Appendix I

Kunzman Traffic Report

Kunzman Associates, Inc.

DOHENY HOTEL

TRAFFIC IMPACT ANALYSIS (REVISED)

August 2, 2012

KUNZMAN ASSOCIATES, INC.

DOHENY HOTEL

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Doheny Hotel

Traffic Impact Analysis (Revised)

This report contains the revised traffic impact analysis for the Doheny Hotel project. The proposed development is located at the southwest corner of Del Obispo Street/Dana Point Harbor Drive and Pacific Coast Highway (SR-1) in the City of Dana Point. The proposed development consists of a 258 room hotel with a 12,103 square foot conference center/banquet facility and a 7,087 square foot restaurant. Parking for the proposed hotel totals 325 parking spaces and consists of 275 on-site parking spaces and 50 off-site overflow parking spaces.

The traffic report contains documentation of existing traffic conditions, existing traffic generated by the project, future traffic generated by the project, distribution of the project traffic to roads outside the project, and an analysis of Existing Plus Project traffic conditions, Opening Year (2013) traffic conditions without and with the project, and Year 2025 traffic conditions without and with the project. Each of these topics is contained in a separate section of the report. The first section is "Executive Summary", and subsequent sections expand upon this section. In this way, information on any particular aspect of the study can be easily located by the reader.

Although this is a technical report, every effort has been made to write the report clearly and concisely. To assist the reader with those terms unique to transportation engineering, a glossary of terms is provided within Appendix A.

I. Executive Summary

This section summarizes the existing traffic conditions, project traffic impacts, and the proposed mitigation measures.

A. Existing Traffic Conditions

1. The project site is currently developed with a 46 room hotel and a 1,277 square foot fast food restaurant with drive-thru and an approximately 1,000 square foot vacant commercial building.

2. Pursuant to the scoping agreement with the City of Dana Point staff, the study area includes the following intersections:

   Del Obispo Street/Dana Point Harbor Drive (NS) at:
   Pacific Coast Highway (SR-1) (EW) - #1
   Project Access (EW) - #2
   Park Lantern (EW) - #3

3. The study area intersections currently operate within acceptable Levels of Service during the peak hours for Existing traffic conditions (see Table 1).

B. Traffic Impacts

1. The proposed development consists of a 258 room hotel with a 12,103 square foot conference center/banquet facility and a 7,087 square foot restaurant. Parking for the proposed hotel totals 325 parking spaces and consists of 275 on-site parking spaces and 50 off-site overflow parking spaces. The project site will continue to have access to Del Obispo Street/Dana Point Harbor Drive.

2. The proposed development is projected to generate approximately 1,409 additional daily vehicle trips on a weekday, 87 of which will occur during the morning peak hour and 104 of which will occur during the evening peak hour (see Table 2).

3. The proposed development is projected to generate approximately 1,266 additional daily vehicle trips on a Saturday, 114 of which will occur during the mid-day peak hour (see Table 2).

4. The study area intersections are projected to operate within acceptable Levels of Service during the peak hours for Existing Plus Project traffic conditions (see Table 3).

5. The study area intersections are projected to operate within acceptable Levels of Service during the peak hours for Opening Year (2013) Without Project traffic conditions (see Table 4).

6. The study area intersections are projected to operate within acceptable Levels of Service during the peak hours for Opening Year (2013) With Project traffic conditions (see Table 5).

7. Table 6 depicts the Opening Year (2013) With Project intersection traffic contribution at the study area intersections. As shown in Table 7, the project site does not significantly impact any study area intersections.

8. This traffic impact analysis other development information relies on the approved traffic impact analyses prepared for the Dana Point Harbor Revitalization Project, the Town Center Specific Plan, and the Makar project. The other development data from these studies have been approved and provided by the City of Dana Point. This data is the best available at the time the study was prepared.

9. The study area intersections are projected to operate within acceptable Levels of Service during the peak hours for Year 2025 Without Project traffic conditions (see Table 8).

10. The study area intersections are projected to operate within acceptable Levels of Service during the peak hours for Year 2025 With Project traffic conditions (see Table 9).

11. Table 10 depicts the Year 2025 With Project intersection traffic contribution at the study area intersections. As shown in Table 10, the project site does not significantly impact any study area intersections.

C. Recommendations

The following measures are recommended traffic conditions for the project:

1. Site-specific circulation and access recommendations are depicted on Figure 83.

2. Construct Del Obispo Street/Dana Point Harbor Drive from Pacific Coast Highway (SR-1) to the project south boundary at its ultimate half-section width as a Primary Arterial (100 foot right-of-way) including landscaping and parkway improvements in conjunction with development, as necessary.

3. Construct Pacific Coast Highway from the project west boundary to Del Obispo Street/Dana Point Harbor Drive at its ultimate half-section width as a Major Arterial (120 foot right-of-way) including landscaping and parkway improvements in conjunction with development, as necessary.

4. Construct an eastbound right turn lane at the intersection of Pacific Coast Highway and Del Obispo Street/Dana Point Harbor Drive. This is in conjunction with Item #3. The project applicant did submit street improvement plans (plan) that showed the construction of the southerly curb line along the proposed right turn lane. The dimensions shown on the plans shall be reviewed and approved by the City Engineer to assure that an additional eastbound left turn lane can be added at a later date as

needed. This is necessary to try to reduce the Level of Service impacts in Year 2025 for the weekday PM Peak Period and the Weekend Mid-day Peak Period, both shown to become Level of Service "D". With the mitigation measures, the Level of Service would be reduced to Level of Service C or better for all periods.

5. Modify the intersection of Dana Point Harbor Drive at Park Lantern to allow for southbound u-turns which are currently prohibited. Implementation of this improvement will require the elimination of the existing westbound free right turn lane, physical modifications to the northeast corner of the intersection and the existing traffic signal. Implementation of these improvements will require review and approval from the City of Dana Point.

6. Sufficient on-site parking shall be provided to meet City of Dana Point parking code requirements.

7. Sight distance at the project access should be reviewed with respect to California Department of Transportation/City of Dana Point standards in conjunction with the preparation of final grading, landscaping, and street improvement plans.

8. On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project.

9. As is the case for any roadway design, the City of Dana Point should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

II. Project Description

This section discusses the project's location and proposed development. Figure 1 shows the project location map. Figure 2 illustrates the site plan.

A. Location

The proposed development is located at the southwest corner of Del Obispo Street/Dana Point Harbor Drive and Pacific Coast Highway (SR-1) in the City of Dana Point.

B. Proposed Development

The proposed development consists of a 258 room hotel with a 12,103 square foot conference center/banquet facility and a 7,087 square foot restaurant. Parking for the proposed hotel totals 325 parking spaces and consists of 275 on-site parking spaces and 50 off-site overflow parking spaces. The project site will continue to have access to Del Obispo Street/Dana Point Harbor Drive.

C. Congestion Management Program Compliance

The Orange County Congestion Management Program was established in 1991 to reduce traffic congestion and to provide a mechanism for coordinating land use development decisions. Compliance with the Congestion Management Program requirements ensures a city's eligibility to compete for State gas tax funds for local transportation projects.

Within the study area, the Congestion Management Program Highway System includes two arterials: Del Obispo Street/Dana Point Harbor Drive, Pacific Coast Highway (SR-1), and includes one intersection: Del Obispo Street/Dana Point Harbor Drive at Pacific Coast Highway (SR-1).

The Orange County Congestion Management Program states that "a Traffic Impact Analysis be required for congestion management purposes for all proposed developments generating 2,400 or more daily trips" and that "for developments which will directly access a Congestion Management Program Highway System link, the threshold for requiring a Traffic Impact Analysis should be reduced to 1,600 or more trips per day".

The Doheny Hotel project is estimated to generate 1,409 daily trips. Thus, the project is not required to comply with the Congestion Management Program Traffic Impact Analysis Guidelines.

Figure 1
Project Location Map

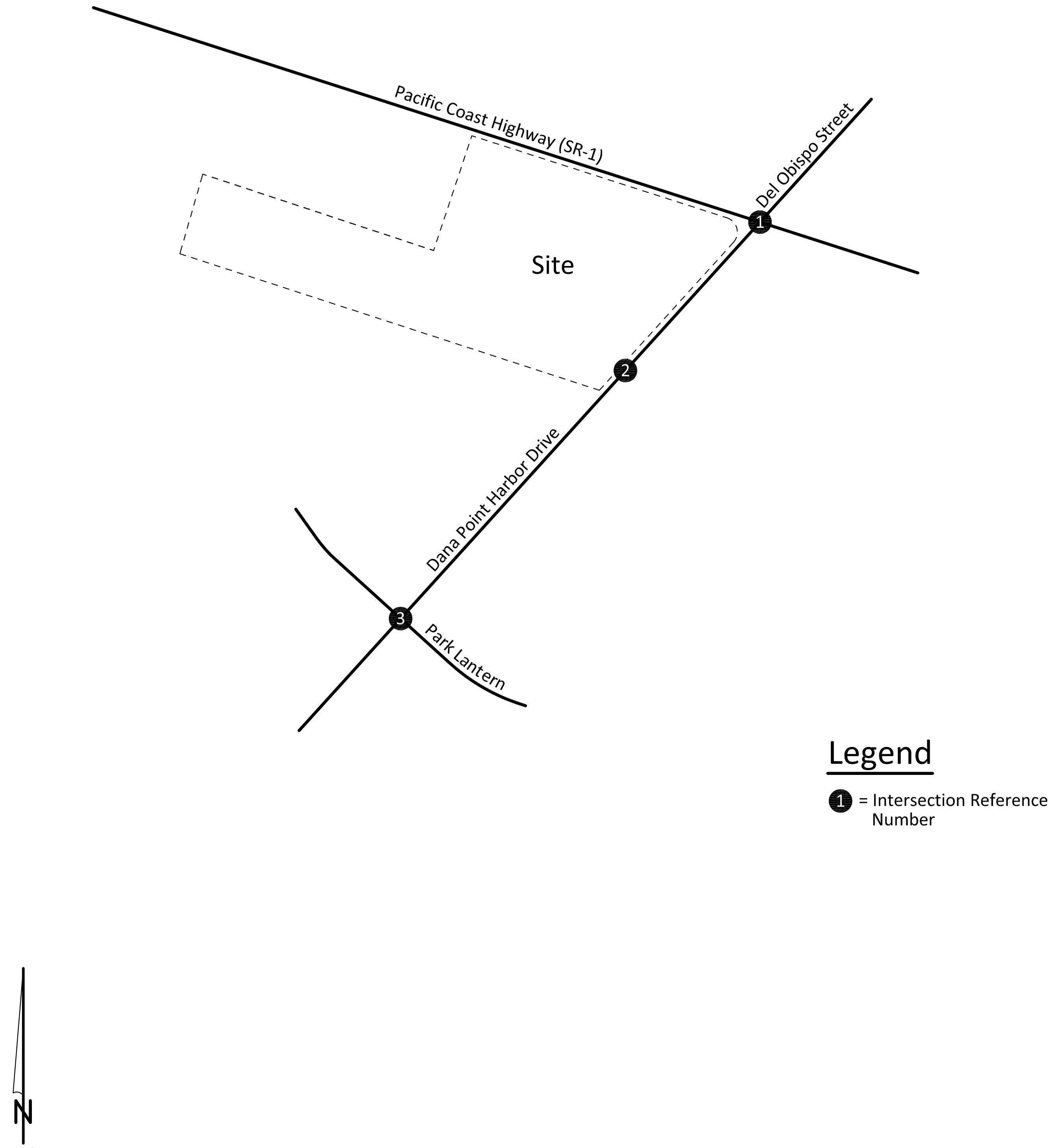

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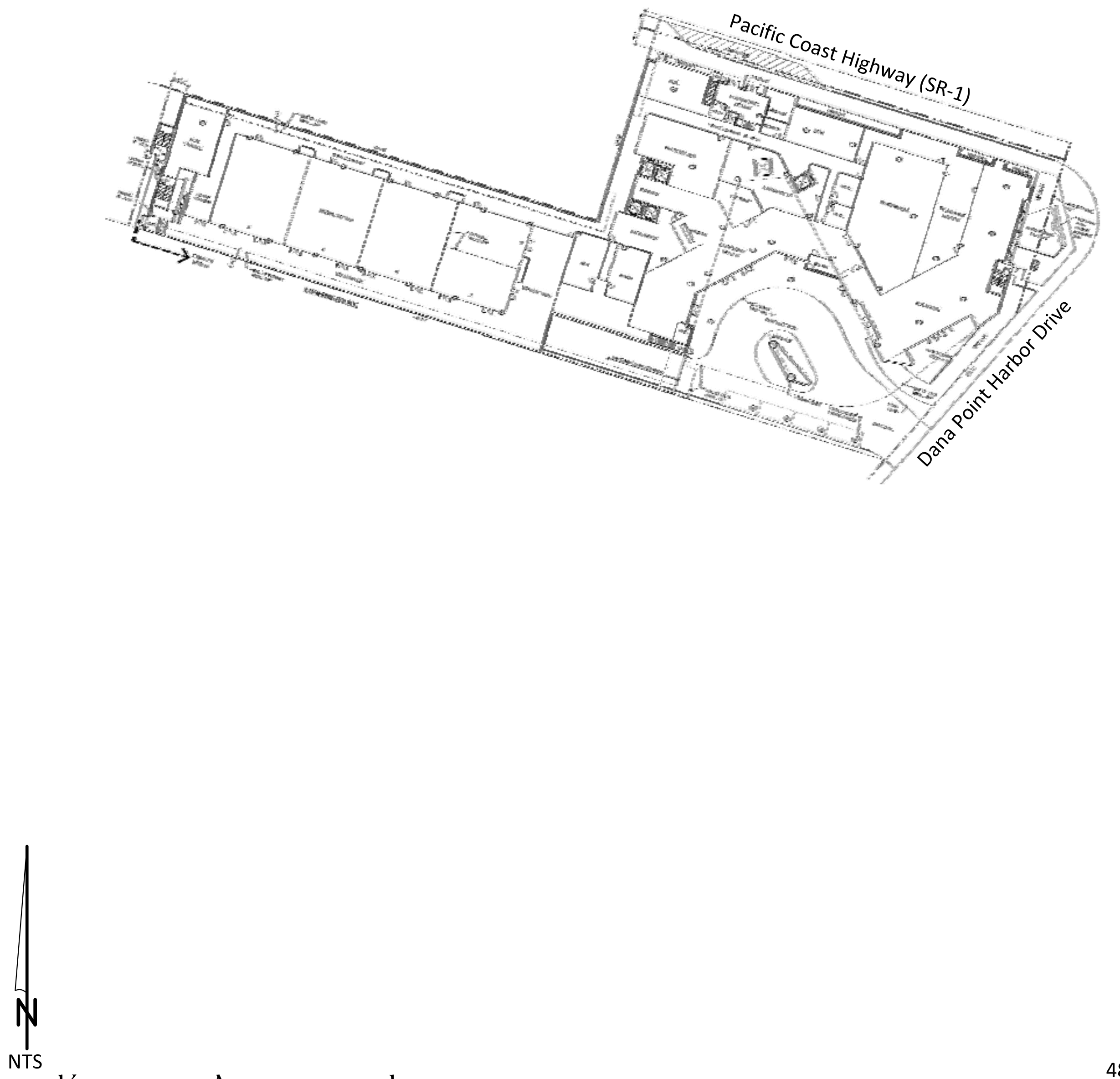
Figure 2
Site Plan



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III. Existing Traffic Conditions

The traffic conditions as they exist today are discussed below and illustrated on Figures 3 to 15.

A. Surrounding Street System

Study area roadways that will be utilized by the development include Del Obispo Street/Dana Point Harbor Drive, Pacific Coast Highway (SR-1), and Park Lantern.

Del Obispo Street/Dana Point Harbor Drive: This north-south roadway currently is four lanes divided in the study area. It is classified as a Primary Arterial (100 foot right-of-way) on the City of Dana Point General Plan Circulation Element. Del Obispo Street/Dana Point Harbor Drive currently carries approximately 10,600 to 11,900 vehicles per day in the study area during a weekday, 8,800 to 12,500 vehicles per day in the study area during a Saturday, 11,800 to 13,300 vehicles per day in the study area during a weekday during peak season, 9,700 to 13,800 vehicles per day in the study area during a Saturday during peak season.

Pacific Coast Highway (SR-1): This east-west roadway currently is six lanes divided in the study area. It is classified as a Major Arterial (120 foot right-of-way) on the City of Dana Point General Plan Circulation Element. Pacific Coast Highway (SR-1) currently carries approximately 33,000 to 41,600 vehicles per day in the study area during a weekday, 29,700 to 37,700 vehicles per day in the study area during a Saturday, 36,700 to 46,300 vehicles per day in the study area during a weekday during peak season, 33,100 to 41,900 vehicles per day in the study area during a Saturday during peak season.

Park Lantern: This east-west roadway currently is two lanes undivided to four lanes undivided in the study area. It is not classified on the City of Dana Point General Plan Circulation Element. Park Lantern currently carries approximately 1,000 to 1,800 vehicles per day in the study area during a weekday, 1,100 to 1,400 vehicles per day in the study area during a Saturday, 1,100 to 2,100 vehicles per day in the study area during a weekday during peak season, 1,200 to 1,500 vehicles per day in the study area during a Saturday during peak season.

B. Existing Travel Lanes and Intersection Controls

Figure 3 identifies the existing roadway conditions for study area roadways. The number of through lanes for existing roadways and the existing intersection controls are identified.

C. Existing Weekday Average Daily Traffic Volumes

Figure 4 depicts the existing weekday average daily traffic volumes. The existing weekday average daily traffic volumes have been obtained from the City of Dana Point 2011 Traffic Flow Map reduced by the peak season factor and factored from peak hour counts obtained by Kunzman Associates, Inc. in March 2011 (see Appendix B and C) using the following formula for each intersection leg:

Weekday PM Peak Hour (Approach Volume + Exit Volume) x 10.0 = Leg Volume.

D. Existing Saturday Daily Traffic Volumes

Figure 5 depicts the existing Saturday daily traffic volumes. The existing Saturday daily traffic volumes have been obtained from factored peak hour counts obtained by Kunzman Associates, Inc. in March 2011 (see Appendix B) using the following formula for each intersection leg:

Saturday Mid-day Peak Hour (Approach Volume + Exit Volume) x 10.0 = Leg Volume.

E. Existing Weekday Peak Season Average Daily Traffic Volumes

Figure 6 depicts the existing weekday peak season average daily traffic volumes. The existing weekday peak season average daily traffic volumes have been obtained from the City of Dana Point 2011 Traffic Flow Map and factored from peak season factored peak hour counts obtained by Kunzman Associates, Inc. in March 2011 (see Appendix B and C) using the following formula for each intersection leg:

Weekday Peak Season PM Peak Hour (Approach Volume + Exit Volume) x 10.0 = Leg Volume.

F. Existing Saturday Peak Season Daily Traffic Volumes

Figure 7 depicts the existing Saturday peak season daily traffic volumes. The existing Saturday peak season traffic volumes have been obtained from factored peak season factored peak hour counts obtained by Kunzman Associates, Inc. in March 2011 (see Appendix B and C) using the following formula for each intersection leg:

Saturday Peak Season Mid-day Peak Hour (Approach Volume + Exit Volume) x 10.0 = Leg Volume.

G. Existing Intersection Levels of Service

The technique used to assess the operation of an intersection is known as Intersection Capacity Utilization, as described in Appendix D. To calculate an Intersection Capacity Utilization value, the volume of traffic using the intersection is compared with the capacity of the intersection. The Intersection Capacity Utilization represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity.

The technique used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization. To calculate an Intersection Capacity Utilization value, the volume of traffic using the intersection is compared with the capacity of the intersection. The Intersection Capacity Utilization represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. The technique used to assess the operation of an unsignalized intersection is known as the Intersection Delay Method based on the 2000 Highway Capacity Manual – Transportation Research Board Special Report 209. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection. The signalized intersections are considered deficient (Level of Service F) if the overall intersection critical volume to capacity ratio equals or exceeds 1.0, even if the Level of Service defined by the delay value is below the defined Level of Service standard. The volume to capacity ratio is defined as the critical volumes divided by the intersection capacity. A volume to capacity ratio greater than 1.0 implies an infinite queue. Both methodologies are described in Appendix C.

The Intersection Capacity Utilization calculations assume a per-lane capacity of 1,700 vehicles per hour for each travel lane (through or turning) through an intersection. A clearance factor of 0.05 or five (5) percent of the total intersection capacity is included in the Intersection Capacity Utilization calculation.

The Levels of Service for the existing traffic conditions have been calculated and are shown in Table 1. Existing Levels of Service are based upon manual weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement counts obtained by Kunzman Associates, Inc. in March 2011 (see Figures 8 to 10). Existing peak season Levels of Service for are based upon factored manual weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement counts obtained by Kunzman Associates, Inc. in March 2011 (see Figures 11 to 13). A peak season factor has been applied to the existing traffic counts to account for non peak season conditions when the traffic counts were conducted. The City of Dana Point staff provided a ten (10) percent peak season factor to be utilized. A verification of this factor was calculated using the last ten (10) years of available California Department of Transportation data. The calculated peak season verse non peak season factor is nine (9) percent. The conservative ten (10) percent peak season factor provided by the City of Dana Point has been utilized in this analysis. Traffic count worksheets are provided in Appendix B and peak season factor calculations are located in Appendix C.

There are two peak hours in a weekday. The morning peak hour is between 7:00 AM and 9:00 AM, and the evening peak hour is between 4:00 PM and 6:00 PM. There is one peak hours on a Saturday. The mid-day peak hour is between 10:00 AM and 2:00 PM. The actual peak hour within the two-hour interval is the four consecutive 15-minute periods with the highest total volume when all movements are added together. Thus, the evening peak hour at one intersection may be 4:45 PM to 5:45 PM if those four consecutive 15-minute periods have the highest combined volume.

The study area intersections currently operate within acceptable Levels of Service during the peak hours for Existing traffic conditions (see Table 1). Existing Level of Service worksheets are provided in Appendix D.

H. Existing General Plan Circulation Element

Figure 14 shows the current City of Dana Point General Plan Circulation Element. Both existing and future roadways are included in the Circulation Element of the General Plan and are graphically depicted on Figure 14. This figure shows the nature and extent of arterial highways that are needed to adequately serve the ultimate development depicted by the land use element of the General Plan. Figure 15 depicts the current City of Dana Point General Plan roadway cross-sections.

I. Performance Criteria

The following are the performance criteria used for comparing volumes and capacities on the City street and highway system:

PEAK HOUR INTERSECTION VOLUMES
- Level of Service C – Primary arterials, secondary arterials and local streets.
- Level of Service D – Major arterials and State highways.
- Level of Service E – Congestion Management Plan evaluations

Table 1

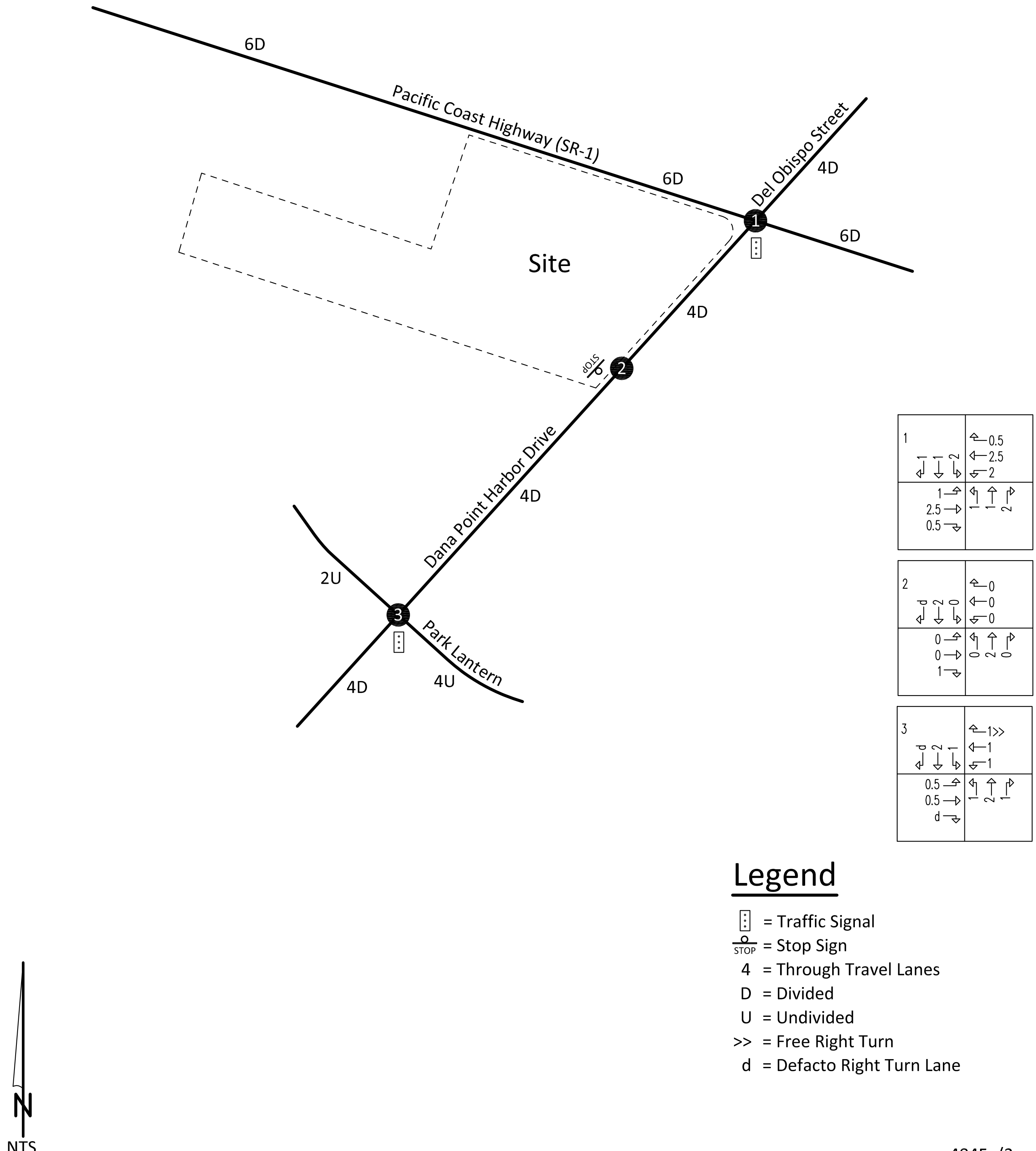
Existing Intersection Delay and Level of Service

Intersection	Traffic Control [2]	Intersection Approach Lanes [1]																								Intersection Capacity Utilization - Level of Service					
																										Non-peak Season			Peak Season		
		Northbound						Southbound						Eastbound						Westbound						Weekday		Weekend	Weekday		Weekend
		L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	Morning	Evening	Midday	Morning	Evening	Midday
Del Obispo Street/Dana Point Harbor Drive (NS) at:																															
Pacific Coast Highway (EW) - #1	TS	1	0	1	0	2	0	2	0	1	0	1	0	1	0	2	1	0	0	2	0	2	1	0	0	0.515-A	0.634-B	0.579-A	0.561-A	0.692-B	0.640-B
Park Lantern (EW) - #3	TS	1	0	2	0	1	0	1	0	2	0	d	0	0	1	0	0	d	0	1	0	1	0	1>>	0	0.191-A	0.288-A	0.259-A	0.205-A	0.312-A	0.280-A

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right;
>> = Free Right Turn; d = Defacto Right Turn Lane

[2] TS = Traffic Signal

Figure 3
Existing Through Travel Lanes and Intersection Controls



Legend

- = Traffic Signal
- STOP = Stop Sign
- 4 = Through Travel Lanes
- D = Divided
- U = Undivided
- >> = Free Right Turn
- d = Defacto Right Turn Lane

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KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

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Figure 4
Existing Weekday Average Daily Traffic Volumes

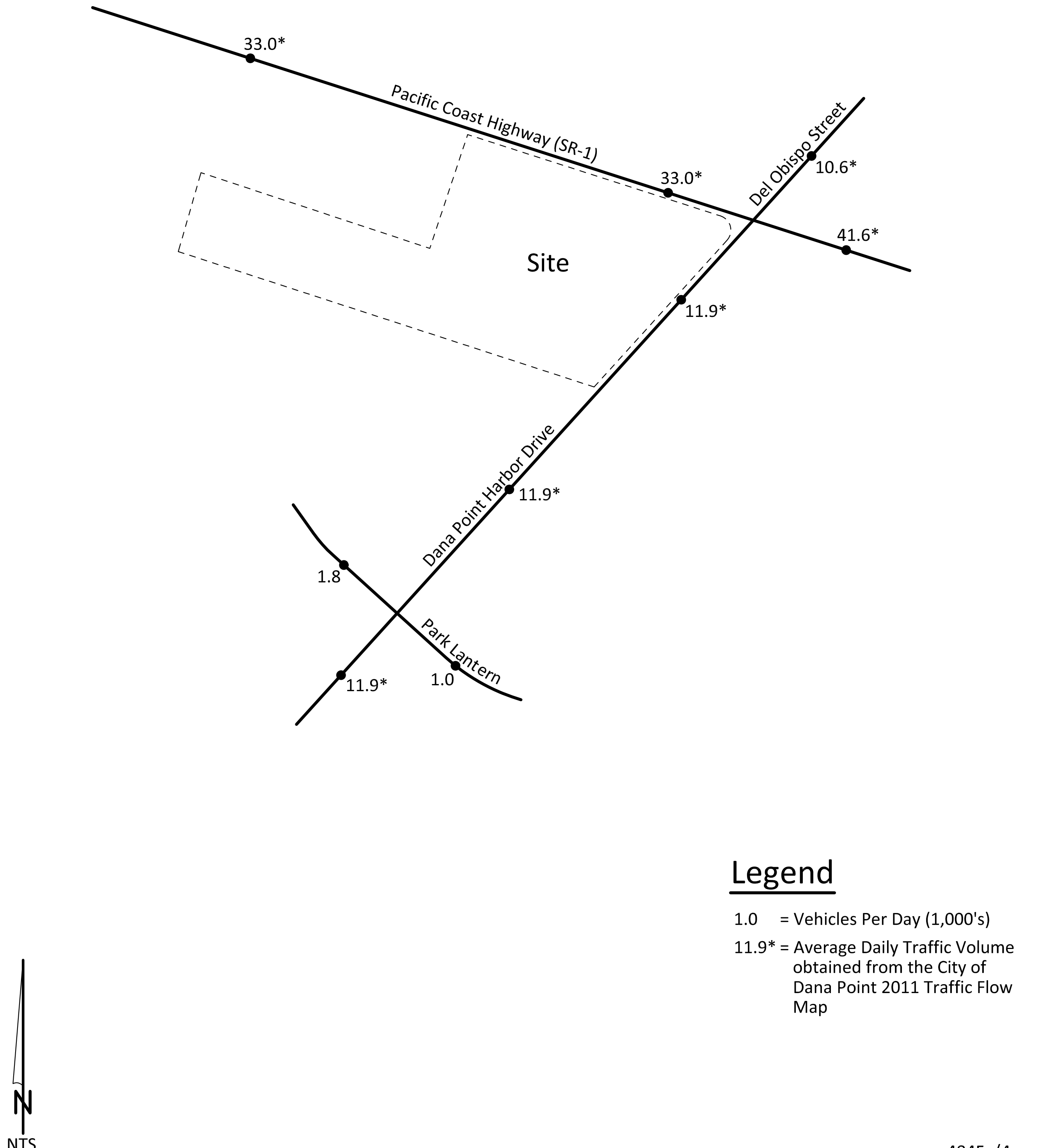

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Figure 5
Existing Saturday Daily Traffic Volumes

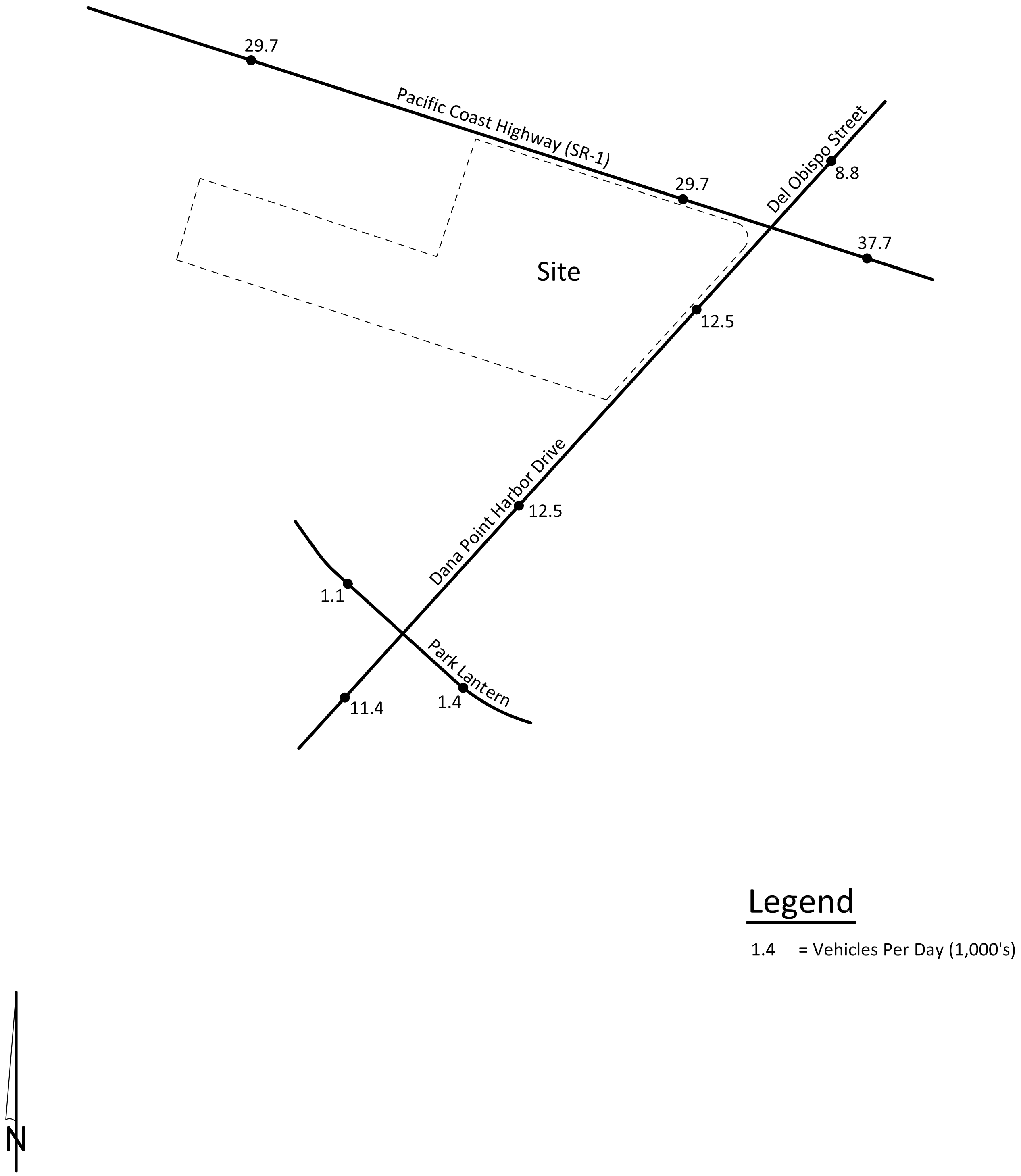

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Figure 6
Existing Weekday Peak Season Average Daily Traffic Volumes

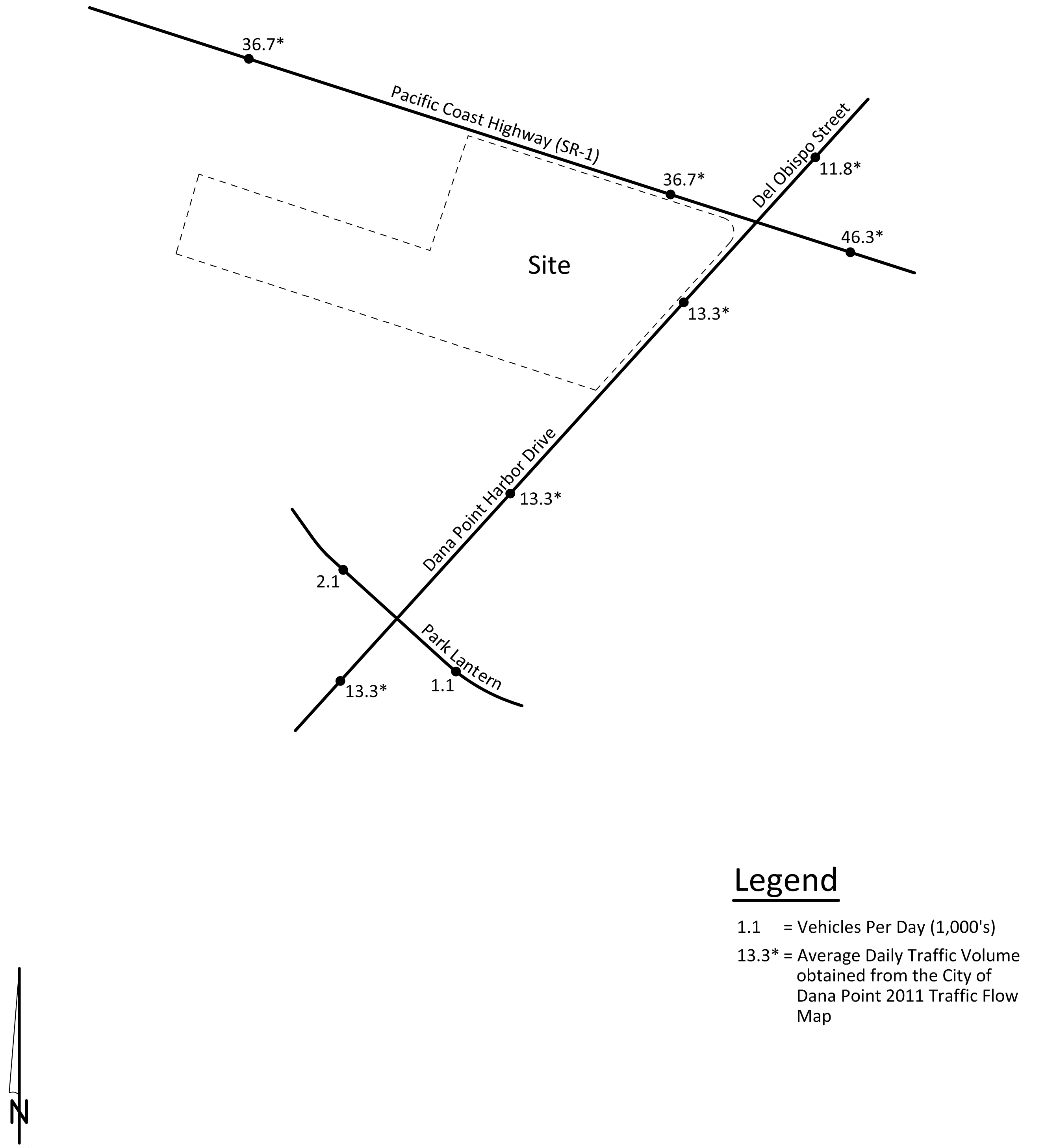

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Figure 7
Existing Saturday Peak Season Daily Traffic Volumes

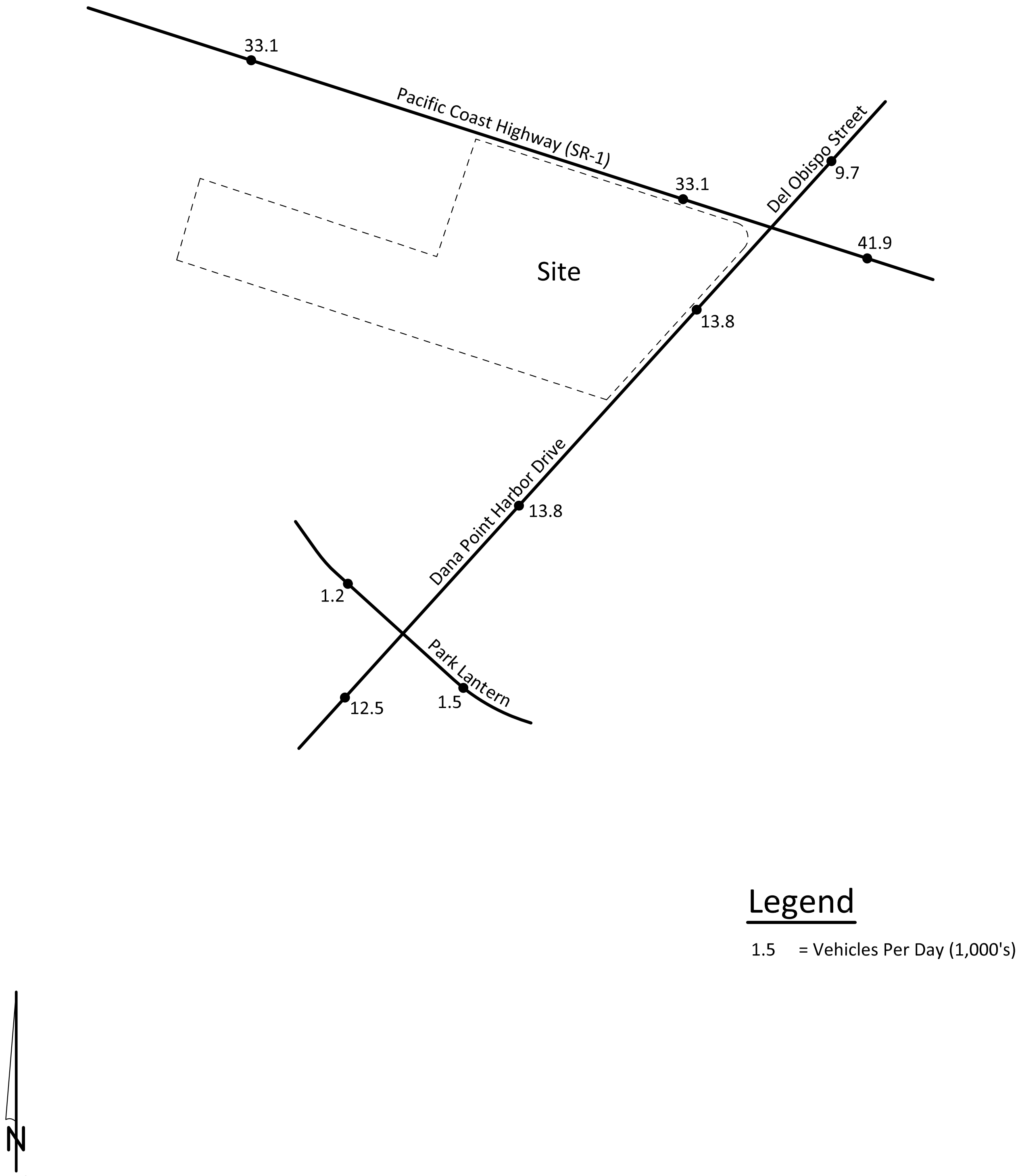

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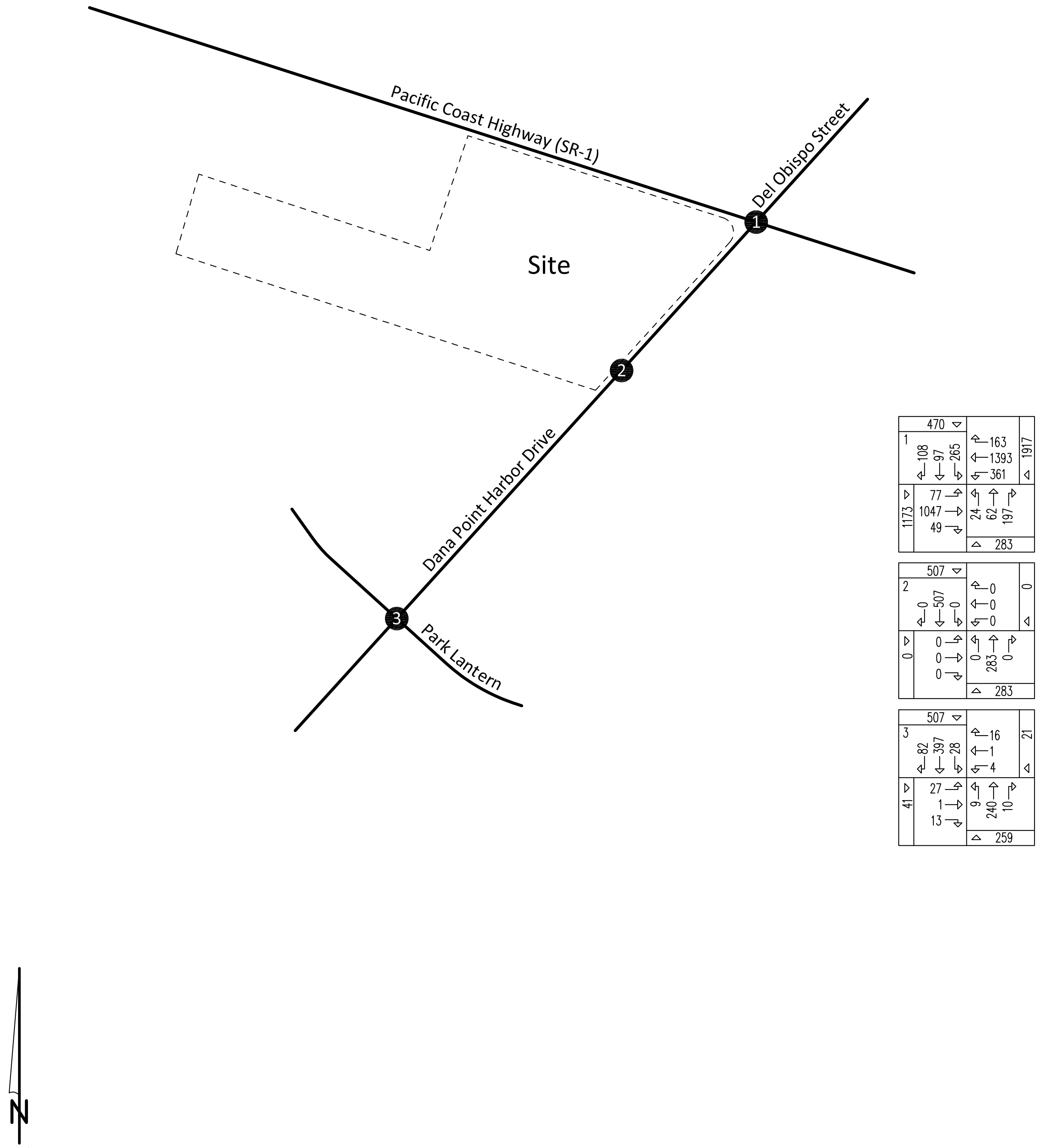
Figure 8
Existing Weekday Morning Peak Hour Turning Movement Volumes



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KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

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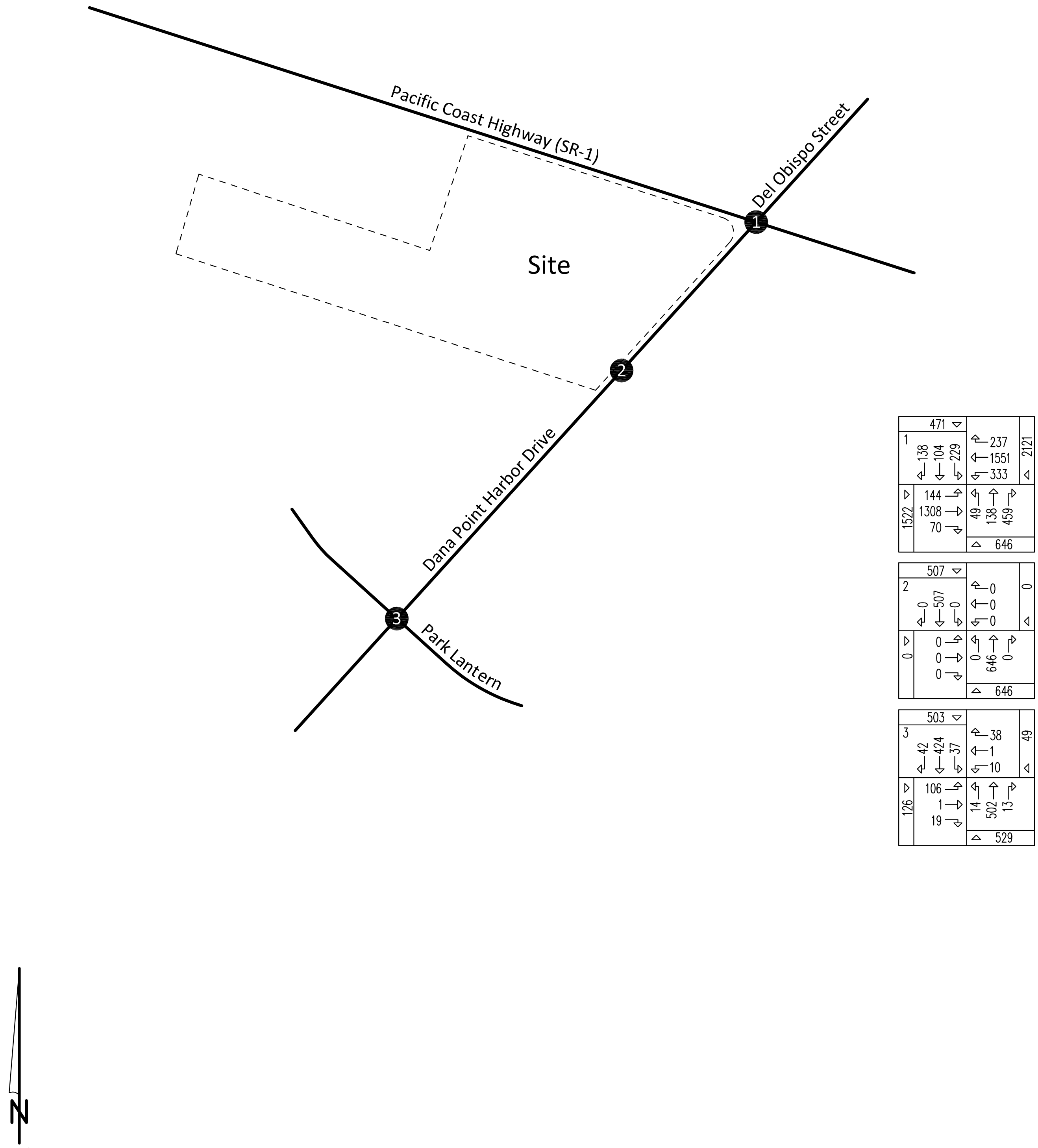
Figure 9
Existing Weekday Evening Peak Hour Turning Movement Volumes



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Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

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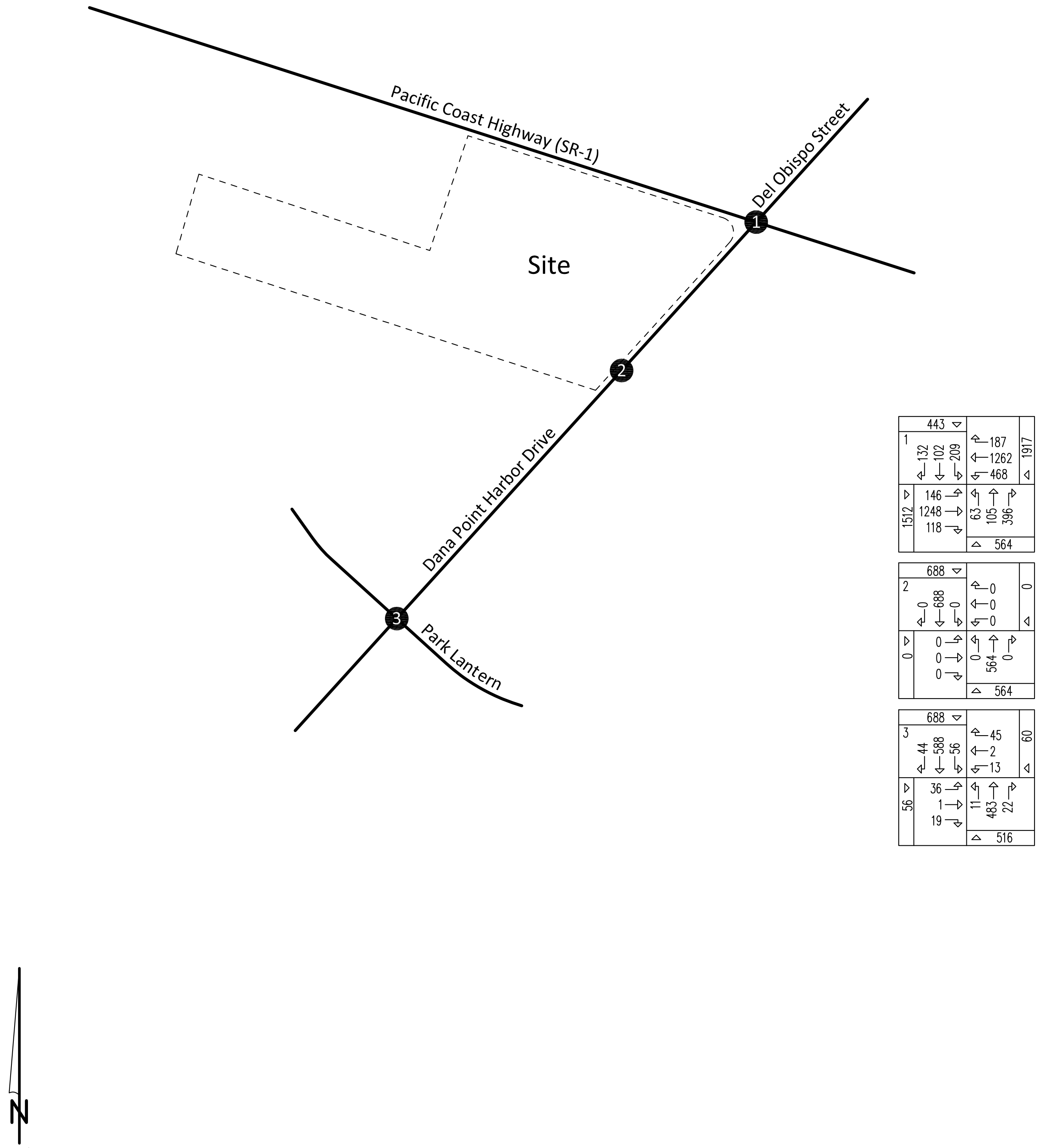
Figure 10
Existing Saturday Mid-day Peak Hour Turning Movement Volumes



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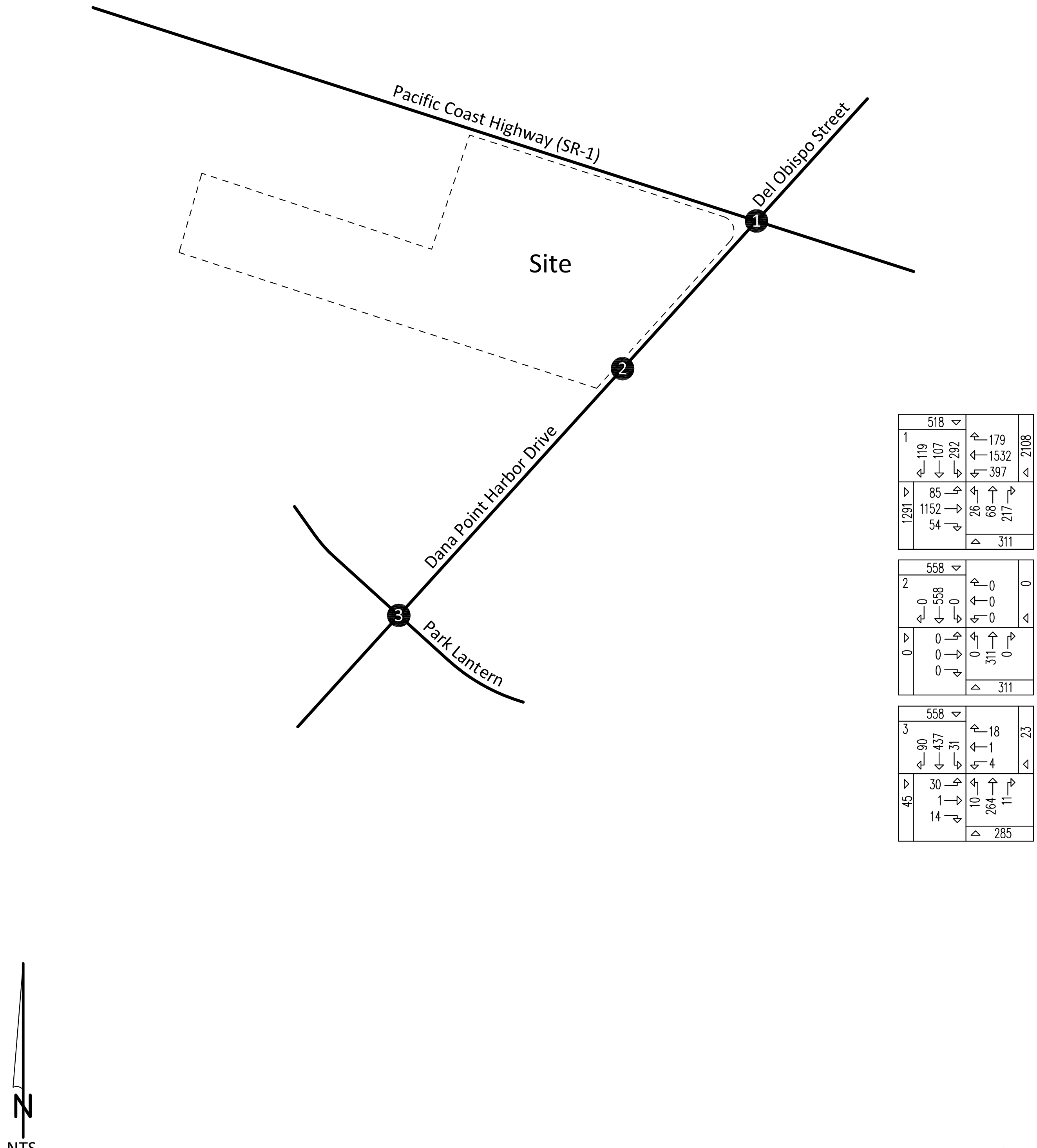
KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 11
Existing Weekday Peak Season
Morning Peak Hour Turning Movement Volumes



