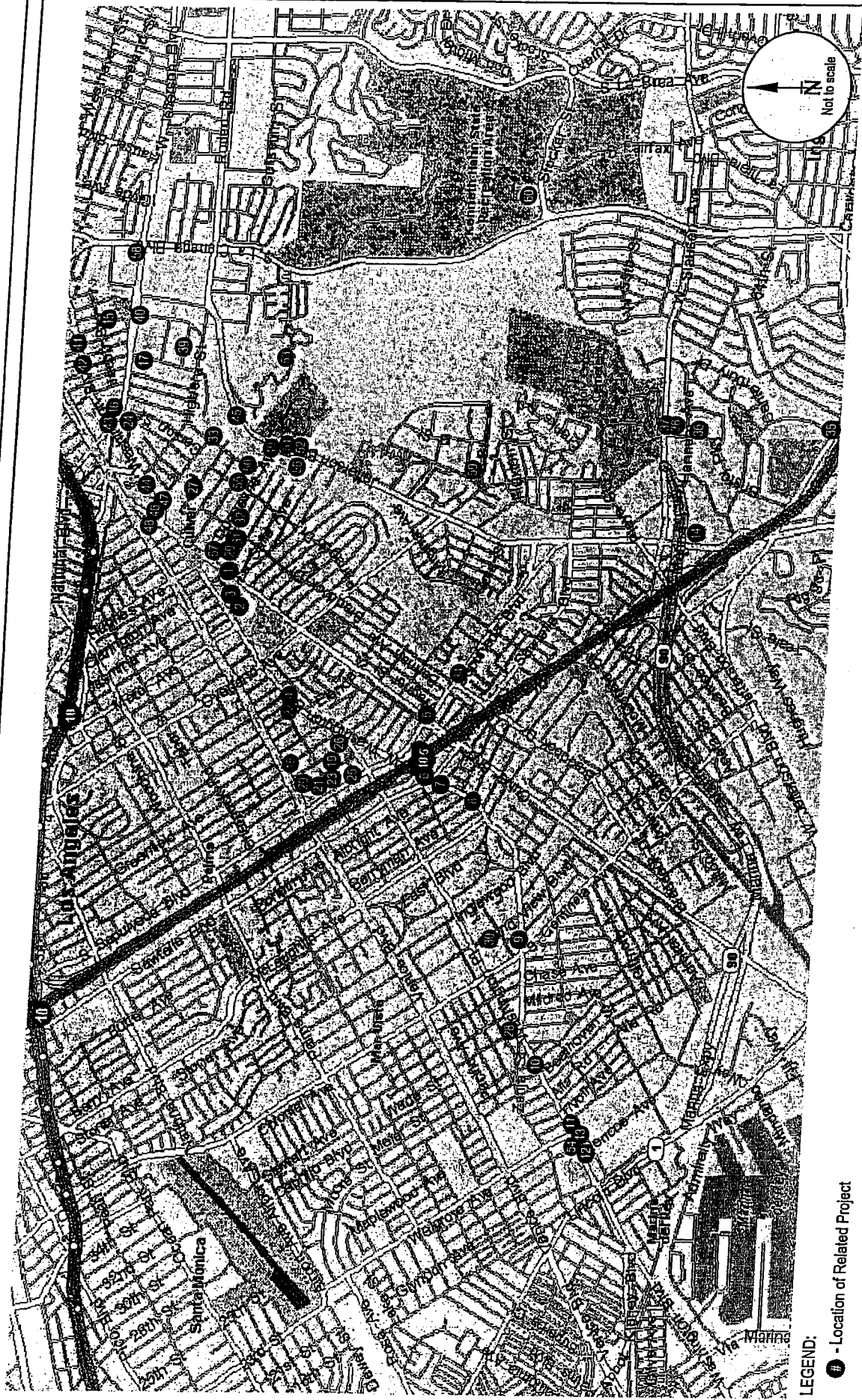


FIGURE 3
LOCATION OF RELATED PROJECTS

TABLE 5
ESTIMATED WEEKDAY TRIP GENERATION OF RELATED PROJECTS [1]

Map No.	Project	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
			In	Out	Total	In	Out	Total
City of Culver City								
1	Mixed Use Development	698	10	24	34	35	26	61
2	Sony	545	68	9	77	13	61	74
3	Sony	10,856	1,345	183	1,528	250	1,219	1,469
4	Live/ work lofts	18	0	1	1	1	1	2
5	Veterinary Clinic	220	13	12	25	18	18	36
6	Mixed Use Development	751	11	7	18	32	34	66
7	Culver City Muffler	N/A	5	2	7	4	4	8
8	FAYNSOD	150	0	1	1	5	6	11
9	The Olson Co. Mixed Use	1,196	16	34	50	63	41	104
10	West- Culver Lofts	141	2	9	11	8	4	12
11	Commercial & Retail Development	183	3	2	5	8	8	16
12	Encore	1,962	28	40	68	90	82	172
13	Live/ work units	240	3	15	18	14	7	21
14	Westfield Fox Hills Mall Expansion [2]	5,377	63	41	104	255	276	531
15	Echo Horizon School Expansion	99	20	16	36	0	0	0
16	Distribution & Warehouse	116	14	2	16	3	13	16
17	Office Bldg.	1,663	208	28	236	38	187	225
18	Huron Townhouses	88	1	5	7	5	3	8
19	Condominiums	23	0	2	2	1	1	2
20	Condominiums	23	0	2	2	1	1	2
21	Condominiums	12	0	1	1	1	0	1
22	Condominium Conversion	41	1	3	3	2	1	4
23	Condominiums	23	0	2	2	1	1	2
24	Park Century School [3]	365	80	82	162	-8	-17	-25
25	Hampton Inn	629	26	17	43	24	21	45
26	Four unit condominium	23	0	2	2	1	1	2
27	Four unit condominium	23	0	2	2	1	1	2
28	Four unit condominium	23	0	2	2	1	1	2
29	Condominiums	23	0	2	2	1	1	2
30	Grandview Palms [2]	151	2	2	4	7	5	12
31	TTM, Eight Unit Condo	47	1	3	4	3	1	4
32	TPM, Condominiums	23	0	2	2	1	1	2
33	4227 Ince Blvd.	35	0	2	3	2	1	3
34	Office & Retail Bldg.	99	12	2	14	2	11	13
35	Chevron Gas Station	N/A	131	126	257	160	160	319
36	Fire Station No. 3	838	60	11	71	5	10	15

TABLE 5 (continued)
ESTIMATED WEEKDAY TRIP GENERATION OF RELATED PROJECTS [1]

Map No.	Project	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
			In	Out	Total	In	Out	Total
37	Office & Retail Bldg.	2,649	329	45	374	61	298	359
38	Symantec Office Multiphase Dev. [2]	4,910	639	87	726	118	578	696
39	Conjunctive Points Theater Complex	10,208	282	146	428	287	395	682
40	Public Storage Expansion	179	6	5	11	19	10	9
41	Max Leather AUP [2]	70	7	3	10	4	5	9
42	Mixed Use Development	471	56	8	64	18	90	108
43	Surfas Restaurant Supplies	1,143	32	23	55	31	32	63
44	SPE Television Bldg. (Higuera/Ince)	297	37	5	42	7	33	40
45	Culver City Transfer Station [2]	N/A	12	5	17	3	14	17
46	Parcel B	1,267	157	21	178	29	143	172
47	Culver Studios Expansion	551	69	9	78	13	62	75
48	Office Building	185	23	3	26	4	21	25
49	Inspired Ventures	440	55	7	62	10	50	60
50	Weinstock	35	0	2	3	2	1	3
51	Culver City Dog Park	2	1	0	1	1	0	1
52	Skateboard Park	275	12	7	19	6	14	20
53	Baldwin Hills Scenic Overlook Park [2]	265	2	1	3	5	7	12
54	Mixed Use	283	4	9	12	14	11	25
55	Apartment Project	54	1	3	4	3	2	5
56	Spartan Supply Co. [4]	N/A	24	18	42	17	13	30
57	9900 Culver Bl	339	5	10	15	17	13	30
City of Los Angeles								
58	MTA Division 6 - West Los Angeles Transit Center [2]	1,666	67	40	107	77	26	103
County of Los Angeles								
59	West Los Angeles College Master Plan Project [5]	6,785	436	45	481	300	133	433
60	Baldwin Hills Regional Park Master Plan Project	6,398	126	154	280	160	204	364
Total Related Project Trip Generation		65,176	4,505	1,352	5,857	2,254	4,347	6,581

Notes:

- [1] Trip Generation based on rates provided from *ITE Trip Generation Manual*, Seventh Edition, unless otherwise noted.
 [2] Trip generation from *Symantec Office Development - Environmental Impact Report*, PCR, 2004.
 [3] Trip generation from *Traffic Study for Park Century School*, Kaku Associates, 2003.
 [4] Trip generation from *Memorandum - Relocation of Spartan Supply Co. 9919 Jefferson Boulevard*, Arthur Kassan, May 2006.
 [5] Trip generation from *West Los Angeles College Master Plan EIR*, Jones & Stokes, 2004.

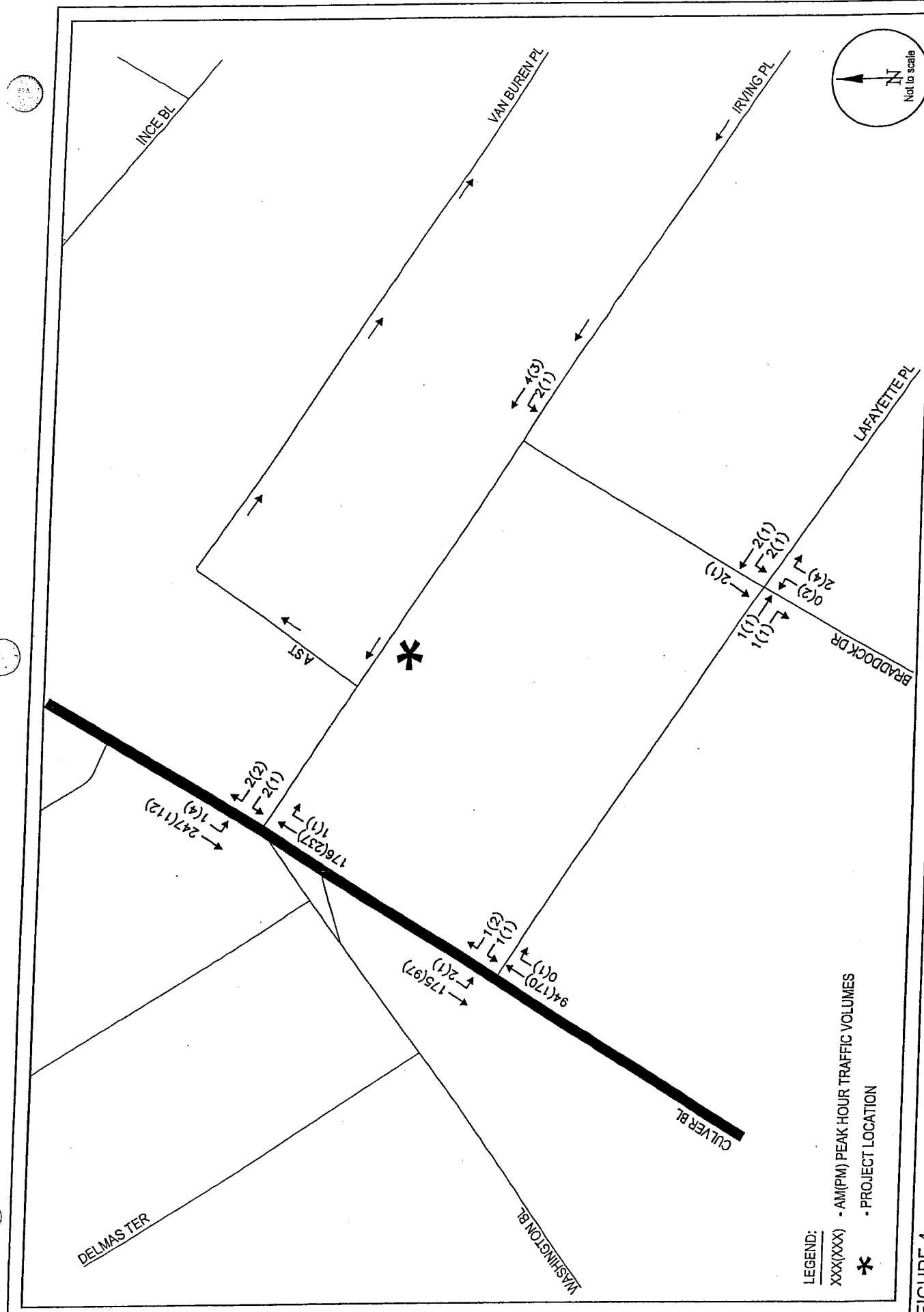
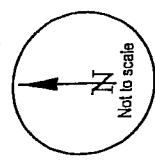