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KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

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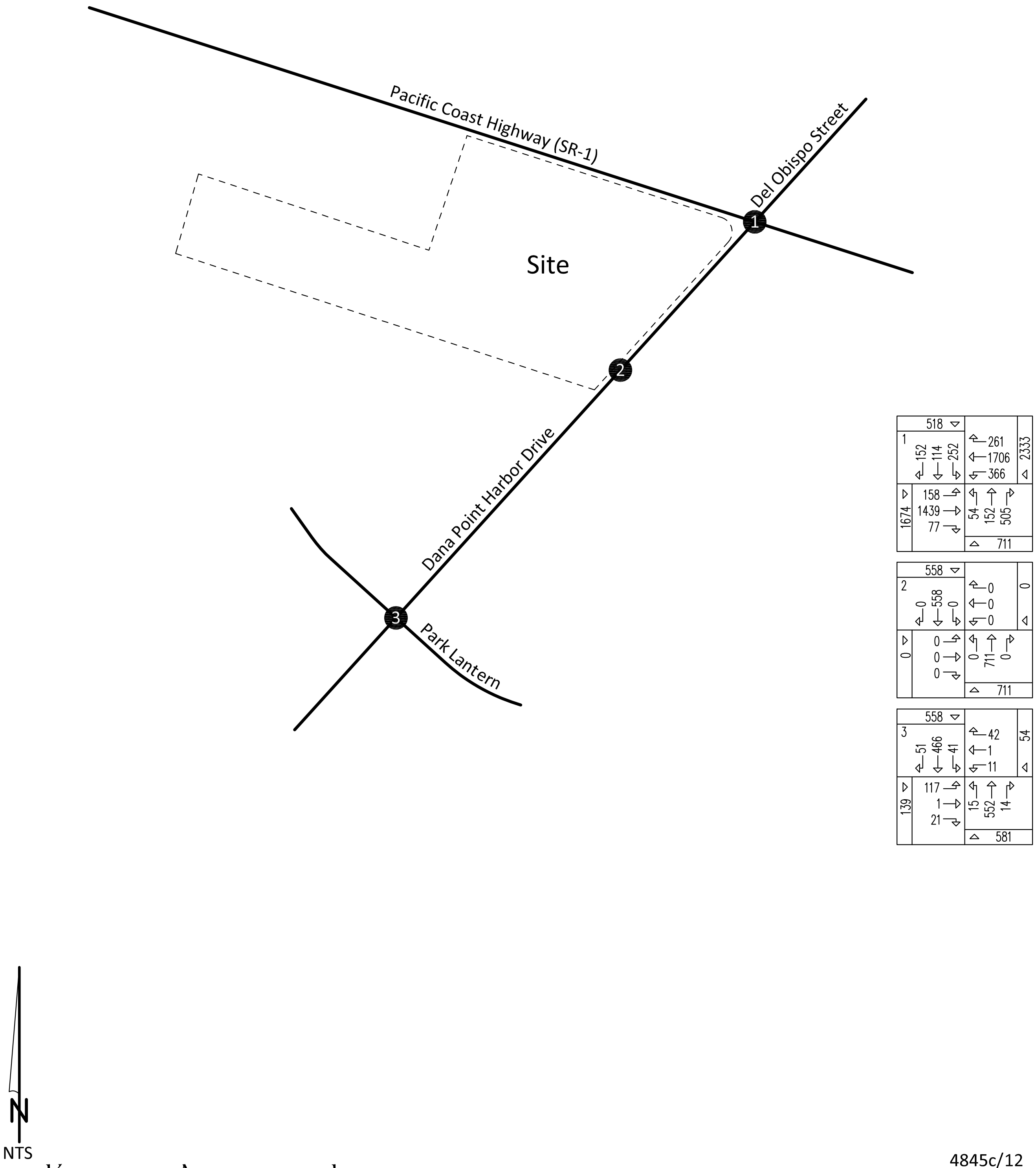
Figure 12
Existing Weekday Peak Season
Evening Peak Hour Turning Movement Volumes



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Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

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Figure 13
Existing Saturday Peak Season
Mid-day Peak Hour Turning Movement Volumes

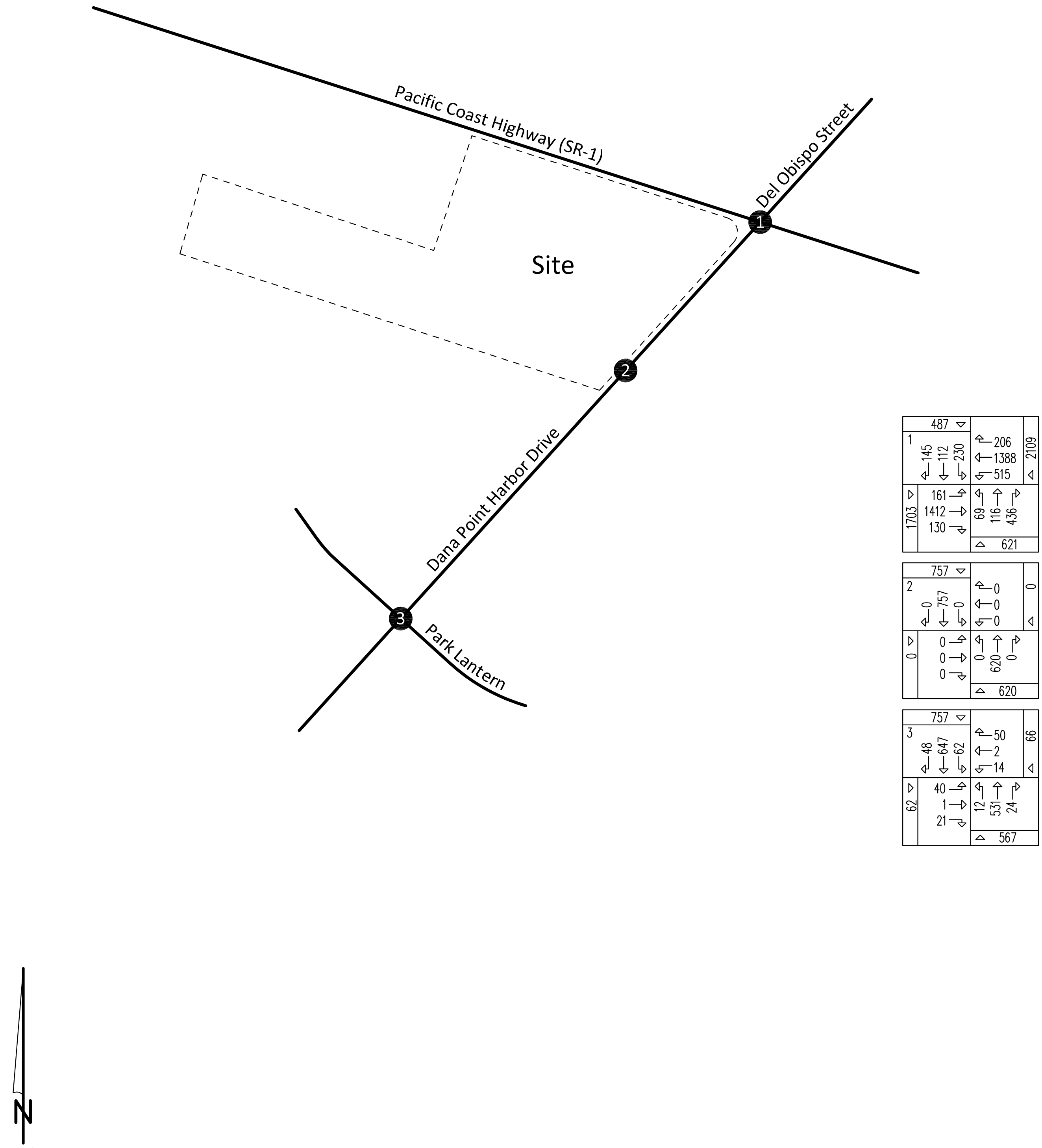

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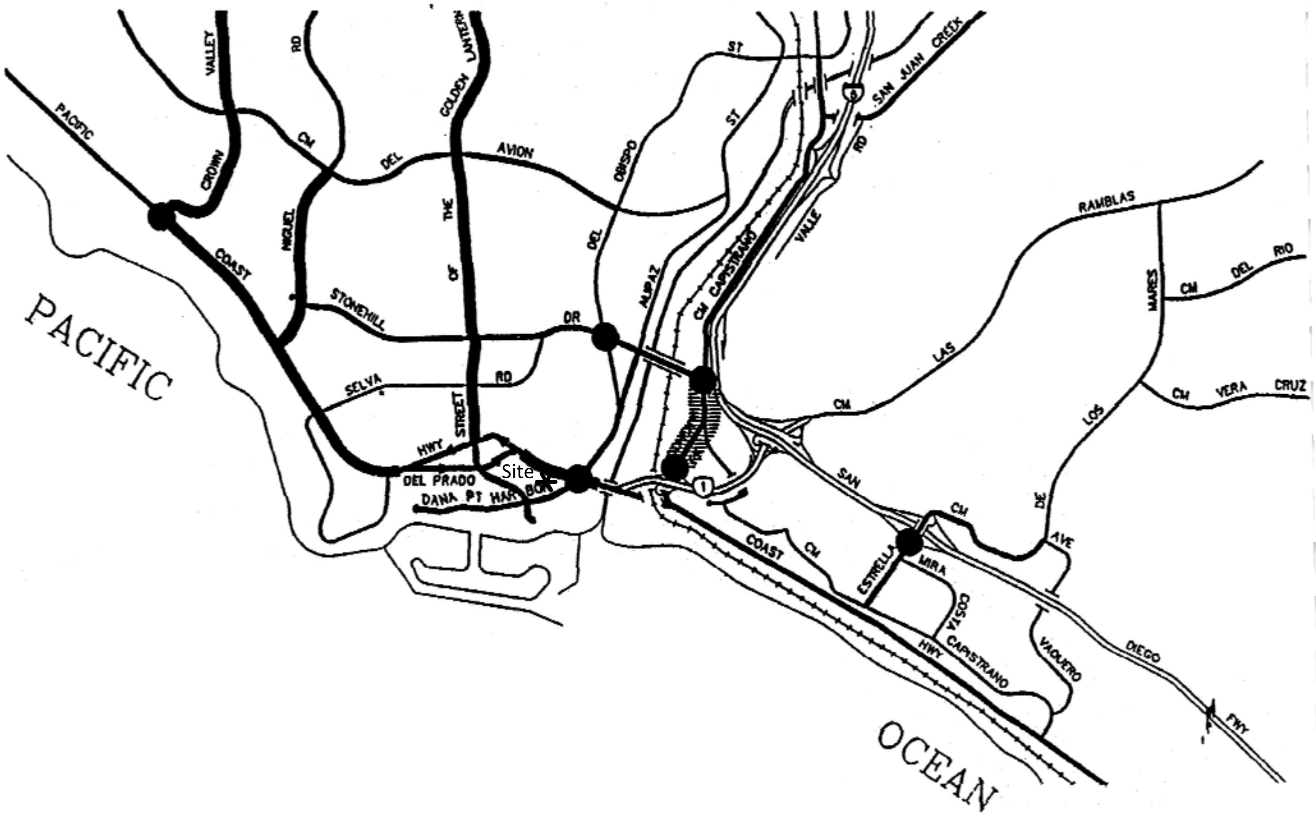
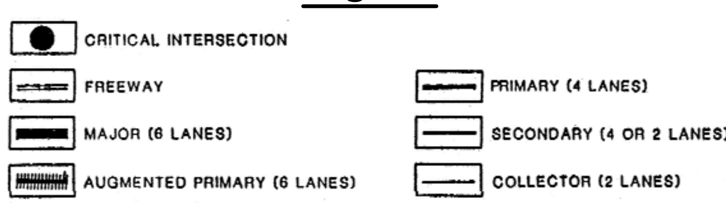
Figure 14
City of Dana Point General Plan Circulation Element



Legend



Source: City of Dana Point

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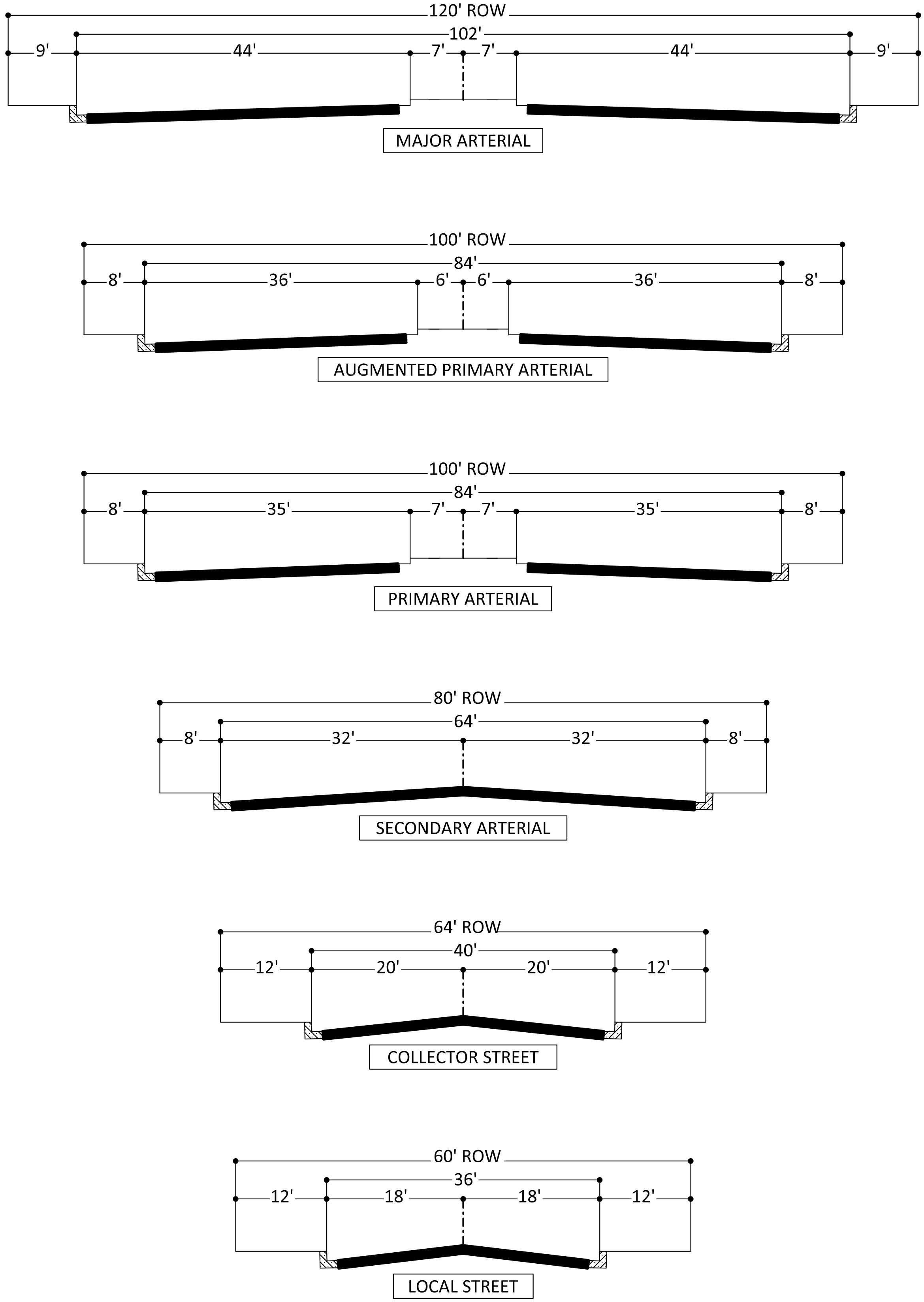
Figure 15
City of Dana Point General Plan Roadway Cross-Sections



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Source: City of Dana Point

IV. Project Traffic

The proposed development consists of a 258 room hotel with a 12,103 square foot conference center/banquet facility and a 7,087 square foot restaurant. Parking for the proposed hotel totals 325 parking spaces and consists of 275 on-site parking spaces and 50 off-site overflow parking spaces. The project site will continue to have access to Del Obispo Street/Dana Point Harbor Drive.

A. Trip Generation

The traffic generated by the project is determined by multiplying an appropriate trip generation rate by the quantity of land use. Trip generation rates are predicated on the assumption that energy costs, the availability of roadway capacity, the availability of vehicles to drive, and our life styles remain similar to what we know today. A major change in these variables may affect trip generation rates.

Trip generation rates were determined for daily traffic, weekday morning peak hour inbound and outbound traffic, weekday evening peak hour inbound and outbound traffic, and Saturday mid-day peak hour inbound and outbound traffic for the proposed land use. By multiplying the traffic generation rates by the land use quantity, the traffic volumes are determined. Table 2 exhibits the traffic generation rates and peak hour volumes and project daily traffic volumes. The traffic generation rates are from the Institute of Transportation Engineers, Trip Generation, 8th Edition, 2008.

The existing development currently generates approximately 699 daily vehicle trips during the week, 58 of which will occur during the morning peak hour and 48 of which will occur during the evening peak hour.

The existing development currently generates approximately 847 daily vehicle trips on a Saturday, 72 of which will occur during the mid-day peak hour.

The proposed development is projected to generate approximately 2,108 daily vehicle trips on a weekday, 145 of which will occur during the morning peak hour and 152 of which will occur during the evening peak hour.

The proposed development is projected to generate approximately 2,113 additional daily vehicle trips on a Saturday, 186 of which will occur during the mid-day peak hour.

The proposed development is projected to generate approximately 1,409 additional daily vehicle trips on a weekday, 87 of which will occur during the morning peak hour and 104 of which will occur during the evening peak hour.

The proposed development is projected to generate approximately 1,266 additional daily vehicle trips on a Saturday, 144 of which will occur during the mid-day peak hour.

B. Trip Distribution

Figures 16 and 17 contain the directional distributions of the project traffic for the proposed land use. To determine the traffic distributions for the proposed project, peak hour traffic counts of the existing directional distribution of traffic for existing areas in the vicinity of the site, and other additional information on future development and traffic impacts in the area were reviewed. The project's trip distribution pattern assumes that a southbound u-turn movement will be allowed at the intersection of Dana Point Harbor Drive/Park Lantern. This improvement is to be implemented by the project with the review and approval from the City of Dana Point.

It is assumed that the 10 percent of the project traffic exiting the project site and heading south on Dana Point Harbor Drive will potentially be utilizing the Dana Point Harbor facilities and/or utilizing Golden Lantern.

C. Trip Assignment

Based on the identified traffic generation and distributions, project weekday average daily traffic volumes have been calculated and shown on Figure 18 and project Saturday daily traffic volumes have been calculated and shown on Figure 19. Weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes expected from the project are shown on Figures 20 to 22, respectively.

Table 2

Project Traffic Generation[1]

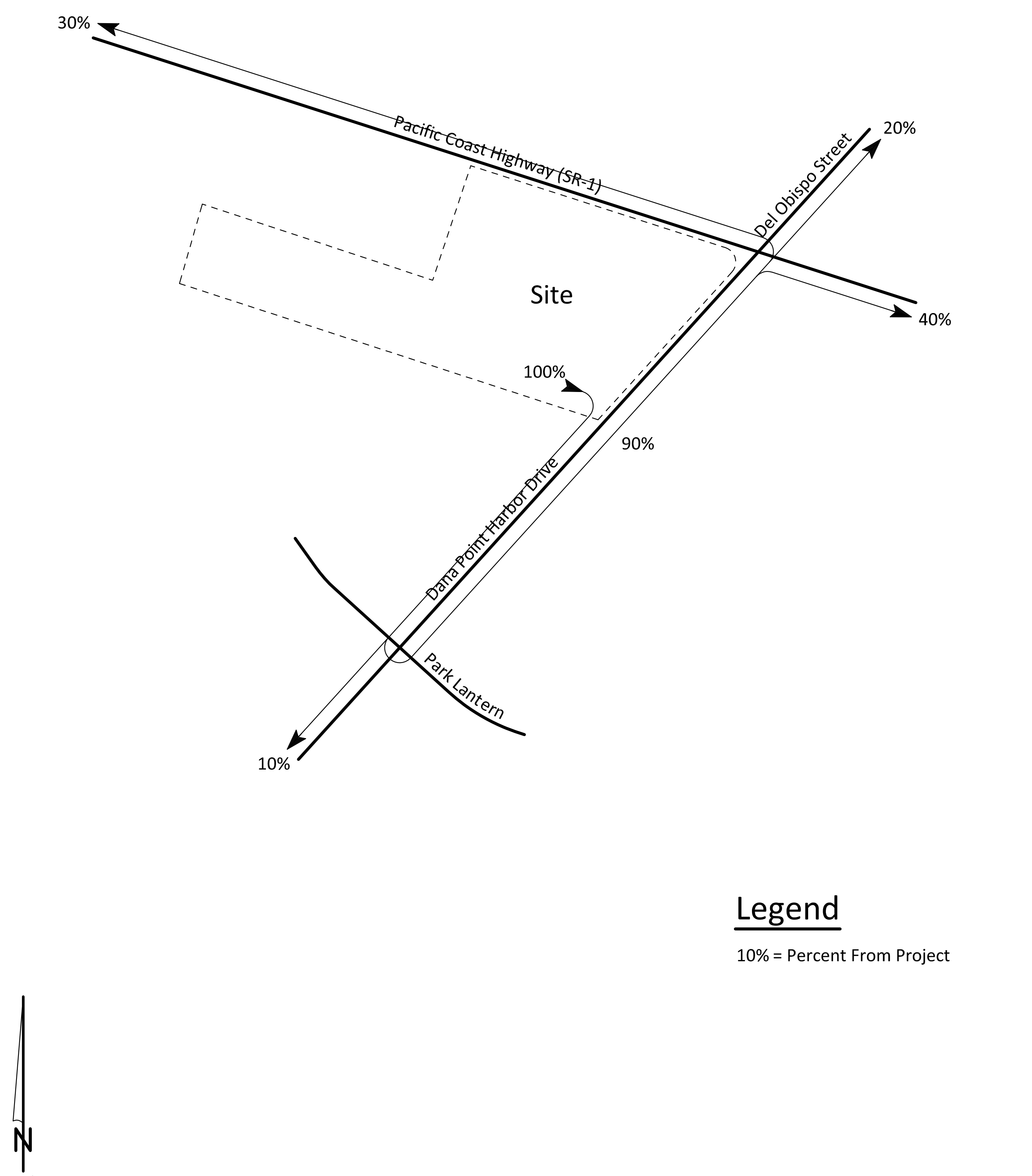
Land Use	Quantity	Units[2]	Weekday							Weekend			
			Peak Hour							Peak Hour			
			Morning			Evening				Mid-day			
			Inbound	Outbound	Total	Inbound	Outbound	Total	Daily	Inbound	Outbound	Total	Daily
Trip Generation Rates													
Hotel		RM	0.34	0.22	0.56	0.31	0.28	0.59	8.17	0.40	0.32	0.72	8.19
Fast Food With Drive-Thru		TSF	25.17	24.18	49.35	17.60	16.24	33.84	496.12	30.29	29.10	59.39	722.00
Trips Generated													
Existing Hotel	-46	RM	-16	-10	-26	-14	-13	-27	-376	-18	-15	-33	-377
Existing Fast Food With Drive-Thru	-1.277	TSF	-32	-31	-63	-22	-21	-43	-634	-39	-37	-76	-922
Pass-by Percentages[3]			49%	49%	49%	50%	50%	50%	49%	49%	49%	49%	49%
Pass-by Trips[3]			16	15	31	11	11	22	311	19	18	37	452
Subtotal			-32	-26	-58	-25	-23	-48	-699	-38	-34	-72	-847
Proposed Hotel	258	RM	88	57	145	80	72	152	2,108	103	83	186	2,113
Difference			56	31	87	55	49	104	1,409	65	49	114	1,266

[1] Source: Institute of Transportation Engineers, Trip Generation, 8th Edition, 2008, Land Use Categories 310 and 934.

[2] RM = Room; TSF = Thousand Square Feet.

[3] Source: Institute of Transportation Engineers, Trip Generation Handbook, 2nd Edition, 2004, Land Use Category 934.

Figure 16
Project Outbound Traffic Distribution



4845c/16

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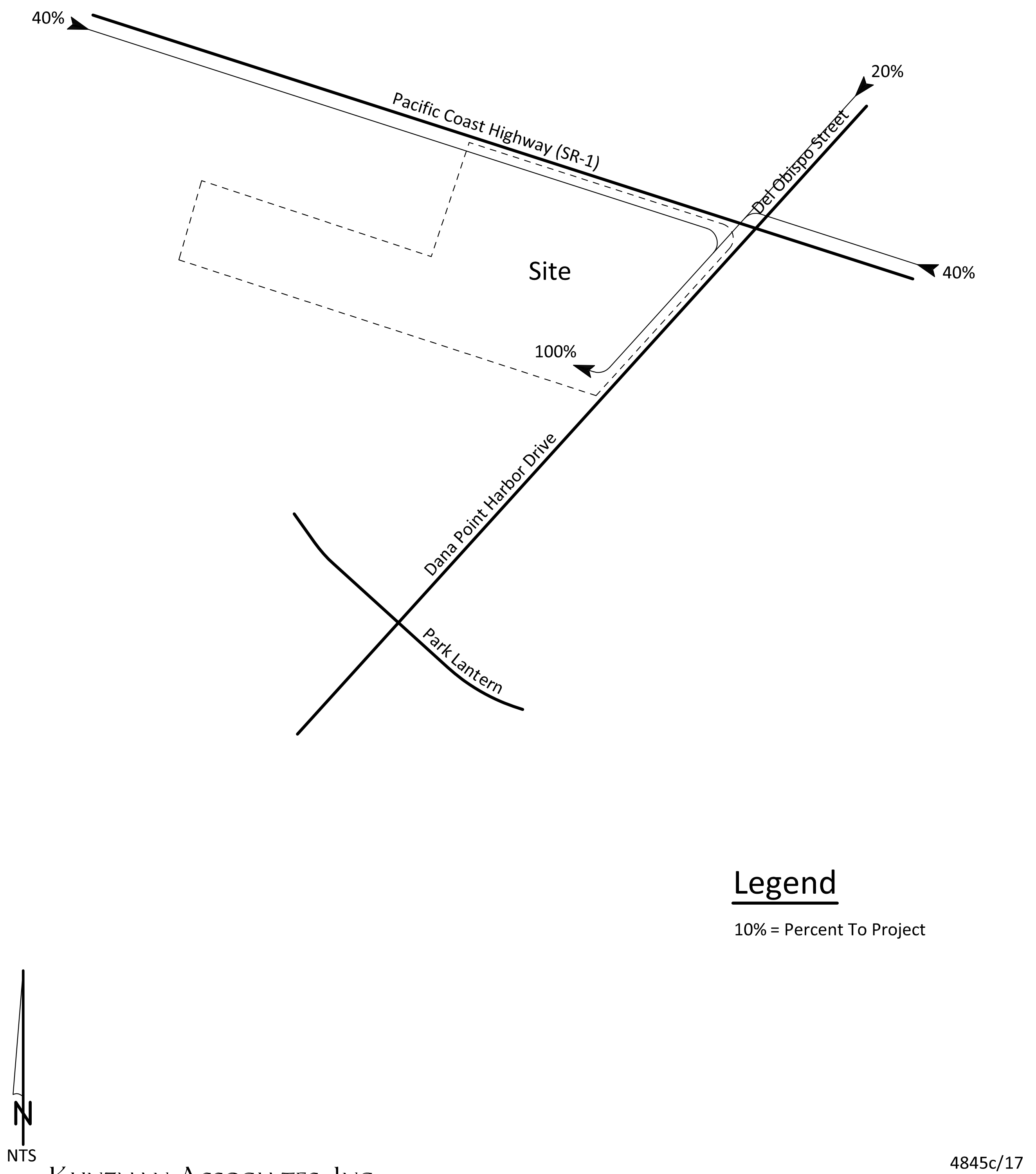
OVER 35 YEARS OF EXCELLENT SERVICE

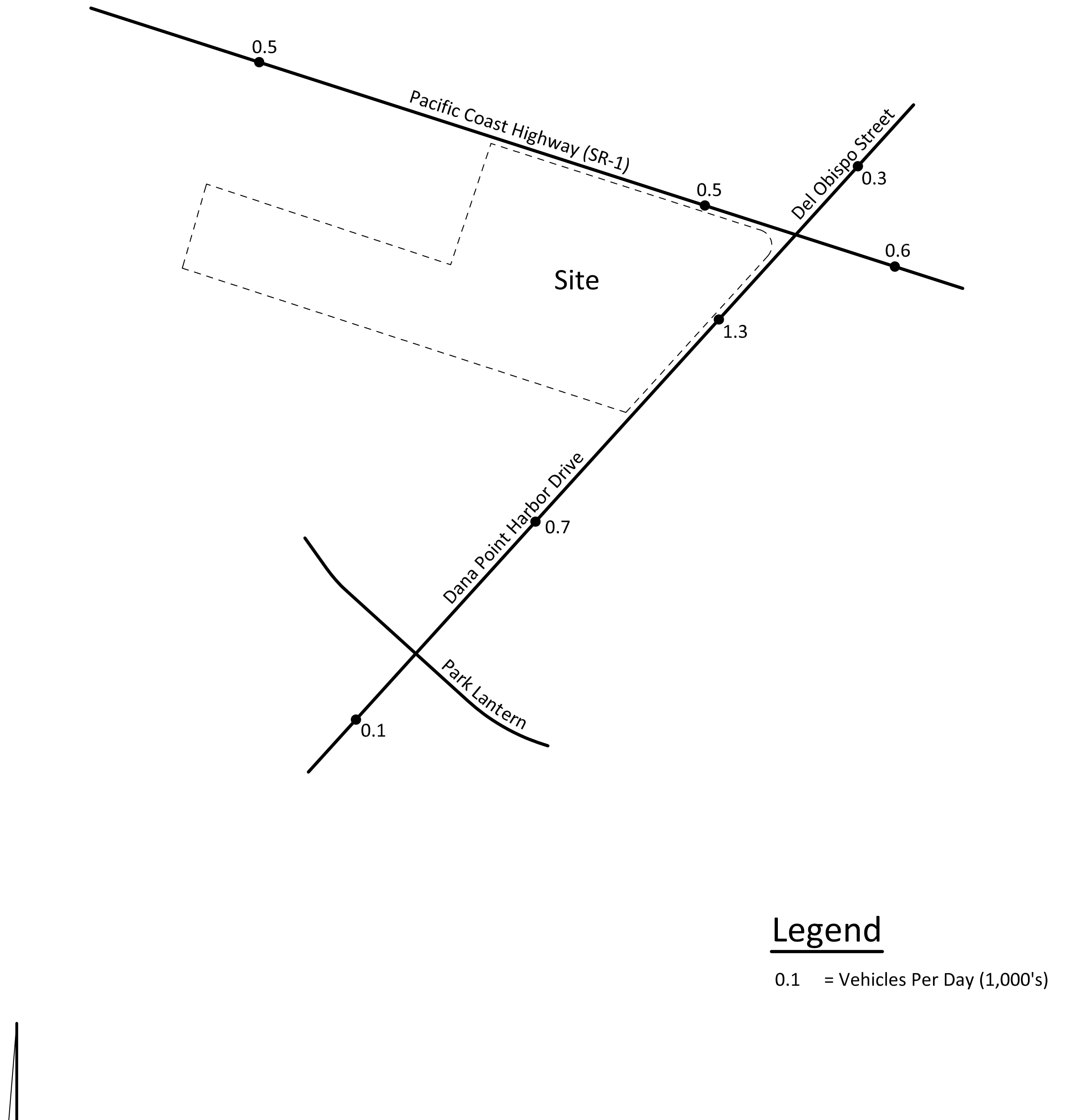
Figure 17
Project Inbound Traffic Distribution



4845c/17

Kunzman Associates, Inc.
Over 35 Years of Excellent Service

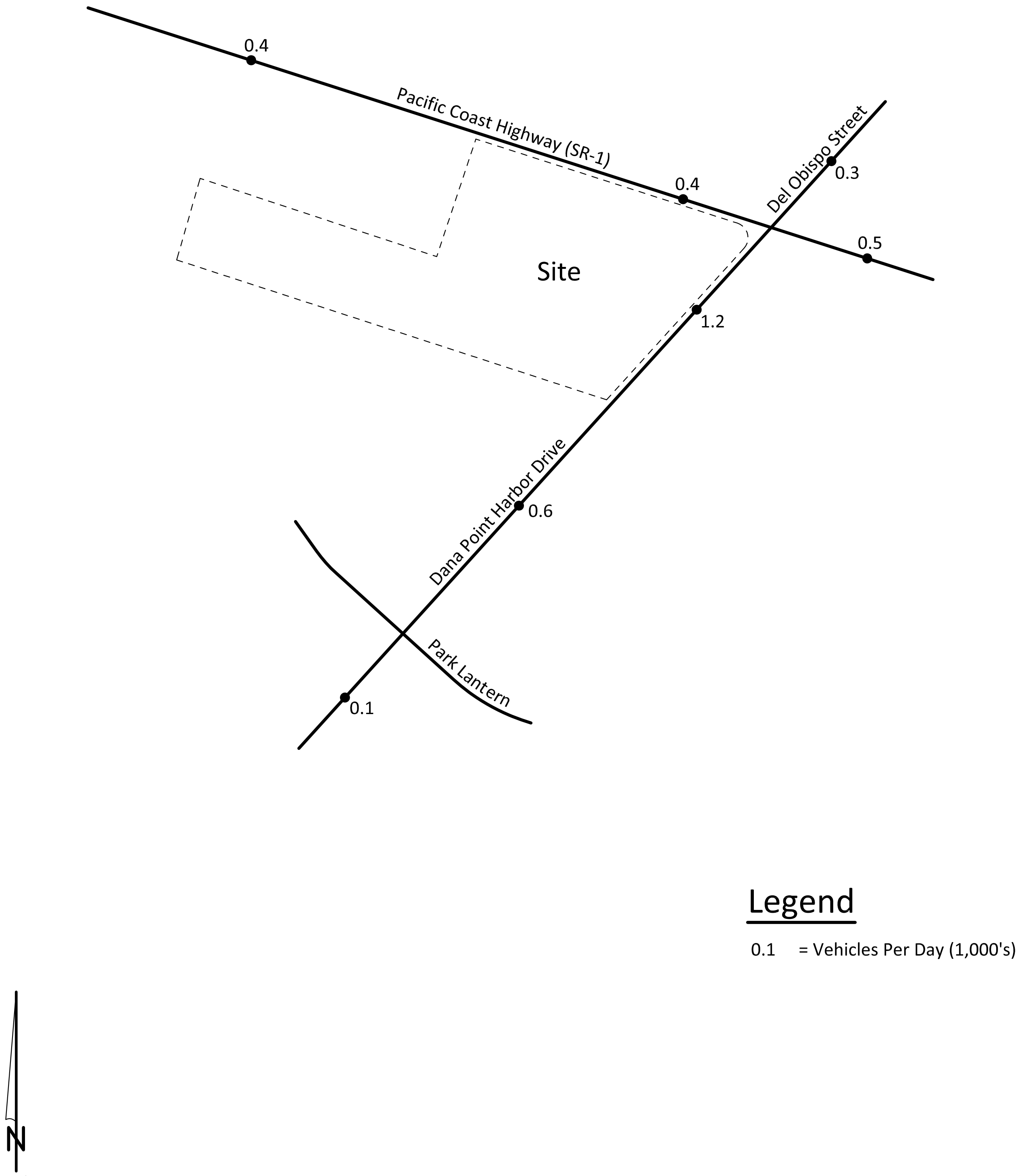
Figure 18
Project Weekday Average Daily Traffic Volumes



4845c/18

KUNZMAN ASSOCIATES, INC.
OVER 35 YEARS OF EXCELLENT SERVICE

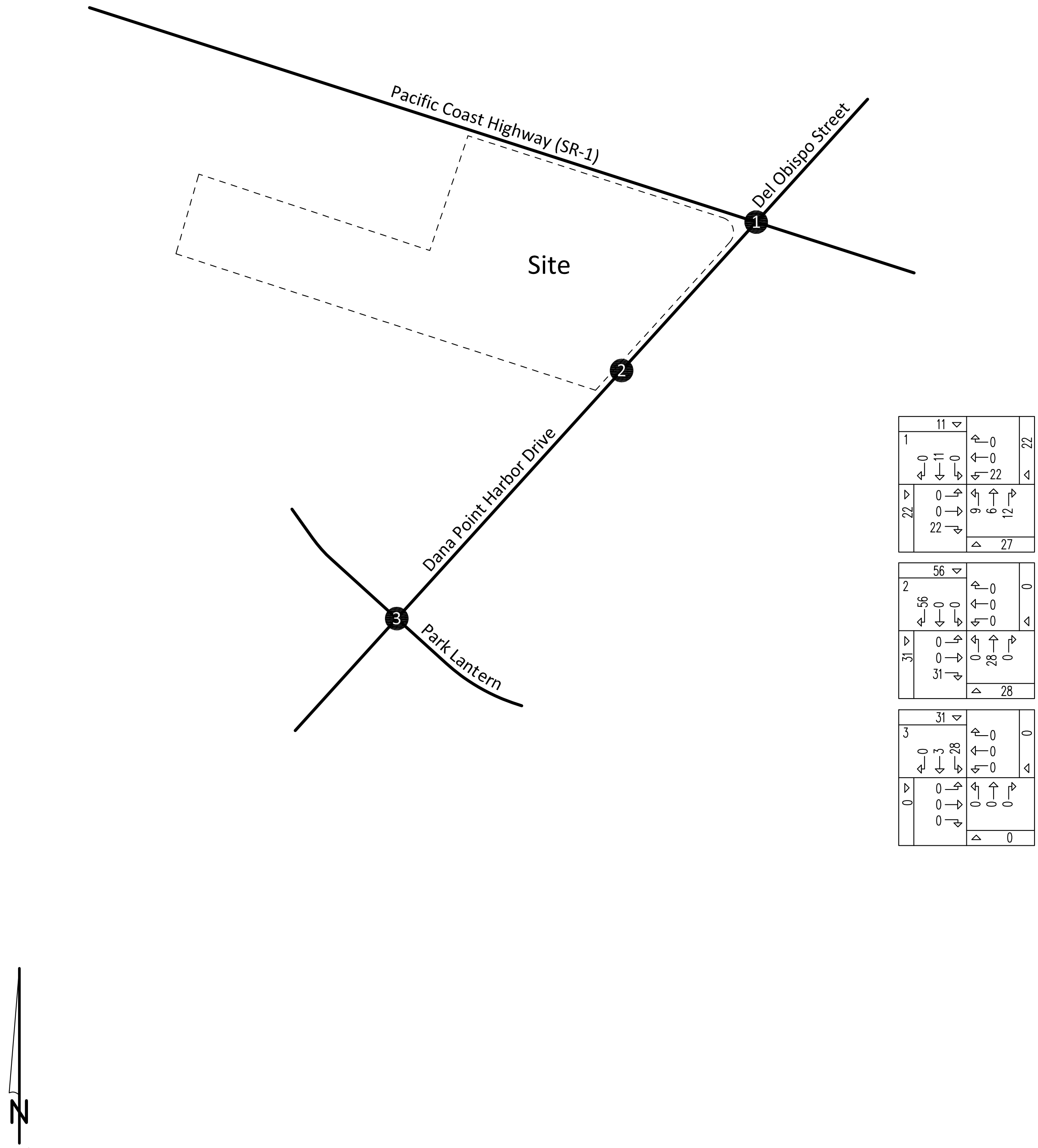
Figure 19
Project Saturday Daily Traffic Volumes



4845c/19

Kunzman Associates, Inc.
Over 35 Years of Excellent Service

Figure 20
Project Weekday Morning Peak Hour Turning Movement Volumes

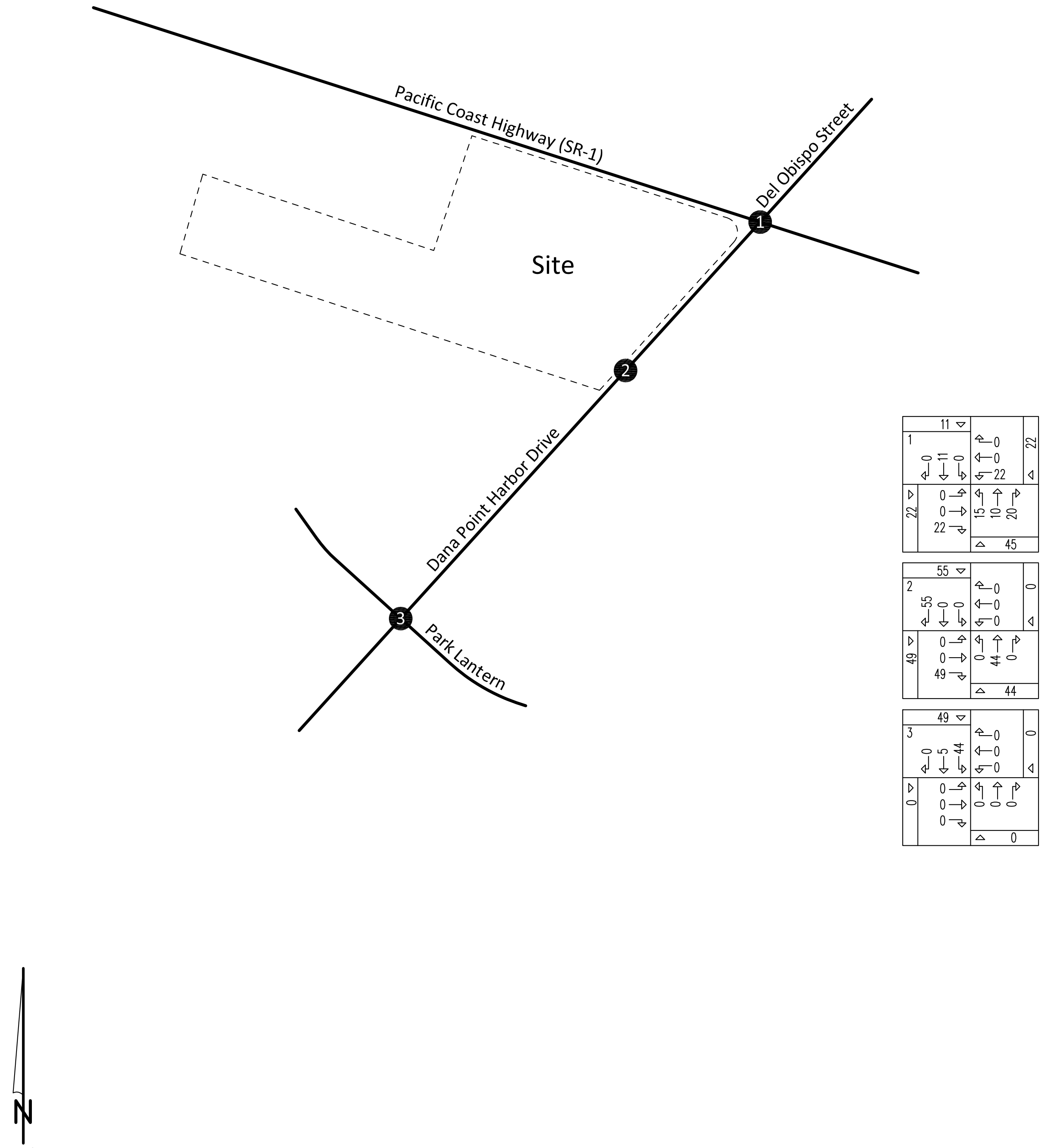


4845c/20

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 21
Project Weekday Evening Peak Hour Turning Movement Volumes

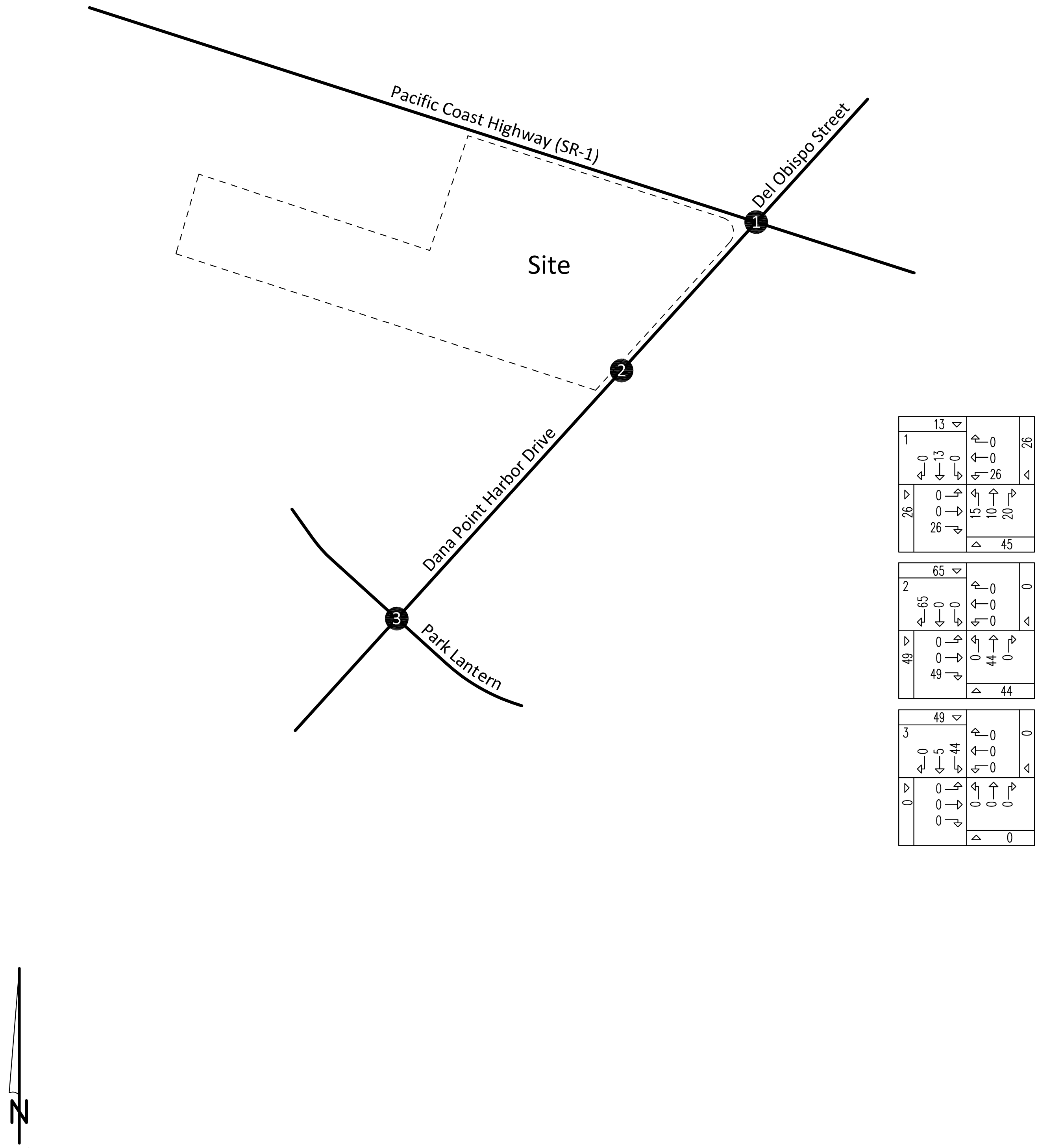


4845c/21

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 22
Project Saturday Mid-day Peak Hour Turning Movement Volumes



4845c/22

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

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V. Existing Plus Project Traffic Conditions

In this section, Existing Plus Project traffic conditions are discussed. Figures 23 to 32 depict the Existing Plus Project traffic conditions.

A. Method of Projection

To assess Existing Plus Project traffic conditions, existing traffic is combined with project traffic.

B. Existing Plus Project Weekday Average Daily Traffic Volumes

Existing Plus Project weekday average daily traffic volumes are as illustrated on Figure 23.

C. Existing Plus Project Saturday Daily Traffic Volumes

Existing Plus Project Saturday daily traffic volumes are as illustrated on Figure 24.

D. Existing Plus Project Weekday Peak Season Average Daily Traffic Volumes

Existing Plus Project weekday peak season average daily traffic volumes are as illustrated on Figure 25.

E. Existing Plus Project Saturday Peak Season Daily Traffic Volumes

Existing Plus Project Saturday peak season daily traffic volumes are as illustrated on Figure 26.

F. Existing Plus Project Intersection Levels of Service

The technique used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization. To calculate an Intersection Capacity Utilization value, the volume of traffic using the intersection is compared with the capacity of the intersection. The Intersection Capacity Utilization represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. The technique used to assess the operation of an unsignalized intersection is known as the Intersection Delay Method based on the 2000 Highway Capacity Manual – Transportation Research Board Special Report 209. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection. The signalized intersections are considered deficient (Level of Service F) if the overall intersection critical volume to capacity ratio equals or exceeds 1.0, even if the Level of Service defined by the delay value is below the defined Level of Service standard. The volume to capacity ratio is defined as the critical volumes divided by the intersection capacity. A volume to capacity ratio greater than 1.0 implies an infinite queue. Both methodologies are described in Appendix C.

The Intersection Capacity Utilization calculations assume a per-lane capacity of 1,700 vehicles per hour for each travel lane (through or turning) through an intersection. A clearance factor of 0.05 or five (5) percent of the total intersection capacity is included in the Intersection Capacity Utilization calculation.

The Levels of Service for the Existing Plus Project traffic conditions have been calculated and are shown in Table 3. Existing Plus Project weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes are shown on Figures 27 to 29, respectively. Existing Plus Project peak season weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes are shown on Figures 30 to 32, respectively.

The study area intersections are projected to operate at within acceptable Levels of Service during the peak hours for Existing Plus Project traffic conditions (see Table 3). Existing Plus Project Level of Service worksheets are provided in Appendix D.

Table 3

Existing Plus Project Intersection Delay and Level of Service

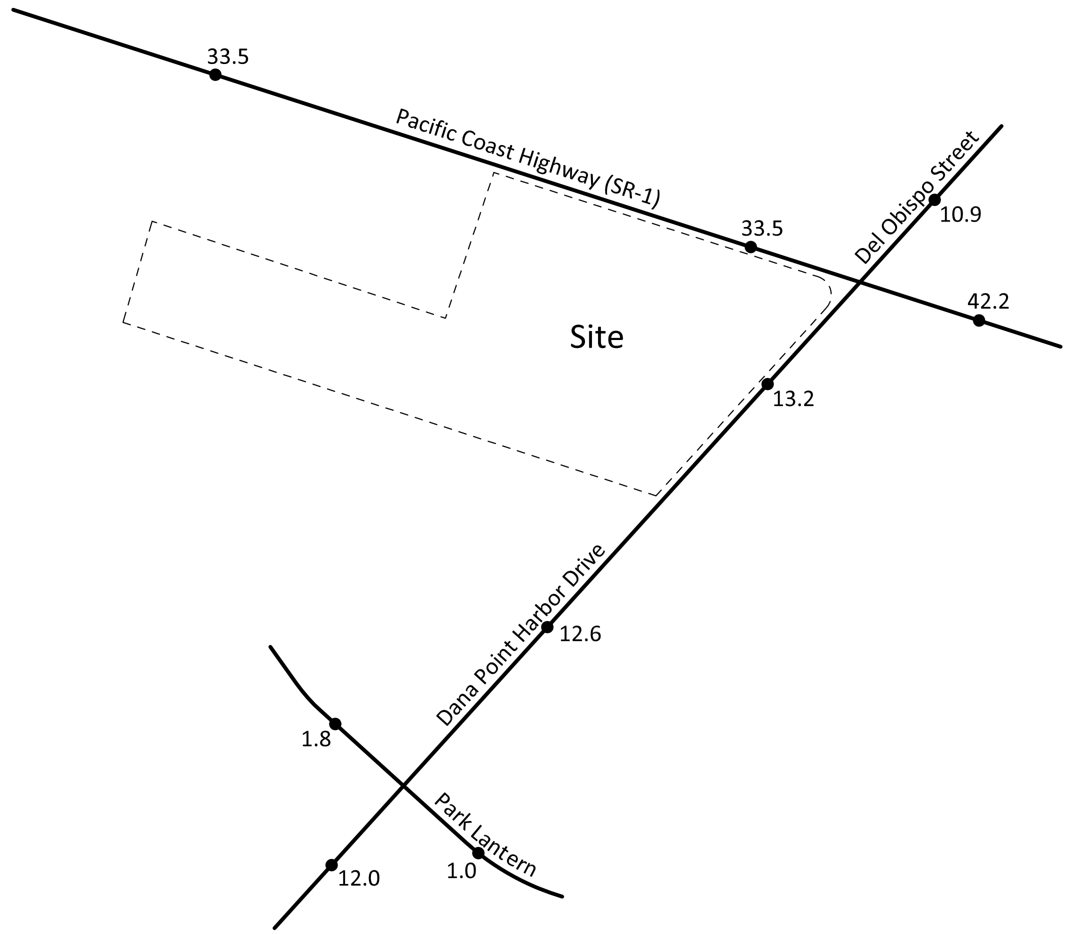
		Intersection Approach Lanes [1]																								Intersection Capacity Utilization - Level of Service					
																										Non-peak Season			Peak Season		
	Traffic	Northbound						Southbound						Eastbound						Westbound						Weekday		Weekend	Weekday		Weekend
Intersection	Control [2]	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	Morning	Evening	Midday	Morning	Evening	Midday
Del Obispo Street/Dana Point Harbor Drive (NS) at:																															
Pacific Coast Highway (EW) - #1	TS	1	0	1	0	2	0	2	0	1	0	1	0	1	0	2	1	0	0	2	0	2	1	0	0	0.518-A	0.640-B	0.569-A	0.565-A	0.698-B	0.628-A
Project Access (EW) - #2[3]	CSS	0	0	2	0	0	0	0	0	2	0	d	0	0	0	0	0	1	0	0	0	0	0	0	0	10.0-A	10.1-B	10.9-B	10.2-B	10.3-B	11.2-B
Park Lantern (EW) - #3	TS	1	0	2	0	1	0	1	0	2	0	d	0	0	1	0	0	d	0	1	0	1	0	1	0	0.198-A	0.330-A	0.299-A	0.214-A	0.356-A	0.321-A

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = Defacto Right Turn Lane

[2] TS = Traffic Signal; CSS = Cross Street Stop

[3] Level of Service calculations for nonsignalized intersections are based on the Highway Capacity Manual delay methodology. Values reported are shown in terms of seconds of delay per vehicle.