FIGURE 4
RELATED PROJECTS ONLY PEAK HOUR TRAFFIC VOLUMES

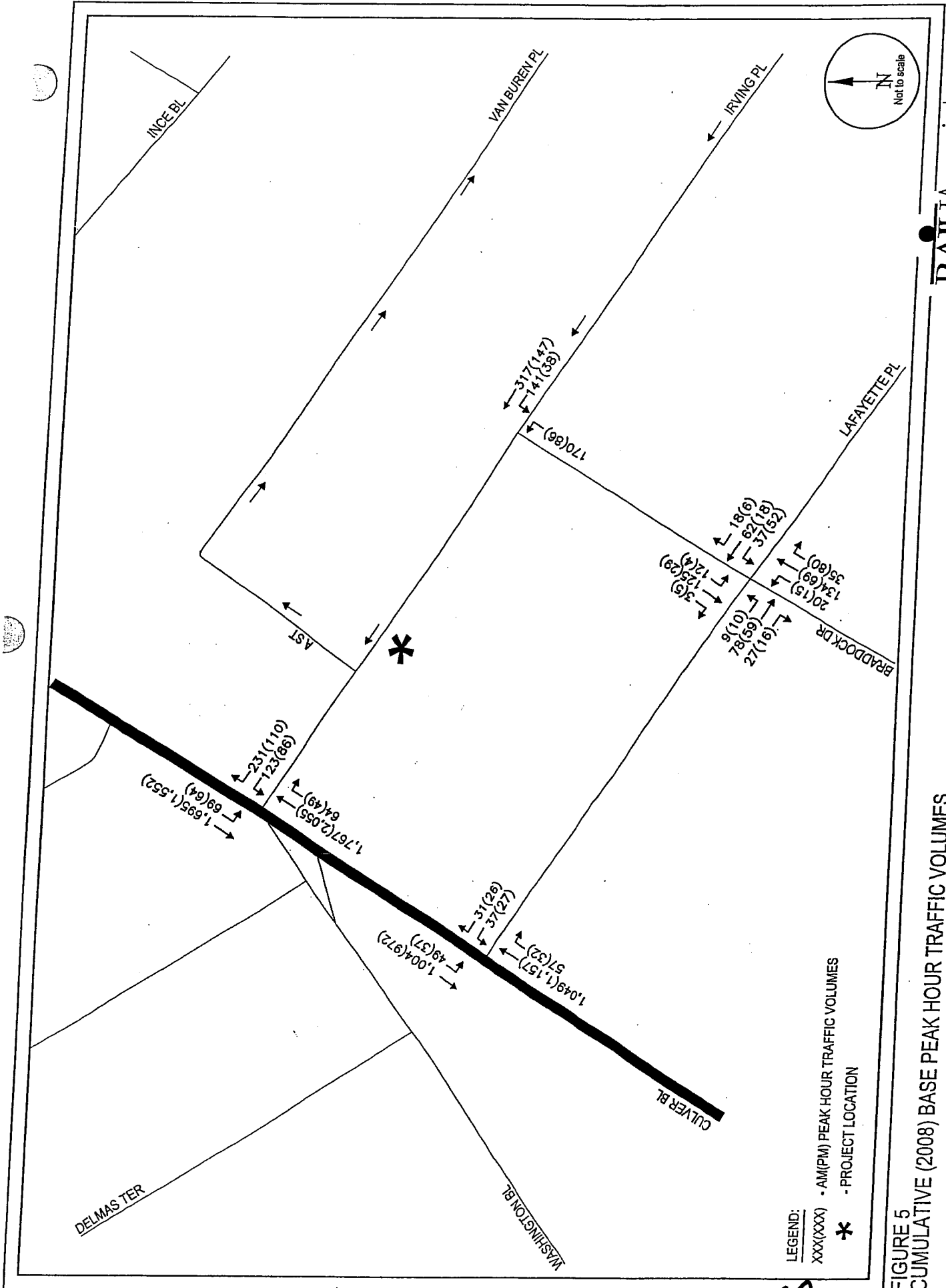


FIGURE 5
 CUMULATIVE (2008) BASE PEAK HOUR TRAFFIC VOLUMES

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PROJECT TRAFFIC VOLUMES

Implementation of the Proposed Project consists of 26 multi-family (condominium) dwelling units and 3,350 square feet of retail use. The Project would provide a subterranean parking garage with a total of 68 parking spaces for residential and office use.

Utilizing the ITE Trip Generation Informational Guide 7th Edition rates, the proposed project's trip generation was determined. Table 6 presents details of the proposed project's trip generation including type of use, size, applicable rate and trip generation estimates.

From Table 6, it can be observed that the proposed project's trip generation would result in a total of approximately 189 daily trips of which 16 trips would occur during the morning peak hour and 19 trips would occur during the evening peak hour.

Project Trip Distribution

The generalized trip distribution for project trips was estimated to be the following based on current traffic patterns:

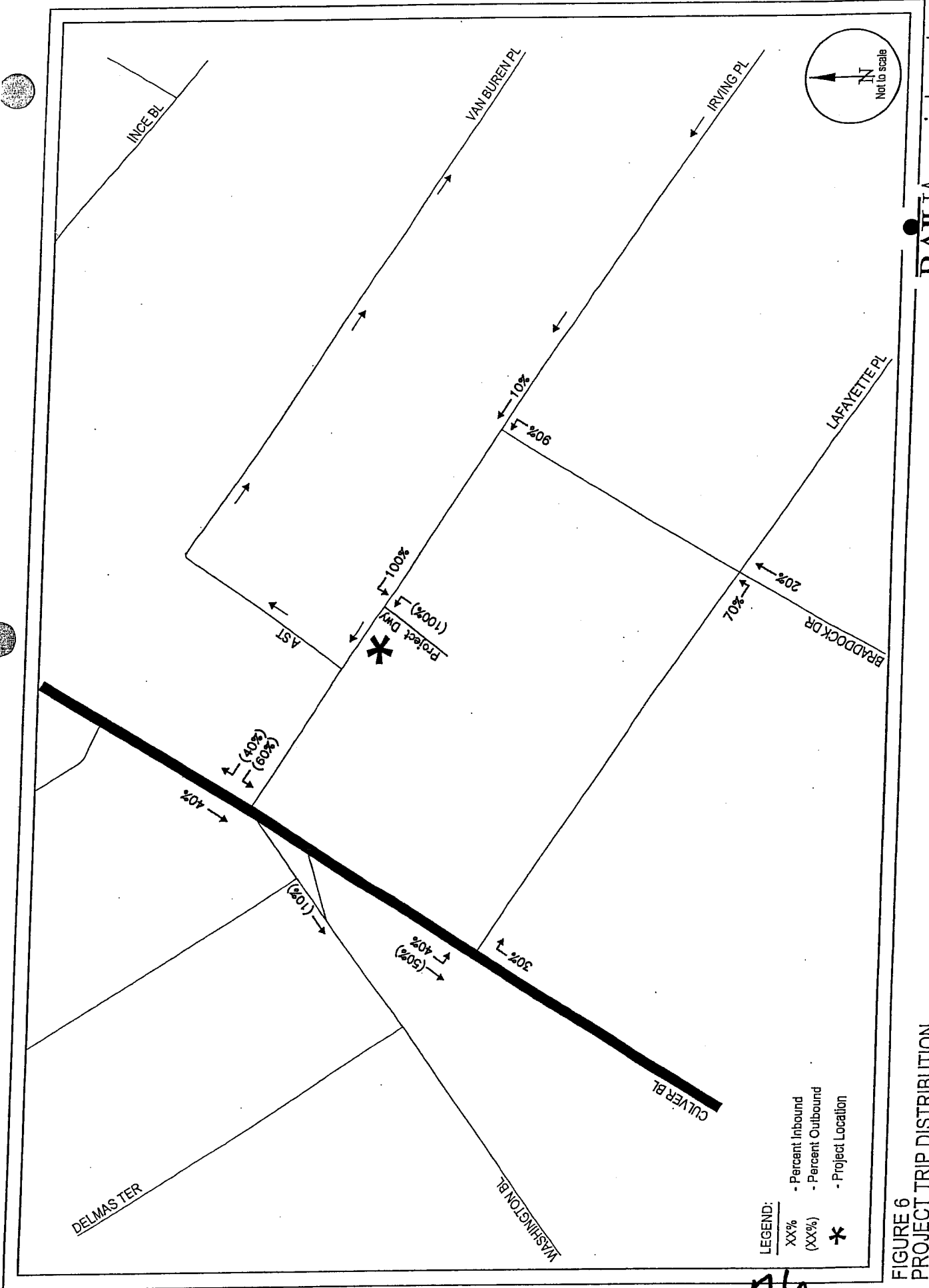
- To and From the North: 25%
- To and From the South: 25%
- To and From the East: 25%
- To and From the West: 25%

Intersection level trip distribution percentages are shown in Figure 6. Based on these distribution assumptions, location and point of access of the project driveway, and trip generation from the proposed project, traffic estimates of project-only trips were developed. These project-only trips are presented in Figure 7.

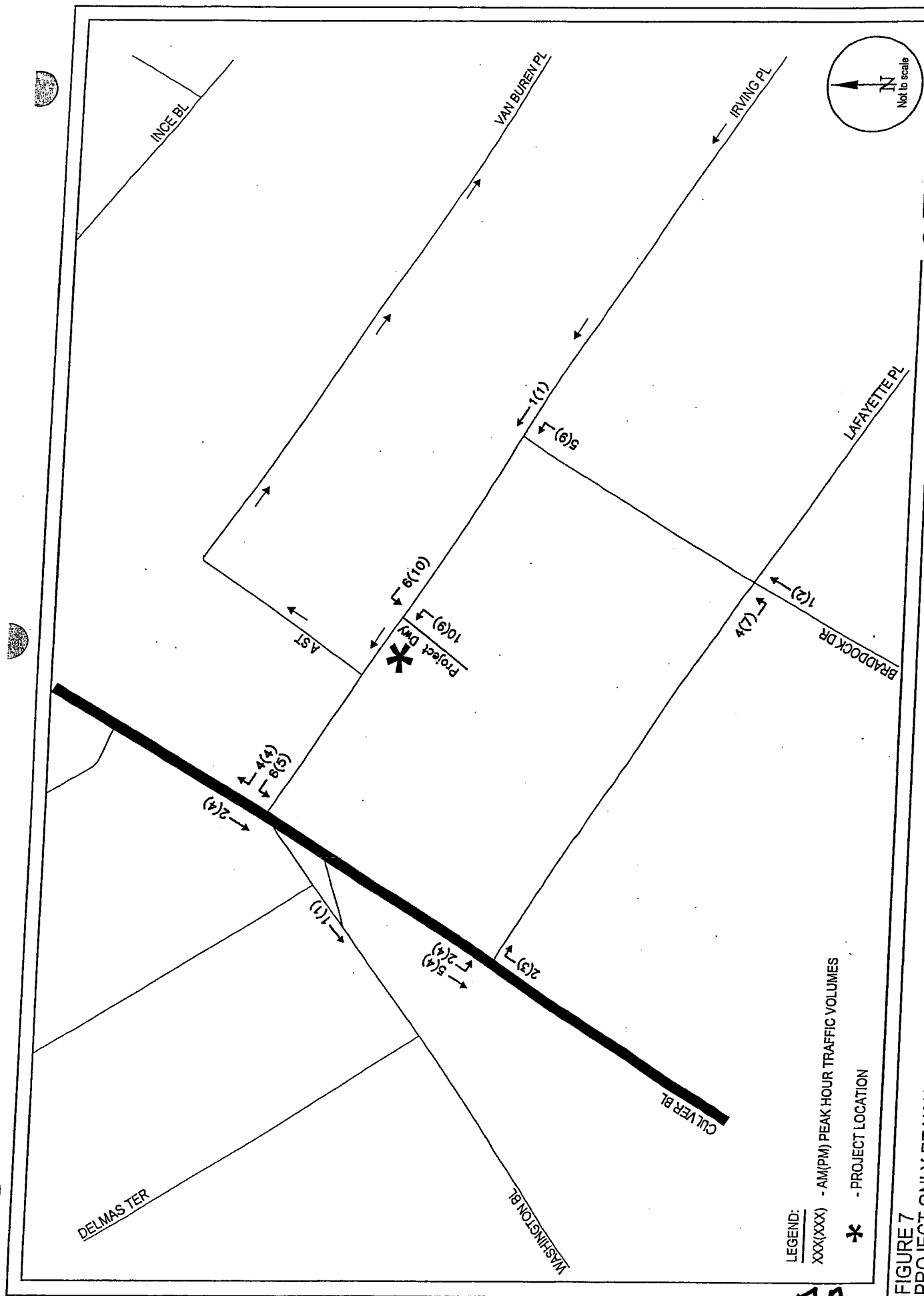
TABLE 6
ESTIMATED PROJECT TRIP GENERATION

	Size	Daily	AM Peak Hour			PM Peak Hour		
			IN	OUT	TOTAL	IN	OUT	TOTAL
Proposed Project Condominium Office	26 d.u. 3,350 s.f.	152 37	2 4	9 1	11 5	9 1	5 4	14 5
Project Trip Generation Total								
Trip Rates		189	6	10	16	10	9	19
Condominium (ITE Land Use 230)		5.86	17%	83%	0.44	67%	33%	0.52
General Office (ITE Land Use 710)	per d.u. per 1,000 s.f.	11.01	88%	12%	1.55	17%	83%	1.49

Source: Rates from ITE, Trip Generation, 7th Edition



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FUTURE YEAR 2008 CUMULATIVE PLUS PROJECT TRAFFIC VOLUMES

Utilizing the project-only traffic estimates developed for both AM and PM peak hours, traffic forecasts for the Future Year 2008 with Project conditions were developed. The Cumulative (2008) Base traffic forecasts were combined with the project-only traffic volumes to obtain the Future with Project traffic volume forecasts. The Future Year 2008 Cumulative plus Project traffic volumes during both A.M. and P.M. peak hours are presented in Figure 8.