Figure 23
Existing Plus Project Weekday Average Daily Traffic Volumes



Legend

1.0 = Vehicles Per Day (1,000's)

NTS

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4845c/23

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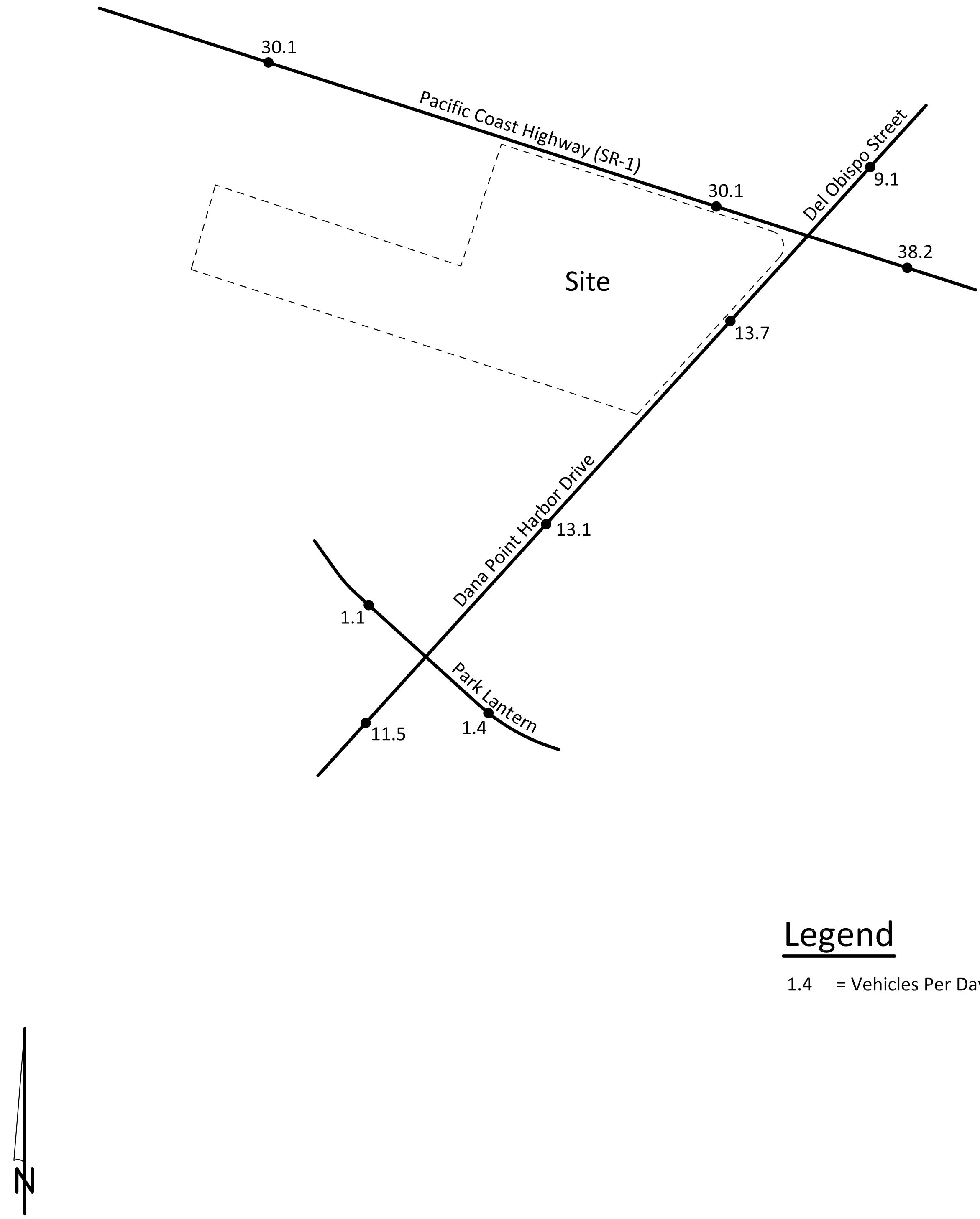
Figure 24
Existing Plus Project Saturday Daily Traffic Volumes



Legend

1.4 = Vehicles Per Day (1,000's)

4845c/24

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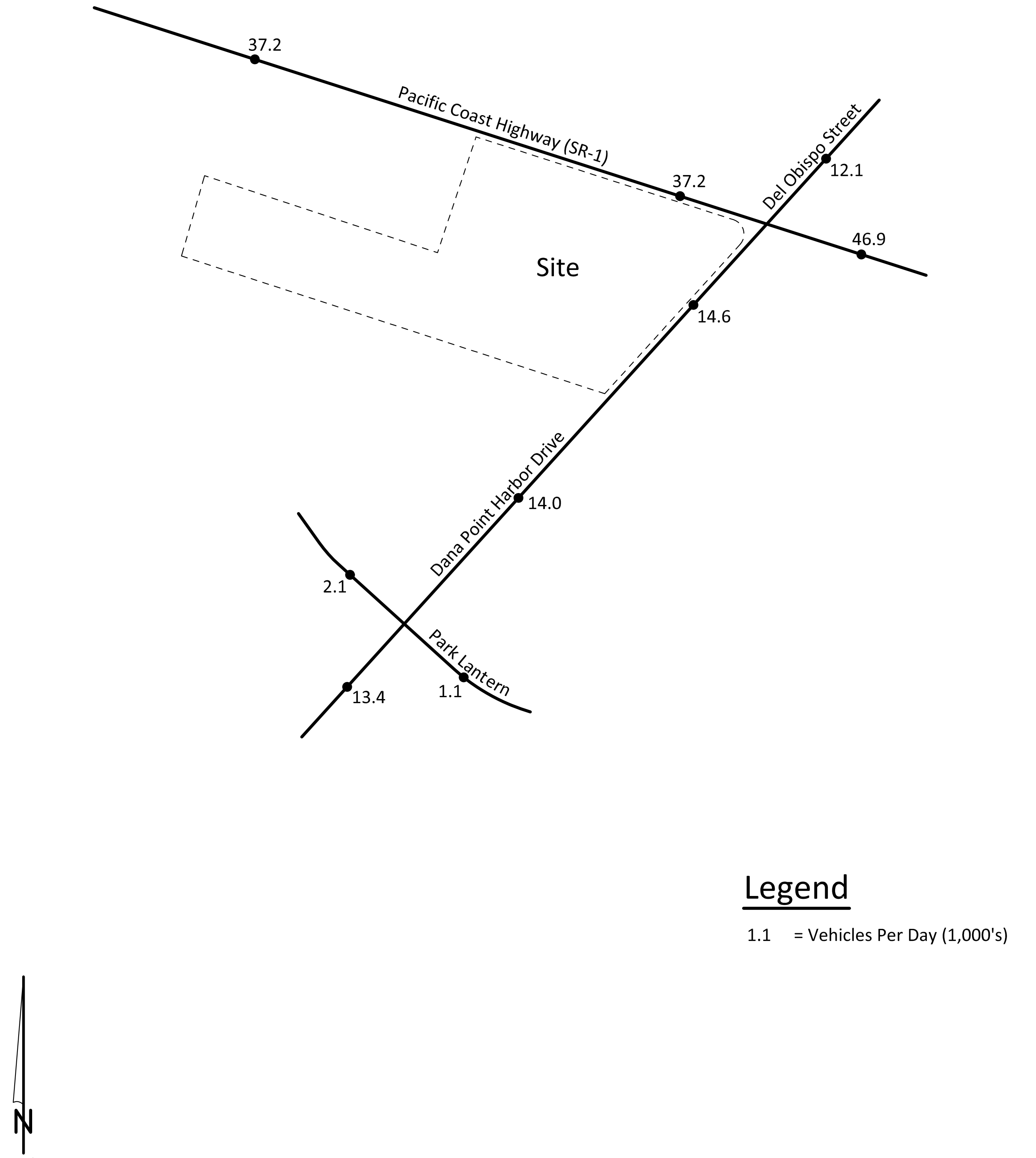
OVER 35 YEARS OF EXCELLENT SERVICE

Figure 25
Existing Plus Project Weekday Peak Season Average Daily Traffic Volumes



4845c/25

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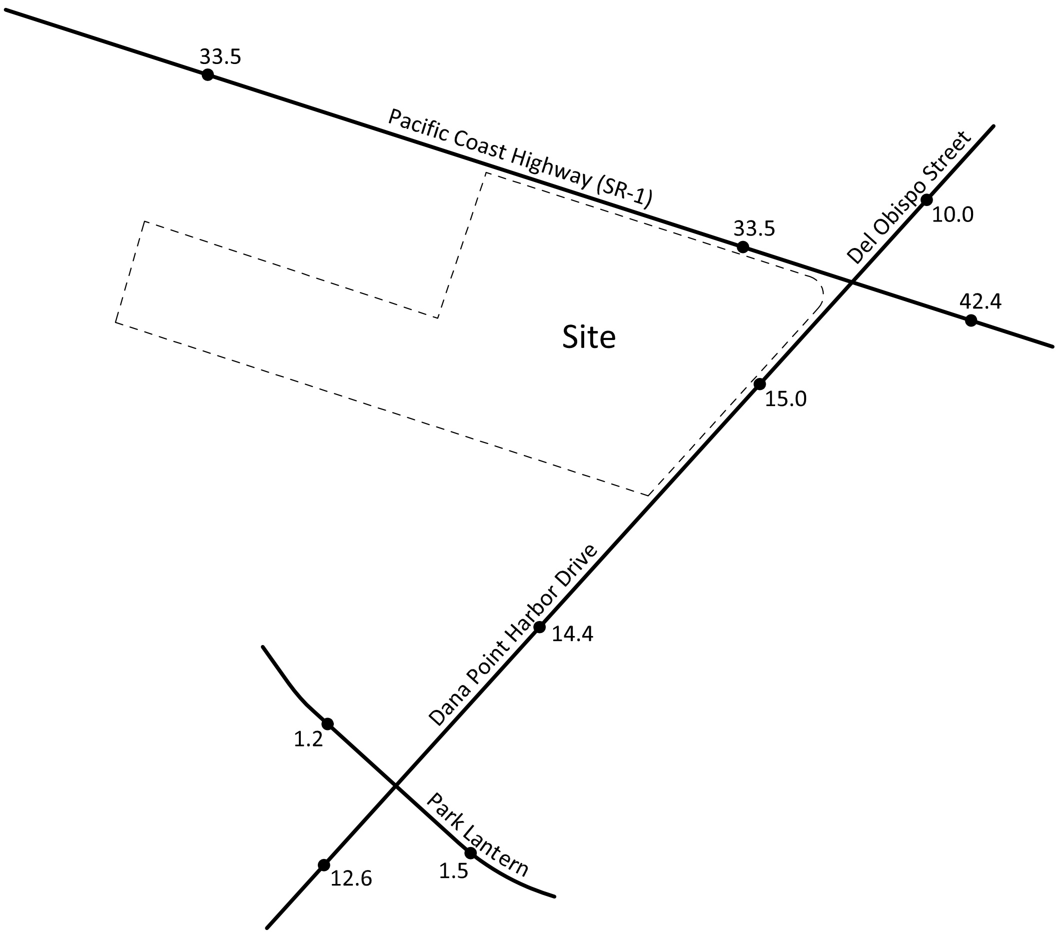
Figure 26
Existing Plus Project Saturday Peak Season Traffic Volumes



Legend

1.5 = Vehicles Per Day (1,000's)

NTS

4845c/26

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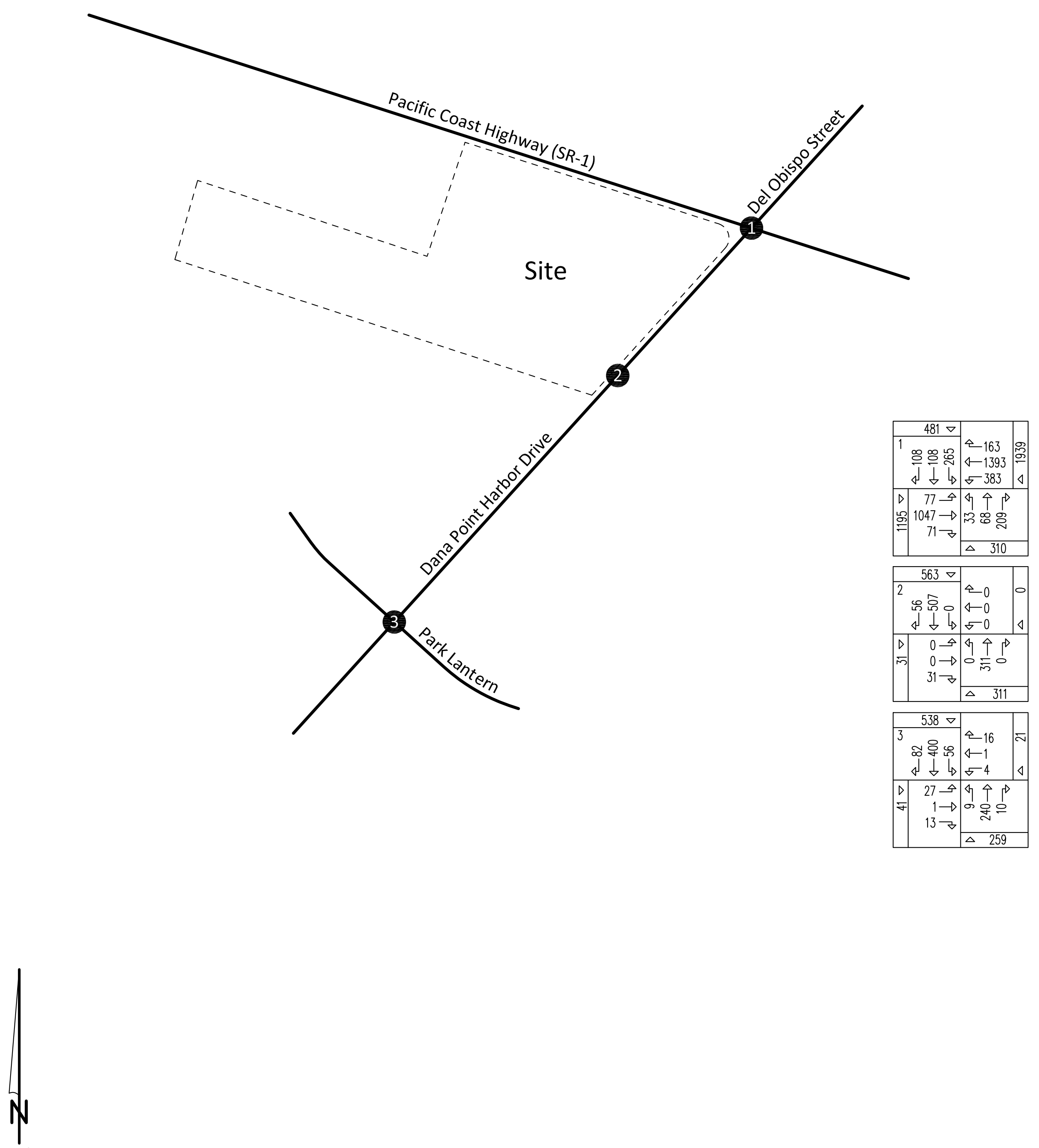
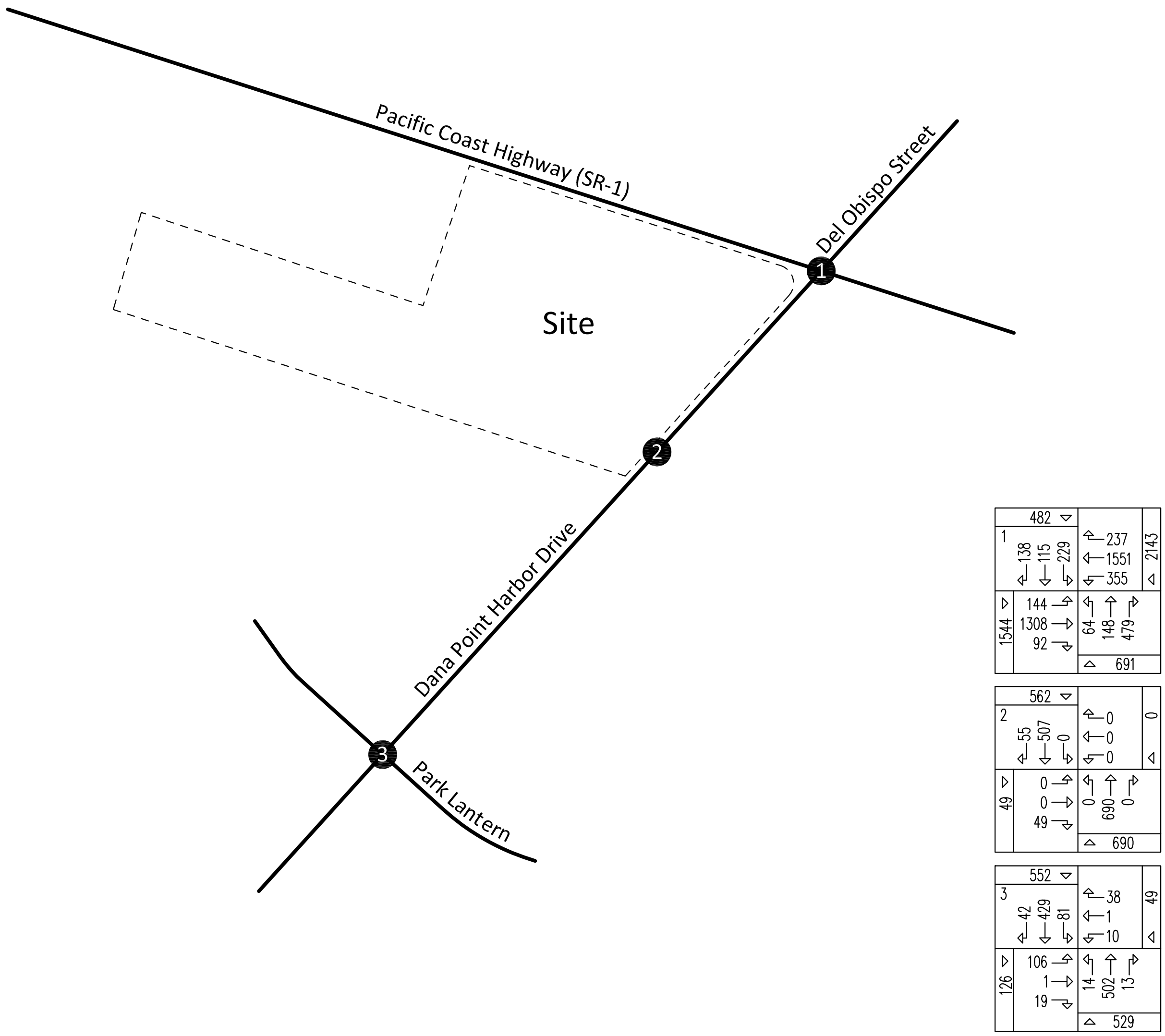
Figure 27
Existing Plus Project
Weekday Morning Peak Hour Turning Movement Volumes

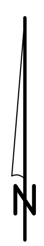


4845c/27

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 28
Existing Plus Project
Weekday Evening Peak Hour Turning Movement Volumes





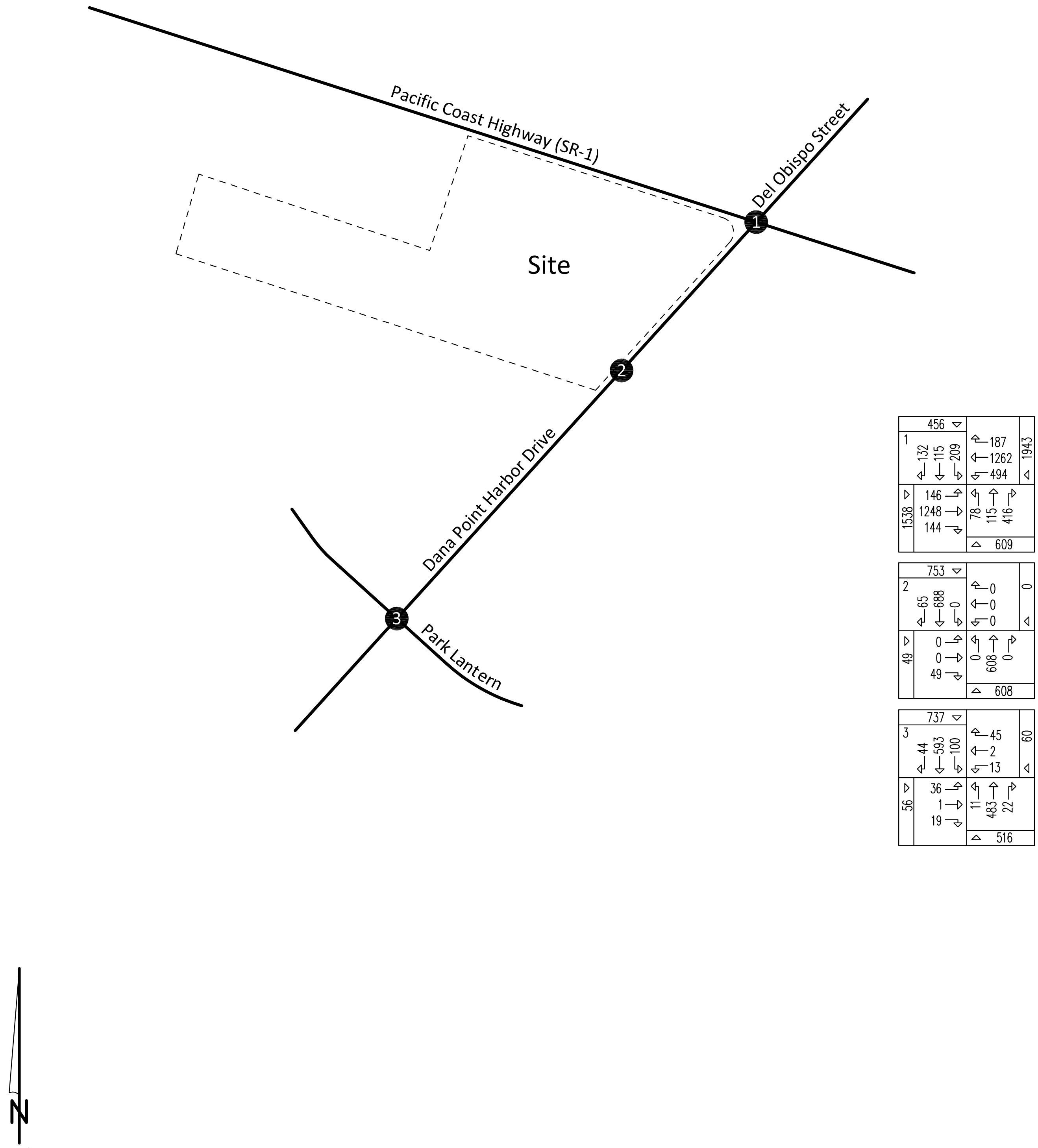
NTS

4845c/28

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

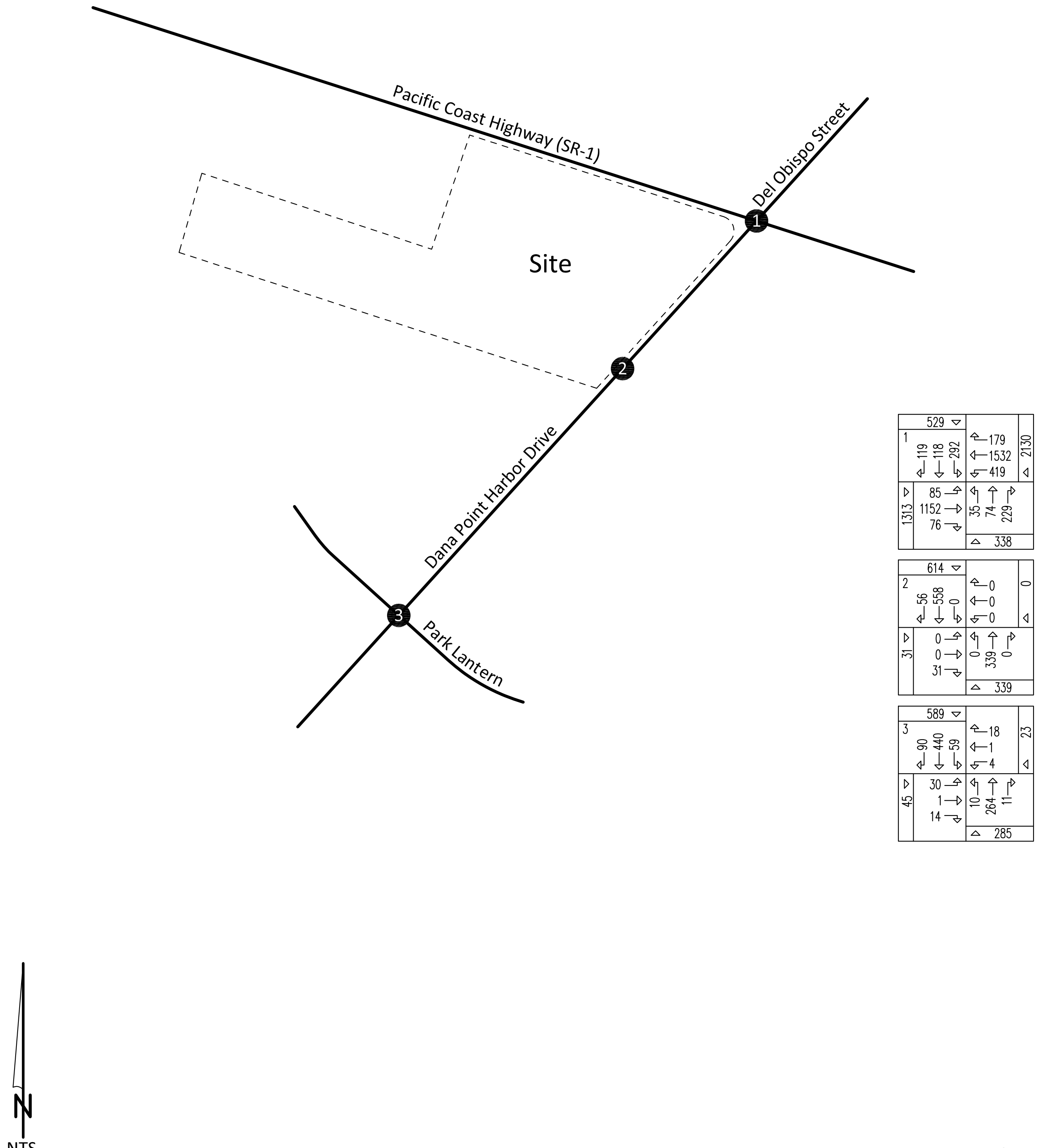
Figure 29
Existing Plus Project
Saturday Mid-day Peak Hour Turning Movement Volumes



4845c/29

 Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 30
Existing Plus Project
Weekday Peak Season Morning Peak Hour Turning Movement Volumes

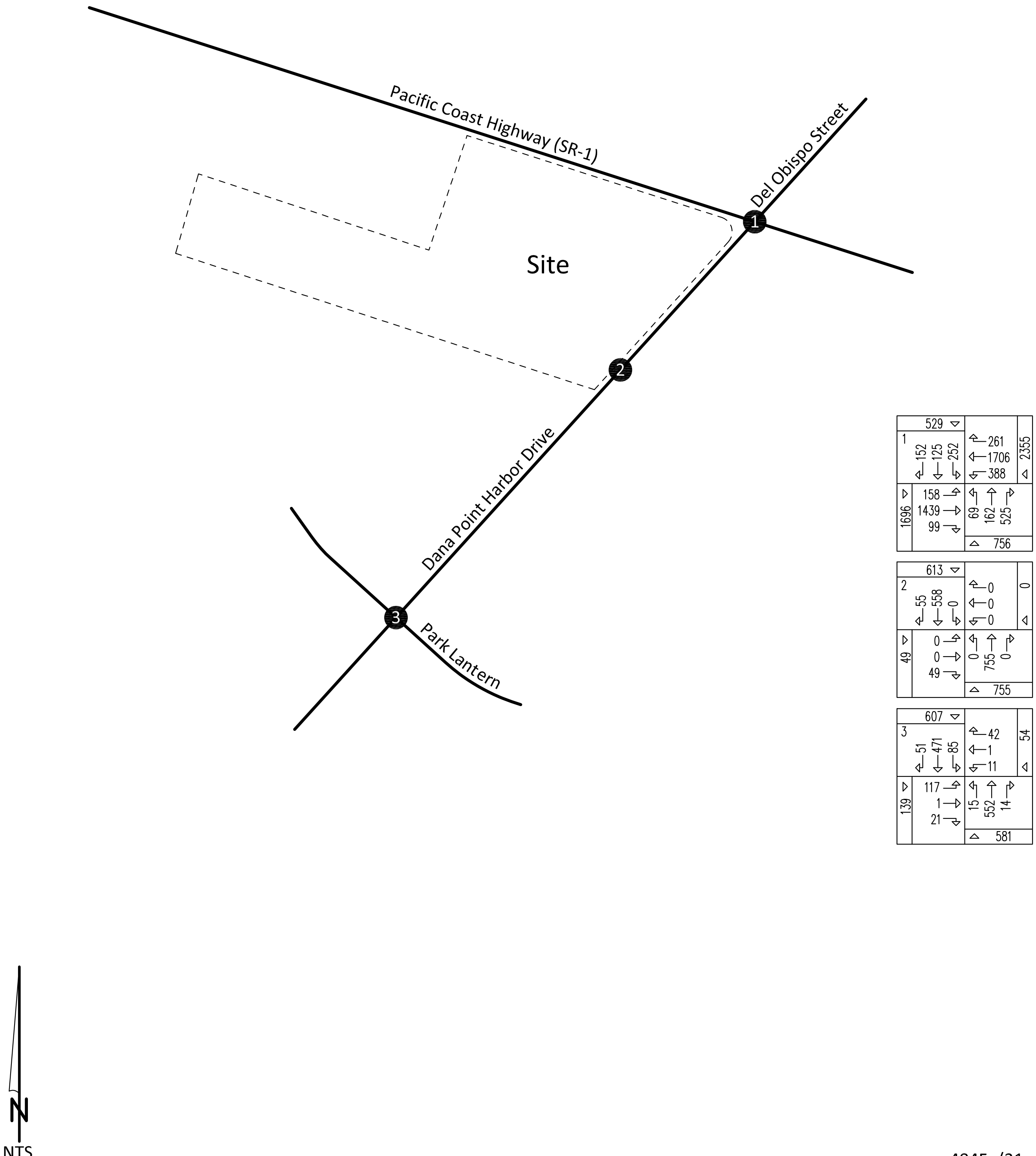


4845c/30

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

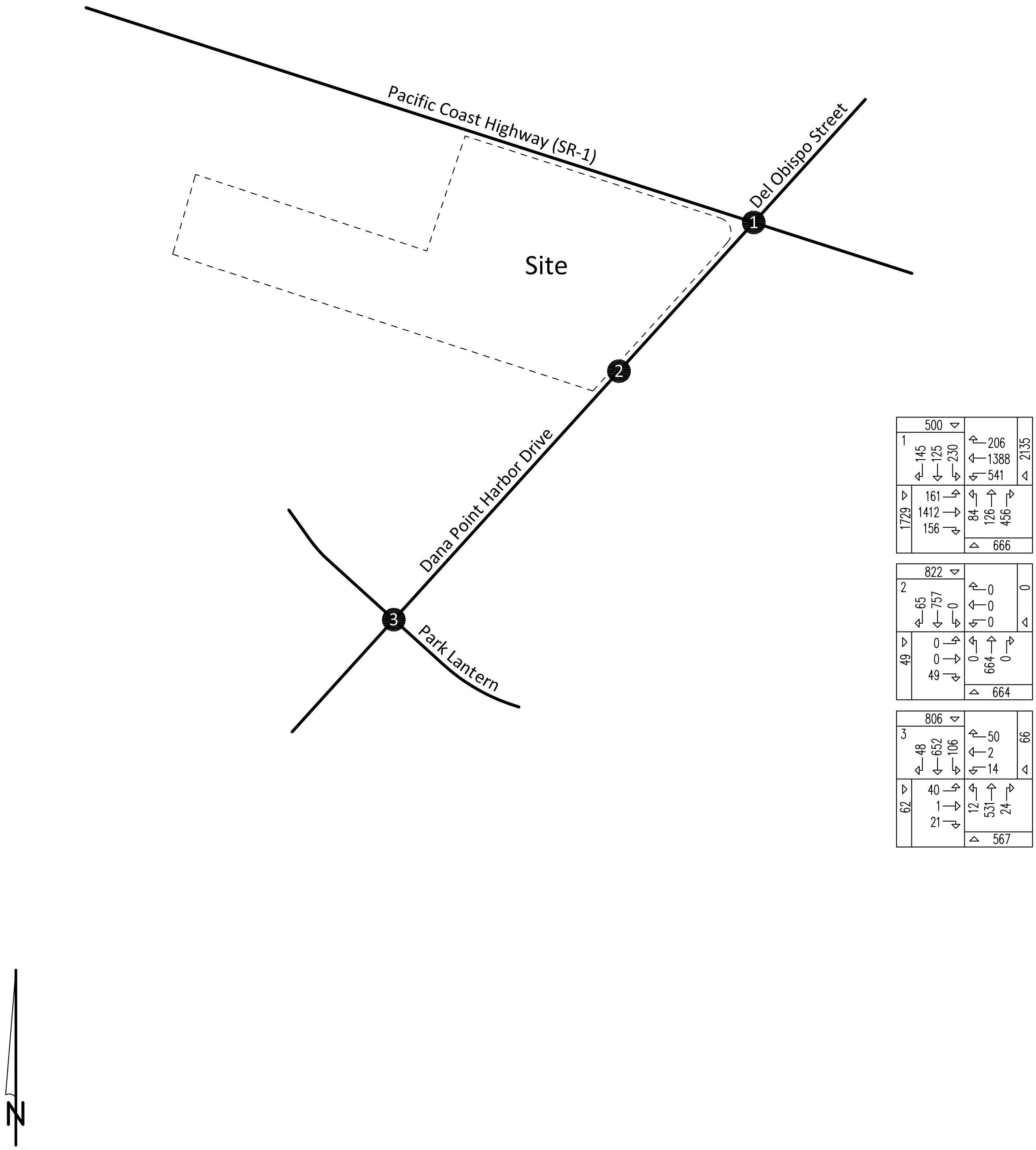
Figure 31
Existing Plus Project
Weekday Peak Season Evening Peak Hour Turning Movement Volumes



4845c/31

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 32
Existing Plus Project
Saturday Peak Season Mid-day Peak Hour Turning Movement Volumes



4845c/32

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

Over 35 Years of Excellent Service

VI. Opening Year (2013) Without Project Traffic Conditions

In this section, Opening Year (2013) Without Project traffic conditions are discussed. Figures 33 to 42 depict the Opening Year (2013) Without Project traffic conditions.

A. Method of Projection

To assess Opening Year (2013) Without Project traffic conditions, existing traffic is combined with areawide growth.

For Opening Year (2013) Without Project traffic conditions, an areawide growth rate has been utilized to account for areawide growth on study area roadways. Opening Year (2013) Without Project traffic volumes have been calculated based on a quarter (0.25) percent annual growth over existing traffic volumes over a two (2) year period. The areawide growth rate has been obtained from the City of Dana Point staff and the City's third party traffic engineering consultant.

Areawide growth has been added to daily and peak hour traffic volumes on surrounding roadways.

B. Opening Year (2013) Without Project Weekday Average Daily Traffic Volumes

Opening Year (2013) Without Project weekday average daily traffic volumes are as illustrated on Figure 33.

C. Opening Year (2013) Without Project Saturday Daily Traffic Volumes

Opening Year (2013) Without Project Saturday daily traffic volumes are as illustrated on Figure 34.

D. Opening Year (2013) Without Project Weekday Peak Season Average Daily Traffic Volumes

Opening Year (2013) Without Project weekday peak season average daily traffic volumes are as illustrated on Figure 35.

E. Opening Year (2013) Without Project Saturday Peak Season Daily Traffic Volumes

Opening Year (2013) Without Project Saturday peak season daily traffic volumes are as illustrated on Figure 36.

F. Opening Year (2013) Without Project Levels of Service

The technique used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization. To calculate an Intersection Capacity Utilization value, the volume of traffic using the intersection is compared with the capacity of the intersection. The Intersection Capacity Utilization represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at

capacity. The technique used to assess the operation of an unsignalized intersection is known as the Intersection Delay Method based on the 2000 Highway Capacity Manual – Transportation Research Board Special Report 209. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection. The signalized intersections are considered deficient (Level of Service F) if the overall intersection critical volume to capacity ratio equals or exceeds 1.0, even if the Level of Service defined by the delay value is below the defined Level of Service standard. The volume to capacity ratio is defined as the critical volumes divided by the intersection capacity. A volume to capacity ratio greater than 1.0 implies an infinite queue. Both methodologies are described in Appendix C.

The Intersection Capacity Utilization calculations assume a per-lane capacity of 1,700 vehicles per hour for each travel lane (through or turning) through an intersection. A clearance factor of 0.05 or five (5) percent of the total intersection capacity is included in the Intersection Capacity Utilization calculation.

The Levels of Service for the Opening Year (2013) Without Project traffic conditions have been calculated and are shown in Table 4. Opening Year (2013) Without Project weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes are shown on Figures 37 to 39, respectively. Opening Year (2013) Without Project peak season weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes are shown on Figures 40 to 42, respectively.

The study area intersections are projected to operate within acceptable Levels of Service during peak hours for Opening Year (2013) Without Project traffic conditions (see Table 4). Opening Year (2013) Without Project Level of Service worksheets are provided in Appendix D.

Table 4

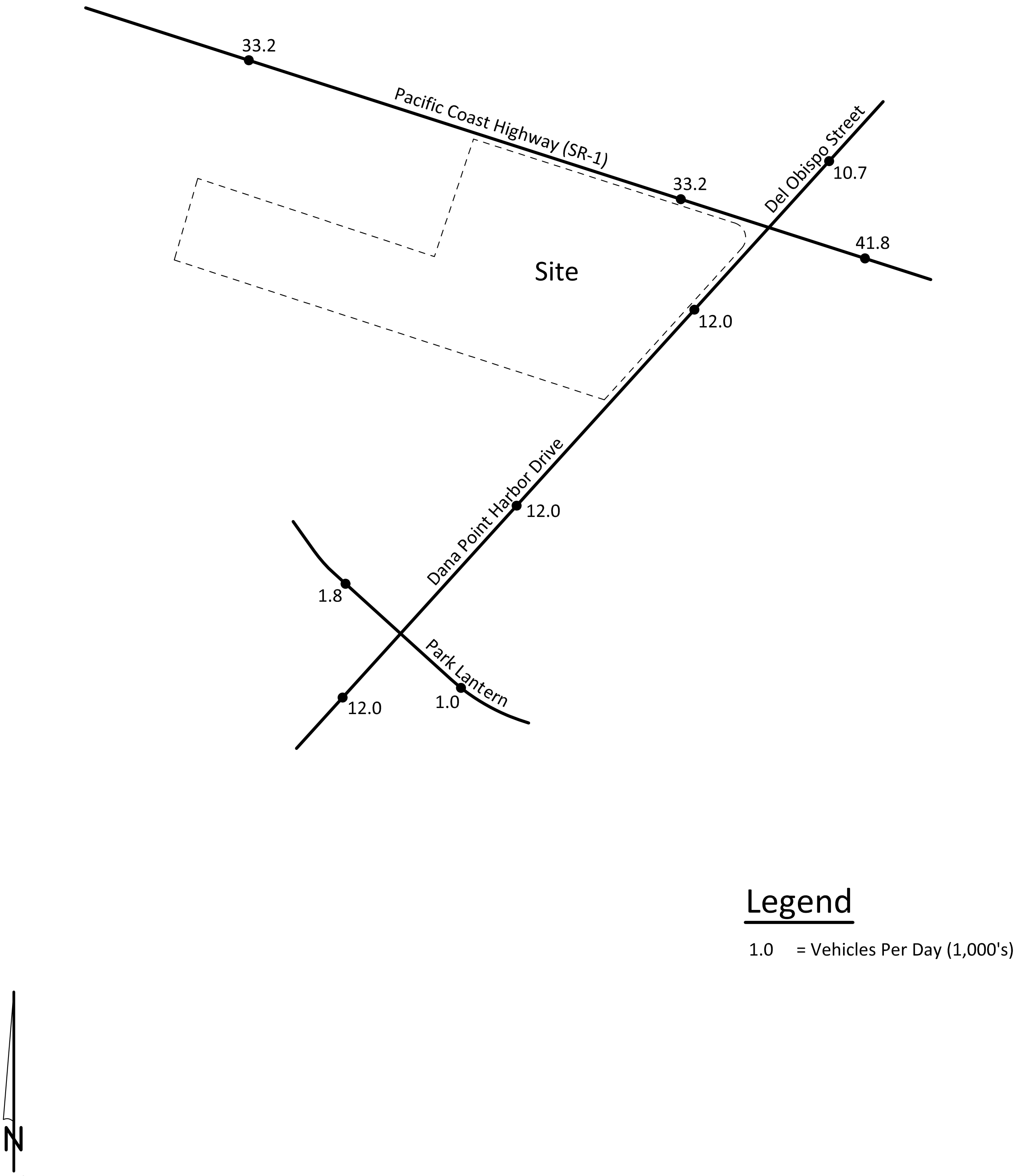
Opening Year (2013) Without Project Intersection Delay and Level of Service

Intersection	Traffic Control [2]	Intersection Approach Lanes [1]																								Intersection Capacity Utilization - Level of Service					
		Northbound						Southbound						Eastbound						Westbound						Non-peak Season			Peak Season		
																										Weekday		Weekend	Weekday		Weekend
		L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	Morning	Evening	Midday	Morning	Evening	Midday
Del Obispo Street/Dana Point Harbor Drive (NS) at:																															
Pacific Coast Highway (EW) - #1	TS	1	0	1	0	2	0	2	0	1	0	1	0	1	0	2	1	0	0	2	0	2	1	0	0	0.517-A	0.627-B	0.581-A	0.564-A	0.695-B	0.643-B
Park Lantern (EW) - #3	TS	1	0	2	0	1	0	1	0	2	0	d	0	0	1	0	0	d	0	1	0	1	0	1>>	0	0.192-A	0.289-A	0.260-A	0.206-A	0.314-A	0.281-A

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right;
>> = Free Right Turn; d = Defacto Right Turn Lane

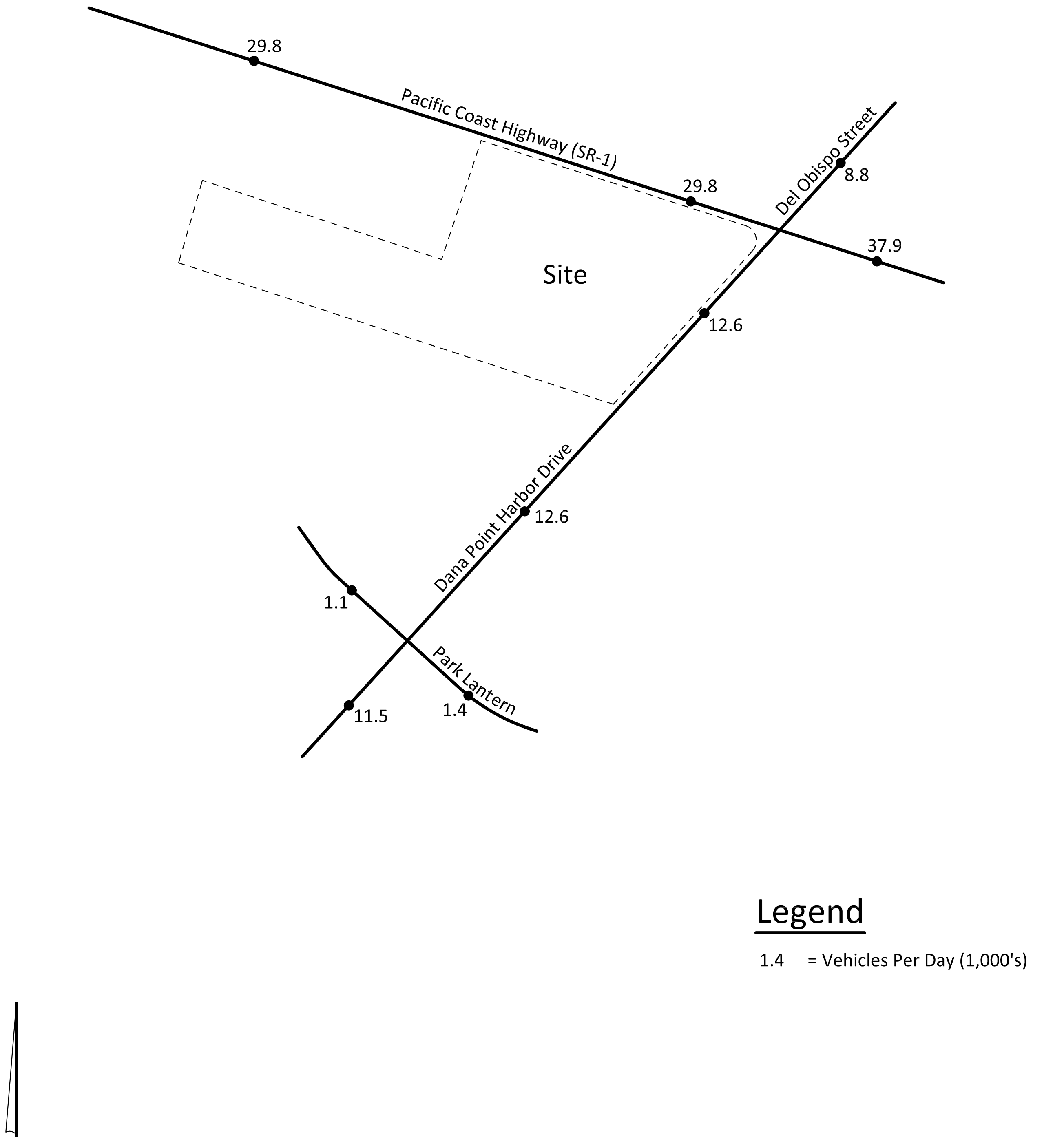
[2] TS = Traffic Signal

Figure 33
Opening Year (2013) Without Project
Weekday Average Daily Traffic Volumes



4845c/33

Figure 34
Opening Year (2013) Without Project
Saturday Daily Traffic Volumes



4845c/34

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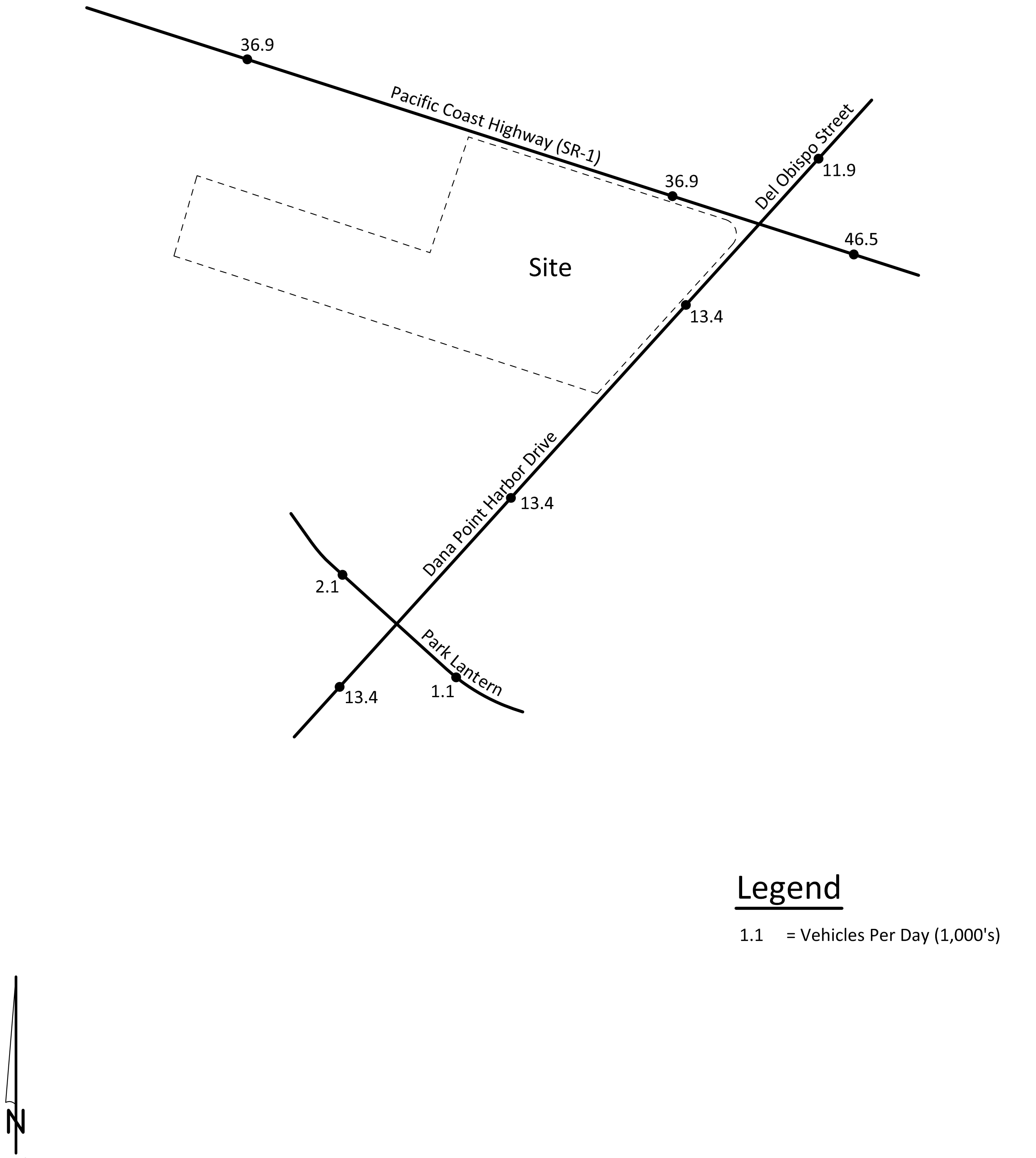
Figure 35
Opening Year (2013) Without Project
Weekday Peak Season Average Daily Traffic Volumes



4845c/35

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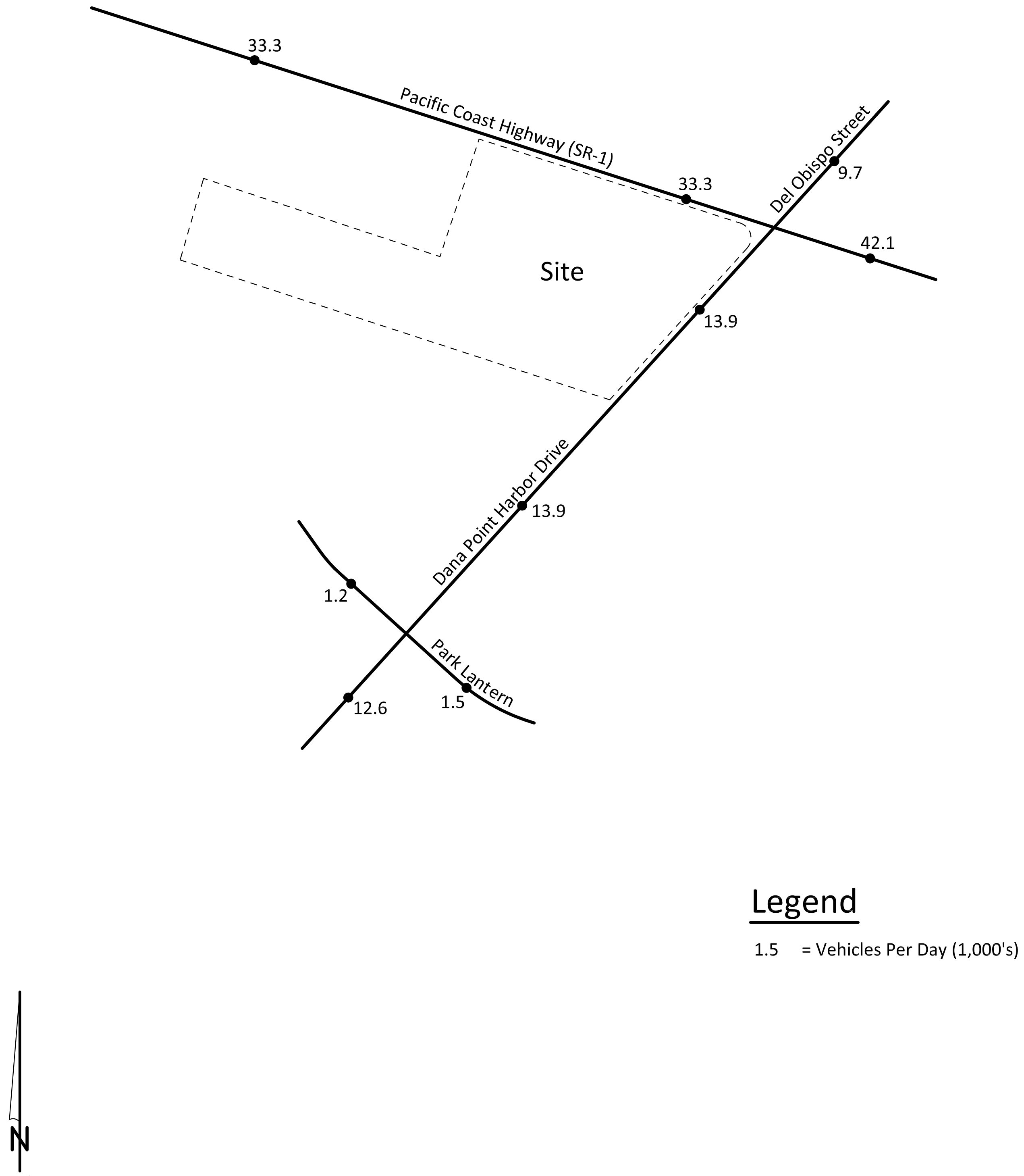
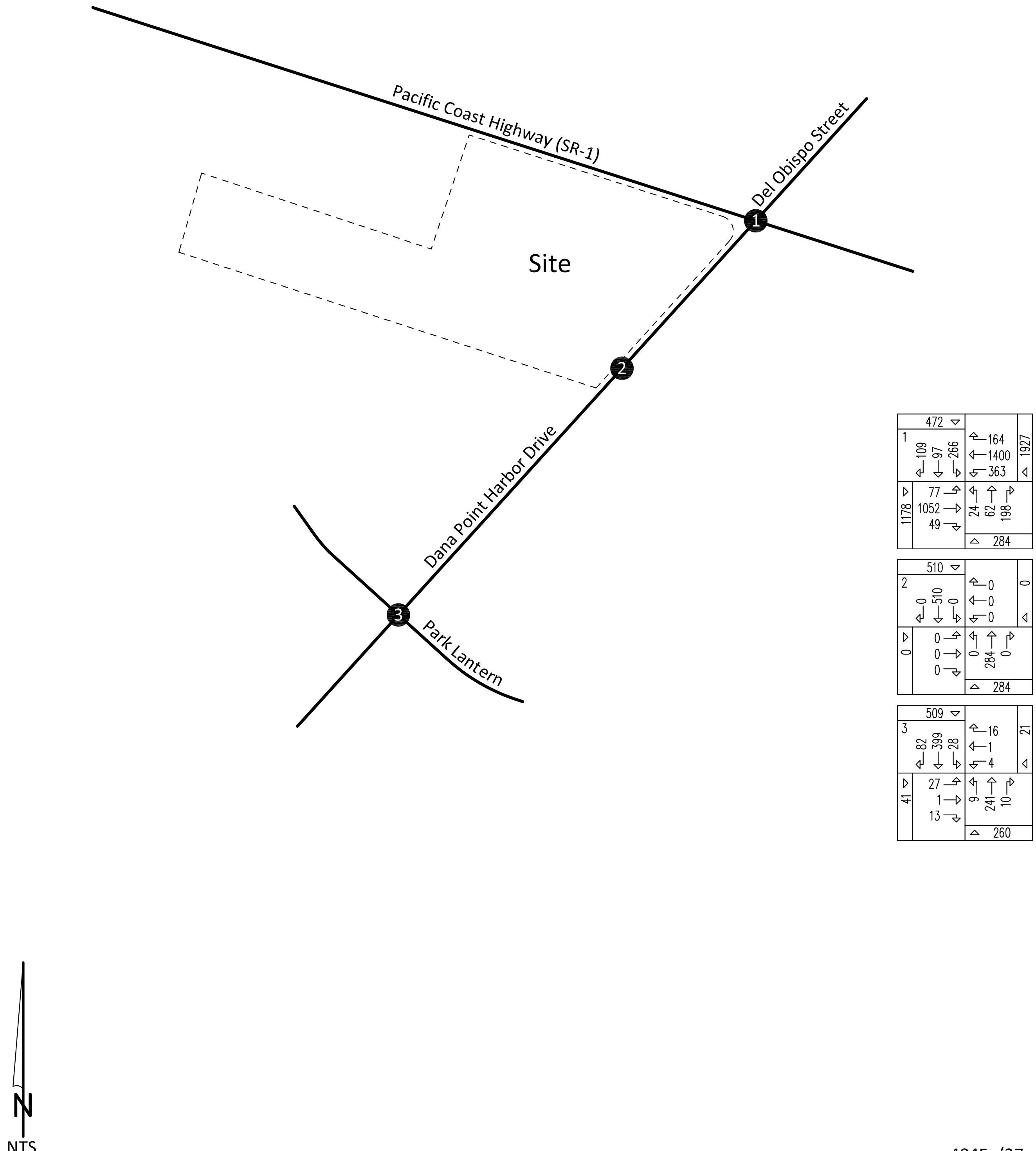
Over 35 Years of Excellent Service

Figure 36
Opening Year (2013) Without Project
Saturday Peak Season Daily Traffic Volumes



4845c/36

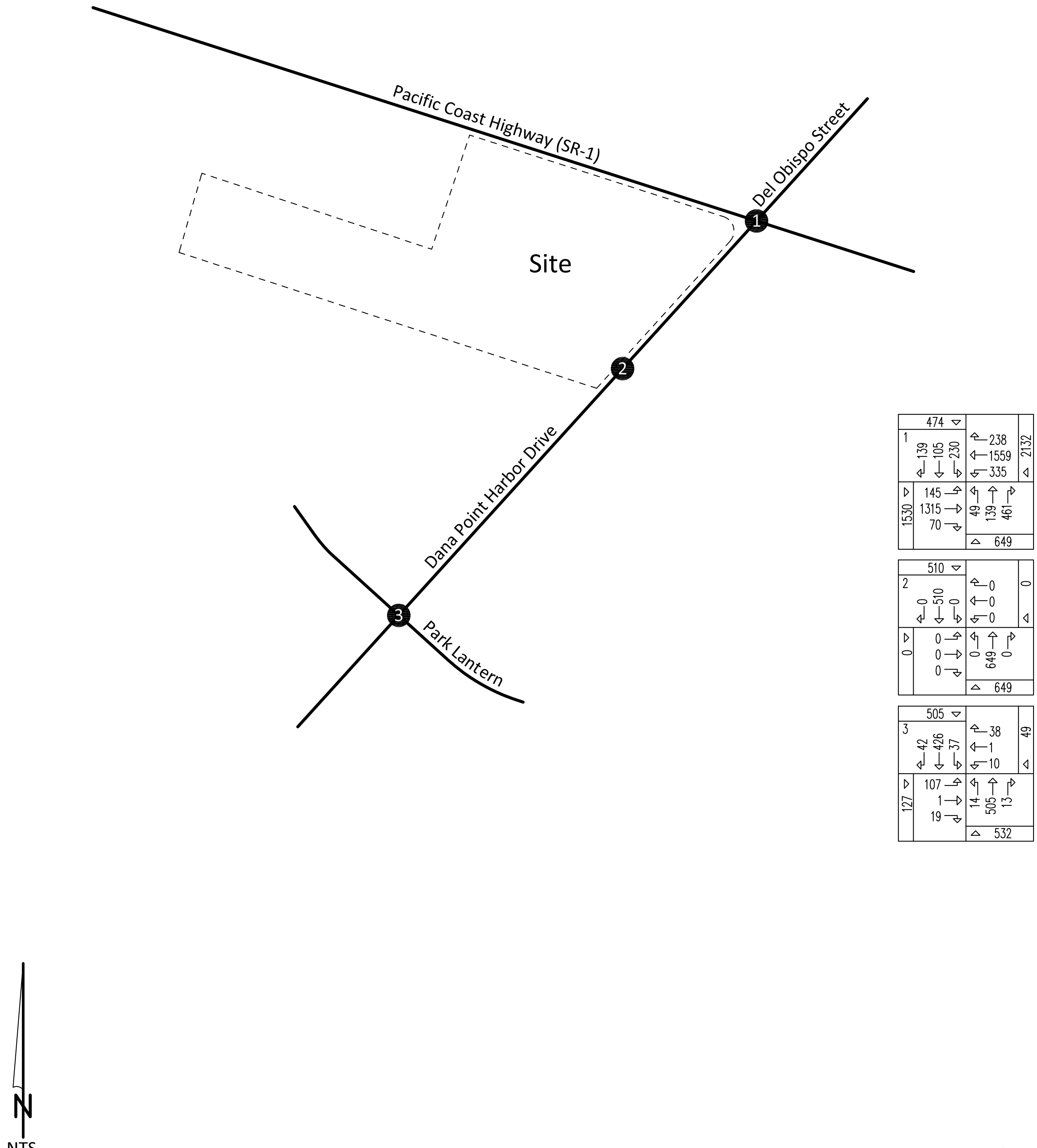
Figure 37
Opening Year (2013) Without Project
Weekday Morning Peak Hour Turning Movement Volumes



4845c/37

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 38
Opening Year (2013) Without Project
Weekday Evening Peak Hour Turning Movement Volumes