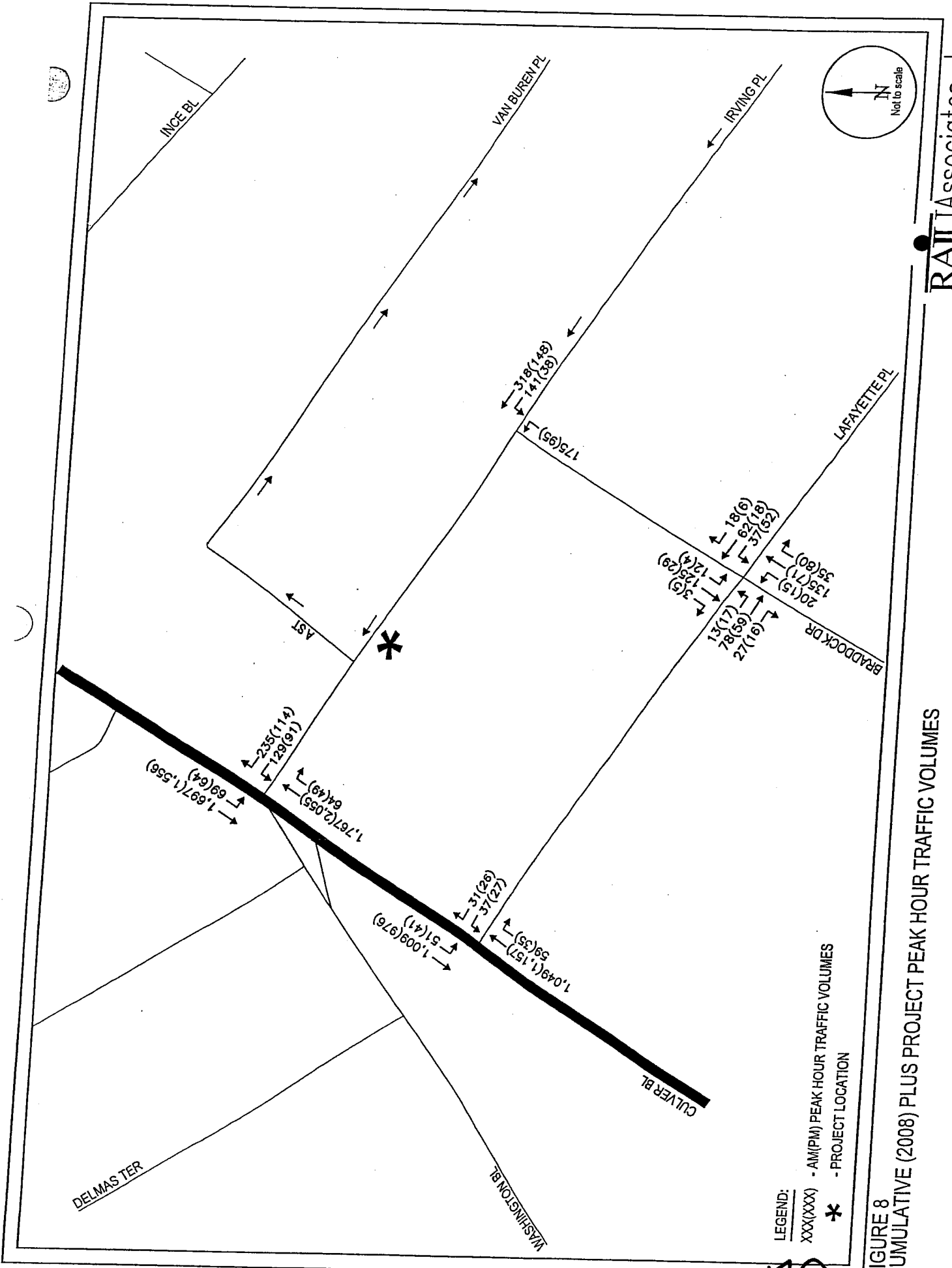


FIGURE 8
 CUMULATIVE (2008) PLUS PROJECT PEAK HOUR TRAFFIC VOLUMES

IV. FUTURE YEAR 2008 TRAFFIC CONDITIONS & IMPACT ANALYSIS

The Future Year 2008 Cumulative Base and Cumulative Plus Project conditions were analyzed utilizing the methodologies and assumptions per the City of Culver City traffic study guidelines. The results were then used to assess the potential impact of the proposed project on the local street system.

The traffic impact analysis compares the volume to capacity (V/C) ratios at each study location under the cumulative base and cumulative plus project conditions to determine the incremental difference in V/C ratios caused by the proposed project. This provides the information needed to assess the potential impact of the project using significance criteria established by the City of Culver City.

SIGNIFICANT TRAFFIC IMPACT CRITERIA

The City of Culver City has established threshold criteria for determining the significance of impacts of a project at a specific location. According to the criteria provided by the City of Culver City, a project impact is considered significant if the following conditions are met:

<u>Intersection Condition With Project Traffic</u>		<u>Project-Related Increase in V/C Ratio</u>
<u>LOS</u>	<u>V/C Ratio</u>	
D	0.801 – 0.900	equal to or greater than 0.040
E, F	> 0.900	equal to or greater than 0.020

Using these criteria, for example, a project would not have a significant impact at an intersection if it is operating at LOS D after the addition of project traffic and the incremental change in the V/C ratio is less than 0.040. However, if the intersection is operating at a LOS F after the addition of

project traffic and the incremental change in the V/C ratio is 0.020 or greater, the project would be considered to have a significant impact.

CUMULATIVE (2008) BASE TRAFFIC CONDITIONS

The Cumulative (2008) Base without proposed project peak hour traffic volumes were analyzed at each of the study intersections to determine the V/C ratio (or delay in seconds) and corresponding level of service. Table 7 presents the results of the Year 2008 Cumulative Base (without project) traffic analysis. As indicated in the table, all of the four analyzed intersections are projected to operate at LOS B or better during both the morning and evening peak hours. LOS B, as defined in Table 1 on page 11, indicates very good operations, while LOS A indicates excellent operations.

Capacity calculation worksheets for Cumulative (2008) Base conditions are attached in Appendix E of the report.

CUMULATIVE (2008) PLUS PROJECT TRAFFIC CONDITIONS

The Cumulative (2008) Plus Project peak hour traffic volumes were analyzed to determine the volume to capacity (V/C) ratio (or delay in seconds) and LOS at each of the analyzed intersections. The results of this analysis are also summarized on Table 7. Table 7 indicates that traffic generated by the project would not change any of the intersection levels of service from cumulative base conditions.

Capacity calculation worksheets for Cumulative (2008) Plus Project conditions are attached in Appendix F of the report.

TABLE 7
INTERSECTION LEVEL OF SERVICE ANALYSIS
FUTURE CONDITIONS

No.	Intersection	Peak Hour	Cumulative (2008) Base		Cumulative (2008) Plus Project		Project Increase in V/C	Significant Project Impact
			V/C or Delay	LOS	V/C or Delay	LOS		
1.	Lafayette Place & Culver Boulevard	AM PM	0.520 0.528	A A	0.521 0.532	A A	0.001 0.004	No No
2.	Lafayette Place & Braddock Drive	AM PM	12.9 sec 10.8 sec.	B B	13.0 sec. 10.8 sec.	B B	- -	No No
3.	Irving Place & Culver Boulevard	AM PM	0.320 0.292	[1] [1]	0.324 0.298	[1] [1]	0.004 0.006	No No
4.	Irving Place & Braddock Drive	AM PM	0.625 0.632	B B	0.628 0.635	B B	0.003 0.003	No No
		AM PM	12.0 sec. 8.2 sec.	B A	12.1 sec. 8.2 sec.	B A	- -	No No
		AM PM	0.492 0.270	[1] [1]	0.496 0.275	[1] [1]	0.004 0.005	No No

[1] V/C ratio was calculated, based on signalized LOS methodology, to determine project impacts.

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PROJECT IMPACTS

Using the specified significant impact criteria, traffic impacts at the analysis locations were determined. Table 7 identifies the individual impacts during both A.M. and P.M. peak hours at each of the analysis locations. It can be observed that none of the analyzed intersections would be significantly impacted by the proposed project. Therefore, no mitigation measures would be required for the proposed project.

Residential Street Segment Impacts

The potential impacts of the Proposed Project traffic on the adjacent neighborhood residential streets were assessed using the City's suggested methodology for evaluation of traffic impacts. The results of the analysis, which are summarized in Table 8, indicate that the Proposed Project will not have a significant impact on the residential streets in the local neighborhood. The addition of the Proposed Project would increase the peak hour traffic (2-way) from 1.3% to 7.4%.

In addition, the project trips would have little effect on the nearby elementary school during the morning peak hour as the traffic analysis indicated at the intersection of Irving Place/Braddock Drive which is adjacent to the pick-up/drop-off area of the school. The intersection is projected to continue to operate at a good level of service (LOS) B during the morning peak hour with the proposed project adding only six trips to this intersection.

At the end of the school day, which occurs before the evening peak hours of 4:00-6:00 p.m., the trips associated with the proposed project are minimal and will have no effect on the school's student pick-up operations or at the intersection of Irving Place/Braddock Drive. The residential trips associated with the Project occur mostly outside the PM peak hour associated with the School.

TABLE 8
RESIDENTIAL STREET TRAFFIC ANALYSIS

Street Segment	Peak Hour	Peak Hour Traffic Volume (2-Way)			% Change	Impact
		Existing (2007) Baseline	Project	Existing (2007) Plus Project		
Lafayette Place north of Braddock Drive	AM	193	4	197	2.1%	No
	PM	117	7	124	6.0%	No
Irving Place north of Braddock Drive	AM	478	6	484	1.3%	No
	PM	228	10	238	4.4%	No
Braddock Drive west of Irving Place	AM	306	5	311	1.6%	No
	PM	122	9	131	7.4%	No

V. REGIONAL/CMP ANALYSIS

This section presents the Congestion Management Program (CMP) transportation impact analysis. This analysis was conducted in accordance with the procedures outlined in the *Congestion Management Program for Los Angeles County* (Los Angeles County Metropolitan Transportation Authority, July 2004). The CMP requires that when a traffic impact report is prepared for a project, traffic impact analyses be conducted for selected regional facilities based on the quantity of project traffic expected to use these facilities.

CMP TRAFFIC IMPACT ANALYSIS

The CMP guidelines for determining the study area of the analysis for CMP arterial monitoring intersections and for freeway monitoring locations are as follows:

- All CMP arterial monitoring intersections where the proposed project will add 50 or more trips during either the AM or PM weekday peak hours of adjacent street traffic.
- All CMP mainline freeway monitoring locations where the proposed project will add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

The closest CMP arterial monitoring intersections to the project site are the intersections of Venice Boulevard/Overland Avenue and La Cienega Boulevard/Venice Boulevard. Based on the incremental project trip generation estimates presented in Chapter III, the proposed project is not expected to add 50 or more new trips per hour to either of these locations. Therefore, no further analysis of this CMP monitoring intersection is required.

The nearest mainline freeway monitoring location to the project site is at the Santa Monica Freeway (I-10) east of Overland Avenue. Based on the incremental project trip generation estimates, the proposed project will not add 150 or more new trips per hour to these locations in either direction. Therefore, no further analysis of CMP freeway monitoring stations is required.

VI. PARKING AND ACCESS/CIRCULATION

This chapter provides an evaluation of parking and access/circulation in the immediate vicinity of the site. The parking evaluation consists of examining the proposed parking supply for the Project in relation to the parking requirements of the various uses within the Project. The access and egress evaluation consists of a review of vehicular access and egress driveways to ascertain that adequate provisions are provided by the Project.

PARKING, ACCESS & CIRCULATION ISSUES

The Proposed Project consists of 26 multi-family (condominium) dwelling units and 3,350 square feet of office use. The Project would provide a subterranean parking garage with 68 parking spaces for residential and office use. The project site plan is shown in Figure 9 and the subterranean parking level is shown in Figure 10.

The required parking for per the City of Culver City zoning parking requirements follows:

- Multi-Family Residential – 2 spaces per dwelling unit plus one guest space for every four residential units (units less than 900 s.f. require 1 space per dwelling unit)
- Office - 3.4 spaces per 1,000 square feet

Based on these requirements, the required parking for this project would be 69 spaces (25 d.u. x 2 spaces/d.u. = 50 spaces; 1 d.u. x 1 space/d.u. = 1 space; 26 d.u. x 0.25 guest spaces/d.u. = 7 spaces shared with office having 3,350 s.f. x 3.4 spaces/1,000 s.f. = 11 spaces). One of the seven residential guest parking would share with the parking spaces provided for the office uses on-site.