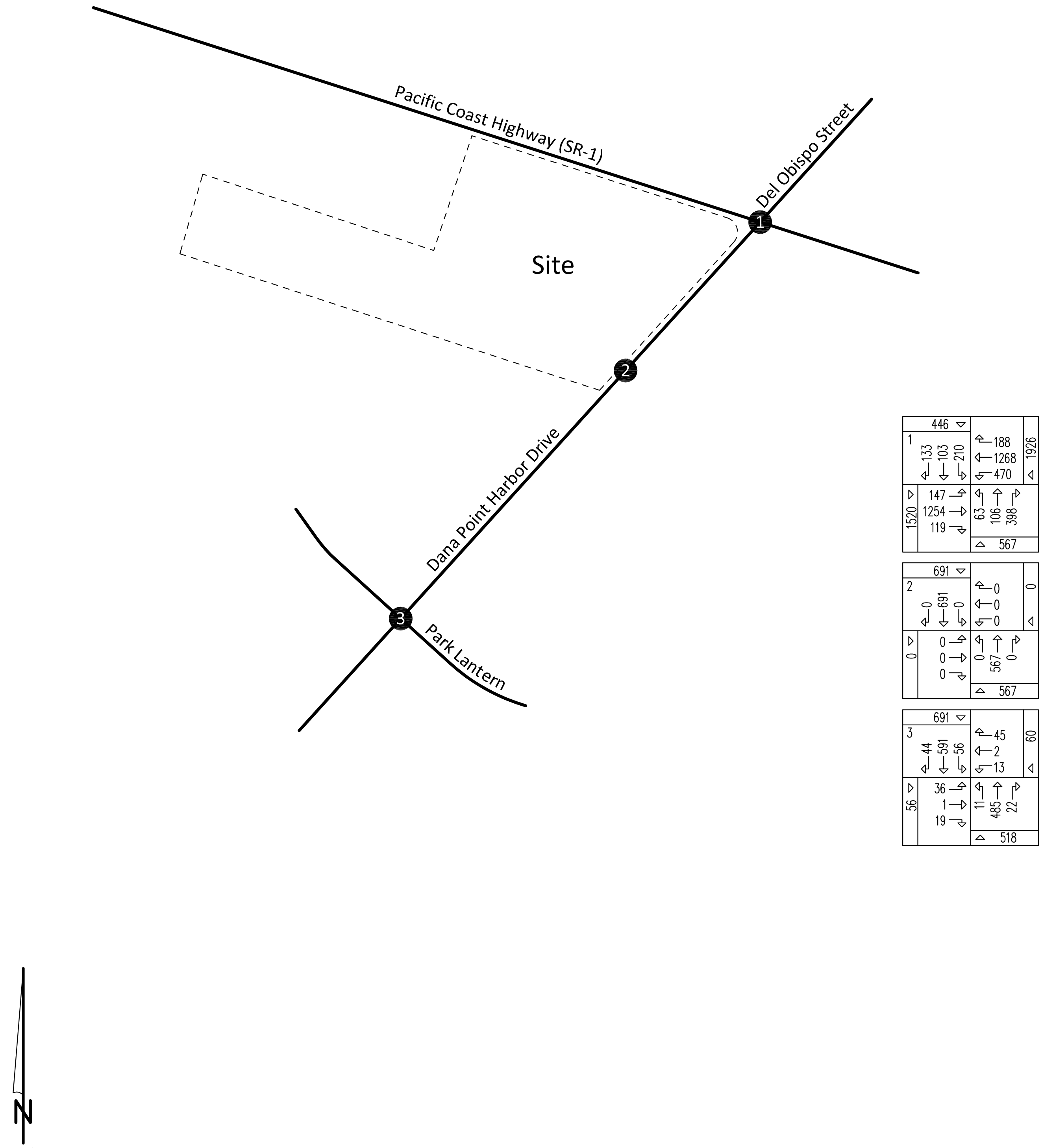


4845c/38

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

Over 35 Years of Excellent Service

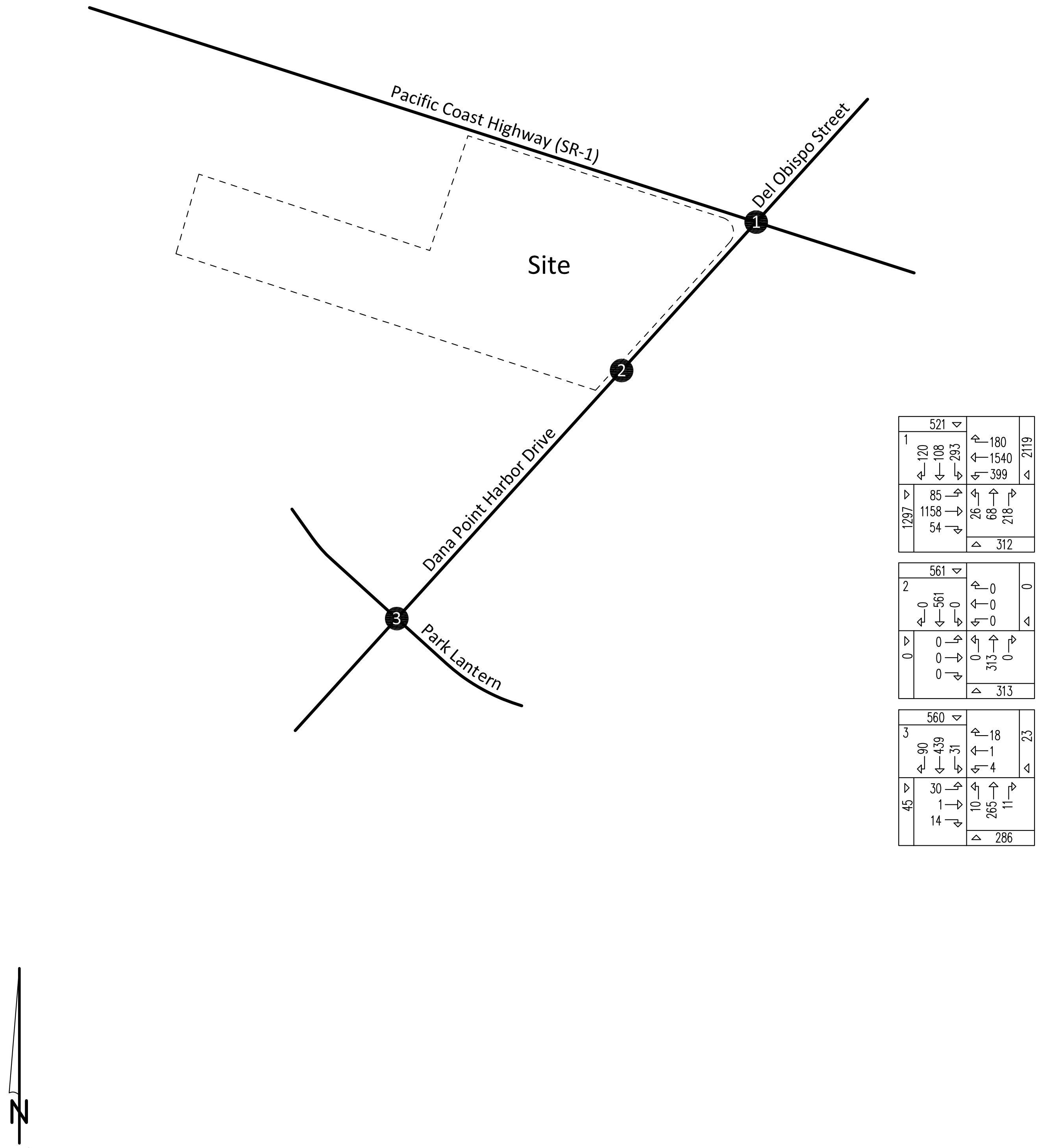
Figure 39
Opening Year (2013) Without Project
Saturday Mid-day Peak Hour Turning Movement Volumes



4845c/39

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 40
Opening Year (2013) Without Project
Weekday Peak Season Morning Peak Hour Turning Movement Volumes

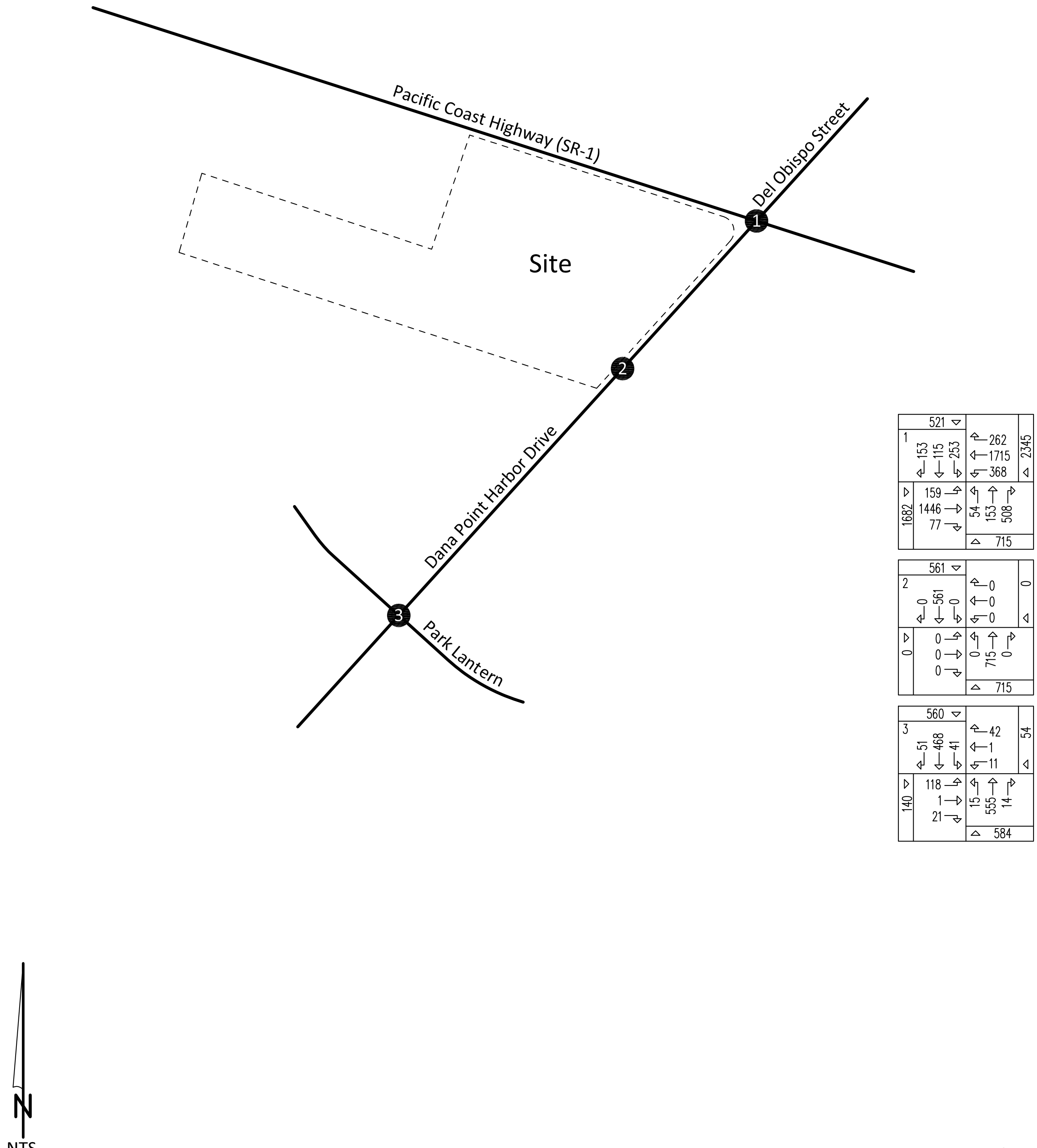


4845c/40

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

Over 35 Years of Excellent Service

Figure 41
Opening Year (2013) Without Project
Weekday Peak Season Evening Peak Hour Turning Movement Volumes

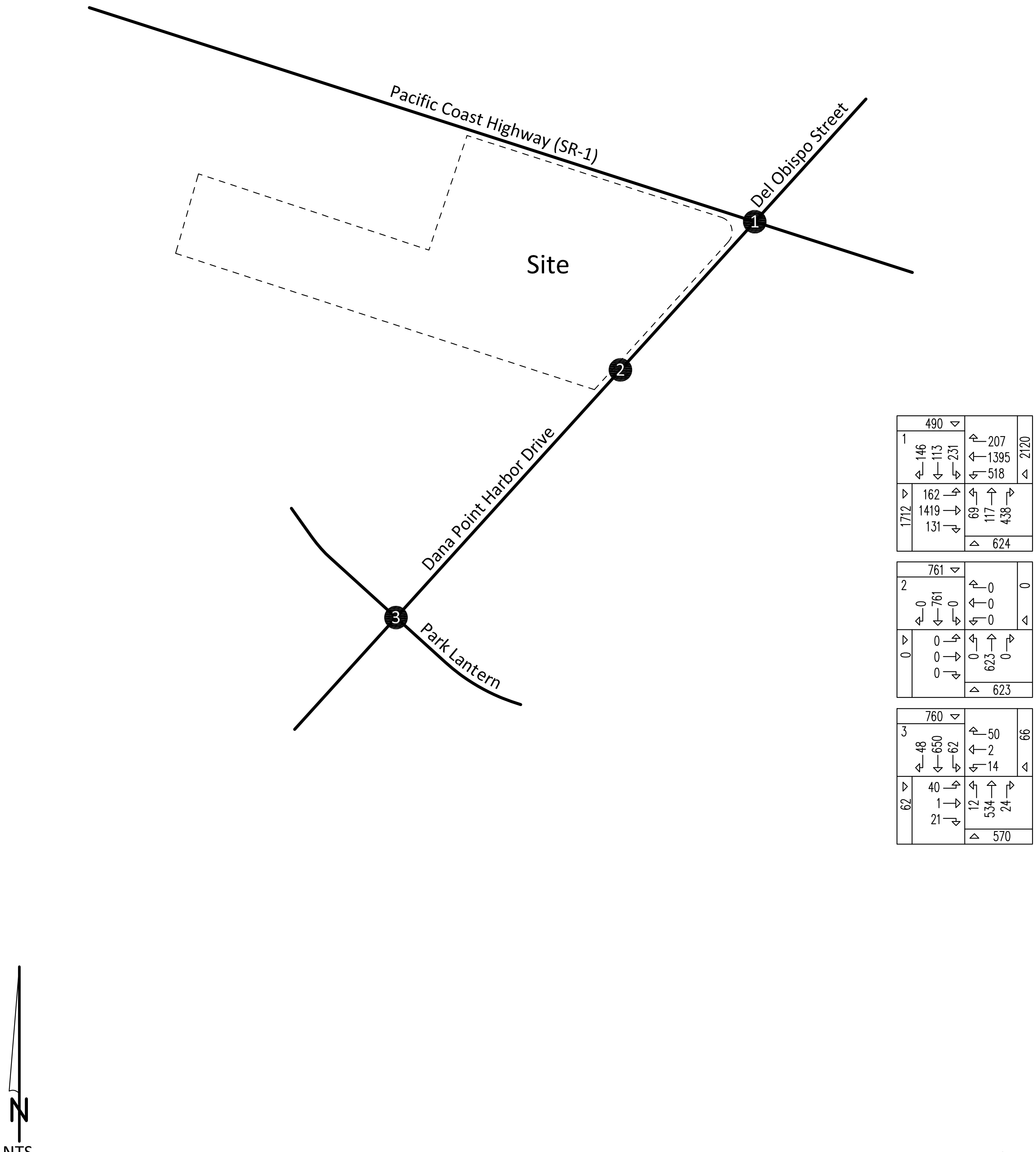


4845c/41

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 42
Opening Year (2013) Without Project
Saturday Peak Season Mid-day Peak Hour Turning Movement Volumes



4845c/42

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

Over 35 Years of Excellent Service

VII. Opening Year (2013) With Project Traffic Conditions

In this section, Opening Year (2013) With Project traffic conditions without and with the project are discussed. Figures 43 to 52 depict the Opening Year (2013) With Project traffic conditions.

A. Method of Projection

To assess Opening Year (2013) With Project traffic conditions, existing traffic is combined with the project and areawide growth.

For Opening Year (2013) With Project traffic conditions, an areawide growth rate has been utilized to account for areawide growth on study area roadways. Opening Year (2013) With Project traffic volumes have been calculated based on a quarter (0.25) percent annual growth rate of existing traffic volumes over a two (2) year period. The areawide growth rate has been obtained from the City of Dana Point staff and the City's third party traffic engineering consultant.

Areawide growth has been added to daily and peak hour traffic volumes on surrounding roadways.

B. Opening Year (2013) With Project Weekday Average Daily Traffic Volumes

Opening Year (2013) With Project weekday average daily traffic volumes are as illustrated on Figure 43.

C. Opening Year (2013) With Project Saturday Daily Traffic Volumes

Opening Year (2013) With Project Saturday daily traffic volumes are as illustrated on Figure 44.

D. Opening Year (2013) With Project Weekday Peak Season Average Daily Traffic Volumes

Opening Year (2013) With Project weekday peak season average daily traffic volumes are as illustrated on Figure 45.

E. Opening Year (2013) With Project Saturday Peak Season Daily Traffic Volumes

Opening Year (2013) With Project Saturday peak season daily traffic volumes are as illustrated on Figure 46.

F. Opening Year (2013) With Project Levels of Service

The technique used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization. To calculate an Intersection Capacity Utilization value, the volume of traffic using the intersection is compared with the capacity of the intersection. The Intersection Capacity Utilization represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at

capacity. The technique used to assess the operation of an unsignalized intersection is known as the Intersection Delay Method based on the 2000 Highway Capacity Manual – Transportation Research Board Special Report 209. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection. The signalized intersections are considered deficient (Level of Service F) if the overall intersection critical volume to capacity ratio equals or exceeds 1.0, even if the Level of Service defined by the delay value is below the defined Level of Service standard. The volume to capacity ratio is defined as the critical volumes divided by the intersection capacity. A volume to capacity ratio greater than 1.0 implies an infinite queue. Both methodologies are described in Appendix C.

The Intersection Capacity Utilization calculations assume a per-lane capacity of 1,700 vehicles per hour for each travel lane (through or turning) through an intersection. A clearance factor of 0.05 or five (5) percent of the total intersection capacity is included in the Intersection Capacity Utilization calculation.

The Levels of Service for the Opening Year (2013) With Project traffic conditions have been calculated and are shown in Table 5. Opening Year (2013) With Project weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes are shown on Figures 47 to 49, respectively. Opening Year (2013) With Project peak season weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes are shown on Figures 50 to 52, respectively.

The study area intersections are projected to operate within acceptable Levels of Service during peak hours for Opening Year (2013) With Project traffic conditions (see Table 5). Opening Year (2013) With Project Level of Service worksheets are provided in Appendix D.

G. Significant Transportation Impact

The significant traffic impact criteria used by the City of Dana Point is as follows:

1. If a project causes a change in Level of Service from acceptable to unacceptable.
2. If a project causes an increase in Volume to Capacity or Intersection Capacity Utilization of 0.010 or more, causing or worsening an unacceptable Level of Service.

If a proposed projects traffic causes the conditions above, then the impacts are deemed significant and the project shall identify feasible mitigation to bring the facility back to the level of service held by the facility prior to the projects significant impact.

Table 6 depicts the Opening Year (2013) With Project intersection traffic contribution at the study area intersections. As shown in Table 6, the project site does not significantly impact any study area intersections.

Table 5

Opening Year (2013) With Project Intersection Delay and Level of Service

Intersection	Traffic Control[2]	Intersection Approach Lanes[1]																								Intersection Capacity Utilization - Level of Service					
																										Non-peak Season			Peak Season		
		Northbound						Southbound						Eastbound						Westbound						Weekday		Weekend	Weekday		Weekend
		L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	Morning	Evening	Midday	Morning	Evening	Midday
Del Obispo Street/Dana Point Harbor Drive (NS) at:																															
Pacific Coast Highway (EW) - #1	TS	1	0	1	0	2	0	2	0	1	0	1	0	1	0	3	0	1	0	2	0	2	1	0	0	0.521-A	0.643-B	0.572-A	0.567-A	0.701-C	0.631-B
Project Access (EW) - #2[3]	CSS	0	0	2	0	0	0	0	0	2	0	d	0	0	0	0	0	1	0	0	0	0	0	0	0	10.0-B	10.1-B	10.9-B	10.2-B	10.3-B	11.3-B
Park Lantern (EW) - #3	TS	1	0	2	0	1	0	1	0	2	0	d	0	0	1	0	0	d	0	1	0	1	0	1	0	0.199-A	0.331-A	0.300-A	0.214-A	0.357-A	0.323-A

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = Defacto Right Turn Lane

[2] TS = Traffic Signal; CSS = Cross Street Stop

[3] Level of Service calculations for nonsignalized intersections are based on the Highway Capacity Manual delay methodology. Values reported are shown in terms of seconds of delay per vehicle.

Table 6

Opening year (2013) With Project Traffic Contribution

Intersection	Peak Hour	Opening Year (2013) Without Project: Intersection Capacity Utilization	Opening Year (2013) Without Project: Level of Service	Opening Year (2013) With Project, Without Mitigation: Intersection Capacity Utilization	Without Mitigation: Level of Service	Without Mitigation: Project Impact	Without Mitigation: Significant Impact[1]	With Mitigation: Intersection Capacity Utilization	With Mitigation: Level of Service	With Mitigation: Project Impact	With Mitigation: Significant Impact	Acceptable Level of Service
Dana Point Harbor Drive (NS) at:												
Pacific Coast Highway (EW) - #1	Morning	0.517	A	0.521	A	0.004	No					D
	Evening	0.627	B	0.643	B	0.016	No					D
	Mid-day	0.581	A	0.572	A	-0.009	No					D
	Morning - Peak Season	0.564	A	0.567	A	0.003	No					D
	Evening - Peak Season	0.695	B	0.701	C	0.006	No					D
	Mid-day - Peak Season	0.643	B	0.631	B	-0.012	No					D
Park Lantern (EW) - #3	Morning	0.192	A	0.199	A	0.007	No					C
	Evening	0.289	A	0.331	A	0.042	No					C
	Mid-day	0.260	A	0.300	A	0.040	No					C
	Morning - Peak Season	0.206	A	0.214	A	0.008	No					C
	Evening - Peak Season	0.314	A	0.357	A	0.043	No					C
	Mid-day - Peak Season	0.281	A	0.323	A	0.042	No					C

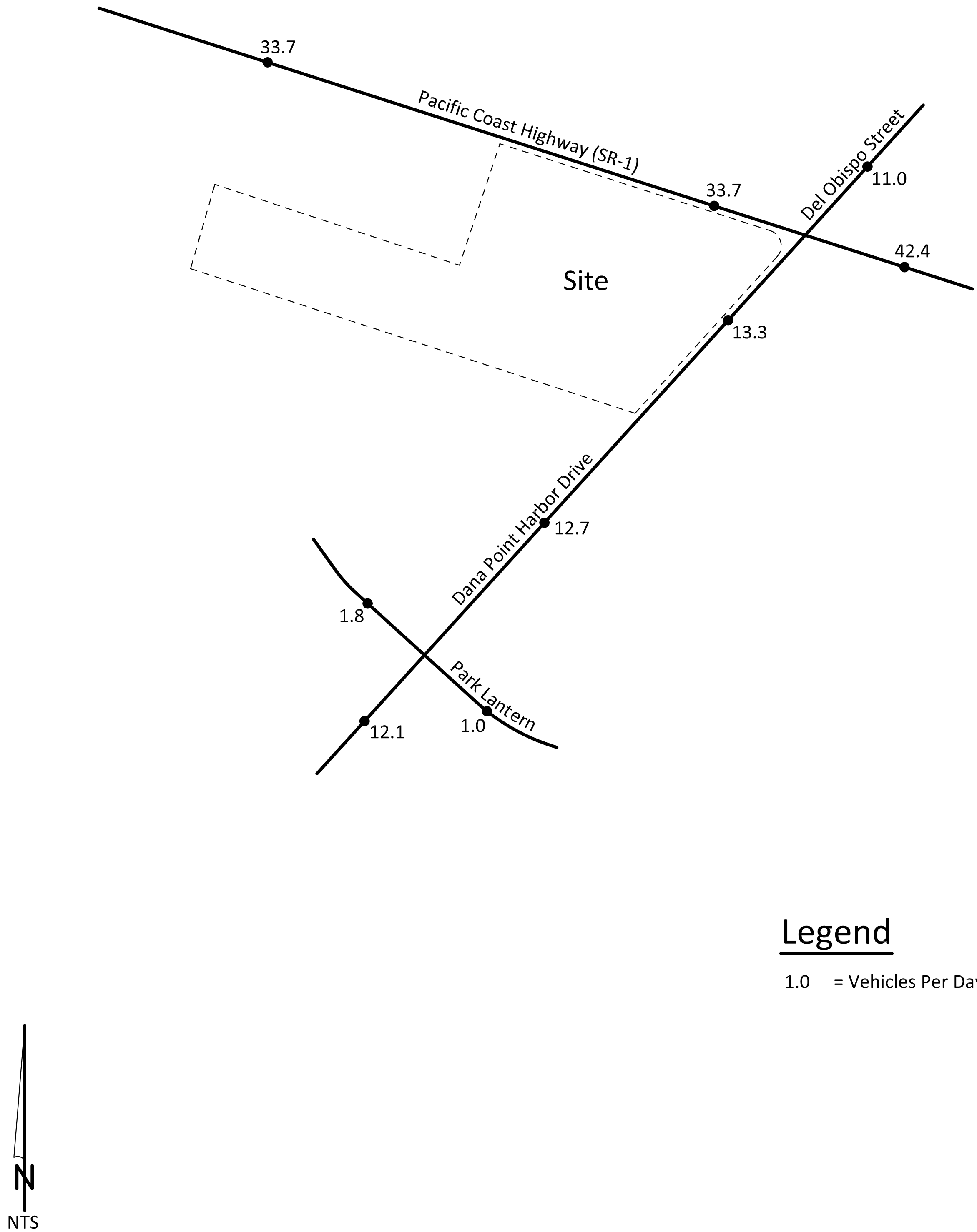
[1]The significant traffic impact criteria used by the City of Dana Point is as follows:

1. If a project causes a change in Level of Service from acceptable to unacceptable.

2. If a project causes an increase in Volume to Capacity or Intersection Capacity Utilization of 0.010 or more, causing or worsening an unacceptable Level of Service.

If a proposed projects traffic causes the conditions above, then the impacts are deemed significant and the project shall identify feasible mitigation to bring the facility back to the level of service held by the facility prior to the projects significant impact.

Figure 43
Opening Year (2013) With Project
Weekday Average Daily Traffic Volumes



Legend

1.0 = Vehicles Per Day (1,000's)

4845c/43

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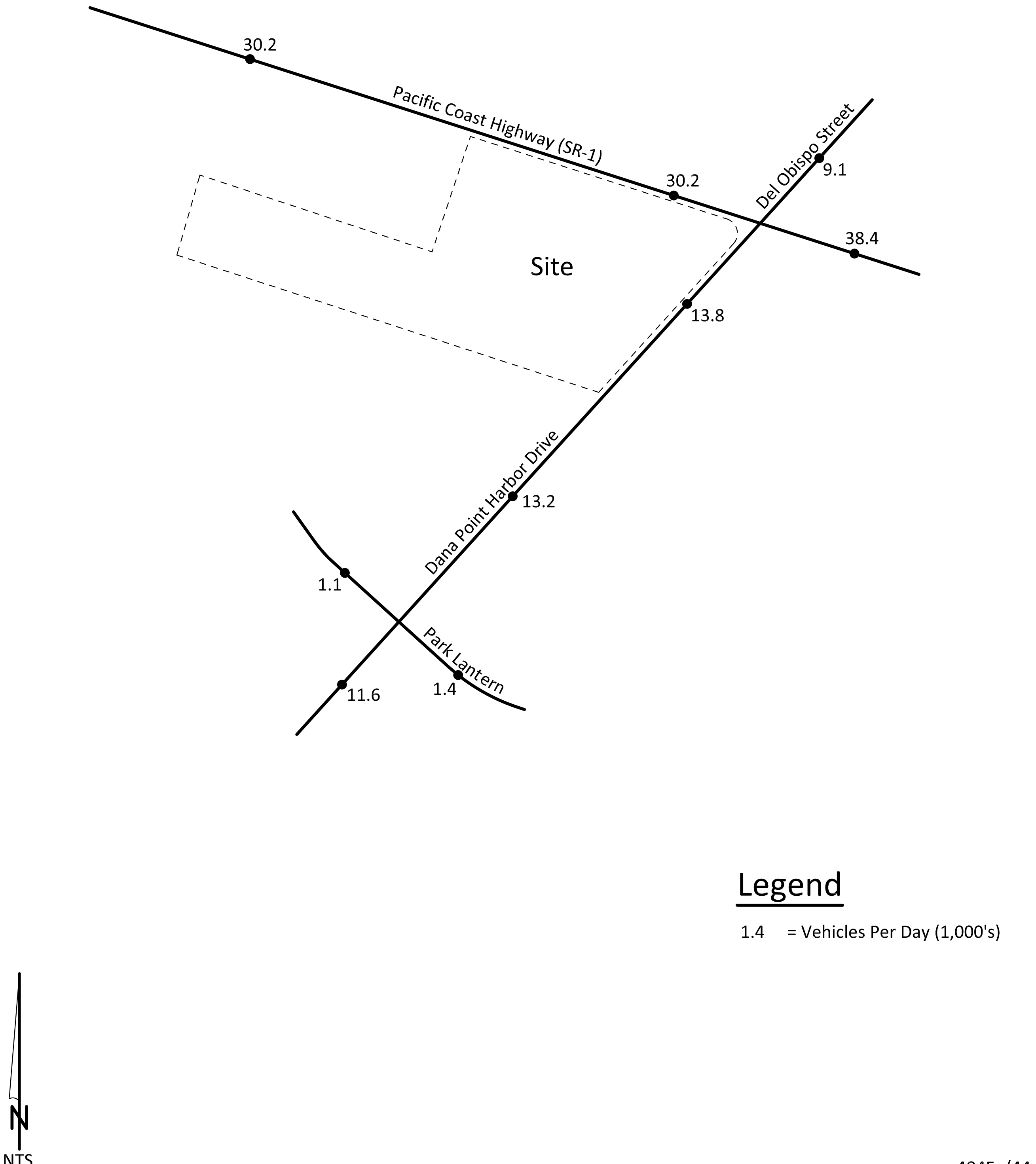
Figure 44
Opening Year (2013) With Project
Saturday Daily Traffic Volumes



4845c/44

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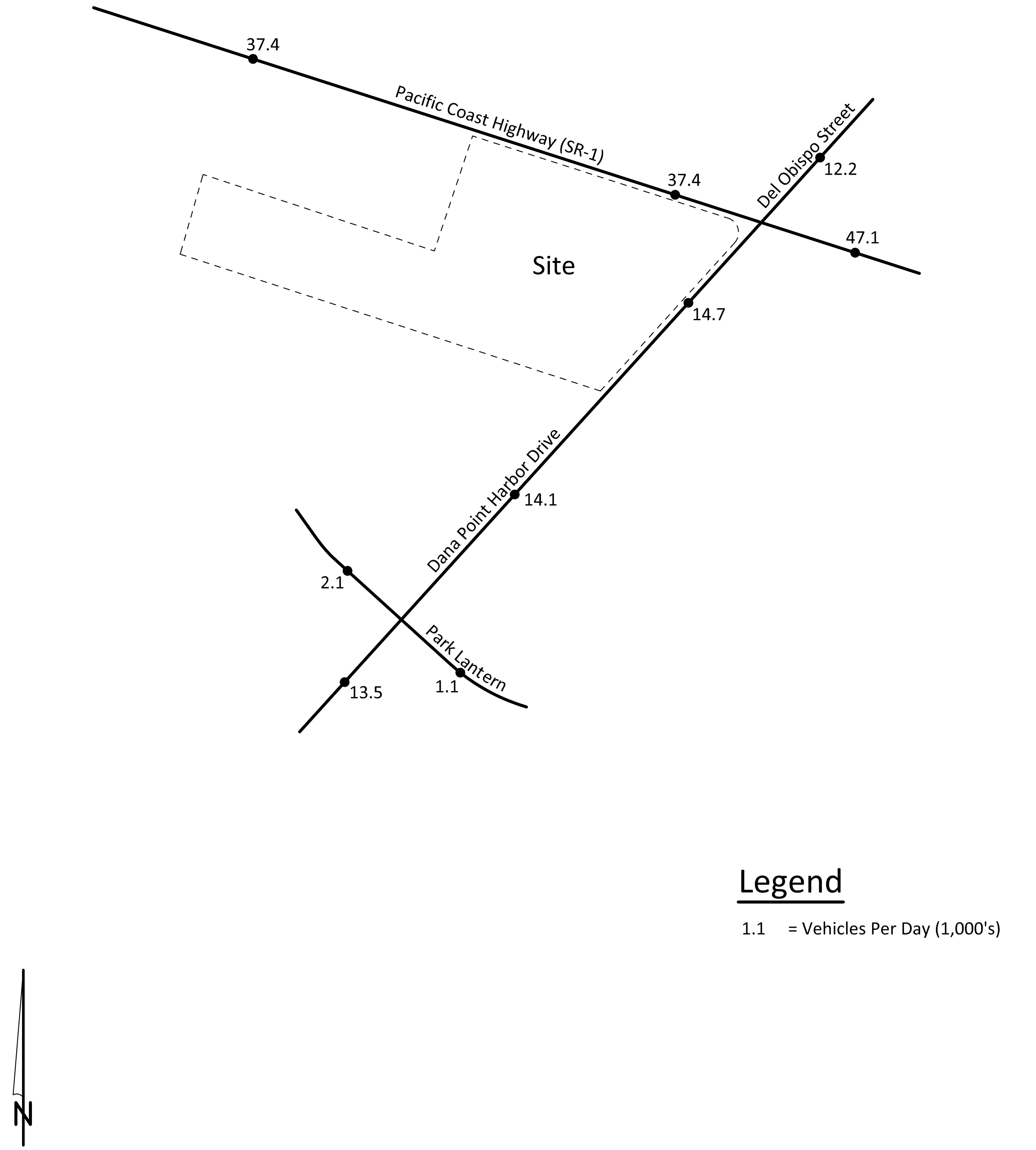
Over 35 Years of Excellent Service

Figure 45
Opening Year (2013) With Project
Weekday Peak Season Average Daily Traffic Volumes



4845c/45

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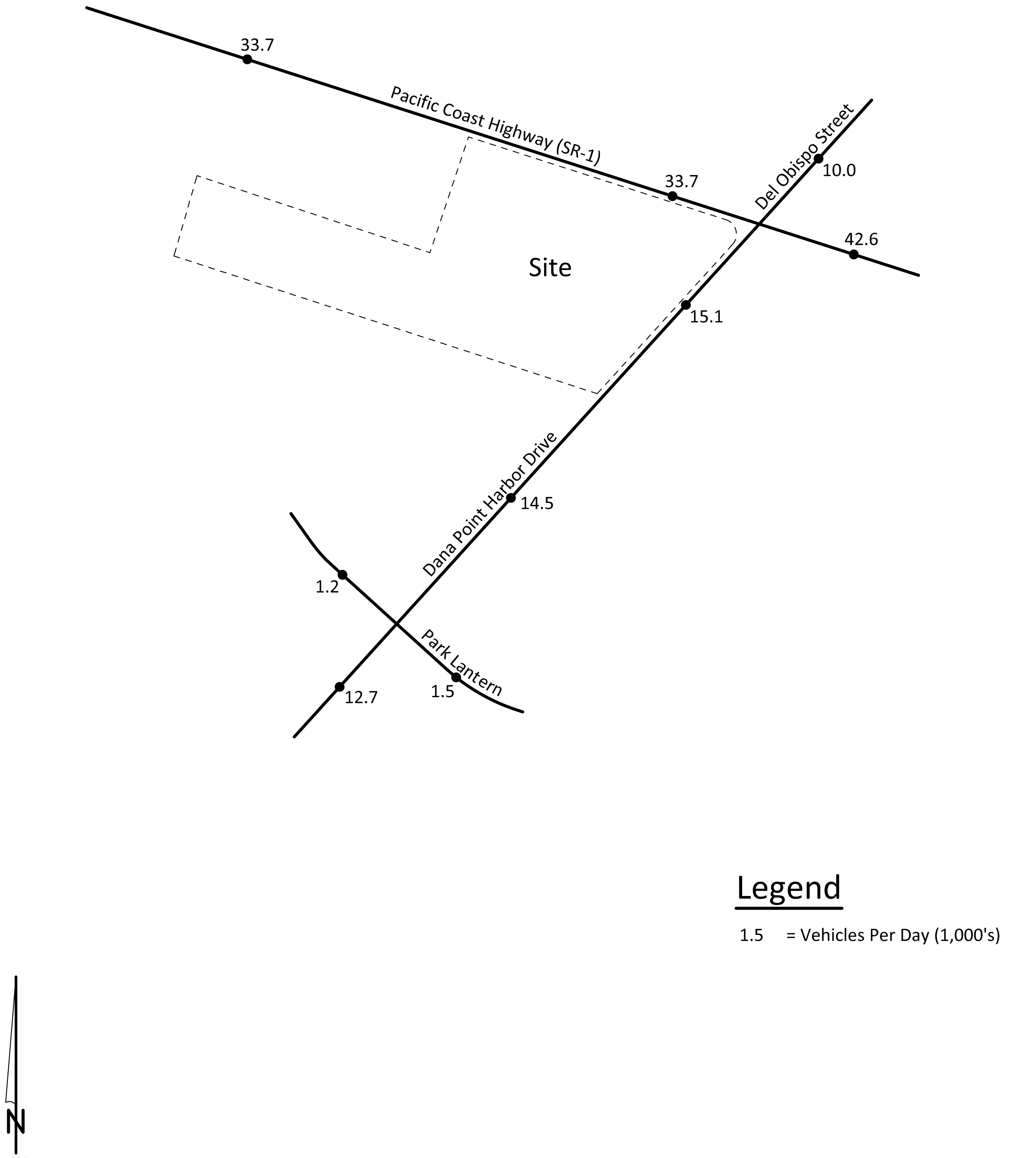
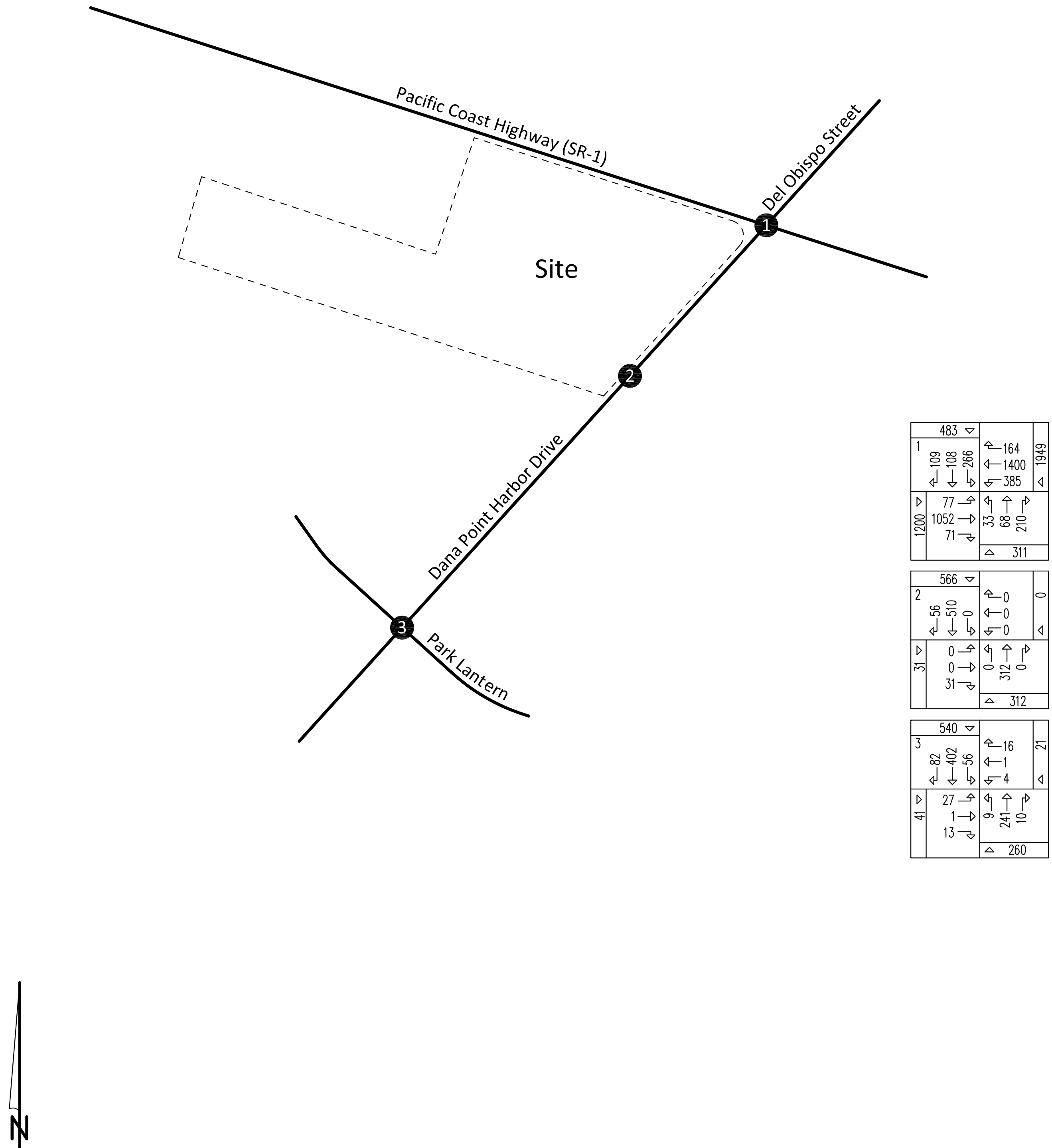
Over 35 Years of Excellent Service

Figure 46
Opening Year (2013) With Project
Saturday Peak Season Daily Traffic Volumes



4845c/46

Figure 47
Opening Year (2013) With Project
Weekday Morning Peak Hour Turning Movement Volumes



4845c/47

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

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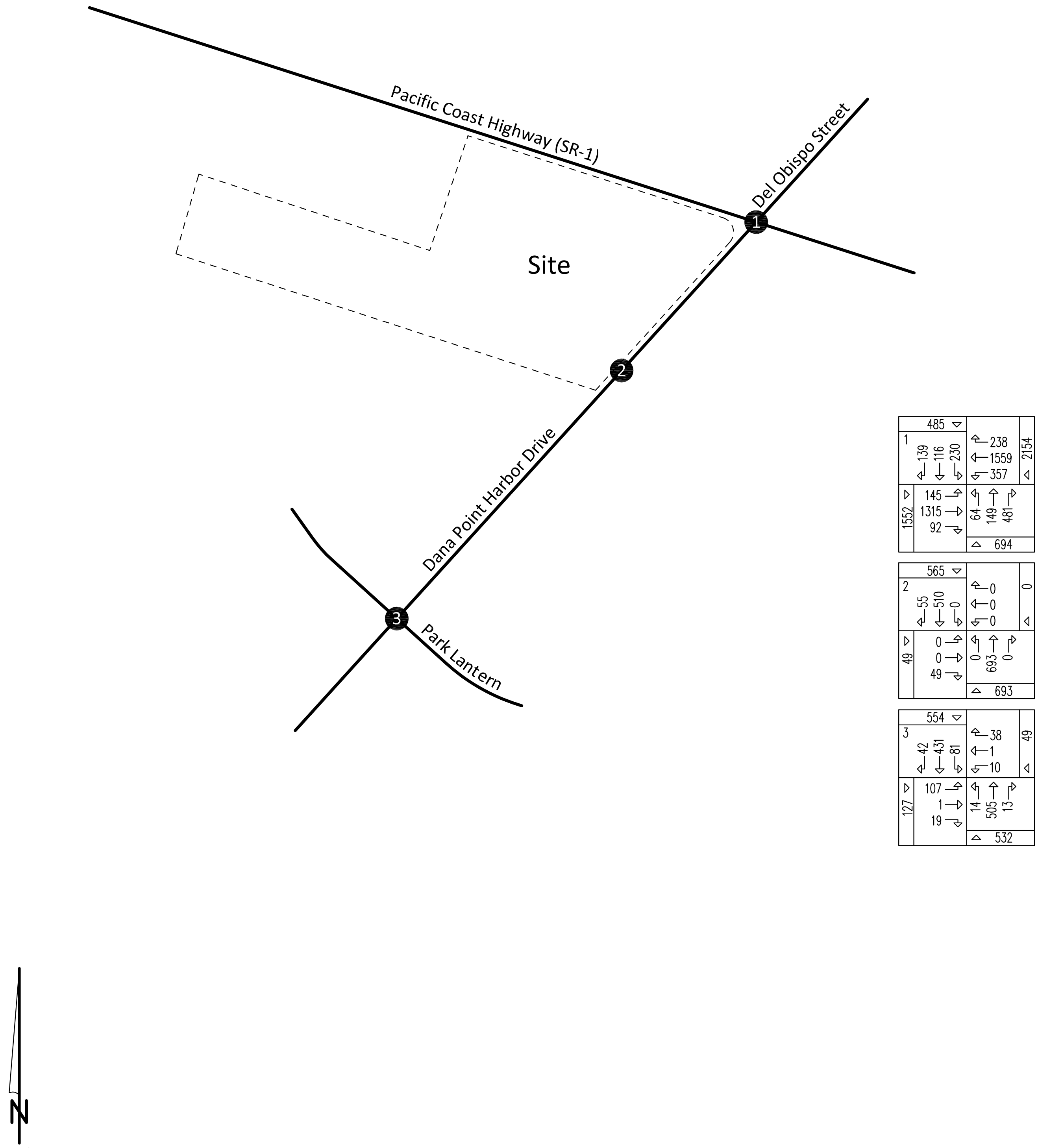
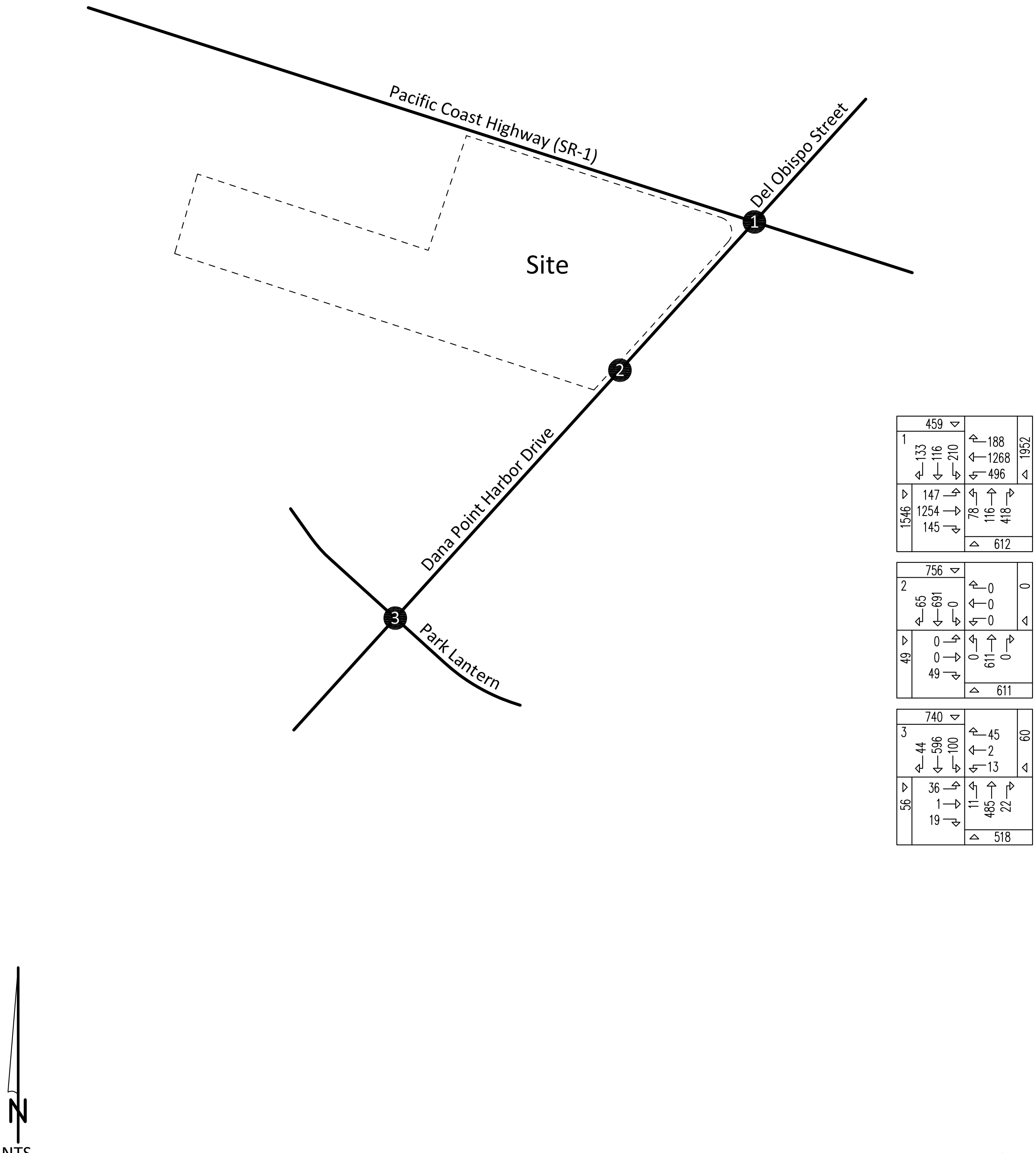
Figure 48
Opening Year (2013) With Project
Weekday Evening Peak Hour Turning Movement Volumes



4845c/48

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

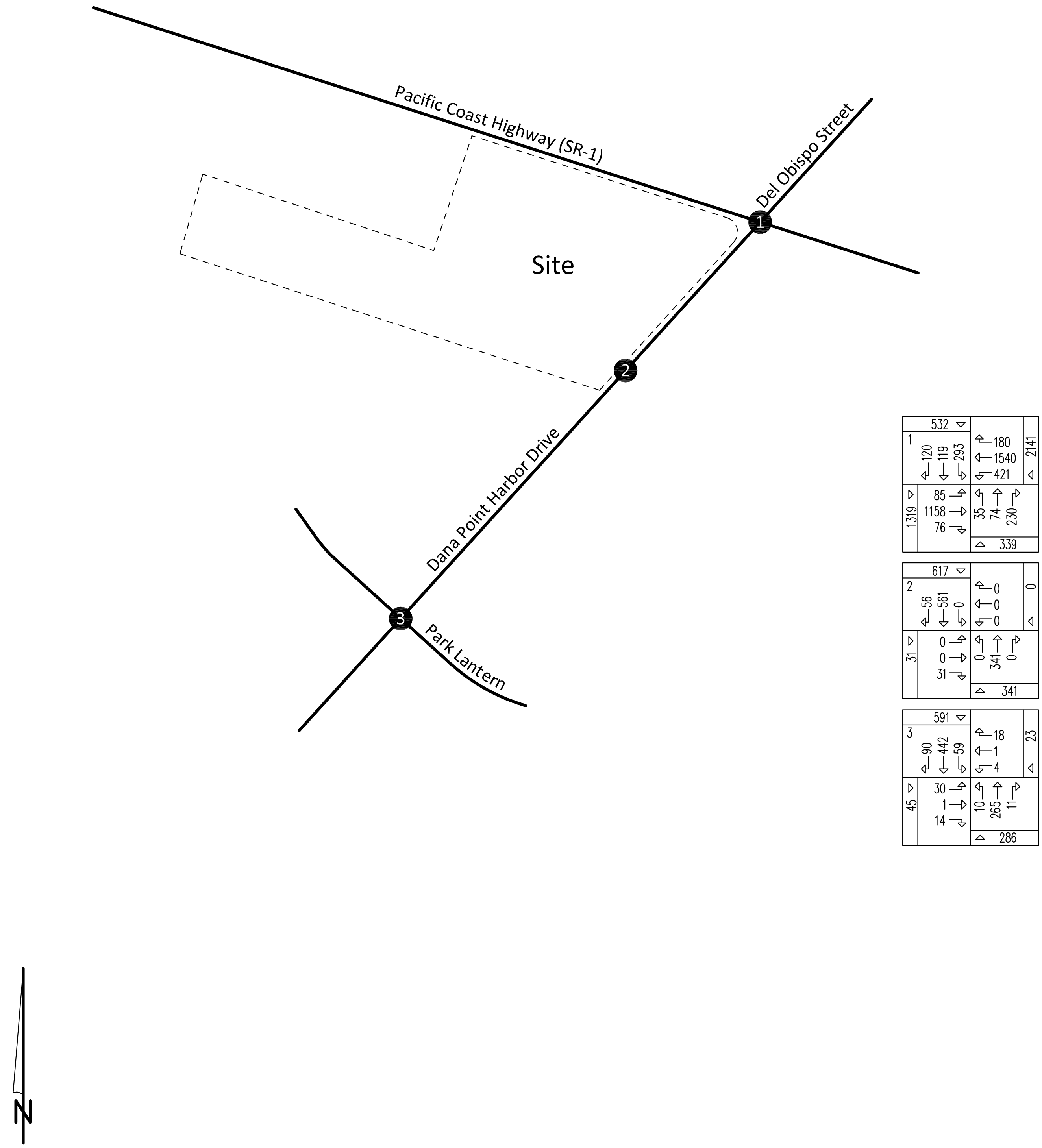
Figure 49
Opening Year (2013) With Project
Saturday Mid-day Peak Hour Turning Movement Volumes



4845c/49

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 50
Opening Year (2013) With Project
Weekday Peak Season Morning Peak Hour Turning Movement Volumes

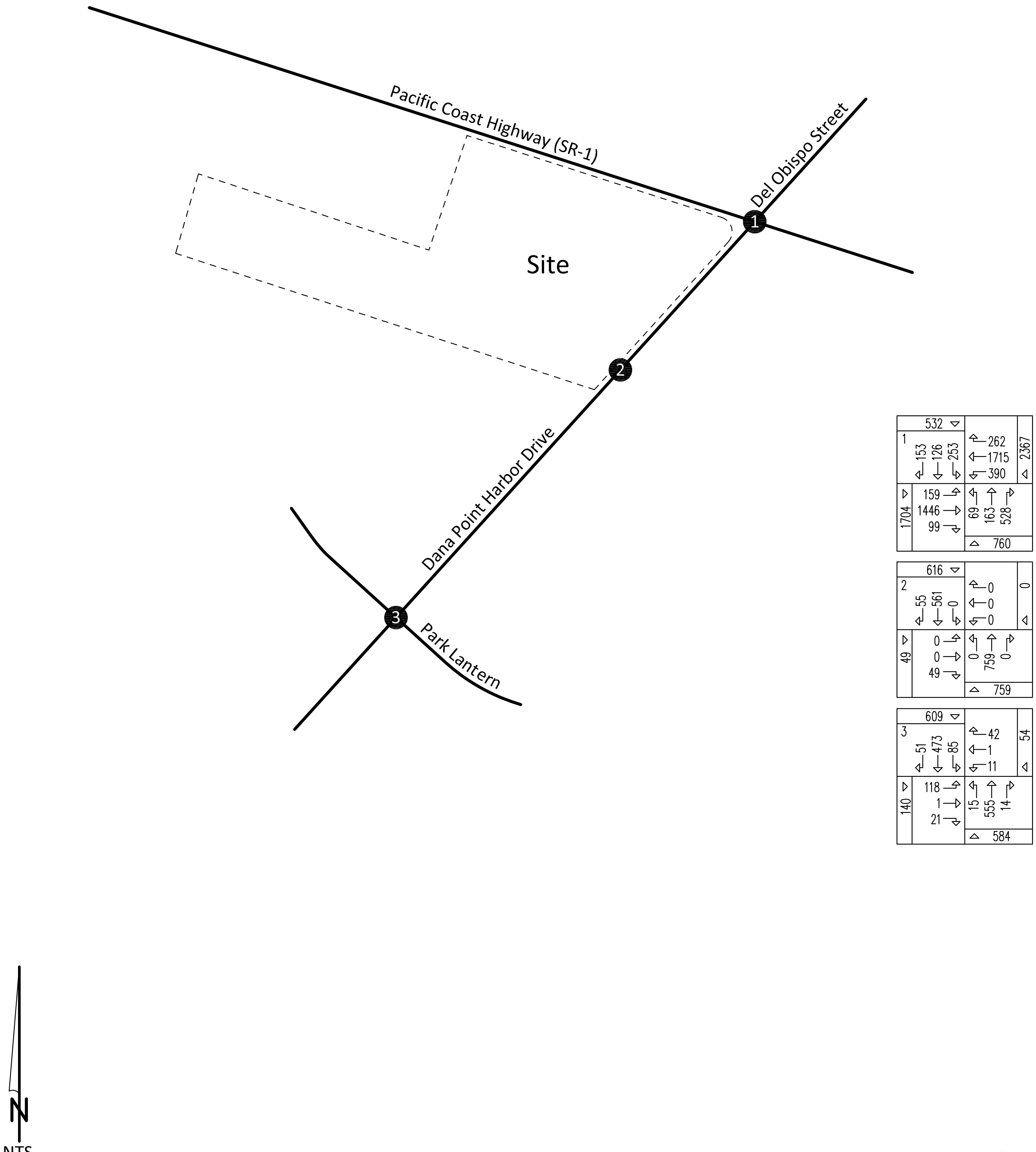


4845c/50

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

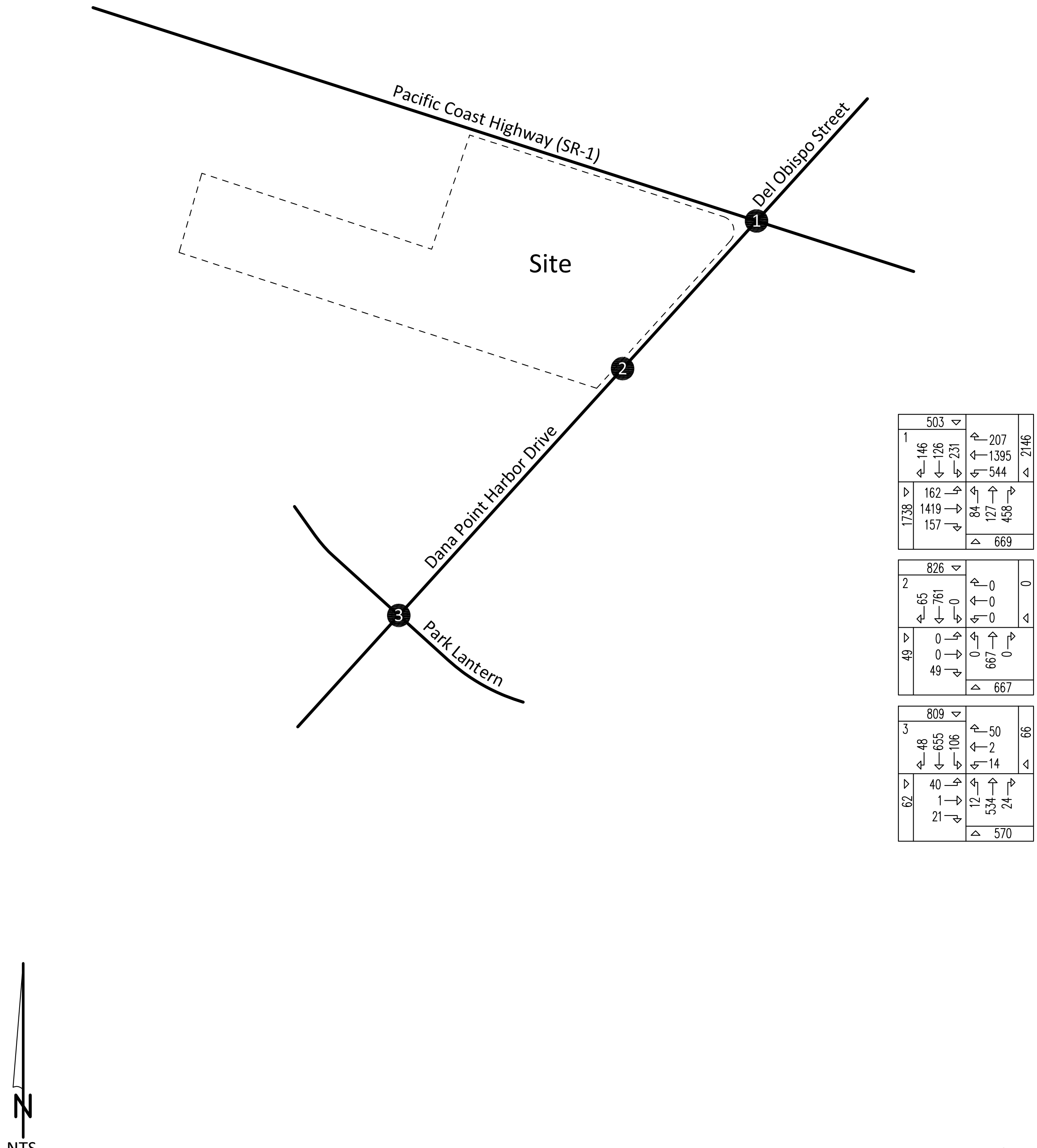
OVER 35 YEARS OF EXCELLENT SERVICE

Figure 51
Opening Year (2013) With Project
Weekday Peak Season Evening Peak Hour Turning Movement Volumes



4845c/51

Figure 52
Opening Year (2013) With Project
Saturday Peak Season Mid-day Peak Hour Turning Movement Volumes



4845c/52

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

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VIII. Year 2025 Without Project Traffic Conditions

In this section, Year 2025 Without Project traffic conditions are discussed. Figures 53 to 72 depict the Year 2025 Without Project traffic conditions.