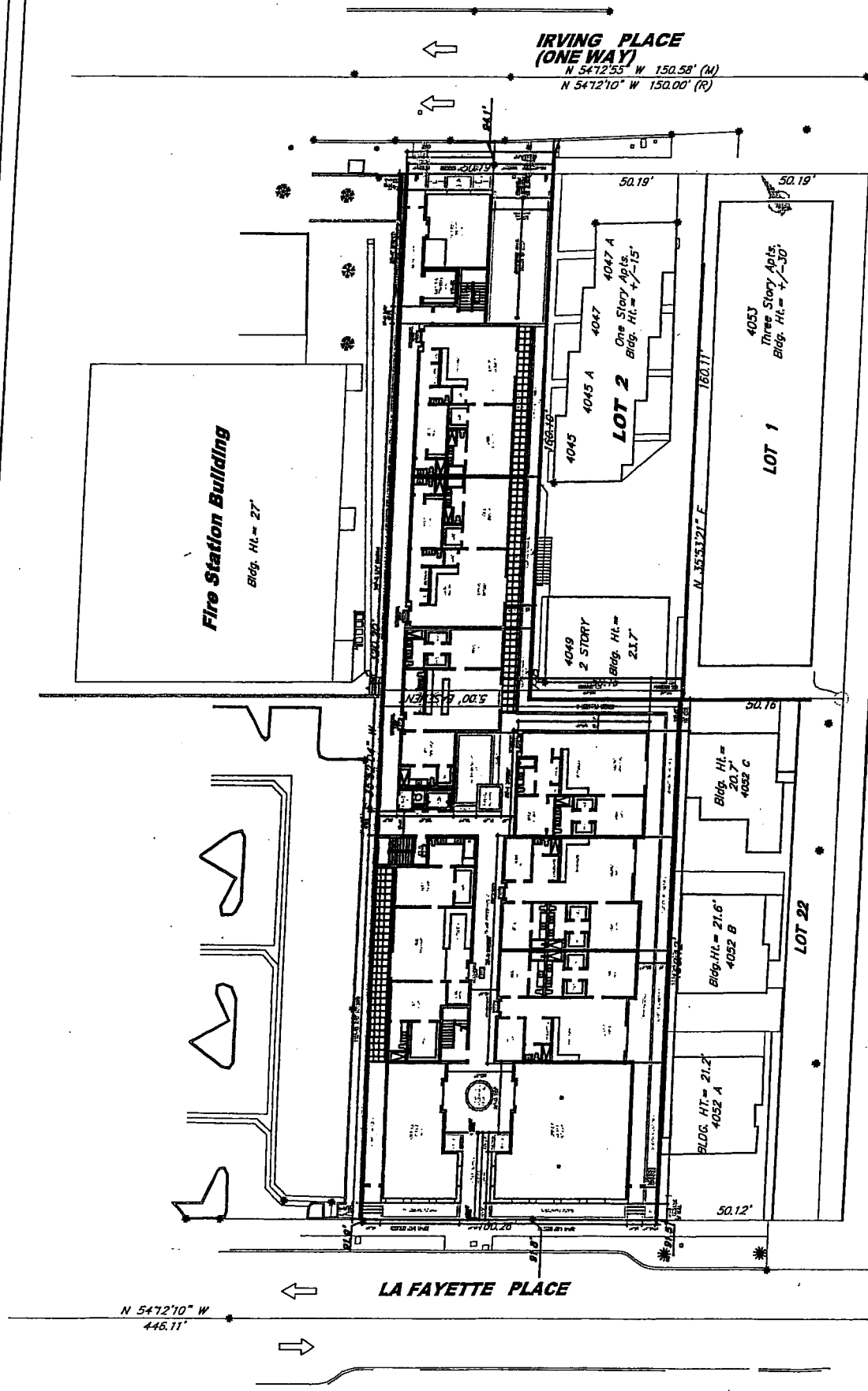
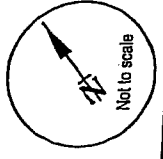
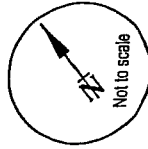
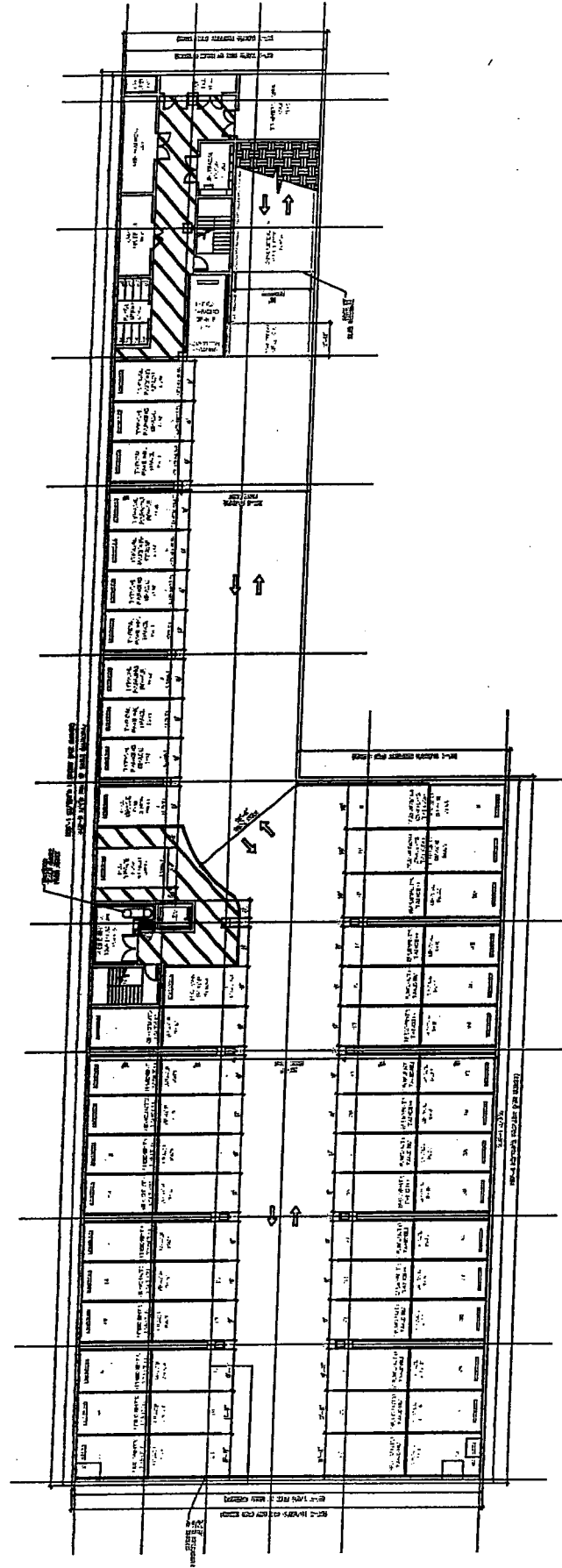


FIGURE 9
PROJECT SITE PLAN

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Source: J.S. Egan Design, Inc.

FIGURE 10
PROJECT SITE PLAN - SUBTERRANEAN PARKING LEVEL

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One driveway located on Irving Place would provide access to the Project's subterranean parking area. This driveway would allow left-turns in and left-turns out only since Irving Place is a one-way northbound roadway south of 'A' Street. The driveway along Irving Place would be approximately 18 feet wide and would allow both inbound and outbound traffic simultaneously.

The commercial parking spaces would be 18 feet deep X 9 feet wide in size and the residential tandem parking spaces would vary from 36 feet deep X 9 feet wide and 36 feet deep X 9 ½ feet wide in size. The width of the parking aisle varies from approximately 26 ½ feet to 30 ½ feet wide. The parking field would provide three handicapped spaces, one of which would be van accessible.

VII. SUMMARY OF CONCLUSIONS

This study was undertaken to assess existing traffic conditions, estimate future conditions with and without the proposed project, analyze potential traffic impacts of the proposed project, assess required improvements and identify/recommend project mitigation to alleviate the significant traffic impacts on the transportation system. Raju Associates, Inc. has performed this detailed study and the following summarizes the results of this analysis:

- Four intersections were analyzed within the study area for this project. These locations are within the study area bounded by Culver Boulevard on the north, Braddock Drive on the south, Lafayette Place on the west and Irving Place on the east within the City of Culver City.
- Currently, all four of the analyzed intersection locations are operating at excellent to very good level of service (LOS B or better) during both the morning and evening peak hours.
- In the Cumulative (Year 2008) Base conditions, i.e., future conditions without the implementation of the proposed project, all four of the analyzed intersection locations are projected to continue to operate at excellent to very good level of service (LOS B or better) during both the morning and evening peak hours.
- The Proposed Project consisting of 26 multi-family (condominium) dwelling units and 3,350 square feet of office use will generate a total of 189 daily trips of which 16 trips would occur during the morning peak hour and 19 trips during the evening peak hour. Typically, the City of Culver City does not require a traffic study for projects that generate less than 50 peak hour trips. However, based on the City's request, this study has been performed.
- In the Cumulative (Year 2008) Plus Project conditions, both the AM and PM peak hour operating conditions would be similar to those projected for the Future Base conditions.
- The Cumulative (Year 2008) Plus Project conditions show that the proposed project would not cause significant traffic impacts at any of the analysis locations, based on significance criteria established by the City of Culver City.
- Residential street segment analysis performed at three roadway segments indicates that the addition of the Proposed Project would increase the peak hour traffic from 1.3% to 7.4%. This is less than the City's street segment traffic impact threshold of 8%. The project would not have a significant street segment traffic impact on adjacent residential streets.

- Parking, access and circulation systems were assessed and a review of the proposed site plan indicates that they would all function adequately and that there would be no adverse impact from the Proposed Project.