A. Method of Projection

To assess Year 2025 Without Project traffic conditions, existing traffic is combined with other development and areawide growth.

For Year 2025 Without Project traffic conditions, an areawide growth rate has been utilized to account for areawide growth on study area roadways. Year 2025 Without Project traffic volumes have been calculated based on a quarter (0.25) percent annual growth over existing traffic volumes over a fourteen (14) year period. The areawide growth rate has been obtained from the City of Dana Point staff and the City's third party traffic engineering consultant.

Areawide growth has been added to daily and peak hour traffic volumes on surrounding roadways, in addition to traffic generated by other development.

B. Other Development

The City of Dana Point staff has provided the other development information. Table 7 lists the proposed land uses for the other development. Table 7 shows the peak hour vehicle trips generated by the other development in the study area. The data that populates this table has been provided by the City of Dana Point Planning Department. Figure 53 depicts the other development location map. Figures 54 to 57 show the other development traffic distributions. Other development weekday average daily traffic volumes are shown on Figure 58 and Saturday daily traffic volumes are shown on Figure 59. Other development weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes are shown on Figures 60 to 62, respectively.

C. Year 2025 Without Project Weekday Average Daily Traffic Volumes

Year 2025 Without Project weekday average daily traffic volumes are as illustrated on Figure 63.

D. Year 2025 Without Project Saturday Daily Traffic Volumes

Year 2025 Without Project Saturday daily traffic volumes are as illustrated on Figure 64.

E. Year 2025 Without Project Weekday Peak Season Average Daily Traffic Volumes

Year 2025 Without Project weekday peak season average daily traffic volumes are as illustrated on Figure 65.

F. Year 2025 Without Project Saturday Peak Season Daily Traffic Volumes

Year 2025 Without Project Saturday peak season daily traffic volumes are as illustrated on Figure 66.

G. Year 2025 Without Project Levels of Service

The technique used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization. To calculate an Intersection Capacity Utilization value, the volume of traffic using the intersection is compared with the capacity of the intersection. The Intersection Capacity Utilization represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. The technique used to assess the operation of an unsignalized intersection is known as the Intersection Delay Method based on the 2000 Highway Capacity Manual – Transportation Research Board Special Report 209. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection. The signalized intersections are considered deficient (Level of Service F) if the overall intersection critical volume to capacity ratio equals or exceeds 1.0, even if the Level of Service defined by the delay value is below the defined Level of Service standard. The volume to capacity ratio is defined as the critical volumes divided by the intersection capacity. A volume to capacity ratio greater than 1.0 implies an infinite queue. Both methodologies are described in Appendix C.

The Intersection Capacity Utilization calculations assume a per-lane capacity of 1,700 vehicles per hour for each travel lane (through or turning) through an intersection. A clearance factor of 0.05 or five (5) percent of the total intersection capacity is included in the Intersection Capacity Utilization calculation.

The Levels of Service for the Year 2025 Without Project traffic conditions have been calculated and are shown in Table 8. Year 2025 Without Project weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes are shown on Figures 67 to 69, respectively. Year 2025 Without Project peak season weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes are shown on Figures 70 to 72, respectively.

The study area intersections are projected to operate within acceptable Levels of Service during peak hours for Year 2025 Without Project traffic conditions (see Table 8). Year 2025 Without Project Level of Service worksheets are provided in Appendix D.

Table 7

Other Development Traffic Generation

Project	Weekday							Weekend			
	Peak Hour						Daily	Peak Hour			Daily
	Morning			Evening				Mid-day			
	Inbound	Outbound	Total	Inbound	Outbound	Total		Inbound	Outbound	Total	
GPA07-01/ZTA07-02/ZC07-01/LCPA07-013[1]	61	96	157	175	156	331	3,716	238	216	454	4,922
Dana Point Harbor Revitalization[2]	154	118	272	199	190	389	4,980	172	142	314	3,186
Dana Point Town Center[3]	306	180	486	374	498	872	11,748	562	517	1,079	9,497
Total	521	394	915	748	844	1,592	20,444	972	875	1,847	17,605

[1] Source: GPA07-01/ZTA07-02/ZC07-01/LCPA07-01 Traffic Impact Analysis Report, dated March 17, 2009, prepared by LLG Engineers.

[2] Source: Dana Point Harbor Revitalization Traffic and Parking Analysis, dated September 2005, prepared by RBF Consulting.

[3] Source: Dana Point Town Center Plan Traffic Impact Analysis, dated August 2006, prepared by Kimley-Horn and Associates, Inc.

Table 8

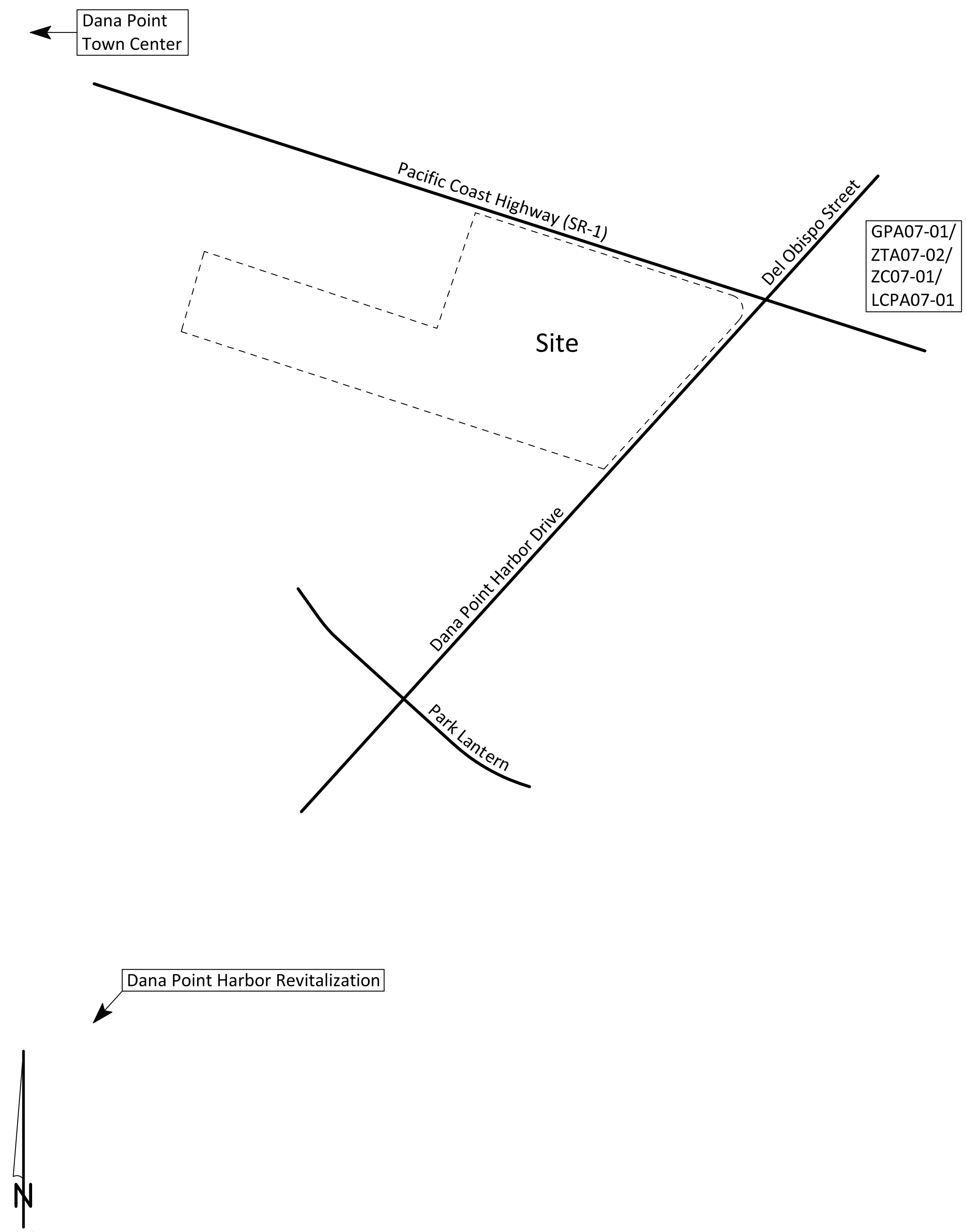
Year 2025 Without Project Intersection Delay and Level of Service

Intersection	Traffic Control [2]	Intersection Approach Lanes [1]																								Intersection Capacity Utilization - Level of Service					
		Northbound						Southbound						Eastbound						Westbound						Non-peak Season			Peak Season		
																										Weekday		Weekend	Weekday		Weekend
		L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	Morning	Evening	Midday	Morning	Evening	Midday
Del Obispo Street/Dana Point Harbor Drive (NS) at:																															
Pacific Coast Highway (EW) - #1	TS	1	0	1	0	2	0	2	0	1	0	1	0	1	0	2	1	0	0	2	0	2	1	0	0	0.597-A	0.785-C	0.763-C	0.645-B	0.845-D	0.813-D
Park Lantern (EW) - #3	TS	1	0	2	0	1	0	1	0	2	0	d	0	0	1	0	0	d	0	1	0	1	0	1>>	0	0.238-A	0.350-A	0.315-A	0.253-A	0.333-A	0.337-A

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right;
>> = Free Right Turn; d = Defacto Right Turn Lane

[2] TS = Traffic Signal

Figure 53
Other Development Location Map



4845c/53

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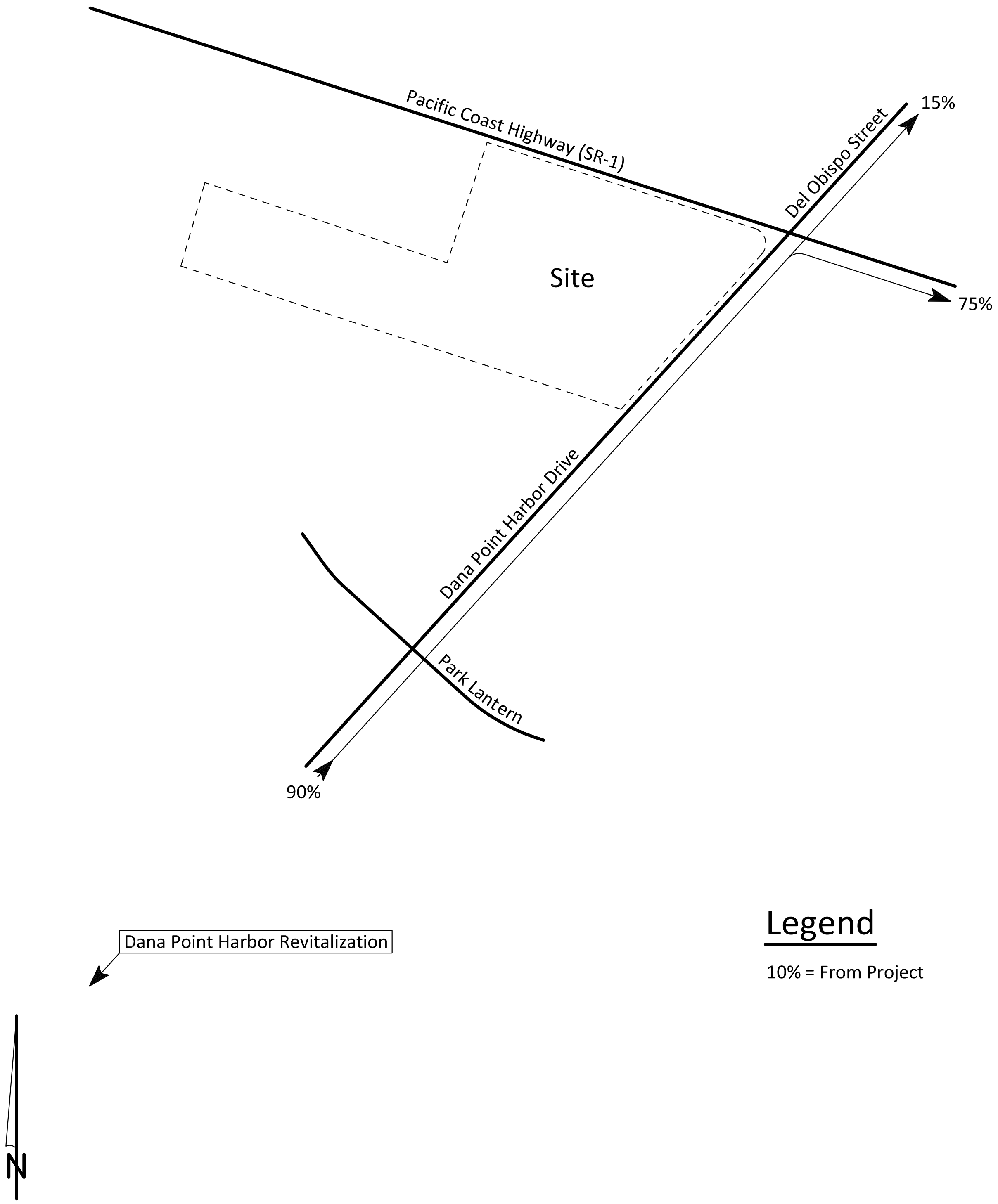
Figure 54
Other Development Traffic Distribution
(Dana Point Harbor Revitalization) - Outbound



4845c/54

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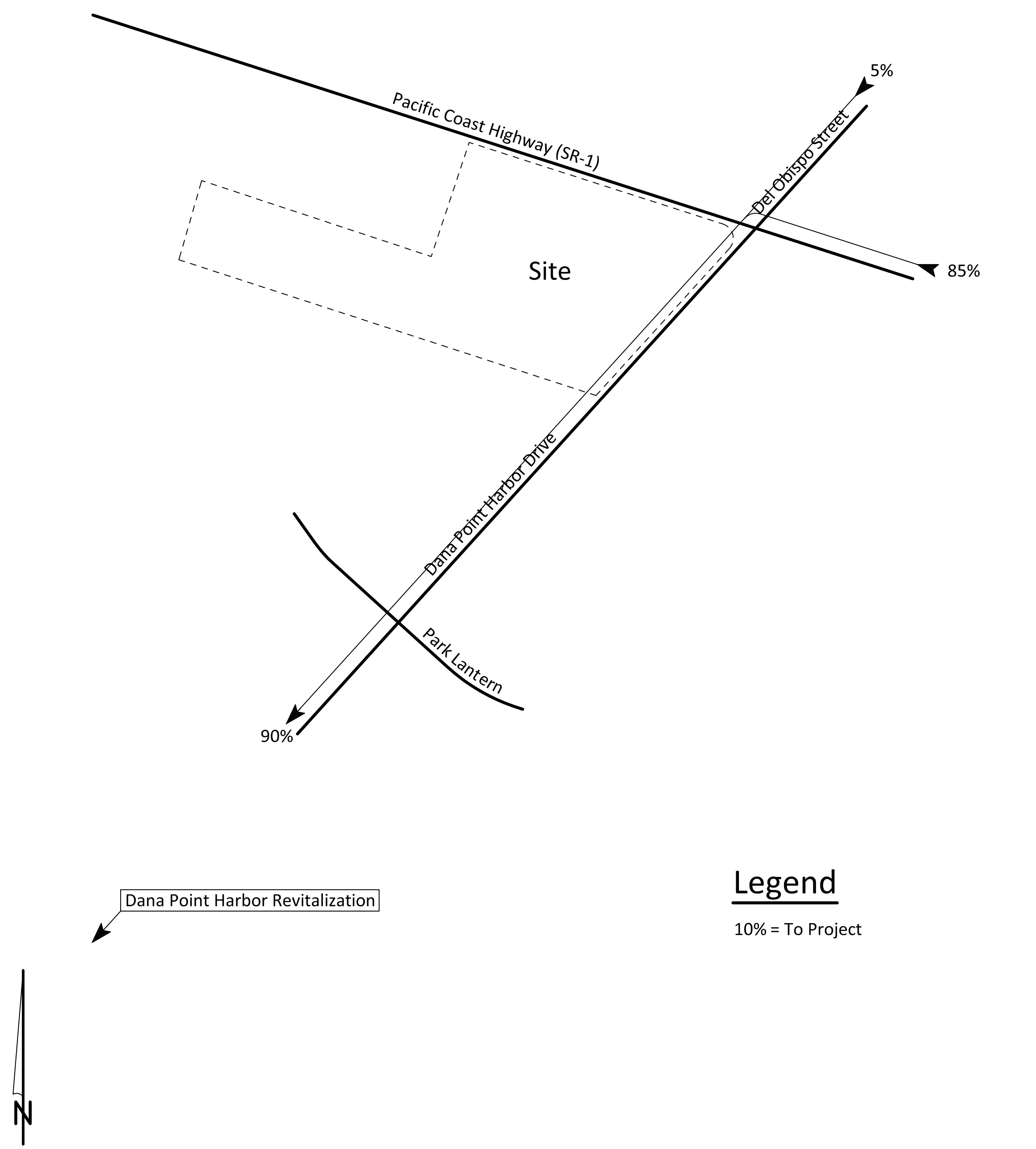
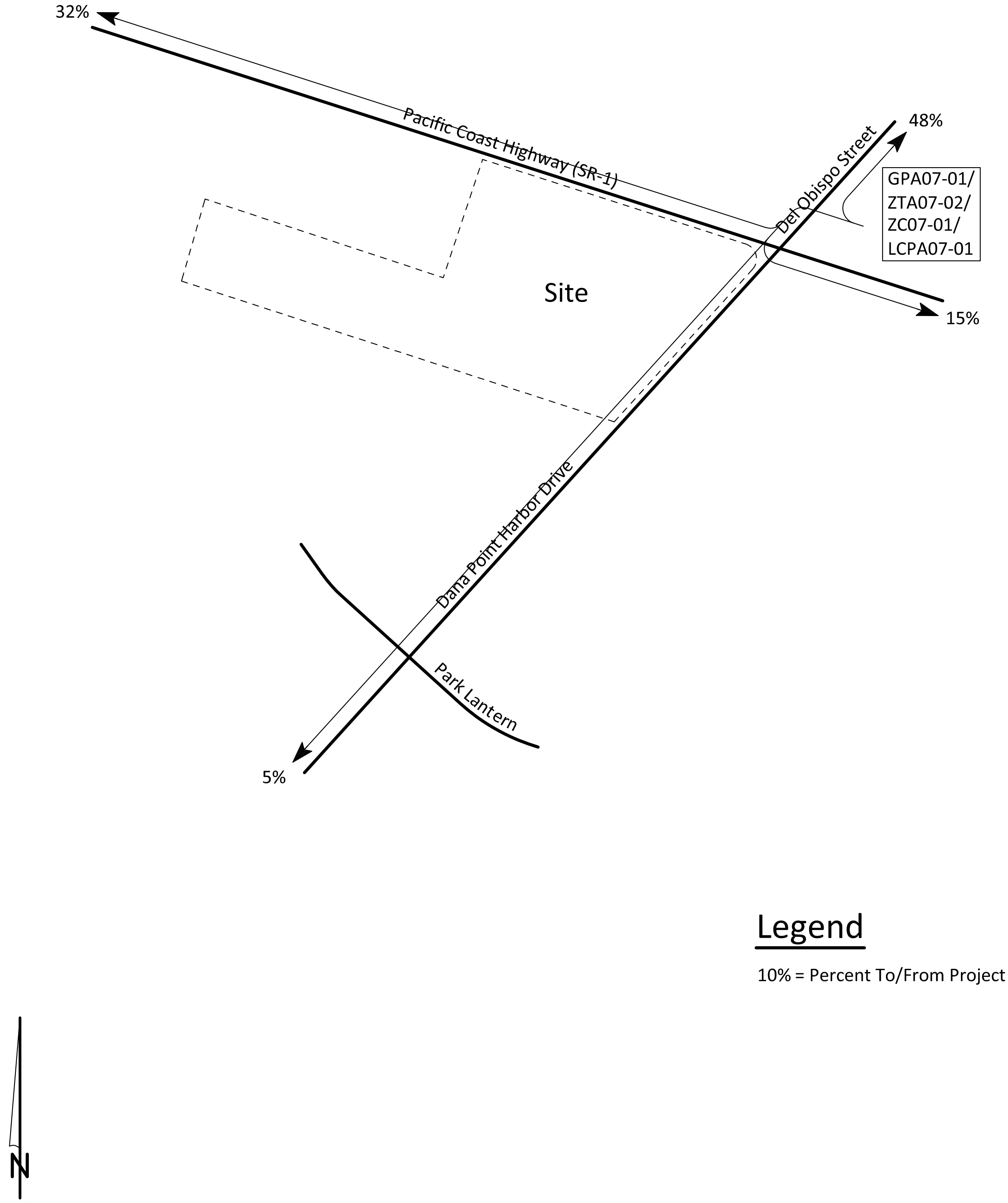
Figure 55
Other Development Traffic Distribution
(Dana Point Harbor Revitalization) - Inbound



4845c/55

Kunzman Associates, Inc.
Over 35 Years of Excellent Service

Figure 56
Other Development Traffic Distribution
(GPA07-01/ZTA07-02/ZC07-01/LCPA07-01)



4845c/56

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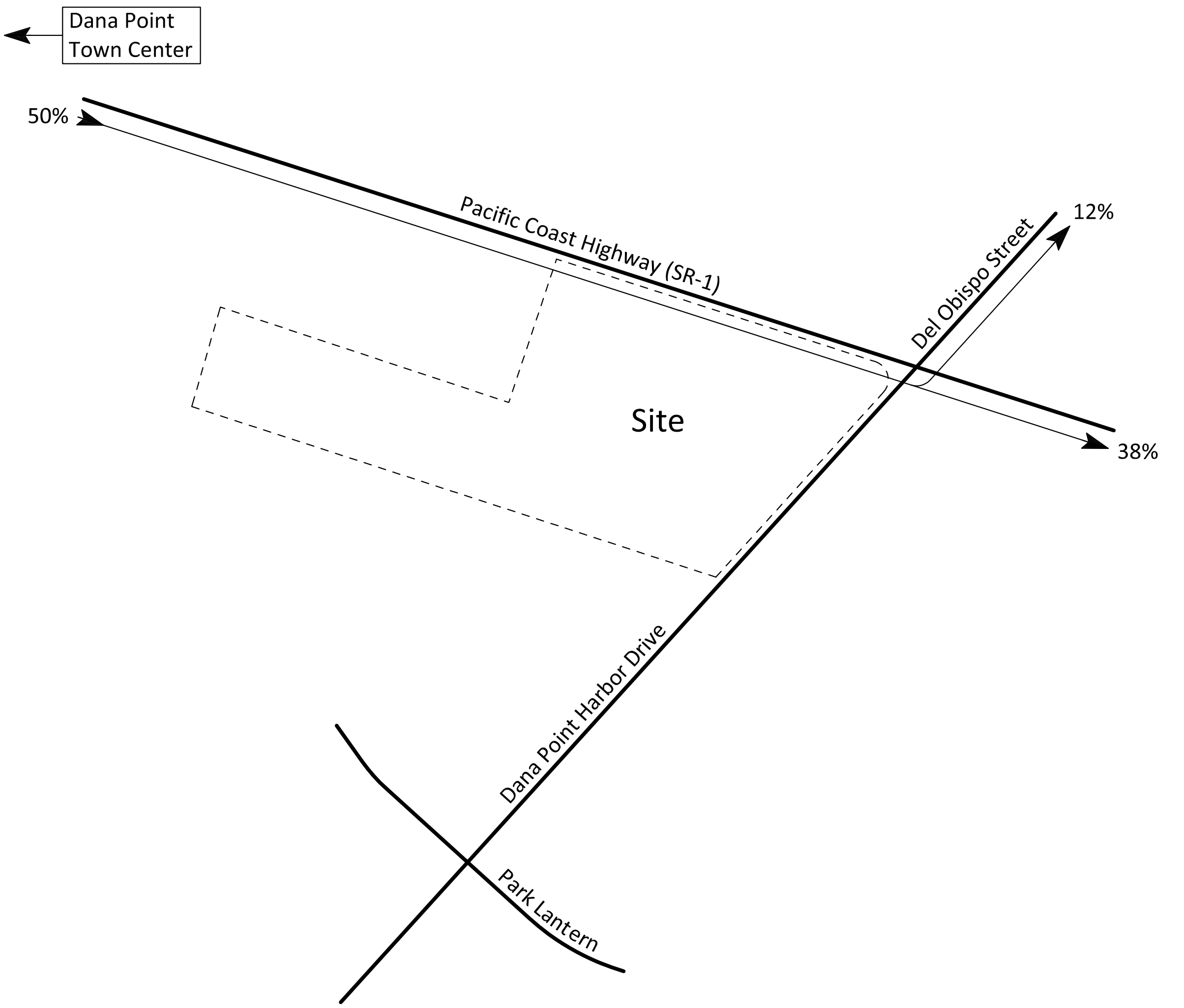
Figure 57
Other Development Traffic Distribution
(Dana Point Town Center)



Legend

10% = Percent To/From Project

NTS

4845c/57

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OVER 35 YEARS OF EXCELLENT SERVICE

Figure 58
Other Development Weekday Average Daily Traffic Volumes

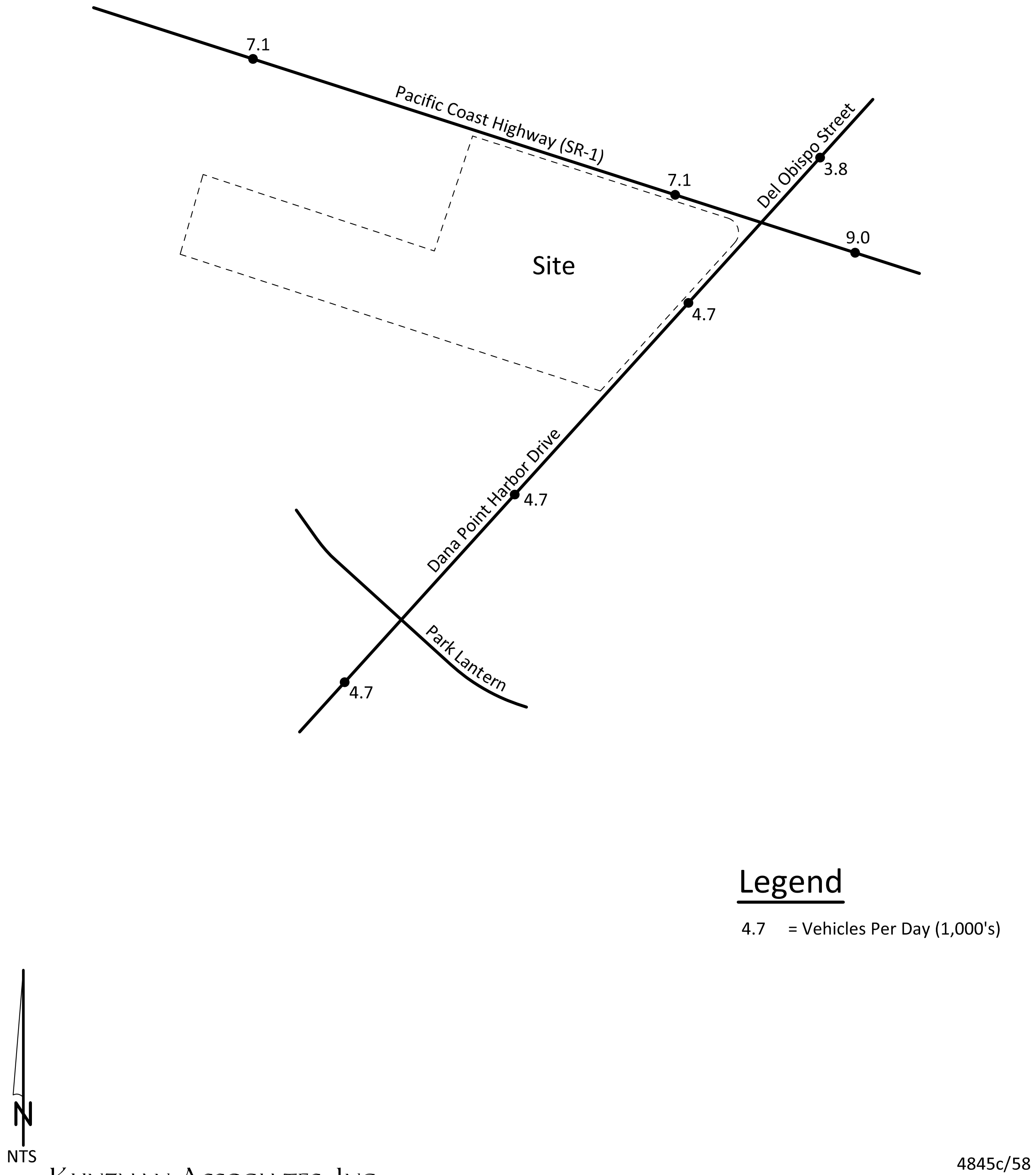

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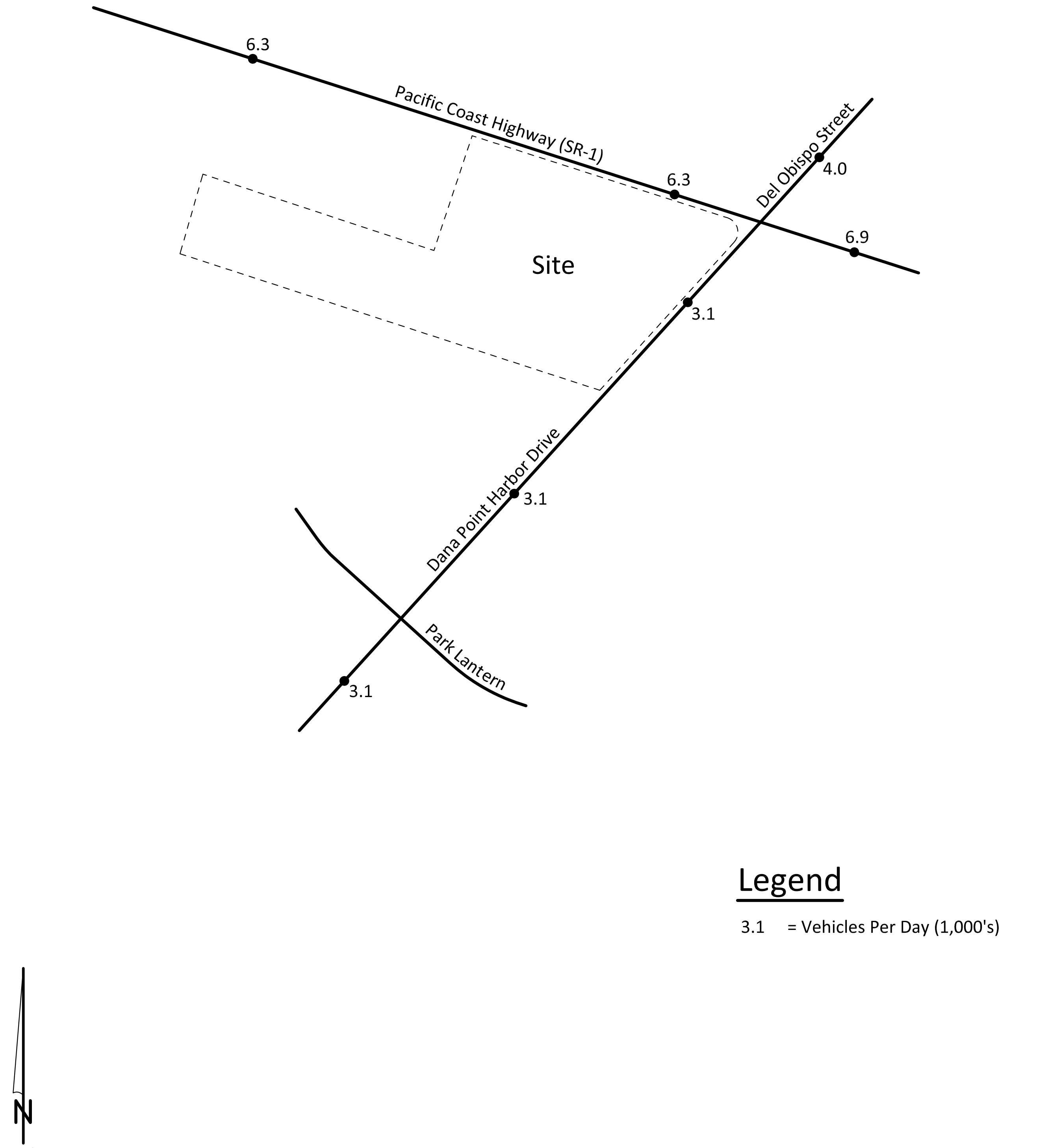
Figure 59
Other Development Saturday Daily Traffic Volumes

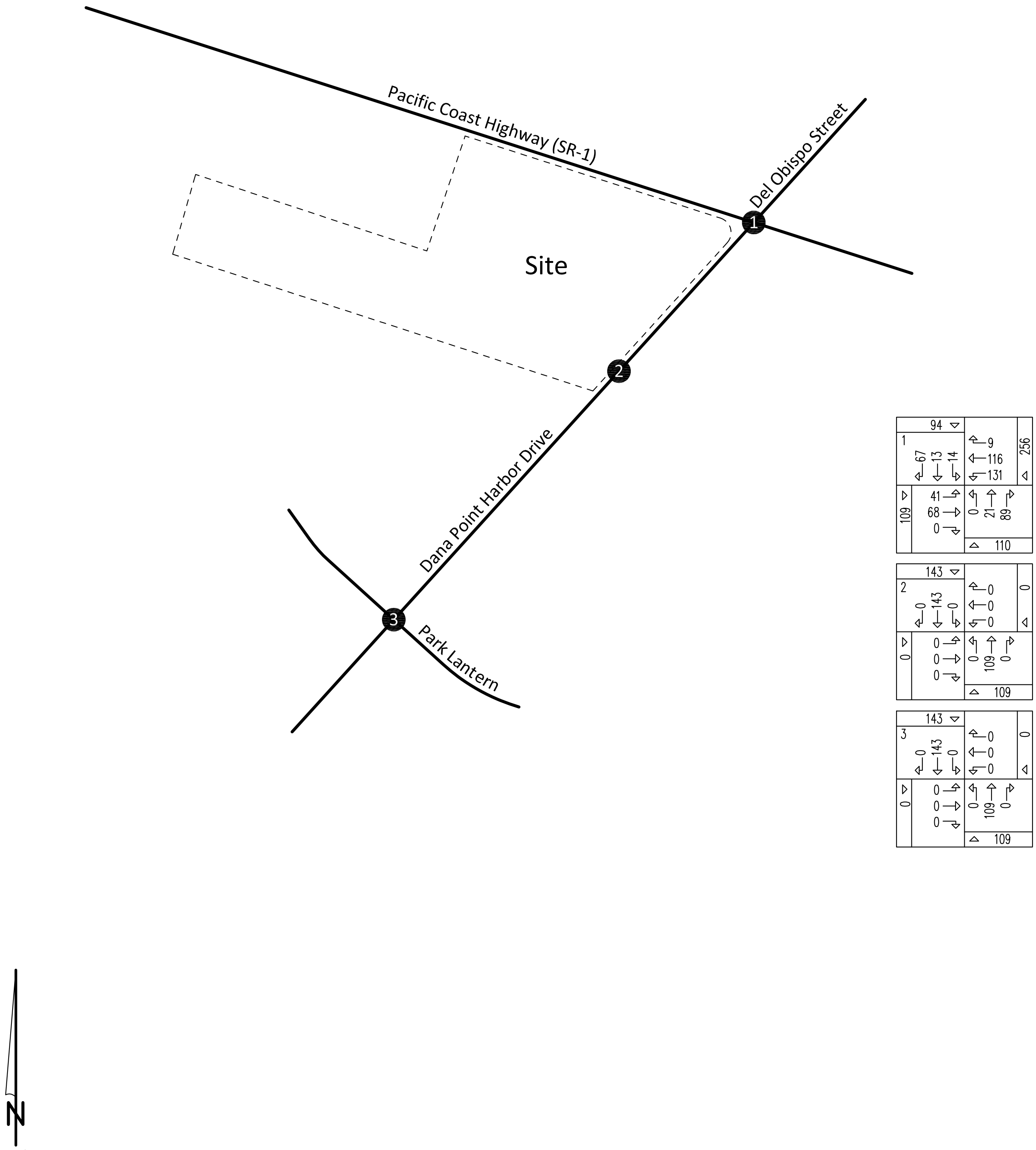


4845c/59

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 60
Other Development
Weekday Morning Peak Hour Turning Movement Volumes

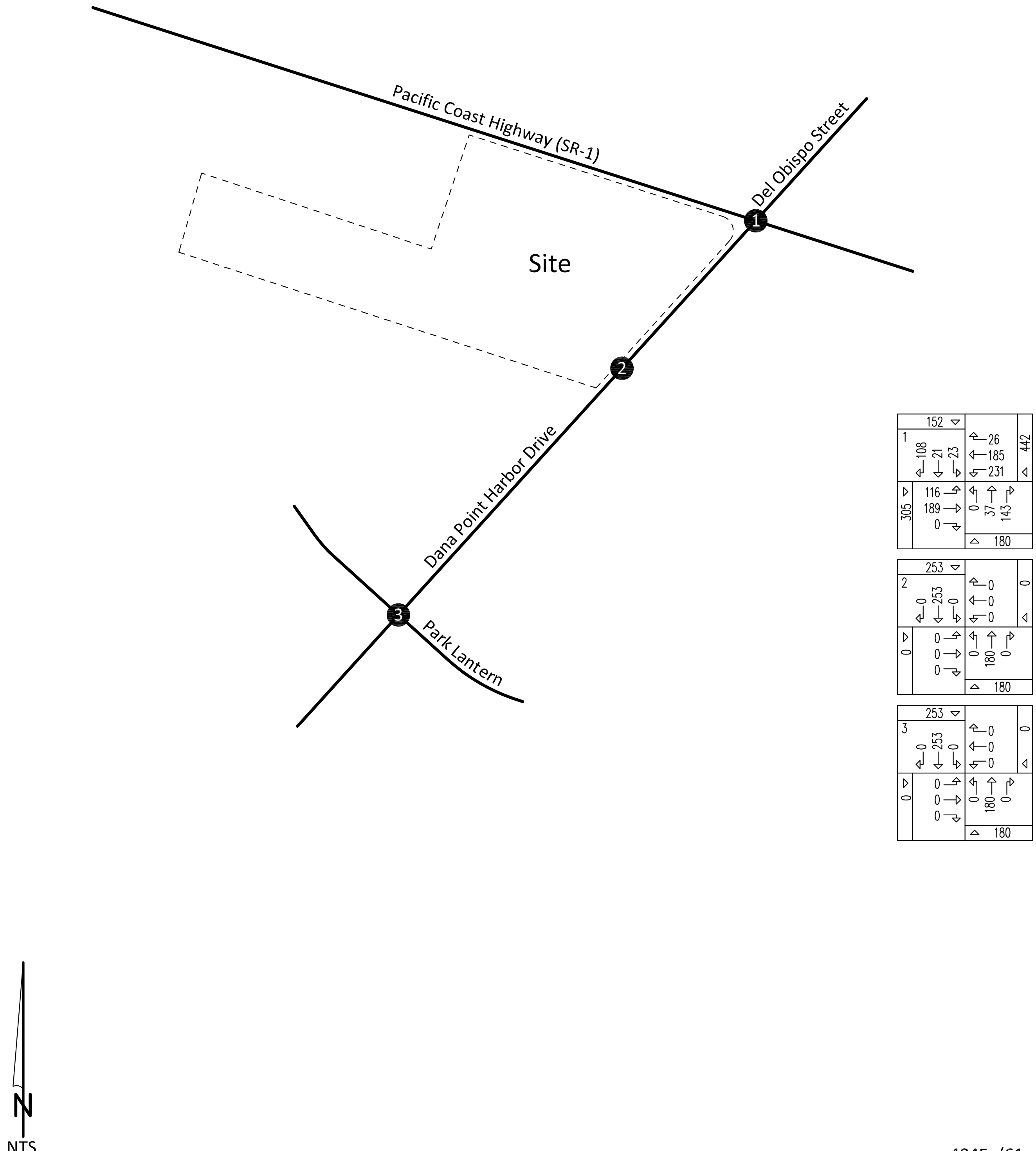


4845c/60

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

Over 35 Years of Excellent Service

Figure 61
Other Development
Weekday Evening Peak Hour Turning Movement Volumes

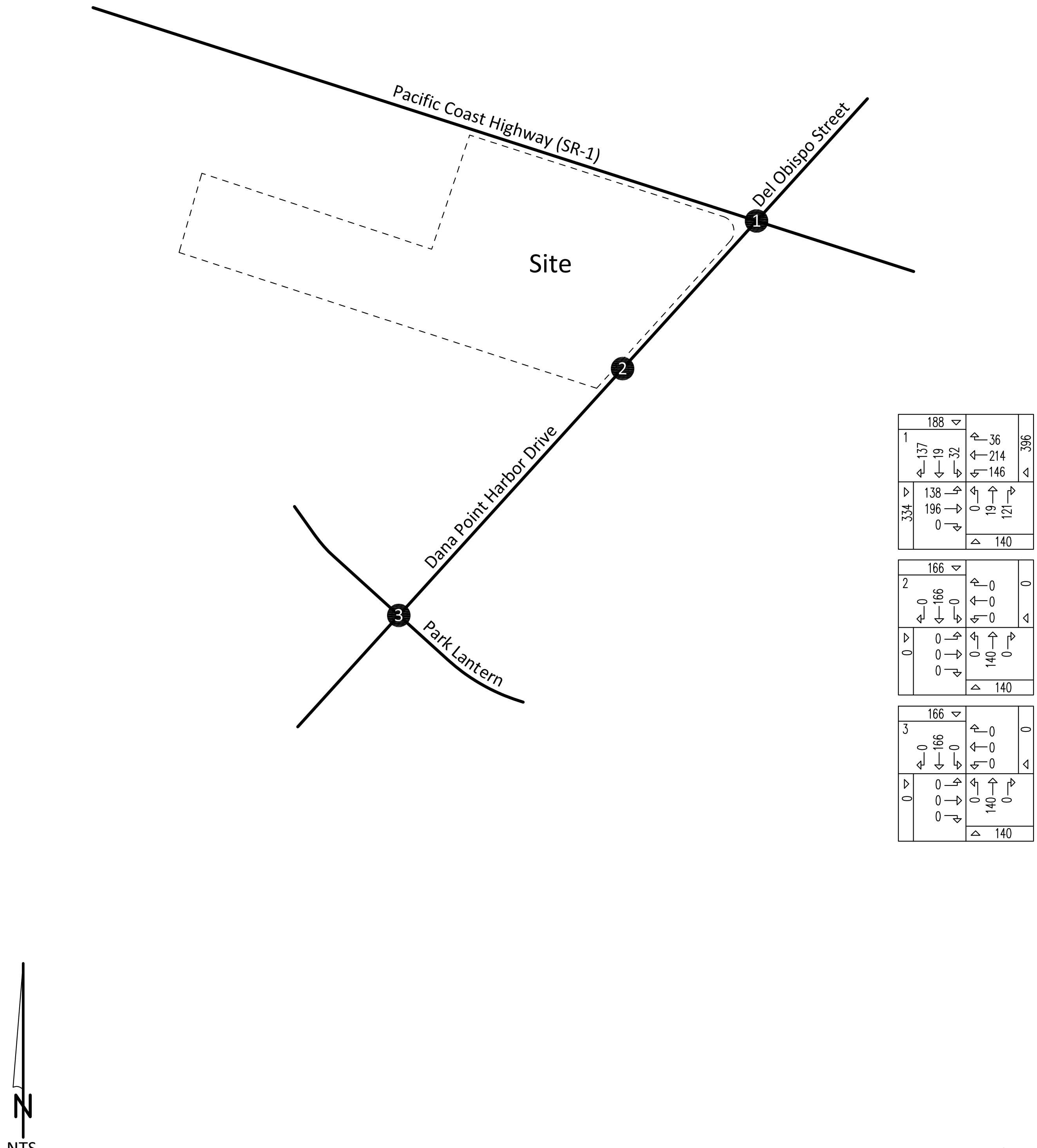


4845c/61

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 62
Other Development
Saturday Mid-day Peak Hour Turning Movement Volumes

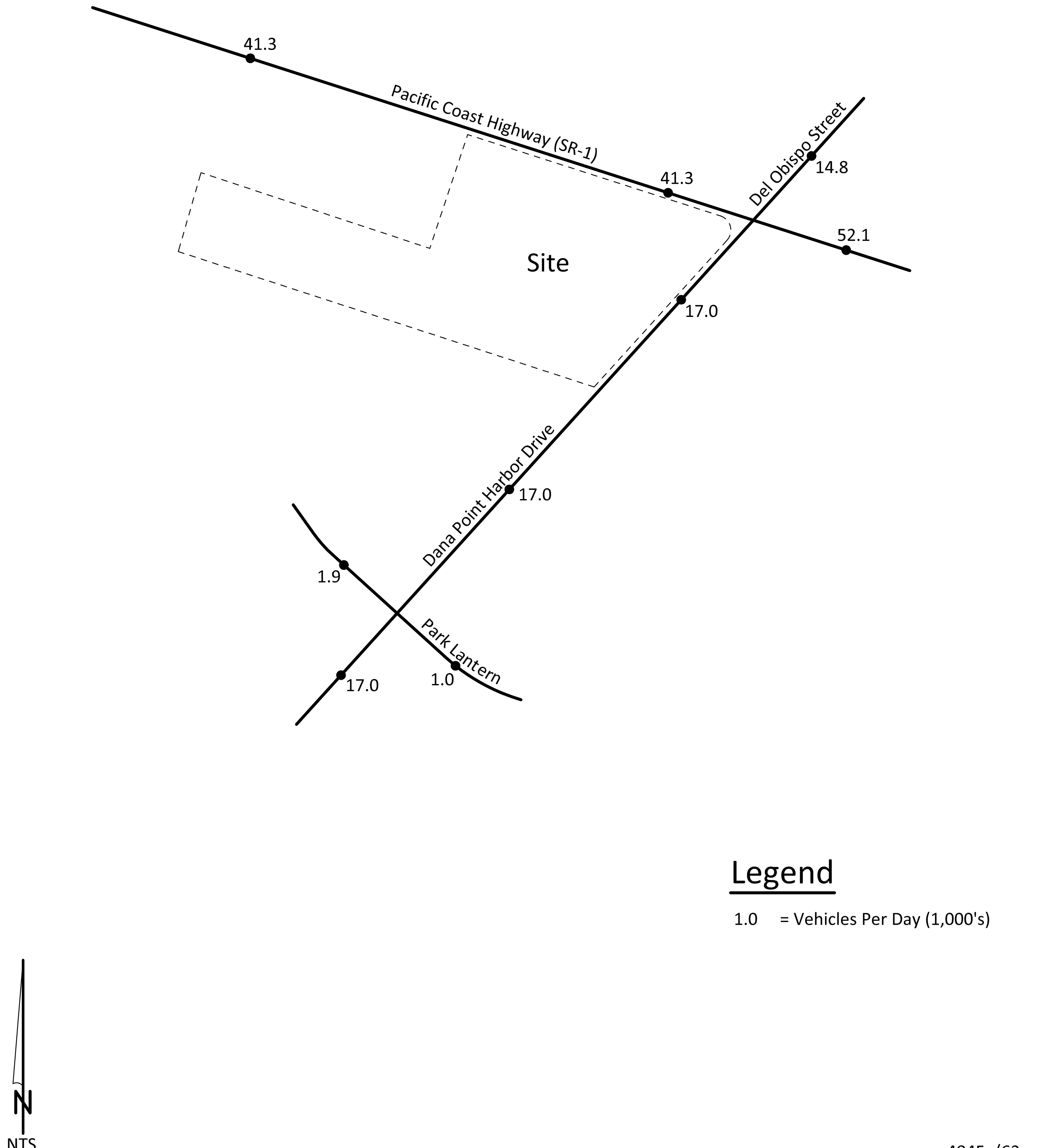


4845c/62

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 63
Year 2025 Without Project
Weekday Average Daily Traffic Volumes

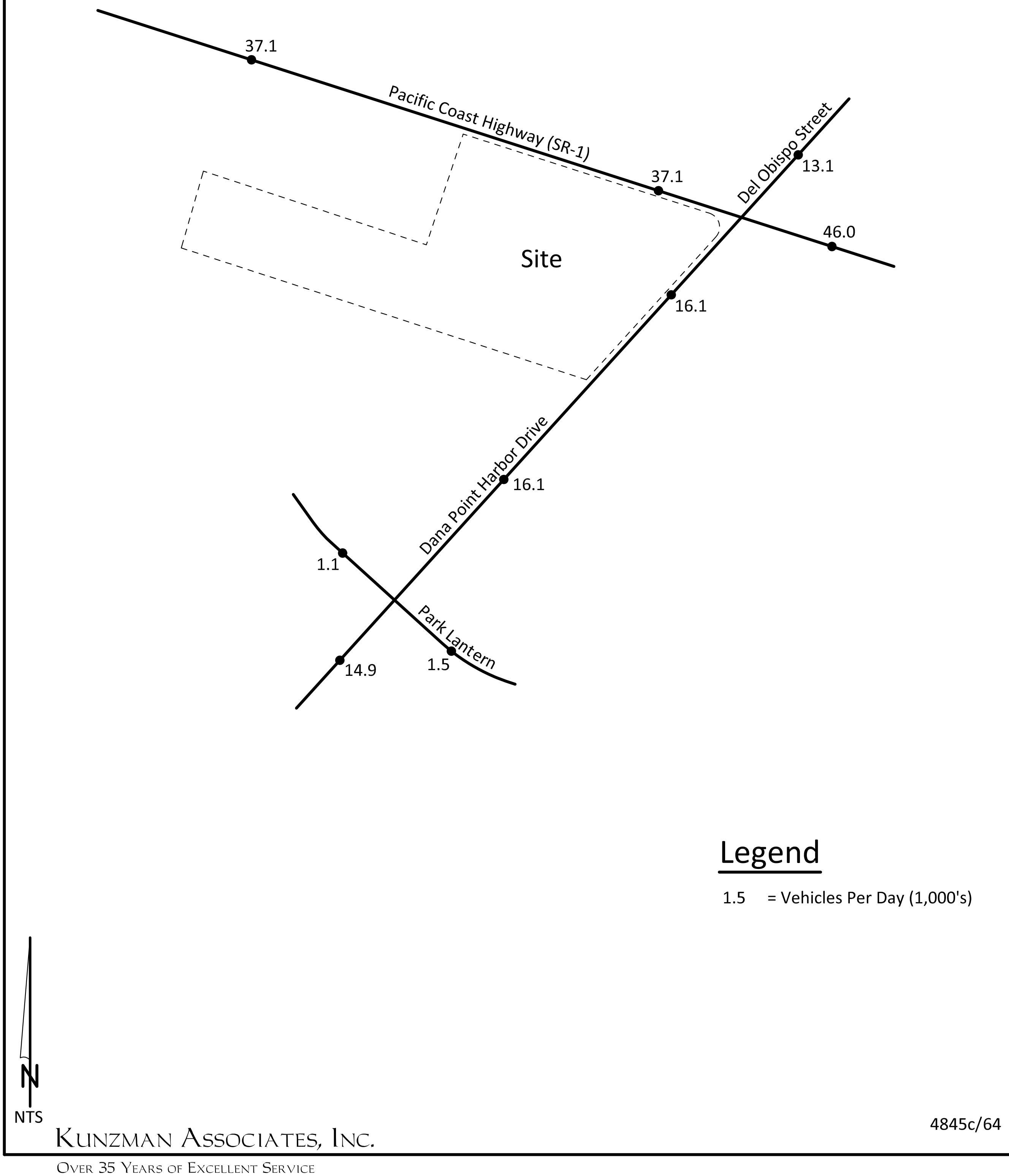


4845c/63

KUNZMAN ASSOCIATES, INC.