APPENDIX A

Memorandum of Understanding (MOU)

SCOPING FOR TRAFFIC STUDY

This Memorandum of Understanding (MOU) acknowledges Culver City Department of Transportation requirements of traffic impact analysis for following project:

Project name	4043 Irving Place Mixed Use Project
Project address	4043 Irving Place, Culver City, CA
Project description	28 apartment units; 3,500 sf office; 1 level of parking – basement replacing existing parking lot

Geographic (Regional) Distribution: N25 S 25 E25 W25

Trip Generation Rate(s)			Source: ITE Trip Generation (7 th Edition), 2003					
Land Use	Apartment		Land Use	Office		Land Use		
	in	out		in	out		in	out
AM Trips	3	11		4	1			
PM Trips	11	6		1	4			

Project Buildout Year	2008	See Exhibit 1 for Trip Generation Table
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Ambient or CMP Growth Rate **1% per year**

Related Projects: *To be provided by the City of Culver City*

Study Intersections: (Subject to revision after CMP requirement, related projects, trip generation and distribution are determined)

- | | |
|-------------------------------|-----------------------------|
| 1. Lafayette PI / Braddock Dr | 4. Lafayette PI / Culver BI |
| 2. Irving PI / Braddock Dr | 5. |
| 3. Irving PI / Culver BI | 6. |

Trip Credits: (Exact amount of credit subject to approval by Culver City)

Transportation Demand Management (TDM)	Yes	X	no
Existing Active Land Use	Yes	X	no
Previous Land Use	Yes	X	no
Internal Trip	Yes	X	no
Pass By Trip	Yes	X	no
Transit	Yes	X	no

This analysis will follow the City of Culver City traffic study guidelines

	<u>Consultant</u>	<u>Developer</u>
Name	<u>Raju Associates Inc</u>	<u>Sal Gonzales, Metro Real Estate & Development</u>
Address	<u>524 S. Rosemead Bl; Pasadena, CA 91107</u>	
Phone No.	<u>626-796-6796; 626-792-2700</u>	

Approved by:			
<u>Prinath Raju, P.E.</u>	<u>6/04/07</u>	<u>Mr. Barry Kurtz</u>	<u> </u>
Consultant's Representative	Date	Culver City Representative	Date

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EXHIBIT 1
ESTIMATED PROJECT TRIP GENERATION

	Size	Daily	AM Peak Hour			PM Peak Hour		
			IN	OUT	TOTAL	IN	OUT	TOTAL
Proposed Project Apartment Office	28 d.u. 3,500 s.f.	188 39	3 4	11 1	14 5	11 1	6 4	17 5
Project Trip Generation Total			7	12	19	12	10	22
Trip Rates								
Apartment (ITE Land Use Code 220)	Trips per d.u.	6.72	20%	80%	0.51	65%	35%	0.62
General Office (ITE Land Use 710)	per 1,000 s.f.	11.01	88%	12%	1.55	17%	83%	1.49

Source: Rates from ITE, Trip Generation, 7th Edition

APPENDIX B

Intersection Lane Configurations

INTERSECTION LANE CONFIGURATIONS

STREET	EXISTING (2007) CONDITIONS	FUTURE (2008) CONDITIONS
1 N/S: LAFAYETTE PL E/W: CULVER BL (Traffic Signal)		SAME AS EXISTING
2 N/S: LAFAYETTE PL E/W: BRADDOCK DR (Two-way stop controlled)		SAME AS EXISTING
3 N/S: IRVING PL E/W: CULVER BL (Traffic Signal)		SAME AS EXISTING
4 N/S: IRVING PL E/W: BRADDOCK DR (All-way stop controlled)		SAME AS EXISTING

APPENDIX C

Traffic Counts

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Lafayette Pl.

DATE: 6/20/2007

LOCATION: City of Culver

E-W STREET: Culver Blvd.

DAY: WEDNESDAY

PROJECT# 07-2328-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	0	0	0	3	0	1	2	0	
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	2		6					106	4	2	98		218
7:15 AM	7		10					156	5	4	136		318
7:30 AM	7		6					189	2	2	178		384
7:45 AM	6		8					229	2	5	217		467
8:00 AM	6		4					226	2	4	193		435
8:15 AM	7		7					237	12	4	200		467
8:30 AM	17		11					248	11	5	211		503
8:45 AM	5		8					239	5	4	204		465
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	57	0	60	0	0	0	0	1630	43	30	1437	0	3257

AM Peak Hr Begins at: 745 AM

PEAK	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	36	0	30	0	0	0	0	940	27	18	821	0	1872
PEAK HR.													
FACTOR:	0.589			0.000			0.933			0.945			0.930

CONTROL: Signalized

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Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Lafayette Pl.

DATE: 6/20/2007

LOCATION: City of Culver

E-W STREET: Culver Blvd.

DAY: WEDNESDAY

PROJECT# 07-2328-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 0	SR 0	EL 0	ET 3	ER 0	WL 1	WT 2	WR 0	TOTAL
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM													
3:45 PM													
4:00 PM	2		7					206	11	12	178		416
4:15 PM	6		10					222	13	10	212		473
4:30 PM	6		2					215	7	11	201		442
4:45 PM	7		2					207	2	6	194		418
5:00 PM	10		9					254	11	12	233		529
5:15 PM	6		6					258	8	13	225		516
5:30 PM	5		5					236	7	6	205		464
5:45 PM	5		4					229	5	5	203		451
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL VOLUMES =	NL 47	NT 0	NR 45	SL 0	ST 0	SR 0	EL 0	ET 1827	ER 64	WL 75	WT 1651	WR 0	TOTAL 3709
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PM Peak Hr Begins at: 500 PM

PEAK VOLUMES =	26	0	24	0	0	0	0	977	31	36	866	0	1960
PEAK HR. FACTOR:	0.658			0.000			0.947			0.920			0.926

CONTROL: Signalized

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Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Lafayette Pl.

DATE: 6/20/2007

LOCATION: City of Culver

E-W STREET: Braddock Dr.

DAY: WEDNESDAY

PROJECT# 07-2328-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
6:00 AM													
6:15 AM													
6:30 AM													
6:45 AM													
7:00 AM	2	6	0	2	2	2	0	8	1	1	3	0	27
7:15 AM	9	8	0	1	1	3	0	12	5	0	6	2	47
7:30 AM	14	12	2	1	7	3	3	23	4	0	13	0	82
7:45 AM	6	9	9	1	5	6	3	38	1	0	30	0	108
8:00 AM	9	9	5	1	4	8	5	30	2	1	19	2	95
8:15 AM	11	20	3	5	5	9	6	40	4	5	24	0	132
8:30 AM	9	21	1	2	3	3	6	25	3	1	16	1	91
8:45 AM	7	15	2	2	3	2	0	18	2	2	13	0	66
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL VOLUMES =	NL 67	NT 100	NR 22	SL 15	ST 30	SR 36	EL 23	ET 194	ER 22	WL 10	WT 124	WR 5	TOTAL 648
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AM Peak Hr Begins at: 745 AM

PEAK VOLUMES =	35	59	18	9	17	26	20	133	10	7	89	3	426
PEAK HR. FACTOR:	0.824			0.684			0.815			0.825			0.807

CONTROL: 2-Way Stop N & S

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