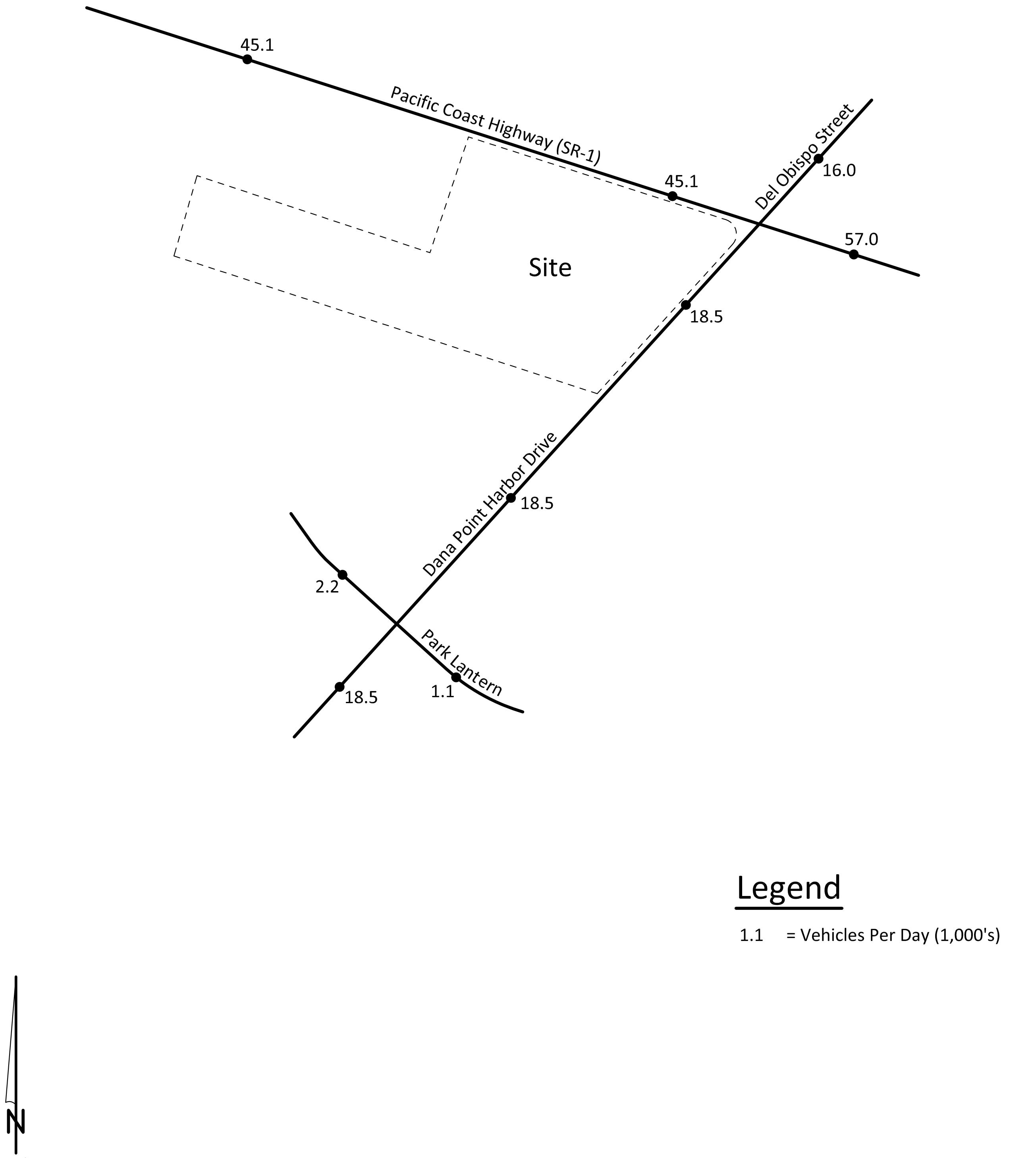
OVER 35 YEARS OF EXCELLENT SERVICE

Figure 64
Year 2025 Without Project
Saturday Daily Traffic Volumes



4845c/64

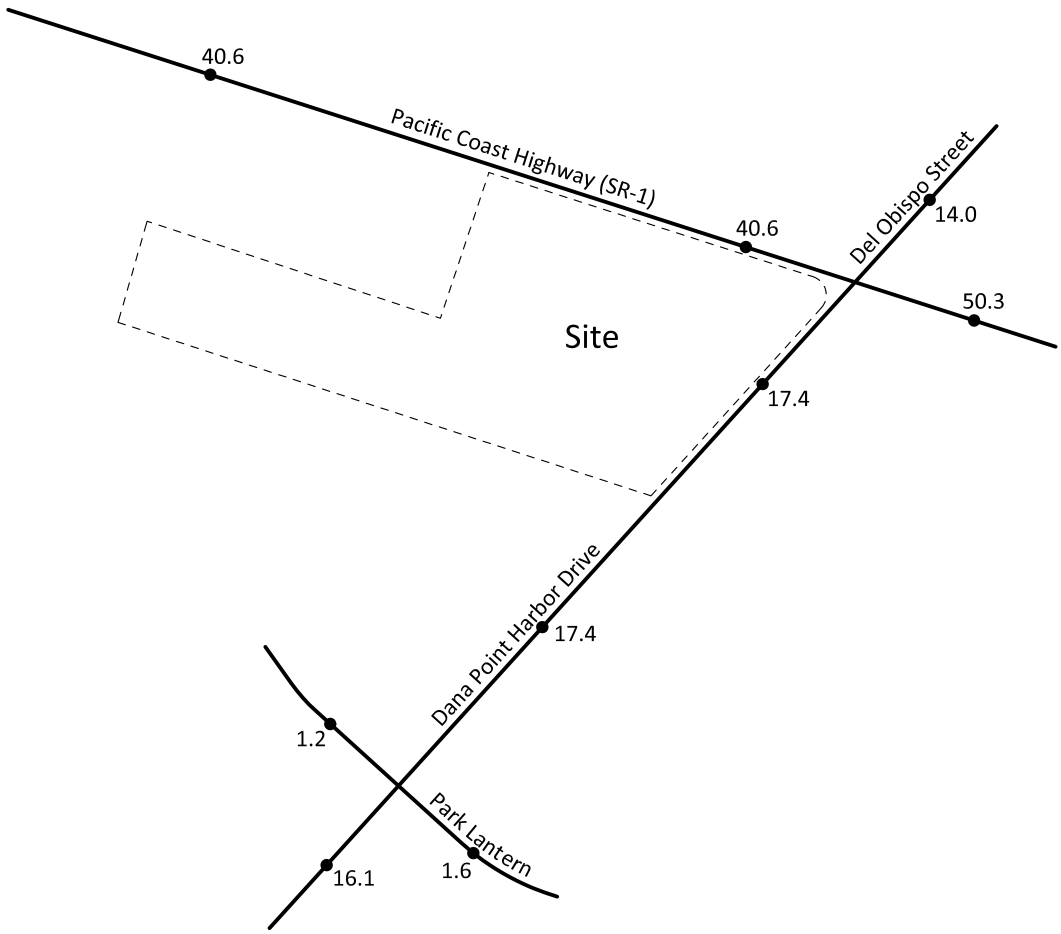
Figure 65
Year 2025 Without Project
Weekday Peak Season Average Daily Traffic Volumes



4845c/65

KUNZMAN ASSOCIATES, INC.
OVER 35 YEARS OF EXCELLENT SERVICE

Figure 66
Year 2025 Without Project
Saturday Peak Season Daily Traffic Volumes



Legend

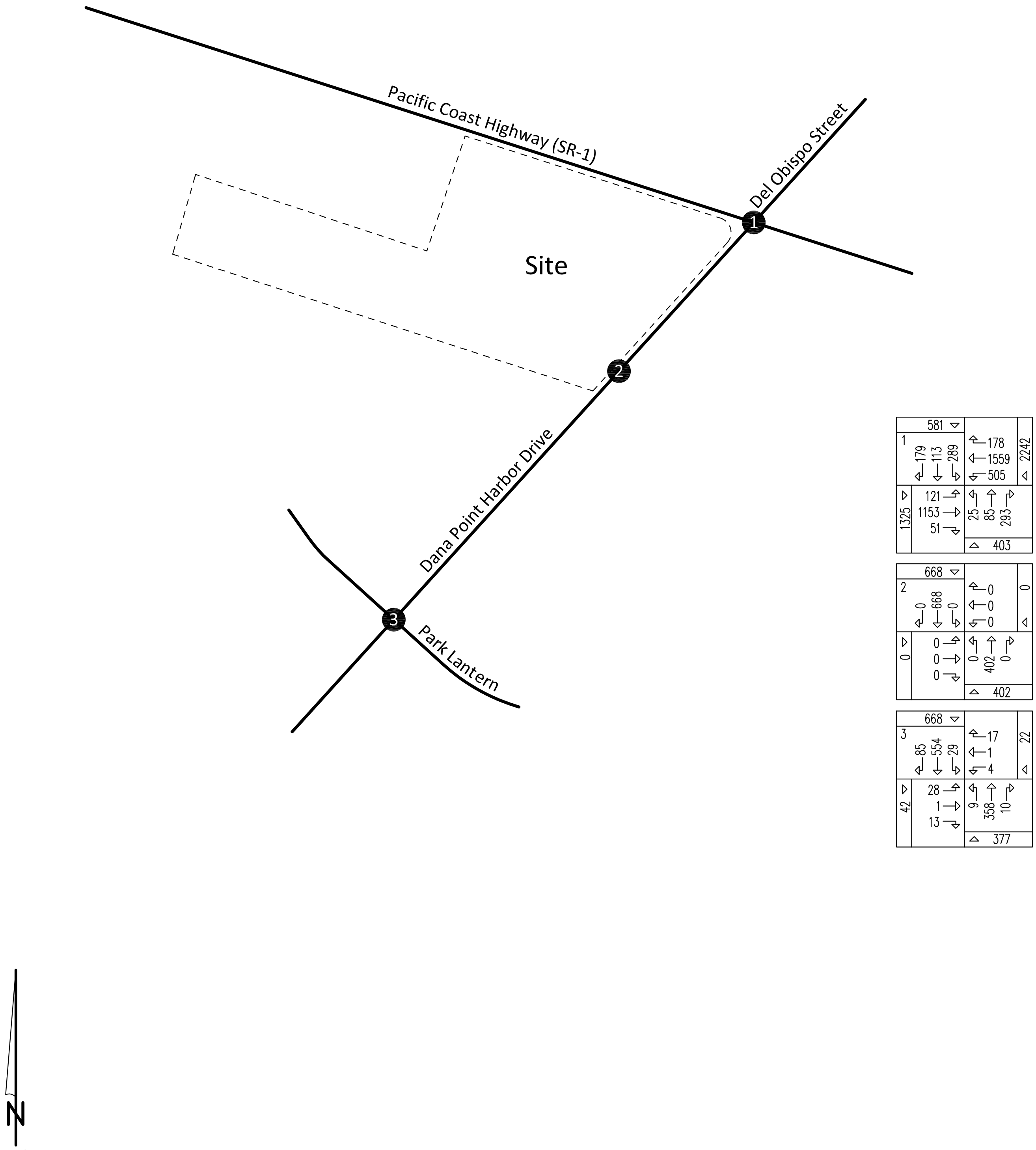
1.6 = Vehicles Per Day (1,000's)

4845c/66

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 67
Year 2025 Without Project
Weekday Morning Peak Hour Turning Movement Volumes

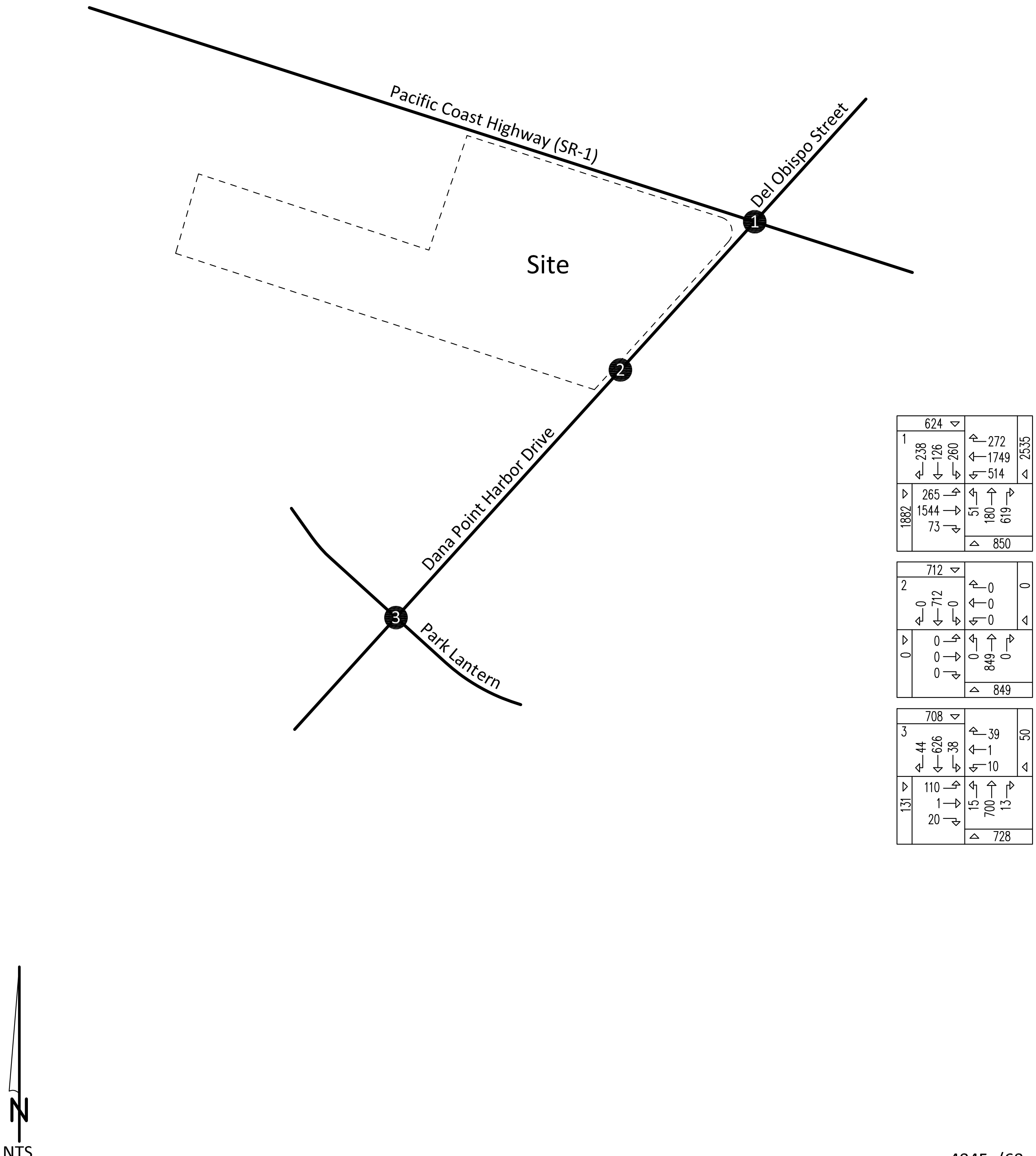


4845c/67

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

Over 35 Years of Excellent Service

Figure 68
Year 2025 Without Project
Weekday Evening Peak Hour Turning Movement Volumes

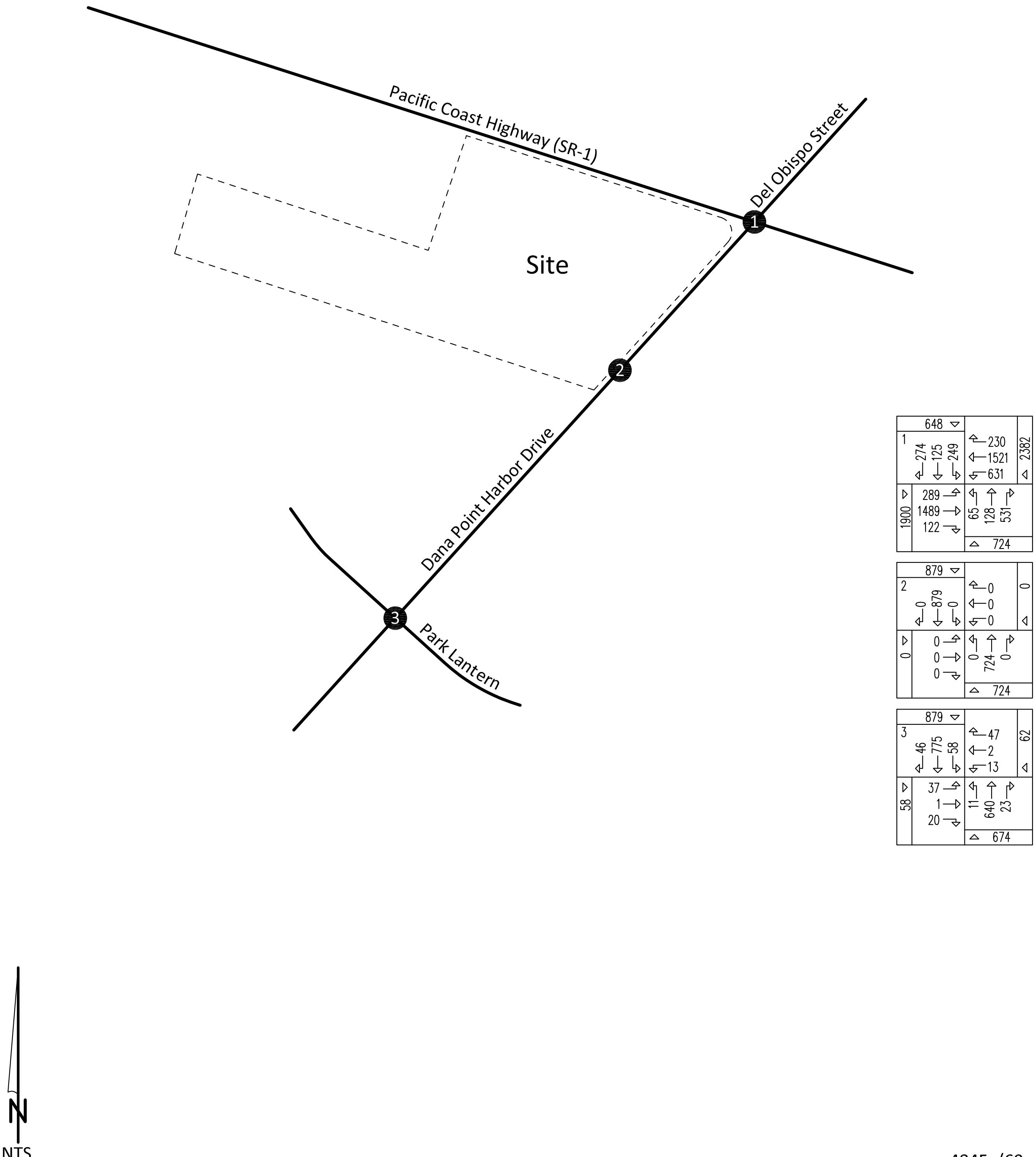


4845c/68

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 69
Year 2025 Without Project
Saturday Mid-day Peak Hour Turning Movement Volumes

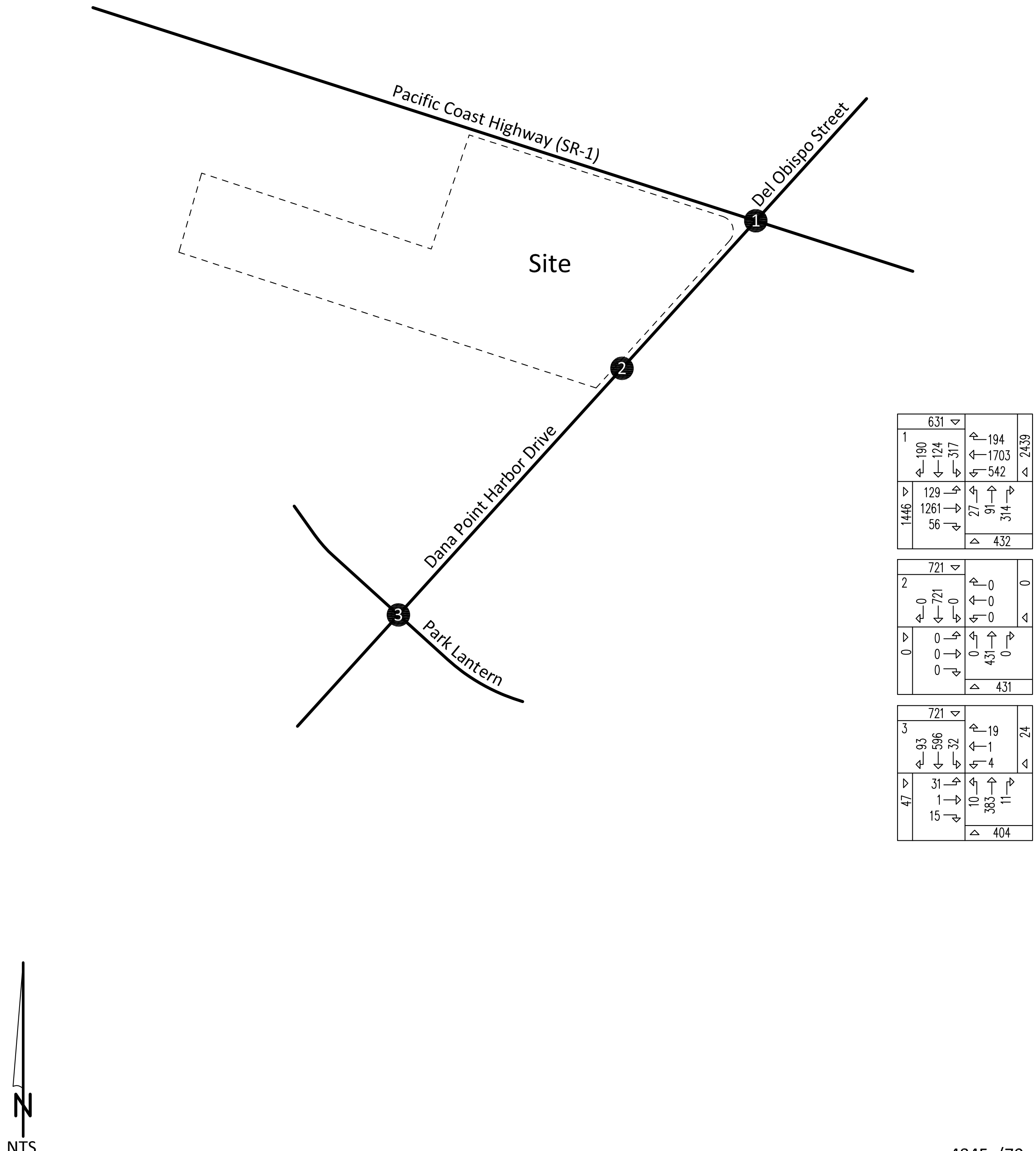


4845c/69

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 70
Year 2025 Without Project
Weekday Peak Season Morning Peak Hour Turning Movement Volumes

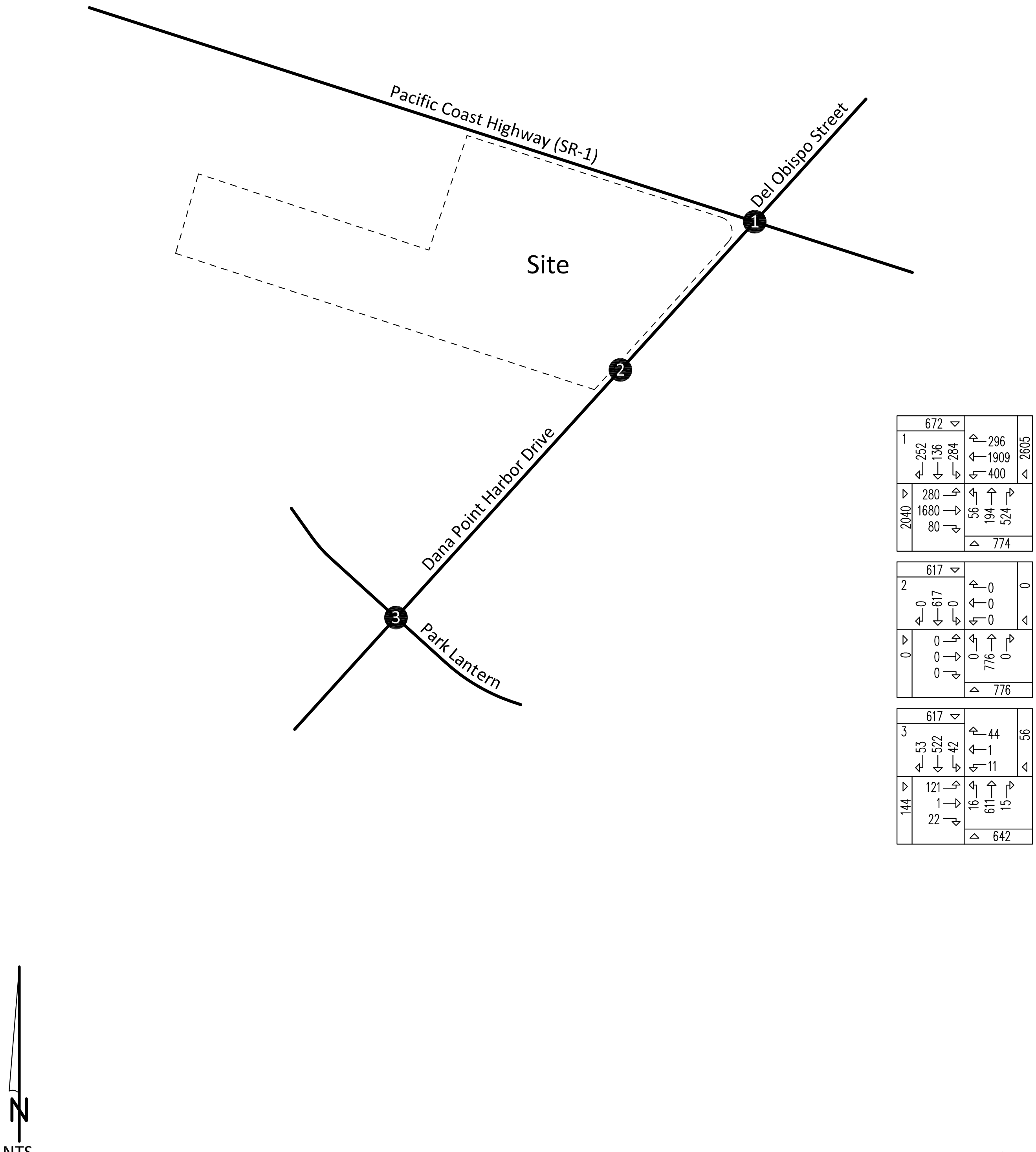


4845c/70

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

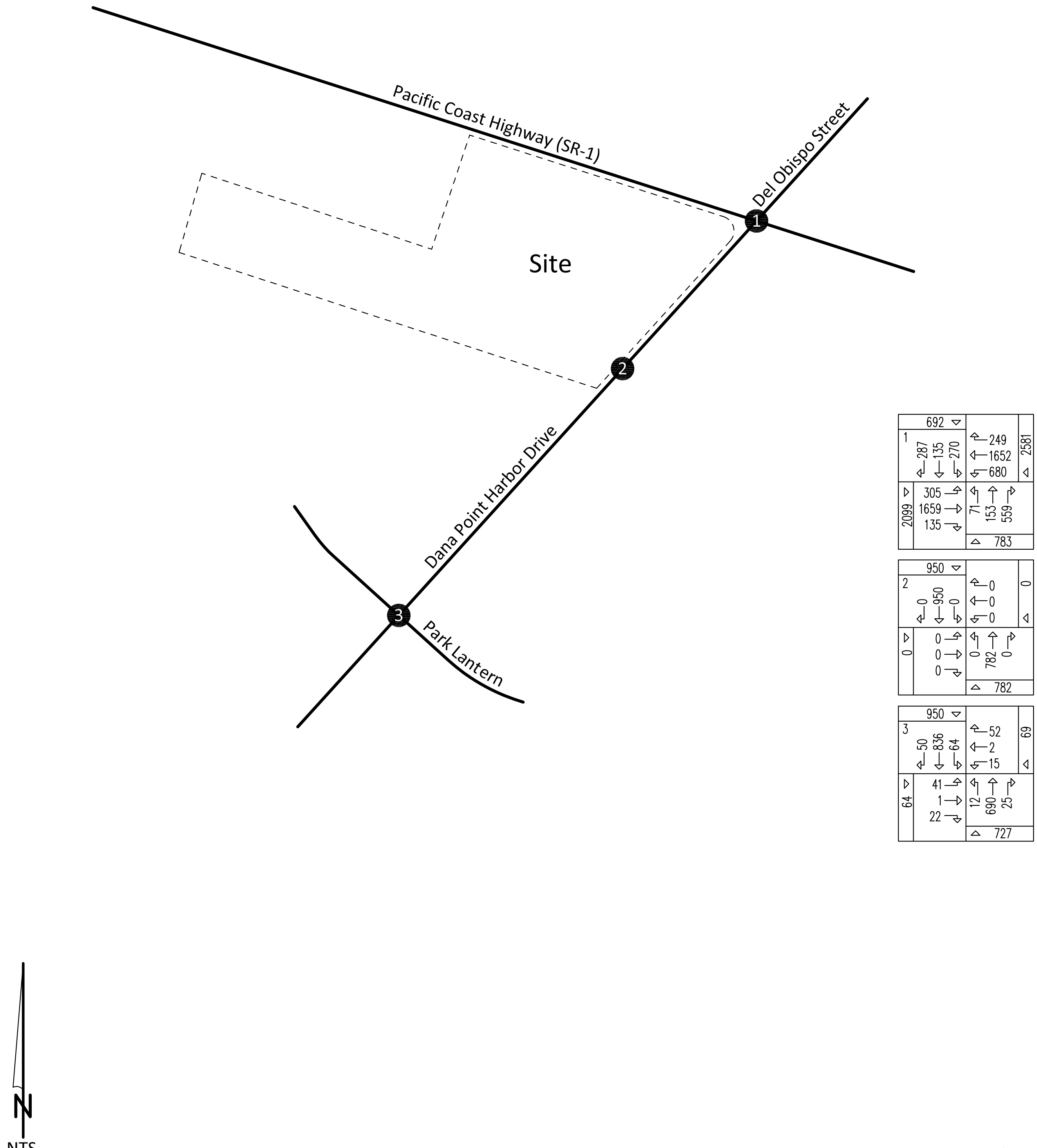
Over 35 Years of Excellent Service

Figure 71
Year 2025 Without Project
Weekday Peak Season Evening Peak Hour Turning Movement Volumes



4845c/71

Figure 72
Year 2025 Without Project
Saturday Peak Season Mid-day Peak Hour Turning Movement Volumes



4845c/72

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

IX. Year 2025 With Project Traffic Conditions

In this section, Year 2025 With Project traffic conditions without and with the project are discussed. Figures 73 to 82 depict the Year 2025 With Project traffic conditions.

A. <u>Method of Projection</u>

To assess Year 2025 With Project traffic conditions, existing traffic is combined with the project, other development, and areawide growth.

For Year 2025 With Project traffic conditions, an areawide growth rate has been utilized to account for areawide growth on study area roadways. Year 2025 With Project traffic volumes have been calculated based on a quarter (0.25) percent annual growth rate of existing traffic volumes over a fourteen (14) year period. The areawide growth rate has been obtained from the City of Dana Point staff and the City's third party traffic engineering consultant.

Areawide growth has been added to daily and peak hour traffic volumes on surrounding roadways, in addition to traffic generated by the project and other development.

B. <u>Year 2025 With Project Weekday Average Daily Traffic Volumes</u>

Year 2025 With Project weekday average daily traffic volumes are as illustrated on Figure 73.

C. <u>Year 2025 With Project Saturday Daily Traffic Volumes</u>

Year 2025 With Project Saturday daily traffic volumes are as illustrated on Figure 74.

D. <u>Year 2025 With Project Weekday Peak Season Average Daily Traffic Volumes</u>

Year 2025 With Project weekday peak season average daily traffic volumes are as illustrated on Figure 75.

E. <u>Year 2025 With Project Saturday Peak Season Daily Traffic Volumes</u>

Year 2025 With Project Saturday peak season daily traffic volumes are as illustrated on Figure 76.

F. <u>Year 2025 With Project Levels of Service</u>

The technique used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization. To calculate an Intersection Capacity Utilization value, the volume of traffic using the intersection is compared with the capacity of the intersection. The Intersection Capacity Utilization represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. The technique used to assess the operation of an unsignalized intersection is known as the Intersection Delay Method based on the 2000 Highway Capacity Manual – Transportation Research Board Special Report 209. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection. The signalized intersections are considered deficient (Level of Service F) if the overall intersection critical volume to capacity ratio equals or exceeds 1.0, even if the Level of Service defined by the delay value is below the defined Level of Service standard. The volume to capacity ratio is defined as the critical volumes divided by the intersection capacity. A volume to capacity ratio greater than 1.0 implies an infinite queue. Both methodologies are described in Appendix C.

The Intersection Capacity Utilization calculations assume a per-lane capacity of 1,700 vehicles per hour for each travel lane (through or turning) through an intersection. A clearance factor of 0.05 or five (5) percent of the total intersection capacity is included in the Intersection Capacity Utilization calculation.

The Levels of Service for the Year 2025 With Project traffic conditions have been calculated and are shown in Table 9. Year 2025 With Project weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes are shown on Figures 77 to 79, respectively. Year 2025 With Project peak season weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes are shown on Figures 80 to 82, respectively.

The study area intersections are projected to operate within acceptable Levels of Service during peak hours for Year 2025 With Project traffic conditions (see Table 9). Year 2025 With Project Level of Service worksheets are provided in Appendix D.

G. Significant Transportation Impact

The significant traffic impact criteria used by the City of Dana Point is as follows:

1. If a project causes a change in Level of Service from acceptable to unacceptable.
2. If a project causes an increase in Volume to Capacity or Intersection Capacity Utilization of 0.010 or more, causing or worsening an unacceptable Level of Service.

If a proposed projects traffic causes the conditions above, then the impacts are deemed significant and the project shall identify feasible mitigation to bring the facility back to the level of service held by the facility prior to the projects significant impact.

Table 10 depicts the Year 2025 With Project intersection traffic contribution at the study area intersections. As shown in Table 10, the project site does not significantly impact any study area intersections.

Table 9

Year 2025 With Project Intersection Delay and Level of Service

		Intersection Approach Lanes [1]																								Intersection Capacity Utilization - Level of Service					
																										Non-peak Season			Peak Season		
	Traffic	Northbound						Southbound						Eastbound						Westbound						Weekday		Weekend	Weekday		Weekend
Intersection	Control [2]	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	Morning	Evening	Midday	Morning	Evening	Midday
Del Obispo Street/Dana Point Harbor Drive (NS) at:																															
Pacific Coast Highway (EW) - #1																															
- Without Improvements	TS	1	0	1	0	2	0	2	0	1	0	1	0	1	0	3	0	1	0	2	0	2	1	0	0	0.600-B	0.790-C	0.772-C	0.648-B	0.851-D[3]	0.822-D[3]
- With Improvements	TS	1	0	1	0	2	0	2	0	1	0	**2**	0	**2**	0	3	0	1	0	2	0	2	1	0	0	0.570-A	0.712-C	0.689-B	0.648-B	0.769-C[3]	0.758-C[3]
Project Access (EW) - #2[4]	CSS	0	0	2	0	0	0	0	0	2	0	d	0	0	0	0	0	1	0	0	0	0	0	0	0	10.7-B	11.0-B	11.9-B	10.9-B	10.6-B	12.3-B
Park Lantern (EW) - #3	TS	1	0	2	0	1	0	1	0	2	0	d	0	0	1	0	0	d	0	1	0	1	0	1	0	0.246-A	0.392-A	0.348-A	0.262-A	0.377-A	0.371-A

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = Defacto Right Turn Lane; **1** = Improvements

[2] TS = Traffic Signal; CSS = Cross Street Stop

[3] Mitigation has been provided to address the expected Level of Service during these periods. That mitigation is to provide adequate roadway width for eastbound Pacific Coast Highway as part of this development project to allow for the construction of an additional eastbound left turn lane. This should reduce the expected Level of Service in the future.

[4] Level of Service calculations for nonsignalized intersections are based on the Highway Capacity Manual delay methodology. Values reported are shown in terms of seconds of delay per vehicle.

Table 10

Project Traffic Contribution

Intersection	Peak Hour	Year 2025 Without Project: Intersection Capacity Utilization	Year 2025 Without Project: Level of Service	Year 2025 With Project, Without Mitigation: Intersection Capacity Utilization	Without Mitigation: Level of Service	Without Mitigation: Project Impact	Without Mitigation: Significant Impact[1]	Year 2025 With Project, With Mitigation: Intersection Capacity Utilization	With Mitigation: Level of Service	With Mitigation: Project Impact	With Mitigation: Significant Impact	Acceptable Level of Service
Dana Point Harbor Drive (NS) at:												
Pacific Coast Highway (EW) - #1	Morning	0.597	A	0.600	B	0.003	No	0.570	A	-0.027	No	D
	Evening	0.785	C	0.790	C	0.005	No	0.712	C	-0.073	No	D
	Mid-day	0.763	C	0.772	C	0.009	No	0.689	B	-0.074	No	D
	Morning - Peak Season	0.645	B	0.648	B	0.003	No	0.648	B	0.003	No	D
	Evening - Peak Season	0.845	D[2]	0.851	D[2]	0.006	No	0.769	C[2]	-0.076	No	D
	Mid-day - Peak Season	0.813	D[2]	0.822	D[2]	0.009	No	0.758	C[2]	-0.055	No	D
Park Lantern (EW) - #3	Morning	0.238	A	0.246	A	0.008	No					C
	Evening	0.350	A	0.392	A	0.042	No					C
	Mid-day	0.315	A	0.348	A	0.033	No					C
	Morning - Peak Season	0.253	A	0.262	A	0.009	No					C
	Evening - Peak Season	0.333	A	0.377	A	0.044	No					C
	Mid-day - Peak Season	0.337	A	0.371	A	0.034	No					C

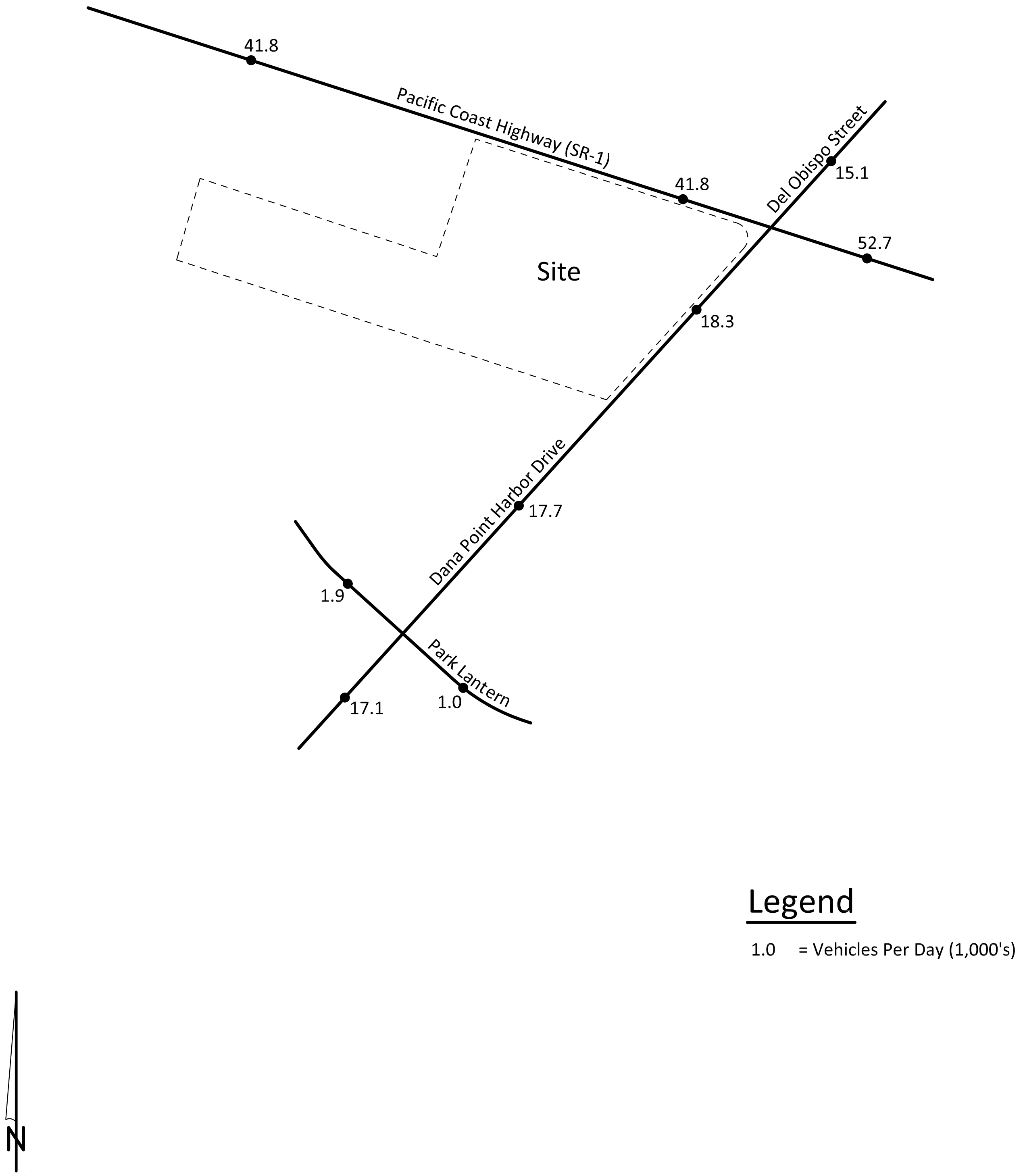
[1]The significant traffic impact criteria used by the City of Dana Point is as follows:

1. If a project causes a change in Level of Service from acceptable to unacceptable.
2. If a project causes an increase in Volume to Capacity or Intersection Capacity Utilization of 0.010 or more, causing or worsening an unacceptable Level of Service.

If a proposed projects traffic causes the conditions above, then the impacts are deemed significant and the project shall identify feasible mitigation to bring the facility back to the level of service held by the facility prior to the projects significant impact.

[2]Mitigation has been provided to address the expected Level of Service during these periods. That mitigation is to provide adequate roadway width for eastbound Pacific Coast Highway as part of this development project to allow for the construction of an additional eastbound left turn lane. This should reduce the expected Level of Service in the future.

Figure 73
Year 2025 With Project
Weekday Average Daily Traffic Volumes

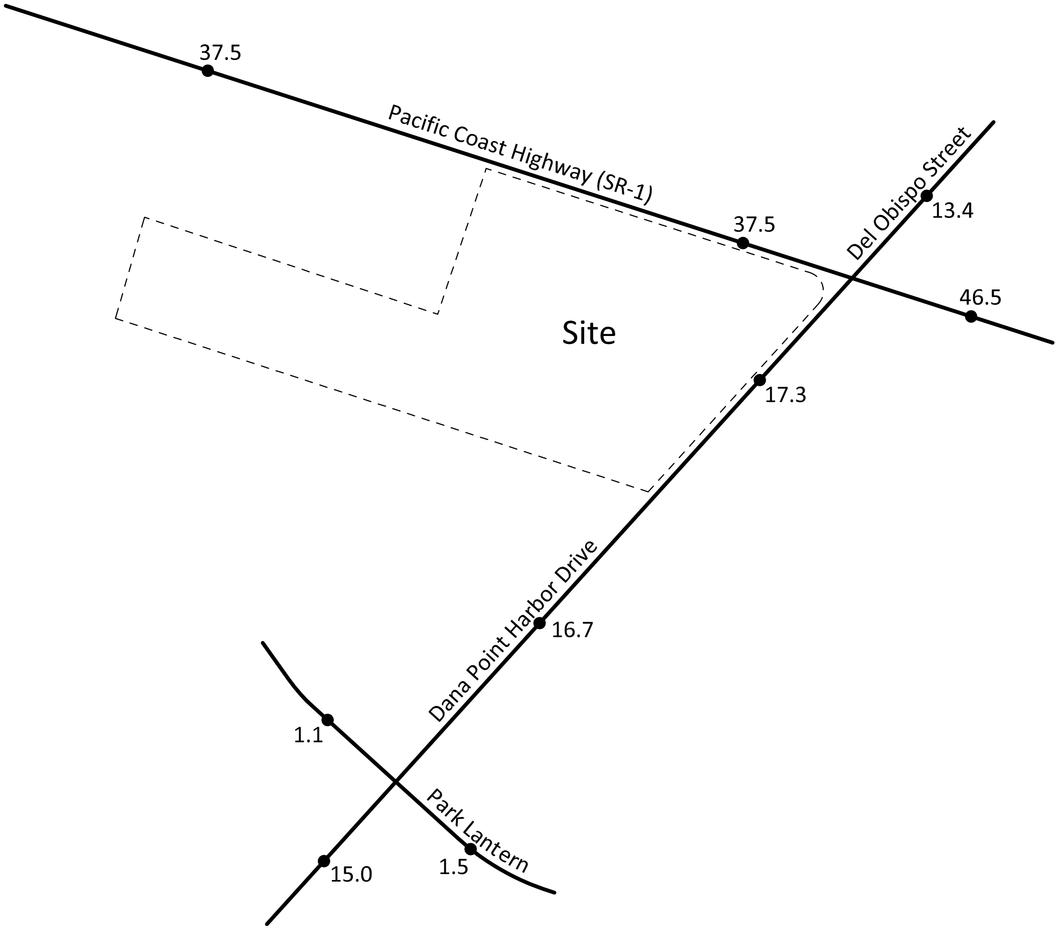


4845c/73

Kunzman Associates, Inc.

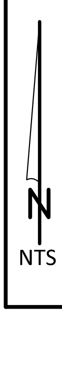
Over 35 Years of Excellent Service

Figure 74
Year 2025 With Project
Saturday Daily Traffic Volumes



Legend

1.5 = Vehicles Per Day (1,000's)

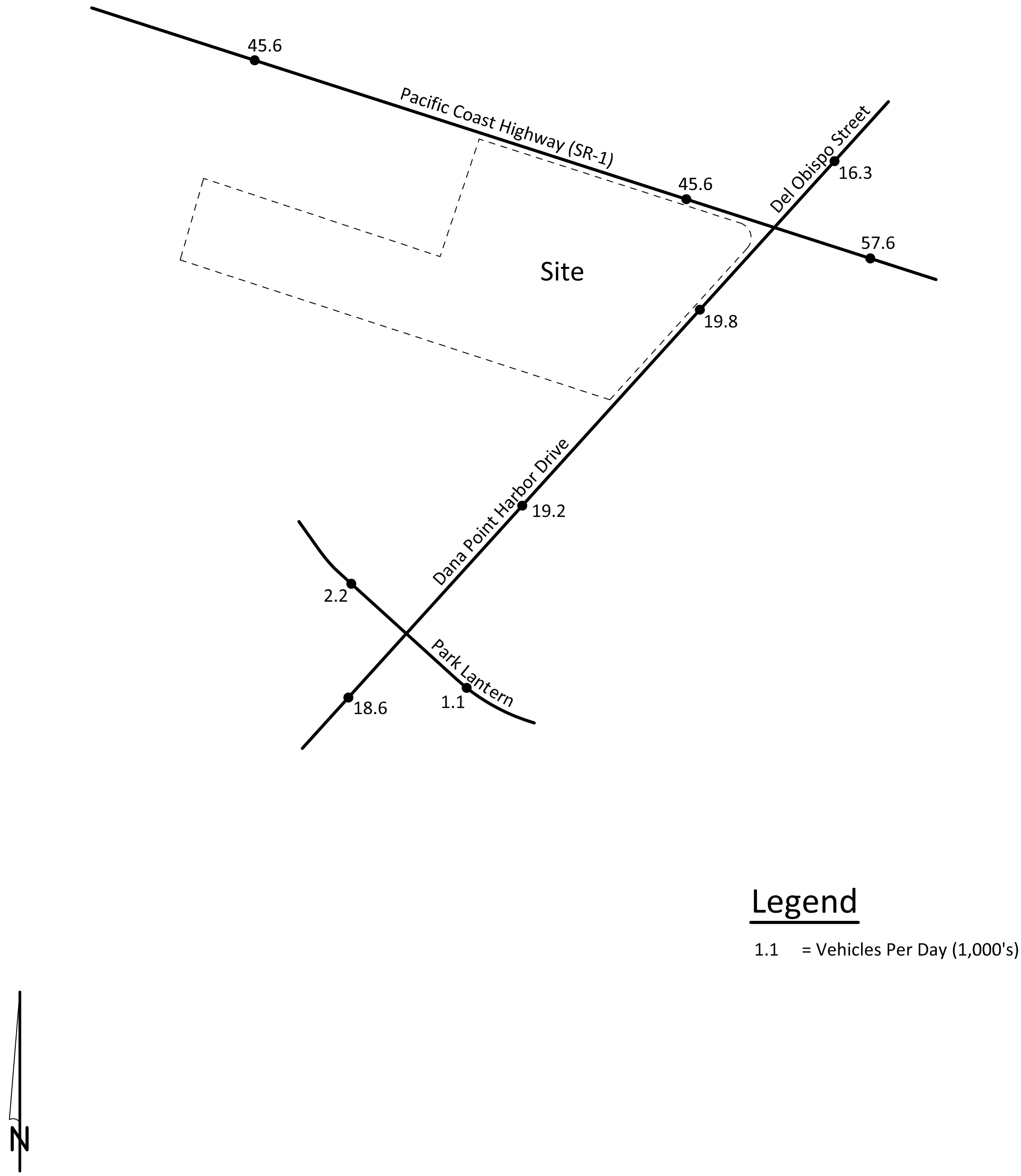


4845c/74

Kunzman Associates, Inc.

Over 35 Years of Excellent Service

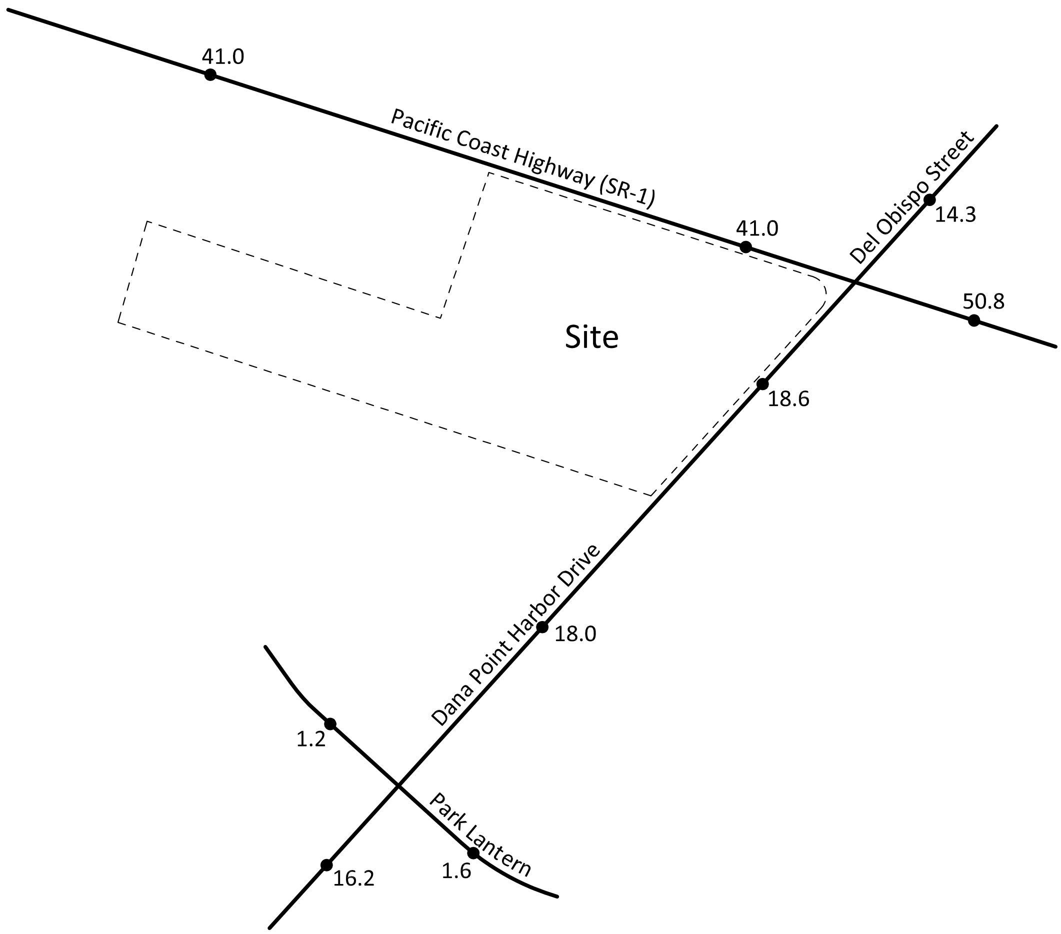
Figure 75
Year 2025 With Project
Weekday Peak Season Average Daily Traffic Volumes



4845c/75

Kunzman Associates, Inc.
Over 35 Years of Excellent Service

Figure 76
Year 2025 With Project
Saturday Peak Season Daily Traffic Volumes



Legend

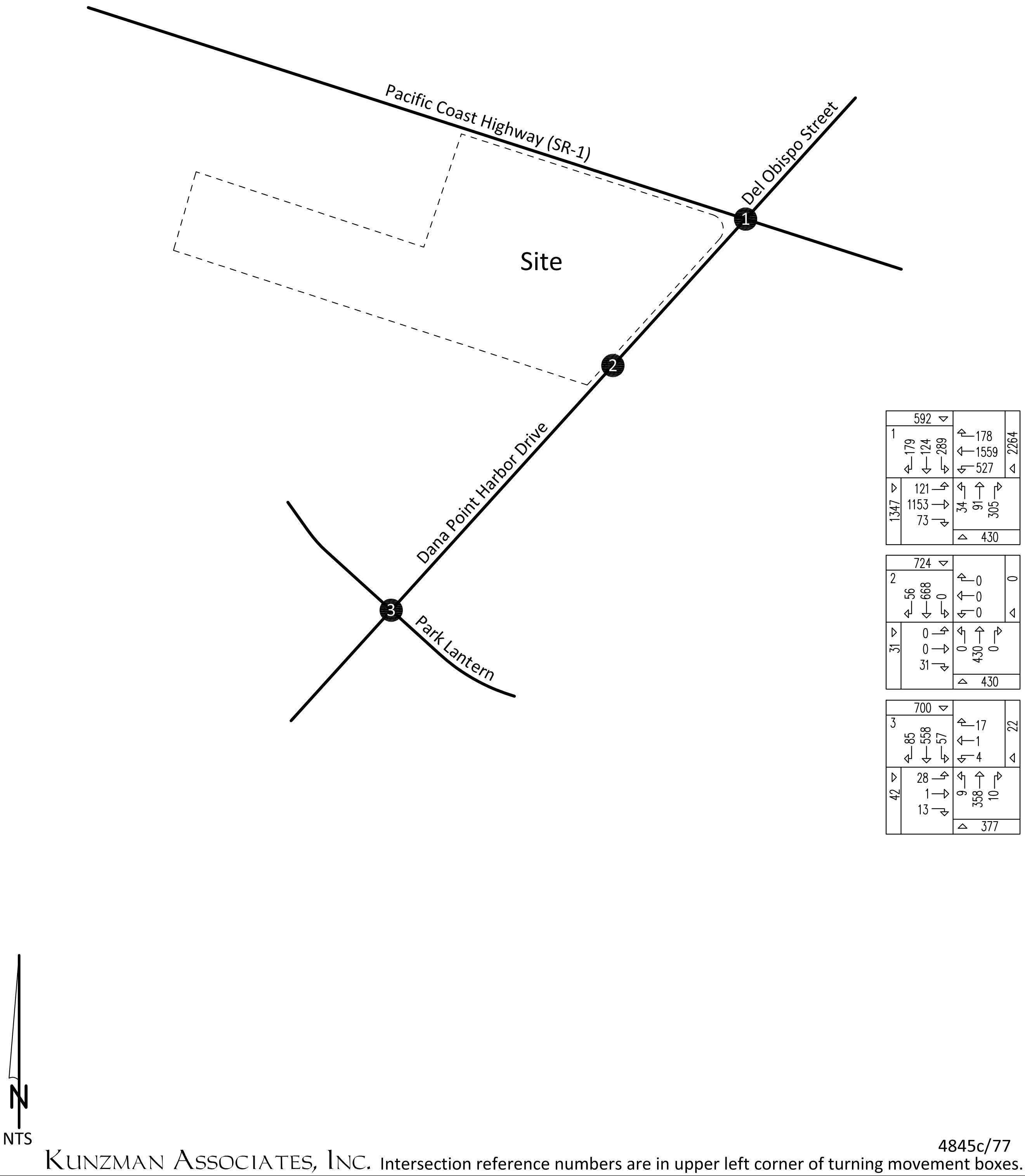
1.6 = Vehicles Per Day (1,000's)

NTS

4845c/76

KUNZMAN ASSOCIATES, INC.
OVER 35 YEARS OF EXCELLENT SERVICE

Figure 77
Year 2025 With Project
Weekday Morning Peak Hour Turning Movement Volumes

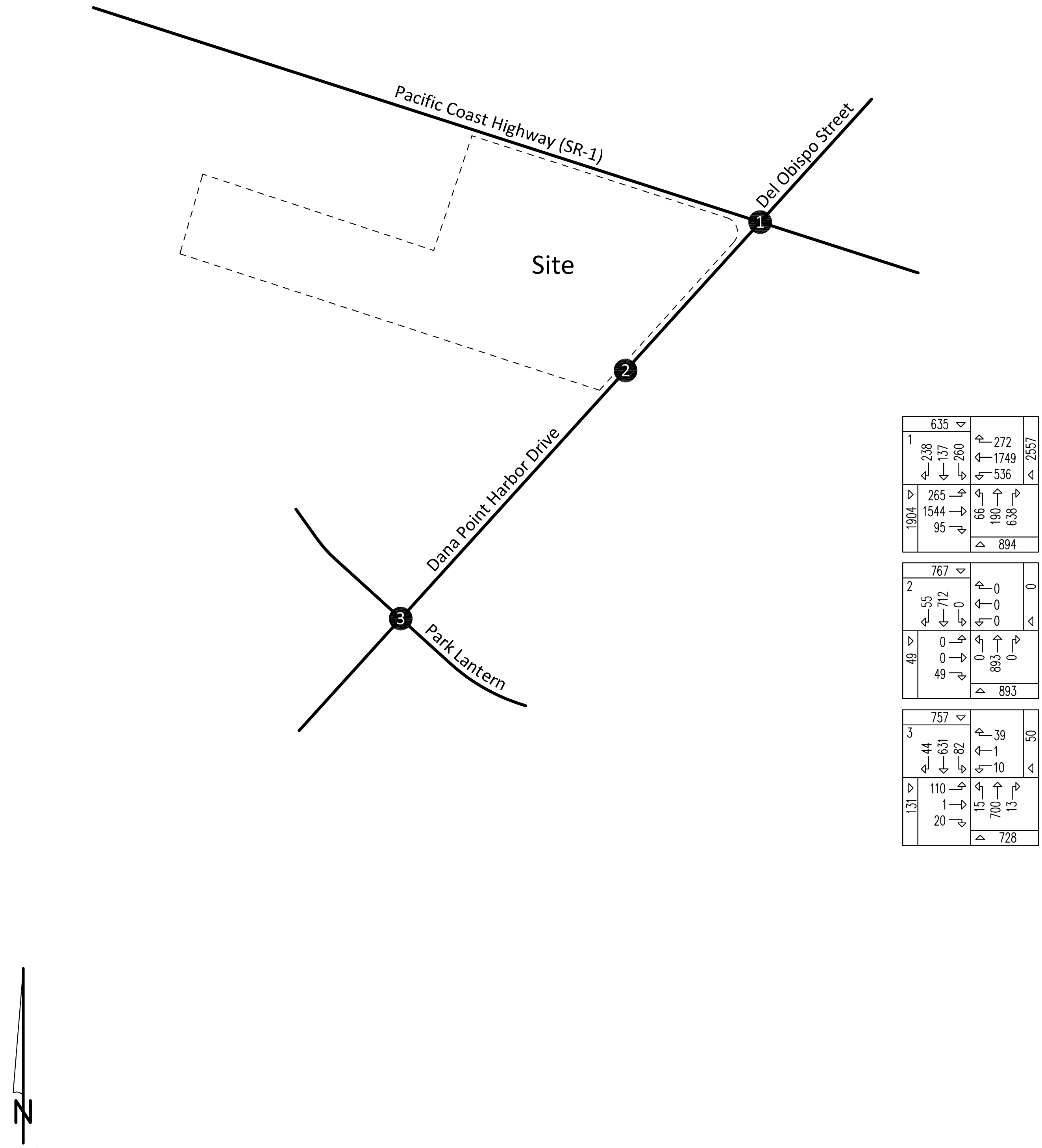


4845c/77

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 78
Year 2025 With Project
Weekday Evening Peak Hour Turning Movement Volumes

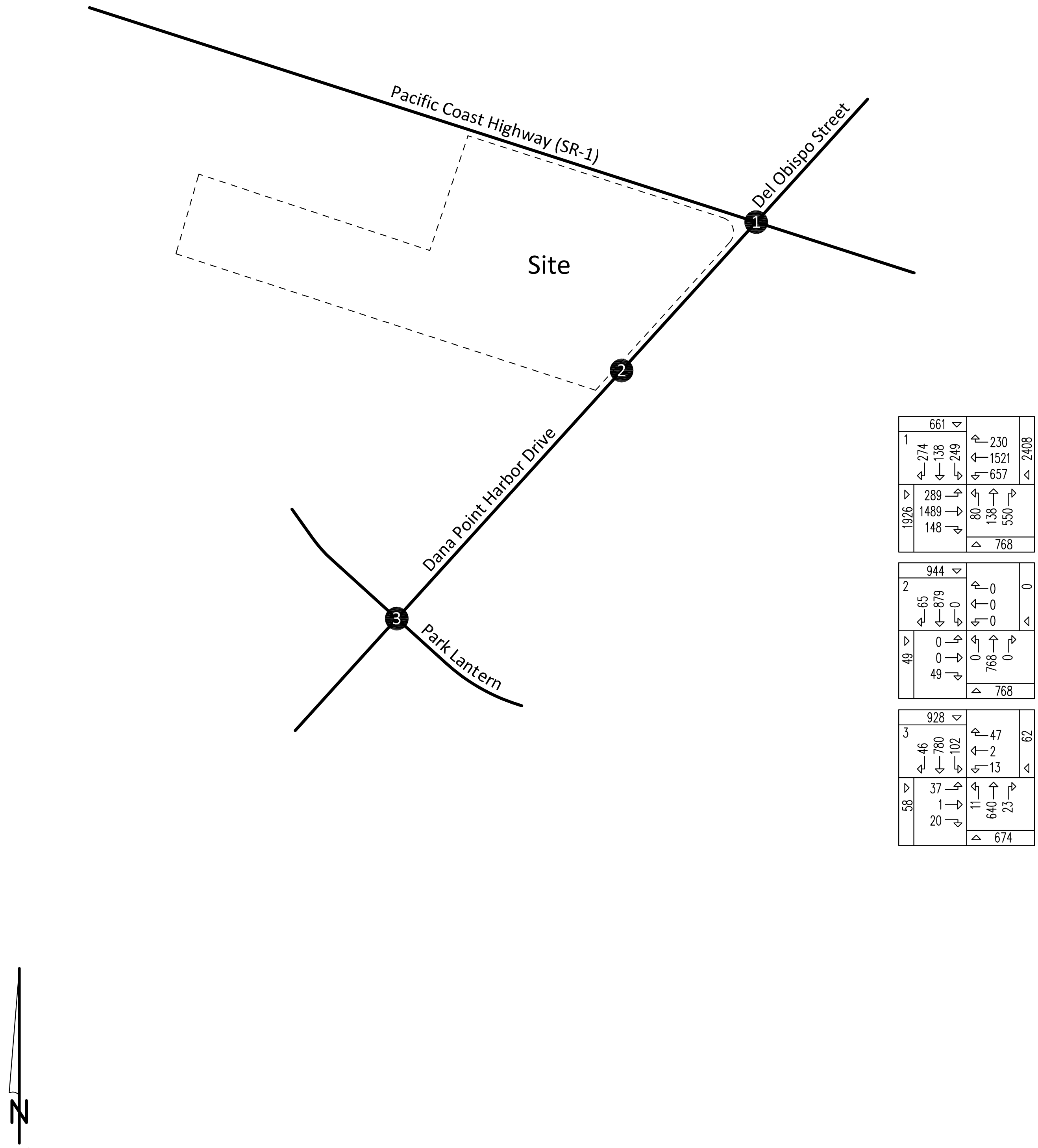


4845c/78

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 79
Year 2025 With Project
Saturday Mid-day Peak Hour Turning Movement Volumes

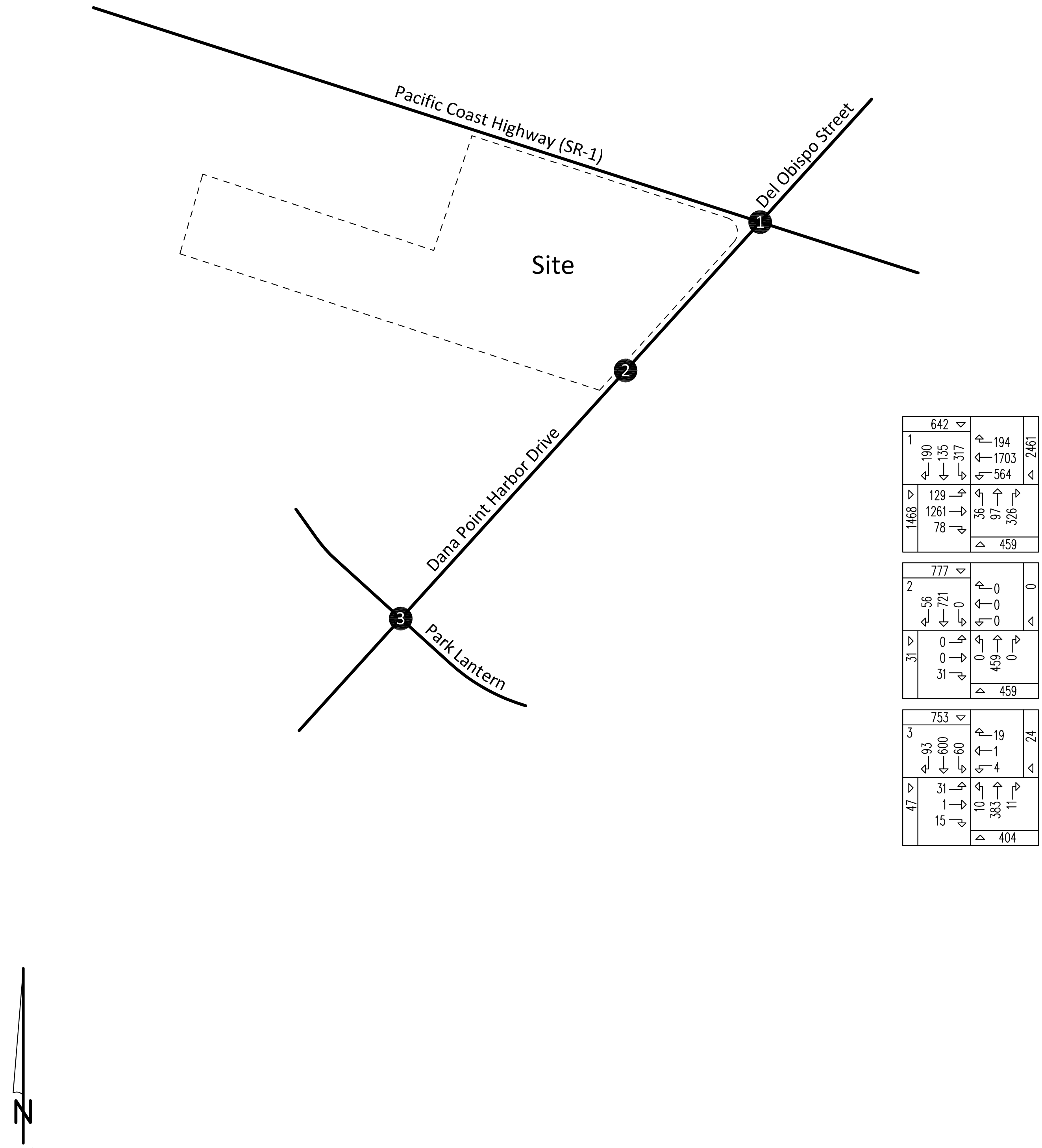


4845c/79

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 80
Year 2025 With Project
Weekday Peak Season Morning Peak Hour Turning Movement Volumes

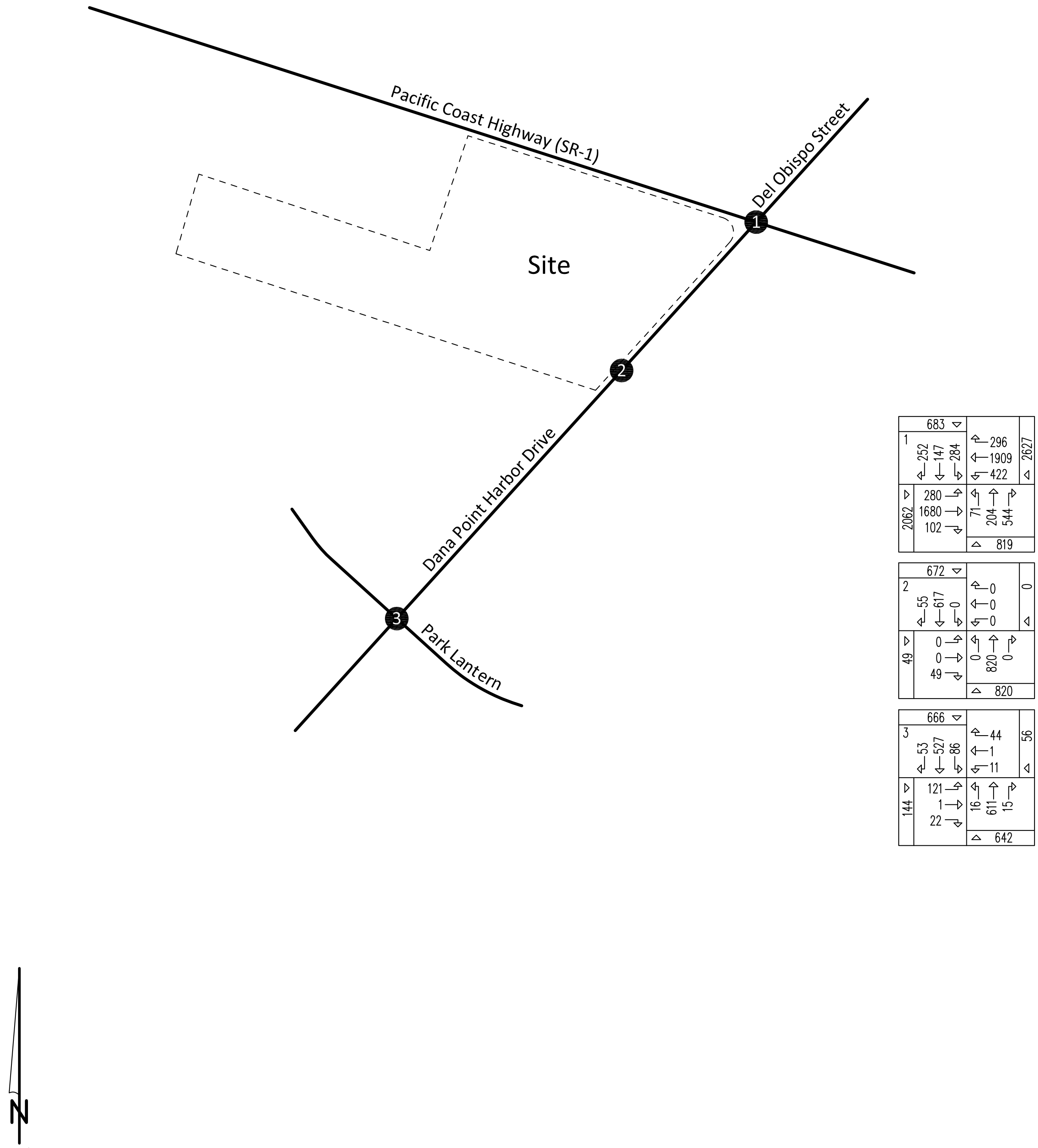


4845c/80

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

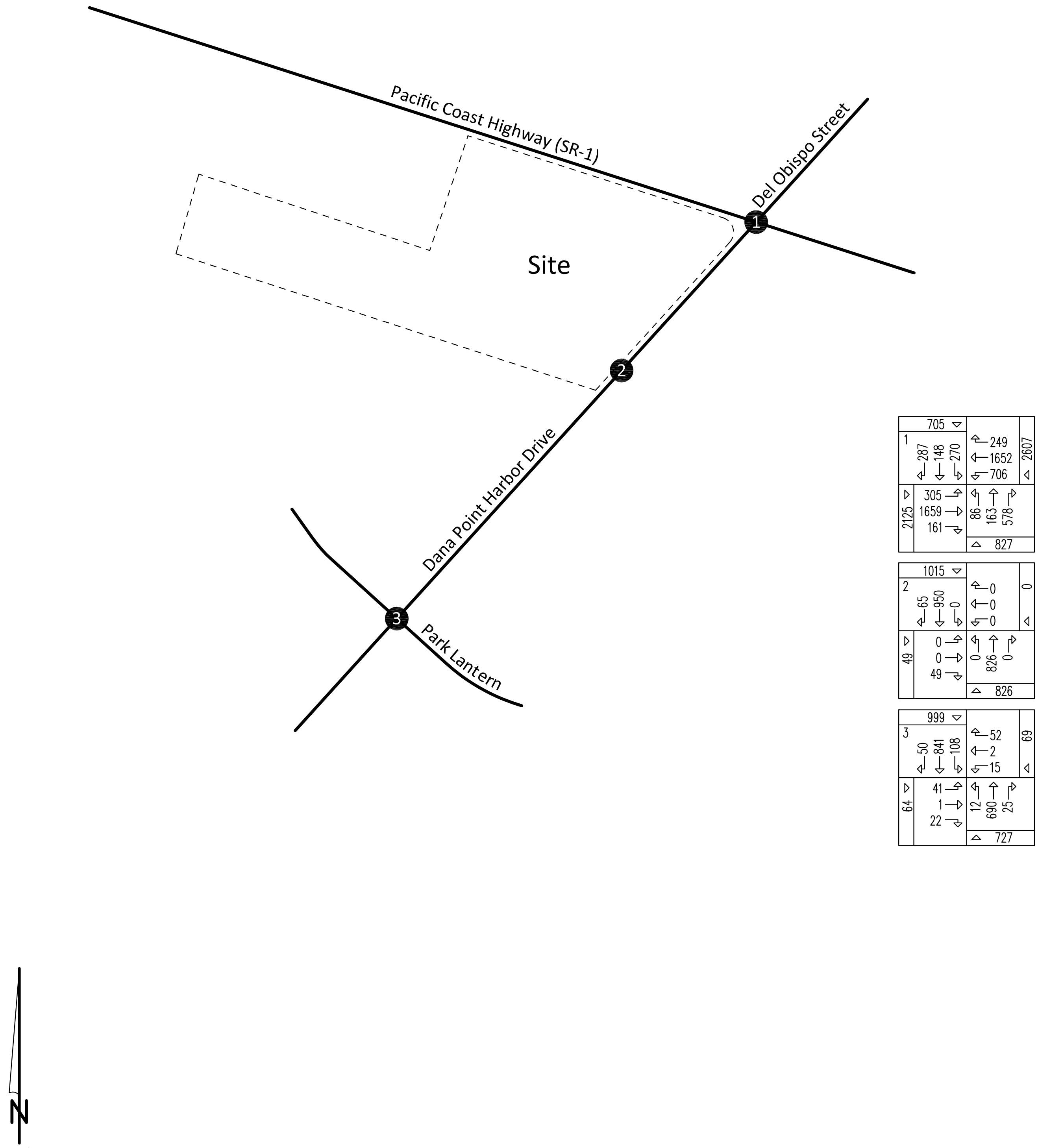
Figure 81
Year 2025 With Project
Weekday Peak Season Evening Peak Hour Turning Movement Volumes



4845c/81

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 82
Year 2025 With Project
Saturday Peak Season Mid-day Peak Hour Turning Movement Volumes



4845c/82

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

X. Recommendations

A. Site Access

The project site will continue to have access to Del Obispo Street/Dana Point Harbor Drive.

B. Roadway Improvements

Site-specific circulation and access recommendations are depicted on Figure 83.

Construct Del Obispo Street/Dana Point Harbor Drive from Pacific Coast Highway (SR-1) to the project south boundary at its ultimate half-section width as a Primary Arterial (100 foot right-of-way) including landscaping and parkway improvements in conjunction with development, as necessary.

Construct Pacific Coast Highway from the west project boundary to Del Obispo Street/Dana Point Harbor Drive at its ultimate half-section width as a Major Arterial (120 foot right-of-way) including landscaping and parkway improvements in conjunction with development, as necessary.

Construct an eastbound right turn lane at the intersection of Pacific Coast Highway and Del Obispo Street/Dana Point Harbor Drive. The project applicant did submit street improvement plans (plan) that showed the construction of the southerly curb line along the proposed right turn lane. The dimensions shown on the plans shall be reviewed and approved by the City Engineer to assure that an additional eastbound left turn lane can be added at a later date as needed. This is necessary to try to reduce the Level of Service impacts in Year 2025 for the weekday PM Peak Period and the Weekend Mid-day Peak Period, both shown to become Level of Service "D". With the mitigation measures, the Level of Service would be reduced to Level of Service C or better for all periods.

Modify the intersection of Dana Point Harbor Drive at Park Lantern to allow for southbound u-turns which are currently prohibited. Implementation of this improvement will require the elimination of the existing westbound free right turn lane, physical modifications to the northeast corner of the intersection and the existing traffic signal. Implementation of these improvements will require review and approval from the City of Dana Point.

Sufficient on-site parking shall be provided to meet City of Dana Point parking code requirements.

Sight distance at the project access should be reviewed with respect to California Department of Transportation/City of Dana Point standards in conjunction with the preparation of final grading, landscaping, and street improvement plans.

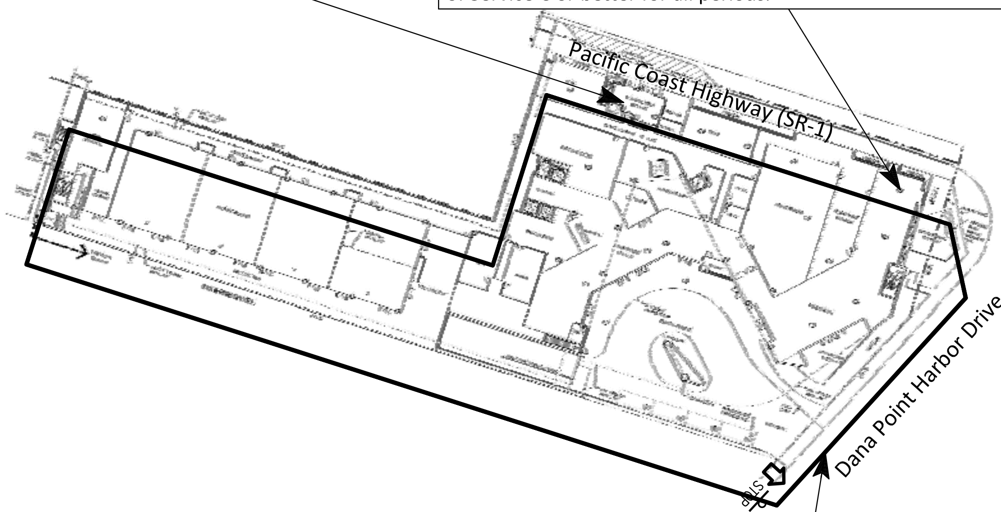
On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project.

As is the case for any roadway design, the City of Dana Point should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

Figure 83
Circulation Recommendations

Construct Pacific Coast Highway from the west project boundary to Dana Point Harbor Drive at its ultimate half-section width as a Major Arterial (120 foot right-of-way) including landscaping and parkway improvements in conjunction with development, as necessary.

Construct an eastbound right turn lane at the intersection of Pacific Coast Highway and Del Obispo Street/Dana Point Harbor Drive. The project applicant did submit street improvement plans (plan) that showed the construction of the southerly curb line along the proposed right turn lane. The dimensions shown on the plans shall be reviewed and approved by the City Engineer to assure that an additional eastbound left turn lane can be added at a later date as needed. This is necessary to try to reduce the Level of Service impacts in Year 2025 for the weekday PM Peak Period and the Weekend Mid-day Peak Period, both shown to become Level of Service "D". With the mitigation measures, the Level of Service would be reduced to Level of Service C or better for all periods.



Construct Dana Point Harbor Drive from Pacific Coast Highway (SR-1) to the project south boundary at its ultimate half-section width as a Primary Arterial (100 foot right-of-way) including landscaping and parkway improvements in conjunction with development, as necessary.

Sufficient on-site parking shall be provided to meet City of Dana Point parking code requirements.

Sight distance at the project access should be reviewed with respect to California Department of Transportation/City of Dana Point standards in conjunction with the preparation of final grading, landscaping, and street improvement plans.

On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project.

As is the case for any roadway design, the City of Dana Point should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

Modify the intersection of Dana Point Harbor Drive at Park Lantern to allow for southbound u-turns which are currently prohibited. Implementation of this improvement will require the elimination of the existing westbound free right turn lane, physical modifications to the northeast corner of the intersection and the existing traffic signal. Implementation of these improvements will require review and approval from the City of Dana Point.

Legend

STOP = Stop Sign
⇨ = Right Turn In/Out Only Access Driveway

N
NTS

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Appendices

Appendix A – Glossary of Transportation Terms

Appendix B – Traffic Count Worksheets

Appendix C – Peak Season Factor Calculations

Appendix D – Explanation and Calculation of Intersection Capacity Utilization/Delay

APPENDIX A

Glossary of Transportation Terms

GLOSSARY OF TRANSPORTATION TERMS

COMMON ABBREVIATIONS

AC:	Acres
ADT:	Average Daily Traffic
Caltrans:	California Department of Transportation
DU:	Dwelling Unit
ICU:	Intersection Capacity Utilization
LOS:	Level of Service
TSF:	Thousand Square Feet
V/C:	Volume/Capacity
VMT:	Vehicle Miles Traveled

TERMS

AVERAGE DAILY TRAFFIC: The total volume during a year divided by the number of days in a year. Usually only weekdays are included.

BANDWIDTH: The number of seconds of green time available for through traffic in a signal progression.

BOTTLENECK: A constriction along a travelway that limits the amount of traffic that can proceed downstream from its location.

CAPACITY: The maximum number of vehicles that can be reasonably expected to pass over a given section of a lane or a roadway in a given time period.

CHANNELIZATION: The separation or regulation of conflicting traffic movements into definite paths of travel by the use of pavement markings, raised islands, or other suitable means to facilitate the safe and orderly movements of both vehicles and pedestrians.

CLEARANCE INTERVAL: Nearly same as yellow time. If there is an all red interval after the end of a yellow, then that is also added into the clearance interval.

CORDON: An imaginary line around an area across which vehicles, persons, or other items are counted (in and out).

CYCLE LENGTH: The time period in seconds required for one complete signal cycle.

CUL-DE-SAC STREET: A local street open at one end only, and with special provisions for turning around.

DAILY CAPACITY: The daily volume of traffic that will result in a volume during the peak hour equal to the capacity of the roadway.

DELAY: The time consumed while traffic is impeded in its movement by some element over which it has no control, usually expressed in seconds per vehicle.

DEMAND RESPONSIVE SIGNAL: Same as traffic-actuated signal.

DENSITY: The number of vehicles occupying in a unit length of the through traffic lanes of a roadway at any given instant. Usually expressed in vehicles per mile.

DETECTOR: A device that responds to a physical stimulus and transmits a resulting impulse to the signal controller.

DESIGN SPEED: A speed selected for purposes of design. Features of a highway, such as curvature, superelevation, and sight distance (upon which the safe operation of vehicles is dependent) are correlated to design speed.

DIRECTIONAL SPLIT: The percent of traffic in the peak direction at any point in time.

DIVERSION: The rerouting of peak hour traffic to avoid congestion.

FORCED FLOW: Opposite of free flow.

FREE FLOW: Volumes are well below capacity. Vehicles can maneuver freely and travel is unimpeded by other traffic.

GAP: Time or distance between successive vehicles in a traffic stream, rear bumper to front bumper.

HEADWAY: Time or distance spacing between successive vehicles in a traffic stream, front bumper to front bumper.

INTERCONNECTED SIGNAL SYSTEM: A number of intersections that are connected to achieve signal progression.

LEVEL OF SERVICE: A qualitative measure of a number of factors, which include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs.

LOOP DETECTOR: A vehicle detector consisting of a loop of wire embedded in the roadway, energized by alternating current and producing an output circuit closure when passed over by a vehicle.

MINIMUM ACCEPTABLE GAP: Smallest time headway between successive vehicles in a traffic stream into which another vehicle is willing and able to cross or merge.

MULTI-MODAL: More than one mode; such as automobile, bus transit, rail rapid transit, and bicycle transportation modes.

OFFSET: The time interval in seconds between the beginning of green at one intersection and the beginning of green at an adjacent intersection.

PLATOON: A closely grouped component of traffic that is composed of several vehicles moving, or standing ready to move, with clear spaces ahead and behind.

ORIGIN-DESTINATION SURVEY: A survey to determine the point of origin and the point of destination for a given vehicle trip.

PASSENGER CAR EQUIVALENTS (PCE): One car is one Passenger Car Equivalent. A truck is equal to 2 or 3 Passenger Car Equivalents in that a truck requires longer to start, goes slower, and accelerates slower. Loaded trucks have a higher Passenger Car Equivalent than empty trucks.

PEAK HOUR: The 60 consecutive minutes with the highest number of vehicles.

PRETIMED SIGNAL: A type of traffic signal that directs traffic to stop and go on a predetermined time schedule without regard to traffic conditions. Also, fixed time signal.

PROGRESSION: A term used to describe the progressive movement of traffic through several signalized intersections.

SCREEN-LINE: An imaginary line or physical feature across which all trips are counted, normally to verify the validity of mathematical traffic models.

SIGNAL CYCLE: The time period in seconds required for one complete sequence of signal indications.

SIGNAL PHASE: The part of the signal cycle allocated to one or more traffic movements.

STARTING DELAY: The delay experienced in initiating the movement of queued traffic from a stop to an average running speed through a signalized intersection.

TRAFFIC-ACTUATED SIGNAL: A type of traffic signal that directs traffic to stop and go in accordance with the demands of traffic, as registered by the actuation of detectors.

TRIP: The movement of a person or vehicle from one location (origin) to another (destination). For example, from home to store to home is two trips, not one.

TRIP-END: One end of a trip at either the origin or destination; i.e. each trip has two trip-ends. A trip-end occurs when a person, object, or message is transferred to or from a vehicle.

TRIP GENERATION RATE: The quality of trips produced and/or attracted by a specific land use stated in terms of units such as per dwelling, per acre, and per 1,000 square feet of floor space.

TRUCK: A vehicle having dual tires on one or more axles, or having more than two axles.

UNBALANCED FLOW: Heavier traffic flow in one direction than the other. On a daily basis, most facilities have balanced flow. During the peak hours, flow is seldom balanced in an urban area.

VEHICLE MILES OF TRAVEL: A measure of the amount of usage of a section of highway, obtained by multiplying the average daily traffic by length of facility in miles.

APPENDIX B

Traffic Count Worksheets

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Del Obispo St/Dana Harbor Dr   DATE: 03/22/2011   LOCATION: City of Dana Point

E-W STREET: Pacific Coast Hwy (SR-1)   DAY: TUESDAY   PROJECT# 11-1028-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	2	2	1	1	1	2.5	0.5	2	3.5	0.5	
7:00 AM	2	3	24	42	9	22	11	153	7	46	198	34	551
7:15 AM	2	7	18	64	13	14	8	196	4	61	278	41	706
7:30 AM	4	9	27	75	15	22	19	263	15	59	322	51	881
7:45 AM	1	10	34	84	25	22	22	289	7	116	462	43	1115
8:00 AM	8	24	67	67	24	35	20	276	10	76	303	39	949
8:15 AM	7	15	45	62	23	29	18	230	16	78	323	40	886
8:30 AM	8	13	51	52	25	22	17	252	16	91	305	41	893
8:45 AM	3	11	54	43	27	34	23	239	17	109	313	42	915

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	35	92	320	489	161	200	138	1898	92	636	2504	331	6896

AM Peak Hr Begins at: 745 AM

PEAK VOLUMES =	24	62	197	265	97	108	77	1047	49	361	1393	163	3843
PEAK HR. FACTOR:		0.715			0.897			0.922			0.772		0.862

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Del Obispo St/Dana Harbor Dr   DATE: 03/22/2011   LOCATION: City of Dana Point

E-W STREET: Pacific Coast Hwy (SR-1)   DAY: TUESDAY   PROJECT# 11-1028-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	2	2	1	1	1	2.5	0.5	2	3.5	0.5	
4:00 PM	15	20	123	56	27	49	38	358	15	79	327	50	1157
4:15 PM	10	31	137	51	24	27	25	316	19	85	399	62	1186
4:30 PM	12	26	107	64	29	34	35	337	18	81	362	63	1168
4:45 PM	9	32	101	73	26	39	39	313	16	74	362	56	1140
5:00 PM	19	44	153	44	27	33	33	309	17	80	370	55	1184
5:15 PM	9	36	98	48	22	32	37	349	19	98	457	63	1268
5:30 PM	13	25	82	59	36	42	43	338	13	68	392	56	1167
5:45 PM	6	17	84	55	24	36	36	274	10	100	373	67	1082

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	93	231	885	450	215	292	286	2594	127	665	3042	472	9352

PM Peak Hr Begins at: 430 PM

PEAK VOLUMES =	49	138	459	229	104	138	144	1308	70	333	1551	237	4760
PEAK HR. FACTOR:		0.748			0.853			0.940			0.858		0.938

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Del Obispo St/Dana Harbor Dr   DATE: 03/19/2011   LOCATION: City of Dana Point

E-W STREET: Pacific Coast Hwy (SR-1)   DAY: SATURDAY   PROJECT# 11-1028-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	2	2	1	1	1	2.5	0.5	2	3.5	0.5	
10:00 AM	7	17	63	41	27	38	28	227	17	85	207	31	788
10:15 AM	13	25	64	54	30	32	30	234	19	117	271	45	934
10:30 AM	9	33	94	40	15	46	36	252	20	91	294	42	972
10:45 AM	13	23	87	47	29	39	30	254	19	97	298	36	972
11:00 AM	9	25	85	61	16	31	43	292	23	107	306	38	1036
11:15 AM	17	27	97	62	29	31	26	264	21	113	298	40	1025
11:30 AM	20	20	82	44	21	46	31	322	23	115	293	48	1065
11:45 AM	18	24	76	69	28	40	23	282	27	116	281	47	1031
12:00 PM	15	25	94	52	18	32	34	289	19	100	310	51	1039
12:15 PM	17	21	97	72	28	42	36	265	30	125	318	48	1099
12:30 PM	17	27	99	39	28	38	37	305	30	110	312	47	1089
12:45 PM	13	29	96	69	30	26	37	295	32	135	331	40	1133
1:00 PM	18	19	97	42	22	35	41	359	27	109	325	49	1143
1:15 PM	15	30	104	59	22	33	31	325	29	114	294	51	1107
1:30 PM	16	21	92	44	21	27	32	276	22	99	302	30	982
1:45 PM	24	18	94	62	25	32	41	260	21	101	324	49	1051

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	241	384	1421	857	389	568	536	4501	379	1734	4764	692	16466

NOON Peak Hr Begins at: 1230 PM

PEAK VOLUMES =	63	105	396	209	102	132	146	1284	118	468	1262	187	4472
PEAK HR. FACTOR:		0.946			0.886			0.906			0.947		0.978

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Del Obispo St/Dana Harbor Dr

DATE: 03/22/2011

LOCATION: City of Dana Point

E-W STREET: Park Lantern

DAY: TUESDAY

PROJECT# 11-1028-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	1	1	2	0	0	1	0	1	1	0	
7:00 AM	0	18	0	0	65	6	2	0	0	0	0	1	92
7:15 AM	1	27	2	5	56	9	5	0	1	1	1	2	110
7:30 AM	0	33	0	6	68	15	5	0	0	0	0	2	129
7:45 AM	4	38	0	8	125	21	3	0	0	1	0	4	204
8:00 AM	0	82	1	7	98	24	9	0	3	1	0	7	232
8:15 AM	2	51	3	3	82	21	10	0	4	0	0	4	180
8:30 AM	2	62	2	11	108	18	3	0	2	0	0	4	212
8:45 AM	5	59	4	7	109	20	8	1	4	3	0	3	223

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	14	370	12	47	711	134	45	1	14	6	1	27	1382

AM Peak Hr Begins at: 800 AM

PEAK VOLUMES =	9	254	10	28	397	83	30	1	13	4	0	18	847
PEAK HR. FACTOR:		0.822			0.927			0.786			0.688		0.913

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Del Obispo St/Dana Harbor Dr   DATE: 03/22/2011   LOCATION: City of Dana Point

E-W STREET: Park Lantern   DAY: TUESDAY   PROJECT# 11-1028-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	1	1	2	0	0	1	0	1	1	0	
4:00 PM	2	140	5	12	118	13	21		5	3		18	337
4:15 PM	5	120	2	5	103	10	24		3	2		10	284
4:30 PM	2	117	2	10	105	14	25		5	3		4	287
4:45 PM	5	121	4	9	95	8	34		6	2		6	290
5:00 PM	3	161	1	15	99	12	21		5	1		5	323
5:15 PM	0	114	4	9	101	17	21		8	4		7	285
5:30 PM	2	92	2	10	107	15	10		4	3		17	262
5:45 PM	2	93	2	13	105	7	19		8	4		4	257

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	21	958	22	83	833	96	175	0	44	22	0	71	2325

PM Peak Hr Begins at: 400 PM

PEAK VOLUMES =	14	498	13	36	421	45	104	0	19	10	0	38	1198
PEAK HR. FACTOR:		0.893			0.878			0.769			0.571		0.889

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Del Obispo St/Dana Harbor Dr — DATE: 03/19/2011 — LOCATION: City of Dana Point

E-W STREET: Park Lantern — DAY: SATURDAY — PROJECT# 11-1028-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	1	1	2	0	0	1	0	1	1	0	
10:00 AM	4	77	2	10	132	5	8	0	11	3	0	3	255
10:15 AM	2	81	3	14	131	15	6	0	6	4	0	8	270
10:30 AM	2	125	3	12	128	7	7	0	2	3	0	7	296
10:45 AM	2	101	8	9	118	10	16	2	2	5	1	7	281
11:00 AM	0	106	6	13	124	12	8	2	12	8	0	12	303
11:15 AM	3	114	7	14	124	6	14	0	2	6	0	8	298
11:30 AM	3	104	10	19	150	8	6	0	4	7	0	13	324
11:45 AM	6	100	4	21	140	9	12	1	4	3	0	5	305
12:00 PM	2	118	9	12	115	3	9	0	4	5	2	11	290
12:15 PM	0	120	10	17	156	16	4	0	4	5	0	12	344
12:30 PM	3	123	5	15	152	7	13	0	3	4	1	13	339
12:45 PM	3	106	4	14	143	17	10	1	9	2	0	11	320
1:00 PM	5	126	3	13	149	7	7	0	3	2	1	7	323
1:15 PM	5	134	3	16	128	12	8	1	4	1	0	5	317
1:30 PM	6	107	8	19	120	4	12	3	5	1	1	7	293
1:45 PM	7	122	3	12	127	5	8	0	7	4	0	7	302

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	53	1764	88	230	2137	143	148	10	82	63	6	136	4860

NOON Peak Hr Begins at: 1215 PM

PEAK VOLUMES =	11	475	22	59	600	47	34	1	19	13	2	43	1326
PEAK HR. FACTOR:		0.948			0.934			0.675			0.806		0.964

CONTROL: Signalized

APPENDIX C

Peak Season Factor Calculations

Pacific Coast Highway (SR-1) Peak Season Calculator[1]

Year	Segment	Average Daily Traffic		Factor
		Average	Peak Month	
2009	Pacific Coast Highway (SR-1) North of Del Obispo	39,000	42,500	109%
2008	Pacific Coast Highway (SR-1) North of Del Obispo	39,000	42,500	109%
	Pacific Coast Highway (SR-1) South of Del Obispo	39,500	43,000	109%
2007	Pacific Coast Highway (SR-1) North of Del Obispo	29,500	32,000	108%
	Pacific Coast Highway (SR-1) South of Del Obispo	40,000	43,500	109%
2006	Pacific Coast Highway (SR-1) North of Del Obispo	30,000	32,500	108%
	Pacific Coast Highway (SR-1) South of Del Obispo	48,500	53,000	109%
2005	Pacific Coast Highway (SR-1) North of Del Obispo	32,000	35,000	109%
	Pacific Coast Highway (SR-1) South of Del Obispo	48,000	52,000	108%
2004	Pacific Coast Highway (SR-1) North of Del Obispo	31,000	33,500	108%
	Pacific Coast Highway (SR-1) South of Del Obispo	47,000	51,000	109%
2003	Pacific Coast Highway (SR-1) North of Del Obispo	30,000	32,500	108%
	Pacific Coast Highway (SR-1) South of Del Obispo	46,000	50,000	109%
2002	Pacific Coast Highway (SR-1) North of Del Obispo	40,000	43,500	109%
	Pacific Coast Highway (SR-1) South of Del Obispo	46,000	50,000	109%
2001	Pacific Coast Highway (SR-1) North of Del Obispo	40,000	43,500	109%
	Pacific Coast Highway (SR-1) South of Del Obispo	46,000	50,000	109%
2000	Pacific Coast Highway (SR-1) North of Del Obispo	40,000	43,500	109%
	Pacific Coast Highway (SR-1) South of Del Obispo	44,000	48,000	109%
1999	Pacific Coast Highway (SR-1) North of Del Obispo	33,000	36,000	109%
Total		788,500	857,500	109%

[1]Traffic volume data obtained from the California Department of Transportation, Traffic Volumes on California State Highways, 1999 to 2009.

APPENDIX D

Explanation and Calculation of Intersection Capacity Utilization/Delay

EXPLANATION AND CALCULATION OF INTERSECTION CAPACITY UTILIZATION

Overview

The ability of a roadway to carry traffic is referred to as capacity. The capacity is usually greater between intersections and less at intersections because traffic flows continuously between them and only during the green phase at them. Capacity at intersections is best defined in terms of vehicles per lane per hour of green. If capacity is 1,600 vehicles per lane per hour of green, and if the green phase is 50 percent of the cycle and there are three lanes, then the capacity is 1,600 times 50 percent times 3 lanes, or 2,400 vehicles per hour for that approach.

The technique used to compare the volume and capacity at a signalized intersection is known as Intersection Capacity Utilization. Intersection Capacity Utilization, usually expressed as a percent, is the proportion of an hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. If an intersection is operating at 80 percent of capacity (i.e., an Intersection Capacity Utilization of 80 percent), then 20 percent of the signal cycle is not used. The signal could show red on all indications 20 percent of the time and the signal would just accommodate approaching traffic.

Intersection Capacity Utilization analysis consists of (a) determining the proportion of signal time needed to serve each conflicting movement of traffic, (b) summing the times for the movements, and (c) comparing the total time required to the total time available. For example, if for north-south traffic the northbound traffic is 1,600 vehicles per hour, the southbound traffic is 1,200 vehicles per hour, and the capacity of either direction is 3,200 vehicles per hour, then the northbound traffic is critical and requires 1,600/3,200 or 50 percent of the signal time. If for east-west traffic, 30 percent of the signal time is required, then it can be seen that the Intersection Capacity Utilization is 50 plus 30, or 80 percent. When left turn arrows (left turn phasing) exist, they are incorporated into the analysis. The critical movements are usually the heavy left turn movements and the opposing through movements.

The Intersection Capacity Utilization technique is an ideal tool to quantify existing as well as future intersection operation. The impact of adding a lane can be quickly determined by examining the effect the lane has on the Intersection Capacity Utilization.

Intersection Capacity Utilization Worksheets That Follow This Discussion

The Intersection Capacity Utilization worksheet table contains the following information:

1. Peak hour turning movement volumes.

2. Number of lanes that serve each movement.

3. For right turn lanes, whether the lane is a free right turn lane, whether it has a right turn arrow, and the percent of right turns on red that are assumed.

4. Capacity assumed per lane.

5. Capacity available to serve each movement (number of lanes times capacity per lane).

6. Volume to capacity ratio for each movement.

7. Whether the movement's volume to capacity ratio is critical and adds to the Intersection Capacity Utilization value.

8. The yellow time or clearance interval assumed.

9. Adjustments for right turn movements.

10. The Intersection Capacity Utilization and Level of Service.

The Intersection Capacity Utilization Worksheet also has two graphics on the same page. These two graphics show the following:

1. Peak hour turning movement volumes.

2. Number of lanes that serve each movement.

3. The approach and exit leg volumes.

4. The two-way leg volumes.

5. An estimate of daily traffic volumes that is fairly close to actual counts and is based strictly on the peak hour leg volumes multiplied by a factor.

6. Percent of daily traffic in peak hours.

7. Percent of peak hour leg volume that is inbound versus outbound.

A more detailed discussion of Intersection Capacity Utilization and Level of Service follows.

Level of Service

Level of Service is used to describe the quality of traffic flow. Levels of Service A to C operate quite well. Level of Service C is typically the standard to which rural roadways are designed.

Level of Service D is characterized by fairly restricted traffic flow. Level of Service D is the standard to which urban roadways are typically designed. Level of Service E is the maximum volume a facility can accommodate and will result in possible stoppages of momentary duration. Level of Service F occurs when a facility is overloaded and is characterized by stop-and-go traffic with stoppages of long duration.

A description of the various Levels of Service appears at the end of the Intersection Capacity Utilization description, along with the relationship between Intersection Capacity Utilization and Level of Service.

Signalized Intersections

Although calculating an Intersection Capacity Utilization value for an unsignalized intersection is invalid, the presumption is that a signal can be installed and the calculation shows whether the geometrics are capable of accommodating the expected volumes with a signal. A traffic signal becomes warranted before Level of Service D is reached for a signalized intersection.

Signal Timing

The Intersection Capacity Utilization calculation assumes that a signal is properly timed. It is possible to have an Intersection Capacity Utilization well below 100 percent, yet have severe traffic congestion. This would occur if one or more movements is not getting sufficient green time to satisfy its demand, and excess green time exists on other movements. This is an operational problem that should be remedied.

Lane Capacity

Capacity is often defined in terms of roadway width; however, standard lanes have approximately the same capacity whether they are 11 or 14 feet wide. Our data indicates a typical lane, whether a through lane or a left turn lane, has a capacity of approximately 1,750 vehicles per hour of green time, with nearly all locations showing a capacity greater than 1,600 vehicles per hour of green per lane. Right turn lanes have a slightly lower capacity; however 1,600 vehicles per hour is a valid capacity assumption for right turn lanes.

This finding is published in the August 1978 issue of Institute of Transportation Engineers Journal in the article entitled, "Another Look at Signalized Intersection Capacity" by William Kunzman. A capacity of 1,600 vehicles per hour per lane with no yellow time penalty, or 1,700 vehicles per hour with a 3 or 5 percent yellow time penalty is reasonable.

Yellow Time

The yellow time can either be assumed to be completely used and no penalty applied, or it can be assumed to be only partially usable. Total yellow time accounts for approximately 10 percent of a signal cycle, and a penalty of 3 to 5 percent is reasonable.

During peak hour traffic operation the yellow times are nearly completely used. If there is no left turn phasing, the left turn vehicles completely use the yellow time. Even if there is left turn phasing, the through traffic continues to enter the intersection on the yellow until just a split second before the red.

Shared Lanes

Shared lanes occur in many locations. A shared lane is often found at the end of an off ramp where the ramp forms an intersection with the cross street. Often at a diamond interchange off ramp, there are three lanes. In the case of a diamond interchange, the middle lane is sometimes shared, and the driver can turn left, go through, or turn right from that lane.

If one assumes a three lane off ramp as described above, and if one assumes that each lane has 1,600 capacity, and if one assumes that there are 1,000 left turns per hour, 500 right turns per hour, and 100 through vehicles per hour, then how should one assume that the three lanes operate. There are three ways that it is done.

One way is to just assume that all 1,600 vehicles (1,000 plus 500 plus 100) are served simultaneously by three lanes. When this is done, the capacity is 3 times 1,600 or 4,800, and the amount of green time needed to serve the ramp is 1,600 vehicles divided by 4,800 capacity or 33.3 percent. This assumption effectively assumes perfect lane distribution between the three lanes that is not realistic. It also means a left turn can be made from the right lane.

Another way is to equally split the capacity of a shared lane and in this case to assume there are 1.33 left turn lanes, 1.33 right turn lanes, and 0.33 through lanes. With this assumption, the critical movement is the left turns and the 1,000 left turns are served by a capacity of 1.33 times 1,600, or 2,133. The volume to capacity ratio of the critical move is 1,000 divided by 2,133 or 46.9 percent.

The first method results in a critical move of 33.3 percent and the second method results in a critical move of 46.9 percent. Neither is very accurate, and the difference in the calculated Level of Service will be approximately 1.5 Levels of Service (one Level of Service is 10 percent).

The way Kunzman Associates, Inc. does it is to assign fractional lanes in a reasonable way. In this example, it would be assumed that there is 1.1 right turn lanes, 0.2 through lanes, and 1.7 left turn lanes. The volume to capacity ratios for each movement would be 31.3 percent for the through traffic, 28.4 percent for the right turn movement, and 36.8 percent for the left turn movement. The critical movement would be the 36.8 percent for the left turns.

Right Turn on Red

Kunzman Associates, Inc.'s software treats right turn lanes in one of five different ways. Each right turn lane is classified into one of five cases. The five cases are (1) free right turn lane, (2) right turn lane with separate right turn arrow, (3) standard right turn lane with no right turns on red allowed, (4) standard right turn lane with a certain percentage of right turns on red allowed, and (5) separate right turn arrow and a certain percentage of right turns on red allowed.

Free Right Turn Lane

If it is a free right turn lane, then it is given a capacity of one full lane with continuous or 100 percent green time. A Free right turn lane occurs when there is a separate approach lane for right turning vehicles, there is a separate departure lane for the right turning vehicles after they turn and are exiting the intersection, and the through cross street traffic does not interfere with the vehicles after they turn right.

Separate Right Turn Arrow

If there is a separate right turn arrow, then it is assumed that vehicles are given a green indication and can proceed on what is known as the left turn overlap.

The left turn overlap for a northbound right turn is the westbound left turn. When the left turn overlap has a green indication, the right turn lane is also given a green arrow indication. Thus, if there is a northbound right turn arrow, then it can be turned green for the period of time that the westbound left turns are proceeding.

If there are more right turns than can be accommodated during the northbound through green and the time that the northbound right turn arrow is on, then an adjustment is made to the Intersection Capacity Utilization to account for the green time that needs to be added to the northbound through green to accommodate the northbound right turns.

Standard Right Turn Lane, No Right Turns on Red

A standard right turn lane, with no right turn on red assumed, proceeds only when there is a green indication displayed for the adjacent through movement. If additional green time is needed above that amount of time, then in the Intersection Capacity Utilization calculation a right turn adjustment green time is added above the green time that is needed to serve the adjacent through movement.

Standard Right Turn Lane, With Right Turns on Red

A standard right turn lane with say 20 percent of the right turns allowed to turn right on a red indication is calculated the same as the standard right turn case where there is no right turn on red allowed, except that the right turn adjustment is reduced to account for the 20 percent of the right turning vehicles that can logically turn right on a red light. The right turns on red are never allowed to exceed the time the overlap left turns take plus the unused part of the green cycle that the cross street traffic moving from left to right has.

As an example of how 20 percent of the cars are allowed to turn right on a red indication, assume that the northbound right turn volume needs 40 percent of the signal cycle to be satisfied. To allow 20 percent of the northbound right turns to turn right on red, then during 8 percent of the signal cycle (40 percent of signal cycle times 20 percent that can turn right on red) right turns on red will be allowed if it is feasible.

For this example, assume that 15 percent of the signal cycle is green for the northbound through traffic, and that means that 15 percent of the signal cycle is available to satisfy northbound right turns. After the northbound through traffic has received its green, 25 percent of the signal cycle is still needed to satisfy the northbound right turns (40 percent of the signal cycle minus the 15 percent of the signal cycle that the northbound through used).

Assume that the westbound left turns require a green time of 6 percent of the signal cycle. This 6 percent of the signal cycle is used by northbound right turns on red. After accounting for the northbound right turns that occur on the westbound overlap left turn, 19 percent of the signal cycle is still needed for the northbound right turns (25 percent of the cycle was needed after the northbound through green time was accounted for [see above paragraph], and 6 percent was served during the westbound left turn overlap). Also, at this point 6 percent of the signal cycle has been used for northbound right turns on red, and still 2 percent more of the right turns will be allowed to occur on the red if there is unused eastbound through green time.

For purpose of this example, assume that the westbound through green is critical, and that 15 percent of the signal cycle is unused by eastbound through traffic. Thus, 2 percent more of the signal cycle can be used by the northbound right turns on red since there is 15 seconds of unused green time being given to the eastbound through traffic.

At this point, 8 percent of the signal cycle was available to serve northbound right turning vehicles on red, and 15 percent of the signal cycle was available to serve right turning vehicles on the northbound through green. So 23 percent of the signal cycle has been available for northbound right turns.

Because 40 percent of the signal cycle is needed to serve northbound right turns, there is still a need for 17 percent more of the signal cycle to be available for northbound right turns. What this means is the northbound through traffic green time is increased by 17 percent of the cycle length to serve the unserved right turn volume, and a 17 percent adjustment is added to the Intersection Capacity Utilization to account for the northbound right turns that were not served on the northbound through green time or when right turns on red were assumed.

Separate Right Turn Arrow, With Right Turns on Red

A right turn lane with a separate right turn arrow, plus a certain percentage of right turns allowed on red is calculated the same way as a standard right turn lane with a certain percentage of right turns allowed on red, except the turns which occur on the right turn arrow are not counted as part of the percentage of right turns that occur on red.

Critical Lane Method

Intersection Capacity Utilization parallels another calculation procedure known as the Critical Lane Method with one exception. Critical Lane Method dimensions capacity in terms of standardized vehicles per hour per lane. A Critical Lane Method result of 800 vehicles per hour means that the intersection operates as though 800 vehicles were using a single lane continuously. If one assumes a lane capacity of 1,600 vehicles per hour, then a Critical Lane Method calculation resulting in 800 vehicles per hour is the same as an Intersection Capacity Utilization calculation of 50 percent since 800/1,600 is 50 percent. It is our opinion that the Critical Lane Method is inferior to the Intersection Capacity Utilization method simply because a statement such as "The Critical Lane Method value is 800 vehicles per hour" means little to most persons, whereas a statement such as "The Intersection Capacity Utilization is 50 percent" communicates clearly. Critical Lane Method results directly correspond to Intersection Capacity Utilization results. The correspondence is as follows, assuming a lane capacity of 1,600 vehicles per hour and no clearance interval.

Critical Lane Method Result	Intersection Capacity Utilization Result
800 vehicles per hour	50 percent
960 vehicles per hour	60 percent
1,120 vehicles per hour	70 percent
1,280 vehicles per hour	80 percent
1,440 vehicles per hour	90 percent
1,600 vehicles per hour	100 percent
1,760 vehicles per hour	110 percent

INTERSECTION CAPACITY UTILIZATION
LEVEL OF SERVICE DESCRIPTION[1]

Level of Service	Description	Volume to Capacity Ratio
A	Level of Service A occurs when progression is extremely favorable and vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	0.600 and below
B	Level of Service B generally occurs with good progression and/or short cycle lengths. More vehicles stop than for Level of Service A, causing higher levels of average delay.	0.601 to 0.700
C	Level of Service C generally results when there is fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.	0.701 to 0.800
D	Level of Service D generally results in noticeable congestion. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume to capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	0.801 to 0.900
E	Level of Service E is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume to capacity ratios. Individual cycle failures are frequent.	0.901 to 1.000
F	Level of Service F is considered to be unacceptable to most drivers. This condition often occurs when oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high volume to capacity ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.	1.001 and up

[1]Source: Highway Capacity Manual Special Report 209, Transportation Research Board, National Research Council Washington D.C., 2000.

EXPLANATION AND CALCULATION OF INTERSECTION LEVEL OF SERVICE USING DELAY METHODOLOGY

The levels of service at the unsignalized intersections are calculated using the delay methodology in the 2000 Highway Capacity Manual. This methodology views an intersection as consisting of several lane groups. A lane group is a set of lanes serving a movement. If there are two northbound left turn lanes, then the lane group serving the northbound left turn movement has two lanes. Similarly, there may be three lanes in the lane group serving the northbound through movement, one lane in the lane group serving the northbound right turn movement, and so forth. It is also possible for one lane to serve two lane groups. A shared lane might result in there being 1.5 lanes in the northbound left turn lane group and 2.5 lanes in the northbound through lane group.

For each lane group, there is a capacity. That capacity is calculated by multiplying the number of lanes in the lane group times a theoretical maximum lane capacity per lane times 12 adjustment factors.

Each of the 12 adjustment factors has a value of approximately 1.00. A value less than 1.00 is generally assigned when a less than desirable condition occurs.

The 12 adjustment factors are as follows:

1. Peak hour factor (to account for peaking within the peak hour)
2. Lane utilization factor (to account for not all lanes loading equally)
3. Lane width
4. Percent of heavy trucks
5. Approach grade
6. Parking
7. Bus stops at intersections
8. Area type (CBD or other)
9. Right turns
10. Left turns

11. Pedestrian activity

12. Signal progression

The maximum theoretical lane capacity and the 12 adjustment factors for it are all unknowns for which approximate estimates have been recommended in the 2000 Highway Capacity Manual. For the most part, the recommended values are not based on statistical analysis but rather on educated estimates. However, it is possible to use the delay method and get reasonable results as will be discussed below.

Once the lane group volume is known and the lane group capacity is known, a volume to capacity ratio can be calculated for the lane group.

With a volume to capacity ratio calculated, average delay per vehicle in a lane group can be estimated. The average delay per vehicle in a lane group is calculated using a complex formula provided by the 2000 Highway Capacity Manual, which can be simplified and described as follows:

Delay per vehicle in a lane group is a function of the following:

1. Cycle length

2. Amount of red time faced by a lane group

3. Amount of yellow time for that lane group

4. The volume to capacity ratio of the lane group

The average delay per vehicle for each lane group is calculated, and eventually an overall average delay for all vehicles entering the intersection is calculated. This average delay per vehicle is then used to judge Level of Service. The Level of Services are defined in the table that follows this discussion.

Experience has shown that when a maximum lane capacity of 1,900 vehicles per hour is used (as recommended in the 2000 Highway Capacity Manual), little or no yellow time penalty is used, and none of the 12 penalty factors are applied, calculated delay is realistic. The delay calculation for instance assumes that yellow time is totally unused. Yet experience shows that most of the yellow time is used.

An idiosyncrasy of the delay methodology is that it is possible to add traffic to an intersection and reduce the average total delay per vehicle. If the average total delay is 30 seconds per vehicle for all vehicles traveling through an intersection, and traffic is added to a movement that has an average total delay of 15 seconds per vehicle, then the overall average total delay is reduced.

The delay calculation for a lane group is based on a concept that the delay is a function of the amount of unused capacity available. As the volume approaches capacity and there is no more unused capacity available, then the delay rapidly increases. Delay is not proportional to volume, but rather increases rapidly as the unused capacity approaches zero.

Because delay is not linearly related to volumes, the delay does not reflect how close an intersection is to overloading. If an intersection is operating at Level of Service C and has an average total delay of 18 seconds per vehicle, you know very little as to what percent the traffic can increase before Level of Service E is reached.

DELAY LEVEL OF SERVICE DESCRIPTION[1]

Level Of Service	Description	Average Total Delay Per Vehicle (Seconds)	
		Signalized	Unsignalized
A	Level of Service A occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	0 to 10.00	0 to 10.00
B	Level of Service B generally occurs with good progression and/or short cycle lengths. More vehicles stop than for Level of Service A, causing higher levels of average total delay.	10.01 to 20.00	10.01 to 15.00
C	Level of Service C generally results when there is fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.	20.01 to 35.00	15.01 to 25.00
D	Level of Service D generally results in noticeable congestion. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume to capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	35.01 to 55.00	25.01 to 35.00
E	Level of Service E is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume to capacity ratios. Individual cycle failures are frequent occurrences.	55.01 to 80.00	35.01 to 50.00
F	Level of Service F is considered to be unacceptable to most drivers. This condition often occurs with oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high volume to capacity ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.	80.01 and up	50.01 and up

[1] Source: Highway Capacity Manual Special Report 209, Transportation Research Board, National Research Council, Washington, D.C., 2000.

Existing

The Doheny Hotel
Existing
Weekday Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.515
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Street Name:	Del Obispo Street/Dana Point Harb						Pacific Coast Highway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	24	62	197	265	97	108	77	1047	49	361	1393	163
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	62	197	265	97	108	77	1047	49	361	1393	163
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	62	197	265	97	108	77	1047	49	361	1393	163
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	62	197	265	97	108	77	1047	49	361	1393	163
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	62	197	265	97	108	77	1047	49	361	1393	163
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	2.87	0.13	2.00	2.69	0.31
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	4872	228	3400	4566	534
Capacity Analysis Module:												
Vol/Sat:	0.01	0.04	0.06	0.08	0.06	0.06	0.05	0.21	0.21	0.11	0.31	0.31
OvlAdjV/S:			0.00									
Crit Moves:		****		****			****				****	

```
--------------------------------------------------------------------------------
                               The Doheny Hotel
                                   Existing
                          Weekday Evening Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
         ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):         0.634
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100               Level Of Service:                  B
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb      Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:            Ovl             Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        1  0  1  0  2   2  0  1  0  1   1  0  2  1  0   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      49   138   459   229   104   138   144  1308    70   333  1551   237
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:   49   138   459   229   104   138   144  1308    70   333  1551   237
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    49   138   459   229   104   138   144  1308    70   333  1551   237
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   49   138   459   229   104   138   144  1308    70   333  1551   237
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
FinalVolume:   49   138   459   229   104   138   144  1308    70   333  1551   237
OvlAdjVol:                126
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  1.00  2.00  2.00  1.00  1.00  1.00  2.85  0.15  2.00  2.60  0.40
Final Sat.:  1700  1700  3400  3400  1700  1700  1700  4841   259  3400  4424   676
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03  0.08  0.14  0.07  0.06  0.08  0.08  0.27  0.27  0.10  0.35  0.35
OvlAdjV/S:               0.04
Crit Moves:        ****  ****              ****                    ****
********************************************************************************
```

The Doheny Hotel
Existing
Saturday Mid-day Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.579
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Street Name:	Del Obispo Street/Dana Point Harb		Pacific Coast Highway	
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected	Protected
Rights:	Ovl	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 1 0 2	2 0 1 0 1	1 0 2 1 0	2 0 2 1 0

	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Volume Module:												
Base Vol:	63	105	396	209	102	132	146	1248	118	468	1262	187
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	63	105	396	209	102	132	146	1248	118	468	1262	187
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	63	105	396	209	102	132	146	1248	118	468	1262	187
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	105	396	209	102	132	146	1248	118	468	1262	187
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	63	105	396	209	102	132	146	1248	118	468	1262	187
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	2.74	0.26	2.00	2.61	0.39
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	4659	441	3400	4442	658
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.12	0.06	0.06	0.08	0.09	0.27	0.27	0.14	0.28	0.28
OvlAdjV/S:			0.00									
Crit Moves:		****		****				****		****		

```
---------------------------------------------------------------------------------
                              The Doheny Hotel
                                  Existing
                          Weekday Morning Peak Hour
---------------------------------------------------------------------------------

                      Level Of Service Computation Report
          ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
*********************************************************************************
Cycle (sec):          100                Critical Vol./Cap.(X):          0.191
Loss Time (sec):        5 (Y+R=0.0 sec)  Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        100                Level Of Service:                   A
*********************************************************************************
Street Name:       Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:        North Bound      South Bound      East Bound       West Bound
Movement:       L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Protected        Protected        Permitted        Permitted
Rights:            Include          Include          Include          Ignore
Min. Green:     0     0     0   0     0     0   0     0     0   0     0     0
Lanes:          1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        9  240    10    28  397    82    27    1    13     4    1    16
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:     9  240    10    28  397    82    27    1    13     4    1    16
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:      9  240    10    28  397    82    27    1    13     4    1     0
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:     9  240    10    28  397    82    27    1    13     4    1     0
PCE Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:     9  240    10    28  397    82    27    1    13     4    1     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:        1.00 2.00  1.00  1.00 2.00  1.00  0.96 0.04  1.00  1.00 1.00  1.00
Final Sat.:   1700 3400  1700  1700 3400  1700  1639   61  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.01 0.07  0.01  0.02 0.12  0.05  0.02 0.02  0.01  0.00 0.00  0.00
Crit Moves:   ****                  ****              ****        ****
*********************************************************************************
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------------------------------------------------------------------------------
                              The Doheny Hotel
                                  Existing
                          Weekday Evening Peak Hour
------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
******************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
******************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):         0.288
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100              Level Of Service:                  A
******************************************************************************
Street Name:      Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound       East Bound        West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Permitted         Permitted
Rights:           Include          Include           Include           Ignore
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:         1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     14  502    13    37  424    42   106    1    19    10    1    38
Growth Adj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  14  502    13    37  424    42   106    1    19    10    1    38
User Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:   14  502    13    37  424    42   106    1    19    10    1     0
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  14  502    13    37  424    42   106    1    19    10    1     0
PCE Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:  14  502    13    37  424    42   106    1    19    10    1     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:      1.00 2.00  1.00  1.00 2.00  1.00  0.99 0.01  1.00  1.00 1.00  1.00
Final Sat.: 1700 3400  1700  1700 3400  1700  1684   16  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.01 0.15  0.01  0.02 0.12  0.02  0.06 0.06  0.01  0.01 0.00  0.00
Crit Moves:      ****        ****                  ****        ****
******************************************************************************
```

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                          The Doheny Hotel
                              Existing
                     Saturday Mid-day Peak Hour
--------------------------------------------------------------------------------

                  Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):          0.259
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100              Level Of Service:                   A
********************************************************************************
Street Name:      Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Protected        Protected        Permitted        Permitted
Rights:           Include          Include          Include          Ignore
Min. Green:     0    0     0    0    0     0    0    0     0    0    0     0
Lanes:         1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      11  483    22    56  588    44    36    1    19    13    2    45
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   11  483    22    56  588    44    36    1    19    13    2    45
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    11  483    22    56  588    44    36    1    19    13    2     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   11  483    22    56  588    44    36    1    19    13    2     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   11  483    22    56  588    44    36    1    19    13    2     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 2.00  1.00  1.00 2.00  1.00  0.97 0.03  1.00  1.00 1.00  1.00
Final Sat.:  1700 3400  1700  1700 3400  1700  1654   46  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.14  0.01  0.03 0.17  0.03  0.02 0.02  0.01  0.01 0.00  0.00
Crit Moves:  ****                  ****              ****        ****
********************************************************************************
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Existing – Peak Season

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--------------------------------------------------------------------------------
                            The Doheny Hotel
                                Existing
                 Weekday Morning Peak Hour - Peak Season
--------------------------------------------------------------------------------
                    Level Of Service Computation Report
         ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):         0.561
Loss Time (sec):       5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100               Level Of Service:                  A
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:           Ovl            Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        1  0  1  0  2   2  0  1  0  1   1  0  2  1  0   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      26    68   217   292   107   119    85  1152    54   397  1532   179
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:   26    68   217   292   107   119    85  1152    54   397  1532   179
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    26    68   217   292   107   119    85  1152    54   397  1532   179
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   26    68   217   292   107   119    85  1152    54   397  1532   179
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
FinalVolume:   26    68   217   292   107   119    85  1152    54   397  1532   179
OvlAdjVol:                  0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  1.00  2.00  2.00  1.00  1.00  1.00  2.87  0.13  2.00  2.69  0.31
Final Sat.:  1700  1700  3400  3400  1700  1700  1700  4872   228  3400  4566   534
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02  0.04  0.06  0.09  0.06  0.07  0.05  0.24  0.24  0.12  0.34  0.34
OvlAdjV/S:                 0.00
Crit Moves:        ****  ****              ****                          ****
********************************************************************************
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The Doheny Hotel
Existing
Weekday Evening Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.692
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name: Del Obispo Street/Dana Point Harb — Pacific Coast Highway

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 0 2			2 0 1 0 1			1 0 2 1 0			2 0 2 1 0		
Volume Module:												
Base Vol:	54	152	505	252	114	152	158	1439	77	366	1706	261
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	54	152	505	252	114	152	158	1439	77	366	1706	261
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	54	152	505	252	114	152	158	1439	77	366	1706	261
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	152	505	252	114	152	158	1439	77	366	1706	261
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	54	152	505	252	114	152	158	1439	77	366	1706	261
OvlAdjVol:			139									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	2.85	0.15	2.00	2.60	0.40
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	4841	259	3400	4423	677
Capacity Analysis Module:												
Vol/Sat:	0.03	0.09	0.15	0.07	0.07	0.09	0.09	0.30	0.30	0.11	0.39	0.39
OvlAdjV/S:			0.04									
Crit Moves:		****		****			****				****	

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--------------------------------------------------------------------------------
                                The Doheny Hotel
                                    Existing
                      Saturday Mid-day Peak Hour - Peak Season
--------------------------------------------------------------------------------

                        Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):         0.640
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100               Level Of Service:                  B
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:           Ovl            Include          Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:       1  0  1  0  2   2  0  1  0  1   1  0  2  1  0   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      69  116   436   230  112   145   161 1412   130   515 1388   206
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   69  116   436   230  112   145   161 1412   130   515 1388   206
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    69  116   436   230  112   145   161 1412   130   515 1388   206
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   69  116   436   230  112   145   161 1412   130   515 1388   206
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   69  116   436   230  112   145   161 1412   130   515 1388   206
OvlAdjVol:                 0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 2.75  0.25  2.00 2.61  0.39
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 4670   430  3400 4441   659
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.07  0.13  0.07 0.07  0.09  0.09 0.30  0.30  0.15 0.31  0.31
OvlAdjV/S:              0.00
Crit Moves:       ****  ****                        ****        ****
********************************************************************************
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--------------------------------------------------------------------------------
                              The Doheny Hotel
                                  Existing
                  Weekday Morning Peak Hour - Peak Season
--------------------------------------------------------------------------------

                     Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):          0.205
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        100              Level Of Service:                   A
********************************************************************************
Street Name:      Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Permitted         Permitted
Rights:           Include          Include           Include           Ignore
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      10  264    11    31  437    90    30    1    14     4    1    18
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   10  264    11    31  437    90    30    1    14     4    1    18
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    10  264    11    31  437    90    30    1    14     4    1     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   10  264    11    31  437    90    30    1    14     4    1     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   10  264    11    31  437    90    30    1    14     4    1     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 2.00  1.00  1.00 2.00  1.00  0.97 0.03  1.00  1.00 1.00  1.00
Final Sat.:  1700 3400  1700  1700 3400  1700  1645   55  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.08  0.01  0.02 0.13  0.05  0.02 0.02  0.01  0.00 0.00  0.00
Crit Moves:  ****                  ****             ****        ****
********************************************************************************
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--------------------------------------------------------------------------------
                              The Doheny Hotel
                                  Existing
                   Weekday Evening Peak Hour - Peak Season
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):           100                 Critical Vol./Cap.(X):         0.312
Loss Time (sec):         5 (Y+R=0.0 sec)  Average Delay (sec/veh):       xxxxxx
Optimal Cycle:         100                 Level Of Service:                  A
********************************************************************************
Street Name:      Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Permitted        Permitted
Rights:          Include          Include          Include           Ignore
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Lanes:       1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      15  552   14    41  466   51   117    1   21    11    1   42
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:   15  552   14    41  466   51   117    1   21    11    1   42
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.00
PHF Volume:    15  552   14    41  466   51   117    1   21    11    1    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   15  552   14    41  466   51   117    1   21    11    1    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.00
FinalVolume:   15  552   14    41  466   51   117    1   21    11    1    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700 1700  1700 1700 1700  1700 1700 1700  1700 1700 1700
Adjustment:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Lanes:       1.00 2.00 1.00  1.00 2.00 1.00  0.99 0.01 1.00  1.00 1.00 1.00
Final Sat.:  1700 3400 1700  1700 3400 1700  1686   14 1700  1700 1700 1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.16 0.01  0.02 0.14 0.03  0.07 0.07 0.01  0.01 0.00 0.00
Crit Moves:       ****       ****                  ****       ****
********************************************************************************
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-------------------------------------------------------------------------------
                              The Doheny Hotel
                                  Existing
                  Saturday Mid-day Peak Hour - Peak Season
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):         0.280
Loss Time (sec):       5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100               Level Of Service:                  A
********************************************************************************
Street Name:     Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Permitted        Permitted
Rights:           Include          Include           Include          Ignore
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      12  531    24    62  647    48    40    1    21    14    2    50
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   12  531    24    62  647    48    40    1    21    14    2    50
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    12  531    24    62  647    48    40    1    21    14    2     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   12  531    24    62  647    48    40    1    21    14    2     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   12  531    24    62  647    48    40    1    21    14    2     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 2.00  1.00  1.00 2.00  1.00  0.98 0.02  1.00  1.00 1.00  1.00
Final Sat.:  1700 3400  1700  1700 3400  1700  1659   41  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.16  0.01  0.04 0.19  0.03  0.02 0.02  0.01  0.01 0.00  0.00
Crit Moves:  ****                   ****             ****        ****
********************************************************************************
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Existing Plus Project

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--------------------------------------------------------------------------------
                              The Doheny Hotel
                            Existing Plus Project
                          Weekday Morning Peak Hour
--------------------------------------------------------------------------------

                      Level Of Service Computation Report
         ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):          0.518
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        100               Level Of Service:                   A
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:            Ovl            Include          Include          Include
Min. Green:     0    0    0    0    0    0    0    0    0    0    0    0
Lanes:         1  0  1  0  2   2  0  1  0  1   1  0  3  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       24   62   197   265   97   108    77 1047    49   361 1393   163
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    24   62   197   265   97   108    77 1047    49   361 1393   163
Added Vol:       9    6    12     0   11     0     0    0    22    22    0     0
PasserByVol:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    33   68   209   265  108   108    77 1047    71   383 1393   163
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     33   68   209   265  108   108    77 1047    71   383 1393   163
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    33   68   209   265  108   108    77 1047    71   383 1393   163
PCE Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:    33   68   209   265  108   108    77 1047    71   383 1393   163
OvlAdjVol:                  0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:        1.00 1.00  2.00  2.00 1.00  1.00  1.00 3.00  1.00  2.00 2.69  0.31
Final Sat.:   1700 1700  3400  3400 1700  1700  1700 5100  1700  3400 4566   534
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.02 0.04  0.06  0.08 0.06  0.06  0.05 0.21  0.04  0.11 0.31  0.31
OvlAdjV/S:                 0.00
Crit Moves:        ****        ****              ****                   ****
********************************************************************************
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The Doheny Hotel
Existing Plus Project
Weekday Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.640
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	Del Obispo Street/Dana Point Harb						Pacific Coast Highway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	49	138	459	229	104	138	144	1308	70	333	1551	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	49	138	459	229	104	138	144	1308	70	333	1551	237
Added Vol:	15	10	20	0	11	0	0	0	22	22	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	64	148	479	229	115	138	144	1308	92	355	1551	237
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	64	148	479	229	115	138	144	1308	92	355	1551	237
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	148	479	229	115	138	144	1308	92	355	1551	237
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	64	148	479	229	115	138	144	1308	92	355	1551	237
OvlAdjVol:			124									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	3.00	1.00	2.00	2.60	0.40
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	5100	1700	3400	4424	676
Capacity Analysis Module:												
Vol/Sat:	0.04	0.09	0.14	0.07	0.07	0.08	0.08	0.26	0.05	0.10	0.35	0.35
OvlAdjV/S:			0.04									
Crit Moves:		****		****			****				****	

```
--------------------------------------------------------------------------------
                               The Doheny Hotel
                            Existing Plus Project
                         Saturday Mid-day Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):         0.569
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100              Level Of Service:                  A
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:           Ovl            Include          Include          Include
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Lanes:       1  0  1  0  2   2  0  1  0  1   1  0  3  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      63  105   396   209  102   132   146 1248   118   468 1262   187
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   63  105   396   209  102   132   146 1248   118   468 1262   187
Added Vol:     15   10    20     0   13     0     0    0    26    26    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   78  115   416   209  115   132   146 1248   144   494 1262   187
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    78  115   416   209  115   132   146 1248   144   494 1262   187
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   78  115   416   209  115   132   146 1248   144   494 1262   187
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   78  115   416   209  115   132   146 1248   144   494 1262   187
OvlAdjVol:                 0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 3.00  1.00  2.00 2.61  0.39
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 5100  1700  3400 4442   658
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.07  0.12  0.06 0.07  0.08  0.09 0.24  0.08  0.15 0.28  0.28
OvlAdjV/S:                0.00
Crit Moves:       ****        ****                   ****        ****
********************************************************************************
```

The Doheny Hotel
Existing Plus Project
Weekday Morning Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: A[10.0]

Street Name:	Dana Point Harbor Drive						Project Access					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	2	0 0	0 0	2	0 1	0 0	0	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	283	0	0	507	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	283	0	0	507	0	0	0	0	0	0	0
Added Vol:	0	28	0	0	0	56	0	0	31	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	311	0	0	507	56	0	0	31	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	311	0	0	507	56	0	0	31	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	311	0	0	507	56	0	0	31	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	254	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	752	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	752	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.1	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.0	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	A	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		xxxxxx			xxxxxx			10.0			xxxxxx	
ApproachLOS:		*			*			A			*	

Note: Queue reported is the number of cars per lane.

```
-------------------------------------------------------------------------------
                              The Doheny Hotel
                            Existing Plus Project
                          Weekday Evening Peak Hour
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
*******************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
*******************************************************************************
Average Delay (sec/veh):      0.4       Worst Case Level Of Service: B[ 10.1]
*******************************************************************************
Street Name:        Dana Point Harbor Drive                Project Access
Approach:         North Bound      South Bound       East Bound       West Bound
Movement:       L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:            Include          Include          Include          Include
Lanes:          0  0  2  0  0    0  0  2  0  1    0  0  0  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:         0  646     0     0  507     0     0     0     0     0     0     0
Growth Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:      0  646     0     0  507     0     0     0     0     0     0     0
Added Vol:        0   44     0     0    0    55     0     0    49     0     0     0
PasserByVol:      0    0     0     0    0     0     0     0     0     0     0     0
Initial Fut:      0  690     0     0  507    55     0     0    49     0     0     0
User Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:       1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:       0  690     0     0  507    55     0     0    49     0     0     0
Reduct Vol:       0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:      0  690     0     0  507    55     0     0    49     0     0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   254  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   752  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   752  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.07  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.1 xxxxx xxxx xxxxx
LOS by Move:     *    *     *     *    *     *     *    *     B     *    *     *
Movement:      LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:       xxxxxx           xxxxxx             10.1            xxxxxx
ApproachLOS:          *                *                 B                *
*******************************************************************************
Note: Queue reported is the number of cars per lane.
*******************************************************************************
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-------------------------------------------------------------------------------
                              The Doheny Hotel
                           Existing Plus Project
                        Saturday Mid-day Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):      0.4      Worst Case Level Of Service: B[ 10.9]
********************************************************************************
Street Name:       Dana Point Harbor Drive                 Project Access
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Lanes:        0  0  2  0  0   0  0  2  0  1   0  0  0  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  564    0     0  688    0     0    0    0     0    0    0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  564    0     0  688    0     0    0    0     0    0    0
Added Vol:      0   44    0     0    0   65     0    0   49     0    0    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:    0  608    0     0  688   65     0    0   49     0    0    0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  608    0     0  688   65     0    0   49     0    0    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
FinalVolume:    0  608    0     0  688   65     0    0   49     0    0    0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   344  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   658  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   658  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.07  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.9 xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     B     *    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      xxxxxx           xxxxxx            10.9           xxxxxx
ApproachLOS:         *                *                B                *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
```

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--------------------------------------------------------------------------------
                              The Doheny Hotel
                           Existing Plus Project
                         Weekday Morning Peak Hour
--------------------------------------------------------------------------------

                     Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):         0.198
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100               Level Of Service:                  A
********************************************************************************
Street Name:      Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Permitted         Permitted
Rights:           Include          Include          Include           Include
Min. Green:     0    0    0     0    0    0     0    0    0     0    0    0
Lanes:        1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       9  240   10    28  397   82    27    1   13     4    1   16
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:    9  240   10    28  397   82    27    1   13     4    1   16
Added Vol:      0    0    0    28    3    0     0    0    0     0    0    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:    9  240   10    56  400   82    27    1   13     4    1   16
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:     9  240   10    56  400   82    27    1   13     4    1   16
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:    9  240   10    56  400   82    27    1   13     4    1   16
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
FinalVolume:    9  240   10    56  400   82    27    1   13     4    1   16
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700 1700  1700 1700 1700  1700 1700 1700  1700 1700 1700
Adjustment:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Lanes:       1.00 2.00 1.00  1.00 2.00 1.00  0.96 0.04 1.00  1.00 1.00 1.00
Final Sat.:  1700 3400 1700  1700 3400 1700  1639   61 1700  1700 1700 1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.07 0.01  0.03 0.12 0.05  0.02 0.02 0.01  0.00 0.00 0.01
Crit Moves:  ****                 ****       ****                         ****
********************************************************************************
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--------------------------------------------------------------------------------
                               The Doheny Hotel
                             Existing Plus Project
                           Weekday Evening Peak Hour
--------------------------------------------------------------------------------

                       Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100                Critical Vol./Cap.(X):         0.330
Loss Time (sec):        5 (Y+R=0.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100                Level Of Service:                  A
********************************************************************************
Street Name:     Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     14  502    13   37  424    42  106    1    19   10    1    38
Growth Adj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:  14  502    13   37  424    42  106    1    19   10    1    38
Added Vol:     0    0     0   44    5     0    0    0     0    0    0     0
PasserByVol:   0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:  14  502    13   81  429    42  106    1    19   10    1    38
User Adj:   1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Volume:   14  502    13   81  429    42  106    1    19   10    1    38
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:  14  502    13   81  429    42  106    1    19   10    1    38
PCE Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
FinalVolume:  14  502    13   81  429    42  106    1    19   10    1    38
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1700 1700  1700 1700 1700  1700 1700 1700  1700 1700 1700  1700
Adjustment: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Lanes:      1.00 2.00  1.00 1.00 2.00  1.00 0.99 0.01  1.00 1.00 1.00  1.00
Final Sat.: 1700 3400  1700 1700 3400  1700 1684   16  1700 1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.01 0.15  0.01 0.05 0.13  0.02 0.06 0.06  0.01 0.01 0.00  0.02
Crit Moves:      ****       ****             ****                         ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                            The Doheny Hotel
                         Existing Plus Project
                      Saturday Mid-day Peak Hour
--------------------------------------------------------------------------------

                   Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):          0.299
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        100               Level Of Service:                   A
********************************************************************************
Street Name:       Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:        North Bound      South Bound      East Bound       West Bound
Movement:       L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Protected        Protected        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0     0     0   0     0     0   0     0     0   0     0     0
Lanes:          1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      11   483    22    56   588    44    36     1    19    13     2    45
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:   11   483    22    56   588    44    36     1    19    13     2    45
Added Vol:      0     0     0    44     5     0     0     0     0     0     0     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:   11   483    22   100   593    44    36     1    19    13     2    45
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    11   483    22   100   593    44    36     1    19    13     2    45
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   11   483    22   100   593    44    36     1    19    13     2    45
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
FinalVolume:   11   483    22   100   593    44    36     1    19    13     2    45
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  2.00  1.00  1.00  2.00  1.00  0.97  0.03  1.00  1.00  1.00  1.00
Final Sat.:  1700  3400  1700  1700  3400  1700  1654    46  1700  1700  1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01  0.14  0.01  0.06  0.17  0.03  0.02  0.02  0.01  0.01  0.00  0.03
Crit Moves:        ****  ****              ****                                ****
********************************************************************************
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Existing Plus Project – Peak Season

```
--------------------------------------------------------------------------------
                            The Doheny Hotel
                          Existing Plus Project
                 Weekday Morning Peak Hour - Peak Season
--------------------------------------------------------------------------------

                    Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):         0.565
Loss Time (sec):       5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100               Level Of Service:                  A
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:           Ovl            Include          Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:       1  0  1  0  2   2  0  1  0  1   1  0  3  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     26   68   217   292  107   119    85 1152    54   397 1532   179
Growth Adj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  26   68   217   292  107   119    85 1152    54   397 1532   179
Added Vol:     9    6    12     0   11     0     0    0    22    22    0     0
PasserByVol:   0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  35   74   229   292  118   119    85 1152    76   419 1532   179
User Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   35   74   229   292  118   119    85 1152    76   419 1532   179
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  35   74   229   292  118   119    85 1152    76   419 1532   179
PCE Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  35   74   229   292  118   119    85 1152    76   419 1532   179
OvlAdjVol:                0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:      1.00 1.00  2.00  2.00 1.00  1.00  1.00 3.00  1.00  2.00 2.69  0.31
Final Sat.: 1700 1700  3400  3400 1700  1700  1700 5100  1700  3400 4566   534
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.02 0.04  0.07  0.09 0.07  0.07  0.05 0.23  0.04  0.12 0.34  0.34
OvlAdjV/S:             0.00
Crit Moves:      ****        ****             ****                  ****
********************************************************************************
```

The Doheny Hotel
Existing Plus Project
Weekday Evening Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.698
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	Del Obispo Street/Dana Point Harb						Pacific Coast Highway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Ovl			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 0 2			2 0 1 0 1			1 0 3 0 1			2 0 2 1 0		
Volume Module:												
Base Vol:	54	152	505	252	114	152	158	1439	77	366	1706	261
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	54	152	505	252	114	152	158	1439	77	366	1706	261
Added Vol:	15	10	20	0	11	0	0	0	22	22	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	69	162	525	252	125	152	158	1439	99	388	1706	261
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	69	162	525	252	125	152	158	1439	99	388	1706	261
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	69	162	525	252	125	152	158	1439	99	388	1706	261
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	69	162	525	252	125	152	158	1439	99	388	1706	261
OvlAdjVol:			137									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	3.00	1.00	2.00	2.60	0.40
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	5100	1700	3400	4423	677
Capacity Analysis Module:												
Vol/Sat:	0.04	0.10	0.15	0.07	0.07	0.09	0.09	0.28	0.06	0.11	0.39	0.39
OvlAdjV/S:			0.04									
Crit Moves:		****		****			****				****	

The Doheny Hotel
Existing Plus Project
Saturday Mid-day Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.628
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name: Del Obispo Street/Dana Point Harb / Pacific Coast Highway

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	69	116	436	230	112	145	161	1412	130	515	1388	206
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	69	116	436	230	112	145	161	1412	130	515	1388	206
Added Vol:	15	10	20	0	13	0	0	0	26	26	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	84	126	456	230	125	145	161	1412	156	541	1388	206
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	84	126	456	230	125	145	161	1412	156	541	1388	206
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	126	456	230	125	145	161	1412	156	541	1388	206
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	84	126	456	230	125	145	161	1412	156	541	1388	206
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	3.00	1.00	2.00	2.61	0.39
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	5100	1700	3400	4441	659
Capacity Analysis Module:												
Vol/Sat:	0.05	0.07	0.13	0.07	0.07	0.09	0.09	0.28	0.09	0.16	0.31	0.31
OvlAdjV/S:			0.00									
Crit Moves:		****		****				****		****		

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--------------------------------------------------------------------------------
                              The Doheny Hotel
                            Existing Plus Project
                   Weekday Morning Peak Hour - Peak Season
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
          2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):       0.3       Worst Case Level Of Service: B[ 10.2]
********************************************************************************
Street Name:      Dana Point Harbor Drive                 Project Access
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:            Include          Include          Include          Include
Lanes:         0  0  2  0  0   0  0  2  0  1   0  0  0  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0  311     0     0  558     0     0     0     0     0     0     0
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:     0  311     0     0  558     0     0     0     0     0     0     0
Added Vol:       0   28     0     0    0    56     0     0    31     0     0     0
PasserByVol:     0    0     0     0    0     0     0     0     0     0     0     0
Initial Fut:     0  339     0     0  558    56     0     0    31     0     0     0
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:      0  339     0     0  558    56     0     0    31     0     0     0
Reduct Vol:      0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:     0  339     0     0  558    56     0     0    31     0     0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   279  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   724  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   724  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.04  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.1  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.2 xxxxx xxxx xxxxx
LOS by Move:     *    *     *     *    *     *     *    *     B     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:       xxxxxx           xxxxxx             10.2           xxxxxx
ApproachLOS:          *                *                B                *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
```

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-------------------------------------------------------------------------------
                            The Doheny Hotel
                          Existing Plus Project
                 Weekday Evening Peak Hour - Peak Season
-------------------------------------------------------------------------------
                   Level Of Service Computation Report
        2000 HCM Unsignalized Method (Future Volume Alternative)
*******************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
*******************************************************************************
Average Delay (sec/veh):       0.4       Worst Case Level Of Service: B[ 10.3]
*******************************************************************************
Street Name:        Dana Point Harbor Drive                Project Access
Approach:         North Bound       South Bound       East Bound        West Bound
Movement:       L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled      Uncontrolled       Stop Sign         Stop Sign
Rights:           Include           Include           Include           Include
Lanes:        0  0  2  0  0    0  0  2  0  1    0  0  0  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0  711     0     0  558     0     0    0     0     0    0     0
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:     0  711     0     0  558     0     0    0     0     0    0     0
Added Vol:       0   44     0     0    0    55     0    0    49     0    0     0
PasserByVol:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:     0  755     0     0  558    55     0    0    49     0    0     0
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:      0  755     0     0  558    55     0    0    49     0    0     0
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:     0  755     0     0  558    55     0    0    49     0    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   279  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   724  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   724  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.07  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.3 xxxxx xxxx xxxxx
LOS by Move:     *    *     *     *    *     *     *    *     B     *    *     *
Movement:      LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:       xxxxxx            xxxxxx             10.3            xxxxxx
ApproachLOS:          *                 *                 B                 *
*******************************************************************************
Note: Queue reported is the number of cars per lane.
*******************************************************************************
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--------------------------------------------------------------------------------
                              The Doheny Hotel
                            Existing Plus Project
                   Saturday Mid-day Peak Hour - Peak Season
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):      0.4      Worst Case Level Of Service: B[ 11.2]
********************************************************************************
Street Name:     Dana Point Harbor Drive                 Project Access
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:            Include          Include          Include          Include
Lanes:         0  0  2  0  0   0  0  2  0  1   0  0  0  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0  620     0     0  757     0     0     0     0     0     0     0
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:     0  620     0     0  757     0     0     0     0     0     0     0
Added Vol:       0   44     0     0    0    65     0     0    49     0     0     0
PasserByVol:     0    0     0     0    0     0     0     0     0     0     0     0
Initial Fut:     0  664     0     0  757    65     0     0    49     0     0     0
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:      0  664     0     0  757    65     0     0    49     0     0     0
Reduct Vol:      0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:     0  664     0     0  757    65     0     0    49     0     0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   379  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   625  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   625  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.08  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.3  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  11.2 xxxxx xxxx xxxxx
LOS by Move:     *    *     *     *    *     *     *    *     B     *    *     *
Movement:      LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      xxxxxx           xxxxxx             11.2           xxxxxx
ApproachLOS:        *                *                  B                *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
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--------------------------------------------------------------------------------
                              The Doheny Hotel
                            Existing Plus Project
                   Weekday Morning Peak Hour - Peak Season
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100                Critical Vol./Cap.(X):         0.214
Loss Time (sec):        5 (Y+R=0.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100                Level Of Service:                  A
********************************************************************************
Street Name:      Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Protected        Protected         Permitted         Permitted
Rights:            Include          Include           Include           Include
Min. Green:     0    0     0    0    0     0    0    0     0    0    0     0
Lanes:         1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      10  264    11    31  437    90    30    1    14     4    1    18
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   10  264    11    31  437    90    30    1    14     4    1    18
Added Vol:      0    0     0    28    3     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   10  264    11    59  440    90    30    1    14     4    1    18
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    10  264    11    59  440    90    30    1    14     4    1    18
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   10  264    11    59  440    90    30    1    14     4    1    18
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   10  264    11    59  440    90    30    1    14     4    1    18
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 2.00  1.00  1.00 2.00  1.00  0.97 0.03  1.00  1.00 1.00  1.00
Final Sat.:  1700 3400  1700  1700 3400  1700  1645   55  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.08  0.01  0.03 0.13  0.05  0.02 0.02  0.01  0.00 0.00  0.01
Crit Moves:  ****                  ****        ****                         ****
********************************************************************************
```

The Doheny Hotel
Existing Plus Project
Weekday Evening Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach

Cycle (sec):	100	Critical Vol./Cap.(X):	0.356
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Street Name:	Dana Point Harbor Drive						Park Lantern/Doheny State Beach					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	15	552	14	41	466	51	117	1	21	11	1	42
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	15	552	14	41	466	51	117	1	21	11	1	42
Added Vol:	0	0	0	44	5	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	552	14	85	471	51	117	1	21	11	1	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	552	14	85	471	51	117	1	21	11	1	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	552	14	85	471	51	117	1	21	11	1	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	15	552	14	85	471	51	117	1	21	11	1	42
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.99	0.01	1.00	1.00	1.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1686	14	1700	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.16	0.01	0.05	0.14	0.03	0.07	0.07	0.01	0.01	0.00	0.02
Crit Moves:		****		****			****					****

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--------------------------------------------------------------------------------
                              The Doheny Hotel
                            Existing Plus Project
                  Saturday Mid-day Peak Hour - Peak Season
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100                Critical Vol./Cap.(X):        0.321
Loss Time (sec):        5 (Y+R=0.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:        100                Level Of Service:                 A
********************************************************************************
Street Name:      Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:       North Bound     South Bound     East Bound      West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected       Protected       Permitted       Permitted
Rights:          Include         Include         Include         Include
Min. Green:    0    0    0     0    0    0     0    0    0     0    0    0
Lanes:         1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      12  531   24    62  647   48    40    1   21    14    2   50
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:   12  531   24    62  647   48    40    1   21    14    2   50
Added Vol:      0    0    0    44    5    0     0    0    0     0    0    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:   12  531   24   106  652   48    40    1   21    14    2   50
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    12  531   24   106  652   48    40    1   21    14    2   50
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   12  531   24   106  652   48    40    1   21    14    2   50
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
FinalVolume:   12  531   24   106  652   48    40    1   21    14    2   50
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700 1700  1700 1700 1700  1700 1700 1700  1700 1700 1700
Adjustment:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Lanes:       1.00 2.00 1.00  1.00 2.00 1.00  0.98 0.02 1.00  1.00 1.00 1.00
Final Sat.:  1700 3400 1700  1700 3400 1700  1659   41 1700  1700 1700 1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.16 0.01  0.06 0.19 0.03  0.02 0.02 0.01  0.01 0.00 0.03
Crit Moves:       ****       ****            ****                        ****
********************************************************************************
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Opening Year (2013) Without Project

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--------------------------------------------------------------------------------
                            The Doheny Hotel
                     Opening Year (2013) Without Project
                          Weekday Morning Peak Hour
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100                Critical Vol./Cap.(X):         0.517
Loss Time (sec):        5 (Y+R=0.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100                Level Of Service:                  A
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb      Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:           Ovl            Include          Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:       1  0  1  0  2    2  0  1  0  1    1  0  2  1  0    2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     24   62   197   265   97   108    77 1047    49   361 1393   163
Growth Adj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  24   62   198   266   97   109    77 1052    49   363 1400   164
Added Vol:     0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:   0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  24   62   198   266   97   109    77 1052    49   363 1400   164
User Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   24   62   198   266   97   109    77 1052    49   363 1400   164
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  24   62   198   266   97   109    77 1052    49   363 1400   164
PCE Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  24   62   198   266   97   109    77 1052    49   363 1400   164
OvlAdjVol:                0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:      1.00 1.00  2.00  2.00 1.00  1.00  1.00 2.87  0.13  2.00 2.69  0.31
Final Sat.: 1700 1700  3400  3400 1700  1700  1700 4872   228  3400 4566   534
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.01 0.04  0.06  0.08 0.06  0.06  0.05 0.22  0.22  0.11 0.31  0.31
OvlAdjV/S:             0.00
Crit Moves:      ****  ****              ****                        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                              The Doheny Hotel
                      Opening Year (2013) Without Project
                          Weekday Evening Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
     ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):         0.637
Loss Time (sec):       5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              Level Of Service:                  B
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb      Pacific Coast Highway
Approach:     North Bound      South Bound       East Bound        West Bound
Movement:    L  -  T  -  R   L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected         Protected         Protected         Protected
Rights:           Ovl             Include           Include           Include
Min. Green:    0    0    0    0    0     0     0    0     0     0    0     0
Lanes:       1  0  1  0  2   2  0  1  0  1    1  0  2  1  0    2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      49  138   459   229  104   138   144 1308    70   333 1551   237
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   49  139   461   230  105   139   145 1315    70   335 1559   238
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   49  139   461   230  105   139   145 1315    70   335 1559   238
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    49  139   461   230  105   139   145 1315    70   335 1559   238
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   49  139   461   230  105   139   145 1315    70   335 1559   238
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   49  139   461   230  105   139   145 1315    70   335 1559   238
OvlAdjVol:               127
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 2.85  0.15  2.00 2.60  0.40
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 4841   259  3400 4424   676
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.08  0.14  0.07 0.06  0.08  0.09 0.27  0.27  0.10 0.35  0.35
OvlAdjV/S:              0.04
Crit Moves:       ****        ****              ****                  ****
********************************************************************************
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------------------------------------------------------------------------------
                          The Doheny Hotel
                  Opening Year (2013) Without Project
                     Saturday Mid-day Peak Hour
------------------------------------------------------------------------------
                   Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
******************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
******************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):          0.581
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        100              Level Of Service:                  A
******************************************************************************
Street Name:Del Obispo Street/Dana Point Harb      Pacific Coast Highway
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:           Ovl            Include          Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:       1  0  1  0  2   2  0  1  0  1   1  0  2  1  0   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      63  105   396   209  102   132   146 1248   118   468 1262   187
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   63  106   398   210  103   133   147 1254   119   470 1268   188
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   63  106   398   210  103   133   147 1254   119   470 1268   188
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    63  106   398   210  103   133   147 1254   119   470 1268   188
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   63  106   398   210  103   133   147 1254   119   470 1268   188
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   63  106   398   210  103   133   147 1254   119   470 1268   188
OvlAdjVol:                 0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 2.74  0.26  2.00 2.61  0.39
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 4659   441  3400 4442   658
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.06  0.12  0.06 0.06  0.08  0.09 0.27  0.27  0.14 0.29  0.29
OvlAdjV/S:                0.00
Crit Moves:       ****        ****                   ****        ****
******************************************************************************
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--------------------------------------------------------------------------------
                              The Doheny Hotel
                     Opening Year (2013) Without Project
                          Weekday Morning Peak Hour
--------------------------------------------------------------------------------

                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):          0.192
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        100              Level Of Service:                   A
********************************************************************************
Street Name:      Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Permitted        Permitted
Rights:          Include          Include          Include          Ignore
Min. Green:     0     0     0    0     0     0    0     0     0    0     0     0
Lanes:         1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       9   240    10    28   397    82    27     1    13     4     1    16
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:    9   241    10    28   399    82    27     1    13     4     1    16
Added Vol:      0     0     0     0     0     0     0     0     0     0     0     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:    9   241    10    28   399    82    27     1    13     4     1    16
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
PHF Volume:     9   241    10    28   399    82    27     1    13     4     1     0
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:    9   241    10    28   399    82    27     1    13     4     1     0
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
FinalVolume:    9   241    10    28   399    82    27     1    13     4     1     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  2.00  1.00  1.00  2.00  1.00  0.96  0.04  1.00  1.00  1.00  1.00
Final Sat.:  1700  3400  1700  1700  3400  1700  1639    61  1700  1700  1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01  0.07  0.01  0.02  0.12  0.05  0.02  0.02  0.01  0.00  0.00  0.00
Crit Moves:  ****                    ****              ****        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                           The Doheny Hotel
                   Opening Year (2013) Without Project
                       Weekday Evening Peak Hour
--------------------------------------------------------------------------------

                   Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):          0.289
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        100              Level Of Service:                   A
********************************************************************************
Street Name:      Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:      North Bound       South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected         Protected         Permitted         Permitted
Rights:           Include           Include           Include           Ignore
Min. Green:     0    0    0     0    0    0     0    0    0     0    0    0
Lanes:        1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      14  502   13    37  424   42   106    1   19    10    1   38
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:   14  505   13    37  426   42   107    1   19    10    1   38
Added Vol:      0    0    0     0    0    0     0    0    0     0    0    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:   14  505   13    37  426   42   107    1   19    10    1   38
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.00
PHF Volume:    14  505   13    37  426   42   107    1   19    10    1    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   14  505   13    37  426   42   107    1   19    10    1    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.00
FinalVolume:   14  505   13    37  426   42   107    1   19    10    1    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700 1700  1700 1700 1700  1700 1700 1700  1700 1700 1700
Adjustment:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Lanes:       1.00 2.00 1.00  1.00 2.00 1.00  0.99 0.01 1.00  1.00 1.00 1.00
Final Sat.:  1700 3400 1700  1700 3400 1700  1684   16 1700  1700 1700 1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.15 0.01  0.02 0.13 0.02  0.06 0.06 0.01  0.01 0.00 0.00
Crit Moves:       ****       ****                   ****      ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          The Doheny Hotel
                 Opening Year (2013) Without Project
                     Saturday Mid-day Peak Hour
--------------------------------------------------------------------------------
                  Level Of Service Computation Report
     ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):        0.260
Loss Time (sec):       5 (Y+R=0.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100              Level Of Service:                 A
********************************************************************************
Street Name:     Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:      North Bound     South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Permitted        Permitted
Rights:          Include          Include          Include          Ignore
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Lanes:        1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      11  483   22   56  588   44   36    1   19   13    2   45
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   11  485   22   56  591   44   36    1   19   13    2   45
Added Vol:      0    0    0    0    0    0    0    0    0    0    0    0
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:   11  485   22   56  591   44   36    1   19   13    2   45
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Volume:    11  485   22   56  591   44   36    1   19   13    2    0
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   11  485   22   56  591   44   36    1   19   13    2    0
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
FinalVolume:   11  485   22   56  591   44   36    1   19   13    2    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:       1.00 2.00 1.00 1.00 2.00 1.00 0.97 0.03 1.00 1.00 1.00 1.00
Final Sat.:  1700 3400 1700 1700 3400 1700 1654   46 1700 1700 1700 1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.14 0.01 0.03 0.17 0.03 0.02 0.02 0.01 0.01 0.00 0.00
Crit Moves:  ****                ****           ****      ****
********************************************************************************
```

Opening Year (2013) Without Project – Peak Season

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--------------------------------------------------------------------------------
                              The Doheny Hotel
                       Opening Year (2013) Without Project
                     Weekday Morning Peak Hour - Peak Season
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
         ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):         0.564
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        100               Level Of Service:                   A
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb     Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:           Ovl            Include          Include          Include
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Lanes:       1  0  1  0  2   2  0  1  0  1   1  0  2  1  0   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      26   68  217   292  107  119    85 1152   54   397 1532  179
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:   26   68  218   293  108  120    85 1158   54   399 1540  180
Added Vol:      0    0    0     0    0    0     0    0    0     0    0    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:   26   68  218   293  108  120    85 1158   54   399 1540  180
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    26   68  218   293  108  120    85 1158   54   399 1540  180
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   26   68  218   293  108  120    85 1158   54   399 1540  180
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
FinalVolume:   26   68  218   293  108  120    85 1158   54   399 1540  180
OvlAdjVol:                 0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700 1700  1700 1700 1700  1700 1700 1700  1700 1700 1700
Adjustment:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Lanes:       1.00 1.00 2.00  2.00 1.00 1.00  1.00 2.87 0.13  2.00 2.69 0.31
Final Sat.:  1700 1700 3400  3400 1700 1700  1700 4872  228  3400 4566  534
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.04 0.06  0.09 0.06 0.07  0.05 0.24 0.24  0.12 0.34 0.34
OvlAdjV/S:                 0.00
Crit Moves:       ****       ****             ****                  ****
********************************************************************************
```

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-------------------------------------------------------------------------------
                              The Doheny Hotel
                     Opening Year (2013) Without Project
                   Weekday Evening Peak Hour - Peak Season
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100             Critical Vol./Cap.(X):          0.695
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100             Level Of Service:                   B
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected         Protected         Protected
Rights:           Ovl            Include           Include           Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:       1  0  1  0  2    2  0  1  0  1    1  0  2  1  0    2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      54  152   505   252  114   152   158 1439    77   366 1706   261
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   54  153   508   253  115   153   159 1446    77   368 1715   262
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   54  153   508   253  115   153   159 1446    77   368 1715   262
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    54  153   508   253  115   153   159 1446    77   368 1715   262
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   54  153   508   253  115   153   159 1446    77   368 1715   262
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   54  153   508   253  115   153   159 1446    77   368 1715   262
OvlAdjVol:               140
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 2.85  0.15  2.00 2.60  0.40
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 4841   259  3400 4423   677
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.09  0.15  0.07 0.07  0.09  0.09 0.30  0.30  0.11 0.39  0.39
OvlAdjV/S:              0.04
Crit Moves:       ****        ****             ****                   ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                             The Doheny Hotel
                     Opening Year (2013) Without Project
                   Saturday Mid-day Peak Hour - Peak Season
--------------------------------------------------------------------------------

                    Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):         0.643
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100              Level Of Service:                  B
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:            Ovl            Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        1  0  1  0  2    2  0  1  0  1    1  0  2  1  0    2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      69   116   436   230   112   145   161  1412   130   515  1388   206
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:   69   117   438   231   113   146   162  1419   131   518  1395   207
Added Vol:      0     0     0     0     0     0     0     0     0     0     0     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:   69   117   438   231   113   146   162  1419   131   518  1395   207
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    69   117   438   231   113   146   162  1419   131   518  1395   207
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   69   117   438   231   113   146   162  1419   131   518  1395   207
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
FinalVolume:   69   117   438   231   113   146   162  1419   131   518  1395   207
OvlAdjVol:                  0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  1.00  2.00  2.00  1.00  1.00  1.00  2.75  0.25  2.00  2.61  0.39
Final Sat.:  1700  1700  3400  3400  1700  1700  1700  4670   430  3400  4441   659
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04  0.07  0.13  0.07  0.07  0.09  0.10  0.30  0.30  0.15  0.31  0.31
OvlAdjV/S:                 0.00
Crit Moves:        ****  ****                          ****  ****
********************************************************************************
```

The Doheny Hotel
Opening Year (2013) Without Project
Weekday Morning Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach

Cycle (sec):	100	Critical Vol./Cap.(X):	0.206
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Street Name:	Dana Point Harbor Drive						Park Lantern/Doheny State Beach					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	10	264	11	31	437	90	30	1	14	4	1	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	265	11	31	439	90	30	1	14	4	1	18
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	265	11	31	439	90	30	1	14	4	1	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	10	265	11	31	439	90	30	1	14	4	1	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	265	11	31	439	90	30	1	14	4	1	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	10	265	11	31	439	90	30	1	14	4	1	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.97	0.03	1.00	1.00	1.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1645	55	1700	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.08	0.01	0.02	0.13	0.05	0.02	0.02	0.01	0.00	0.00	0.00
Crit Moves:	****				****			****		****		

```
-------------------------------------------------------------------------------
                               The Doheny Hotel
                      Opening Year (2013) Without Project
                    Weekday Evening Peak Hour - Peak Season
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*******************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
*******************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):         0.314
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100              Level Of Service:                  A
*******************************************************************************
Street Name:     Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Permitted        Permitted
Rights:           Include          Include          Include          Ignore
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:         1  0  2  0  1    1  0  2  0  1    0  1  0  0  1    1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      15   552    14    41   466    51   117     1    21    11     1    42
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:   15   555    14    41   468    51   118     1    21    11     1    42
Added Vol:      0     0     0     0     0     0     0     0     0     0     0     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:   15   555    14    41   468    51   118     1    21    11     1    42
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
PHF Volume:    15   555    14    41   468    51   118     1    21    11     1     0
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   15   555    14    41   468    51   118     1    21    11     1     0
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
FinalVolume:   15   555    14    41   468    51   118     1    21    11     1     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  2.00  1.00  1.00  2.00  1.00  0.99  0.01  1.00  1.00  1.00  1.00
Final Sat.:  1700  3400  1700  1700  3400  1700  1686    14  1700  1700  1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01  0.16  0.01  0.02  0.14  0.03  0.07  0.07  0.01  0.01  0.00  0.00
Crit Moves:        ****  ****                    ****        ****
*******************************************************************************
```

The Doheny Hotel
Opening Year (2013) Without Project
Saturday Mid-day Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach

Cycle (sec):	100	Critical Vol./Cap.(X):	0.281
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Street Name:	Dana Point Harbor Drive						Park Lantern/Doheny State Beach					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	12	531	24	62	647	48	40	1	21	14	2	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	534	24	62	650	48	40	1	21	14	2	50
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	534	24	62	650	48	40	1	21	14	2	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	12	534	24	62	650	48	40	1	21	14	2	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	534	24	62	650	48	40	1	21	14	2	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	12	534	24	62	650	48	40	1	21	14	2	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.98	0.02	1.00	1.00	1.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1659	41	1700	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.16	0.01	0.04	0.19	0.03	0.02	0.02	0.01	0.01	0.00	0.00
Crit Moves:	****				****			****		****		

Opening Year (2013) With Project

```
--------------------------------------------------------------------------------
                             The Doheny Hotel
                       Opening Year (2013) With Project
                         Weekday Morning Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):        0.521
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:        100              Level Of Service:                 A
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb        Pacific Coast Highway
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:           Ovl            Include          Include          Include
Min. Green:   0    0     0    0    0     0    0    0     0    0    0     0
Lanes:       1  0  1  0  2   2  0  1  0  1   1  0  3  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     24   62   197   265   97   108    77 1047    49   361 1393   163
Growth Adj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  24   62   198   266   97   109    77 1052    49   363 1400   164
Added Vol:     9    6    12     0   11     0     0    0    22    22    0     0
PasserByVol:   0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  33   68   210   266  108   109    77 1052    71   385 1400   164
User Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   33   68   210   266  108   109    77 1052    71   385 1400   164
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  33   68   210   266  108   109    77 1052    71   385 1400   164
PCE Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  33   68   210   266  108   109    77 1052    71   385 1400   164
OvlAdjVol:                0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:      1.00 1.00  2.00  2.00 1.00  1.00  1.00 3.00  1.00  2.00 2.69  0.31
Final Sat.: 1700 1700  3400  3400 1700  1700  1700 5100  1700  3400 4566   534
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.02 0.04  0.06  0.08 0.06  0.06  0.05 0.21  0.04  0.11 0.31  0.31
OvlAdjV/S:             0.00
Crit Moves:      ****        ****             ****                   ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                               The Doheny Hotel
                         Opening Year (2013) With Project
                            Weekday Evening Peak Hour
--------------------------------------------------------------------------------

                       Level Of Service Computation Report
          ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):          0.643
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        100               Level Of Service:                   B
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:     North Bound      South Bound       East Bound        West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected         Protected         Protected
Rights:           Ovl            Include           Include           Include
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Lanes:       1  0  1  0  2   2  0  1  0  1   1  0  3  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      49  138   459   229  104   138   144 1308    70   333 1551   237
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   49  139   461   230  105   139   145 1315    70   335 1559   238
Added Vol:     15   10    20     0   11     0     0    0    22    22    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   64  149   481   230  116   139   145 1315    92   357 1559   238
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    64  149   481   230  116   139   145 1315    92   357 1559   238
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   64  149   481   230  116   139   145 1315    92   357 1559   238
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   64  149   481   230  116   139   145 1315    92   357 1559   238
OvlAdjVol:                 125
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 3.00  1.00  2.00 2.60  0.40
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 5100  1700  3400 4424   676
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.09  0.14  0.07 0.07  0.08  0.09 0.26  0.05  0.10 0.35  0.35
OvlAdjV/S:                0.04
Crit Moves:       ****    ****              ****                    ****
********************************************************************************
```

The Doheny Hotel
Opening Year (2013) With Project
Saturday Mid-day Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec): 100 Critical Vol./Cap.(X): 0.572
Loss Time (sec): 5 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: A

Street Name:	Del Obispo Street/Dana Point Harb						Pacific Coast Highway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	63	105	396	209	102	132	146	1248	118	468	1262	187
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	63	106	398	210	103	133	147	1254	119	470	1268	188
Added Vol:	15	10	20	0	13	0	0	0	26	26	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	78	116	418	210	116	133	147	1254	145	496	1268	188
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	78	116	418	210	116	133	147	1254	145	496	1268	188
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	116	418	210	116	133	147	1254	145	496	1268	188
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	78	116	418	210	116	133	147	1254	145	496	1268	188
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	3.00	1.00	2.00	2.61	0.39
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	5100	1700	3400	4442	658
Capacity Analysis Module:												
Vol/Sat:	0.05	0.07	0.12	0.06	0.07	0.08	0.09	0.25	0.09	0.15	0.29	0.29
OvlAdjV/S:			0.00									
Crit Moves:		****		****				****		****		

```
-------------------------------------------------------------------------------
                               The Doheny Hotel
                         Opening Year (2013) With Project
                           Weekday Morning Peak Hour
-------------------------------------------------------------------------------

                      Level Of Service Computation Report
             2000 HCM Unsignalized Method (Future Volume Alternative)
*******************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
*******************************************************************************
Average Delay (sec/veh):       0.3      Worst Case Level Of Service: B[ 10.0]
*******************************************************************************
Street Name:      Dana Point Harbor Drive                  Project Access
Approach:       North Bound       South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:      Uncontrolled      Uncontrolled       Stop Sign         Stop Sign
Rights:          Include           Include          Include           Include
Lanes:        0  0  2  0  0    0  0  2  0  1    0  0  0  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  283     0     0  507     0     0     0     0     0     0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  284     0     0  510     0     0     0     0     0     0     0
Added Vol:      0   28     0     0    0    56     0     0    31     0     0     0
PasserByVol:    0    0     0     0    0     0     0     0     0     0     0     0
Initial Fut:    0  312     0     0  510    56     0     0    31     0     0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  312     0     0  510    56     0     0    31     0     0     0
Reduct Vol:     0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:    0  312     0     0  510    56     0     0    31     0     0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   255  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   751  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   751  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.04  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.1  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.0 xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     B     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      xxxxxx            xxxxxx             10.0            xxxxxx
ApproachLOS:         *                 *                 B                 *
*******************************************************************************
Note: Queue reported is the number of cars per lane.
*******************************************************************************
```

The Doheny Hotel
Opening Year (2013) With Project
Weekday Evening Peak Hour

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

```
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):       0.4       Worst Case Level Of Service: B[ 10.1]
********************************************************************************
Street Name:      Dana Point Harbor Drive                 Project Access
Approach:       North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:      Uncontrolled     Uncontrolled      Stop Sign         Stop Sign
Rights:          Include          Include          Include           Include
Lanes:        0  0  2  0  0   0  0  2  0  1   0  0  0  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  646     0     0  507     0     0     0     0     0     0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  649     0     0  510     0     0     0     0     0     0     0
Added Vol:      0   44     0     0    0    55     0     0    49     0     0     0
PasserByVol:    0    0     0     0    0     0     0     0     0     0     0     0
Initial Fut:    0  693     0     0  510    55     0     0    49     0     0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  693     0     0  510    55     0     0    49     0     0     0
Reduct Vol:     0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:    0  693     0     0  510    55     0     0    49     0     0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   255  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   751  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   751  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.07  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.1 xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     B     *    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:     xxxxxx            xxxxxx              10.1            xxxxxx
ApproachLOS:        *                 *                  B                *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
```

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--------------------------------------------------------------------------------
                              The Doheny Hotel
                       Opening Year (2013) With Project
                          Saturday Mid-day Peak Hour
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
             2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):       0.4       Worst Case Level Of Service: B[ 10.9]
********************************************************************************
Street Name:      Dana Point Harbor Drive                  Project Access
Approach:       North Bound       South Bound       East Bound        West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Uncontrolled      Uncontrolled       Stop Sign         Stop Sign
Rights:            Include           Include           Include           Include
Lanes:         0  0  2  0  0    0  0  2  0  1    0  0  0  0  1    0  0  0  0  0
------------|----------------||----------------||----------------||----------------|
Volume Module:
Base Vol:        0  564     0     0  688     0     0     0     0     0     0     0
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:     0  567     0     0  691     0     0     0     0     0     0     0
Added Vol:       0   44     0     0    0    65     0     0    49     0     0     0
PasserByVol:     0    0     0     0    0     0     0     0     0     0     0     0
Initial Fut:     0  611     0     0  691    65     0     0    49     0     0     0
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:      0  611     0     0  691    65     0     0    49     0     0     0
Reduct Vol:      0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:     0  611     0     0  691    65     0     0    49     0     0     0
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   346  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   656  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   656  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.07  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.9 xxxxx xxxx xxxxx
LOS by Move:     *    *     *     *    *     *     *    *     B     *    *     *
Movement:      LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      xxxxxx            xxxxxx             10.9            xxxxxx
ApproachLOS:         *                 *                 B                 *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
```

```
---------------------------------------------------------------------------------
                              The Doheny Hotel
                        Opening Year (2013) With Project
                           Weekday Morning Peak Hour
---------------------------------------------------------------------------------

                      Level Of Service Computation Report
          ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
*********************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):         0.199
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100               Level Of Service:                  A
*********************************************************************************
Street Name:     Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Permitted        Permitted
Rights:         Include          Include          Include          Include
Min. Green:   0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       9  240    10    28  397    82    27    1    13     4    1    16
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    9  241    10    28  399    82    27    1    13     4    1    16
Added Vol:      0    0     0    28    3     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    9  241    10    56  402    82    27    1    13     4    1    16
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     9  241    10    56  402    82    27    1    13     4    1    16
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    9  241    10    56  402    82    27    1    13     4    1    16
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:    9  241    10    56  402    82    27    1    13     4    1    16
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 2.00  1.00  1.00 2.00  1.00  0.96 0.04  1.00  1.00 1.00  1.00
Final Sat.:  1700 3400  1700  1700 3400  1700  1639   61  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.07  0.01  0.03 0.12  0.05  0.02 0.02  0.01  0.00 0.00  0.01
Crit Moves:  ****                  ****        ****                         ****
*********************************************************************************
```

```
--------------------------------------------------------------------------------
                              The Doheny Hotel
                       Opening Year (2013) With Project
                          Weekday Evening Peak Hour
--------------------------------------------------------------------------------

                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):         0.331
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100              Level Of Service:                  A
********************************************************************************
Street Name:        Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:        North Bound      South Bound      East Bound       West Bound
Movement:       L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:          Protected        Protected        Permitted        Permitted
Rights:             Include          Include          Include          Include
Min. Green:     0     0     0   0     0     0   0     0     0   0     0     0
Lanes:          1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       14   502    13    37   424    42   106     1    19    10     1    38
Growth Adj:   1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:    14   505    13    37   426    42   107     1    19    10     1    38
Added Vol:       0     0     0    44     5     0     0     0     0     0     0     0
PasserByVol:     0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:    14   505    13    81   431    42   107     1    19    10     1    38
User Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:      1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:     14   505    13    81   431    42   107     1    19    10     1    38
Reduct Vol:      0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:    14   505    13    81   431    42   107     1    19    10     1    38
PCE Adj:      1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:      1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
FinalVolume:    14   505    13    81   431    42   107     1    19    10     1    38
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700
Adjustment:   1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:        1.00  2.00  1.00  1.00  2.00  1.00  0.99  0.01  1.00  1.00  1.00  1.00
Final Sat.:   1700  3400  1700  1700  3400  1700  1684    16  1700  1700  1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.01  0.15  0.01  0.05  0.13  0.02  0.06  0.06  0.01  0.01  0.00  0.02
Crit Moves:         ****        ****              ****                          ****
********************************************************************************
```

The Doheny Hotel
Opening Year (2013) With Project
Saturday Mid-day Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach

Cycle (sec): 100 Critical Vol./Cap.(X): 0.300
Loss Time (sec): 5 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: A

Street Name:	Dana Point Harbor Drive						Park Lantern/Doheny State Beach					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	11	483	22	56	588	44	36	1	19	13	2	45
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	485	22	56	591	44	36	1	19	13	2	45
Added Vol:	0	0	0	44	5	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	485	22	100	596	44	36	1	19	13	2	45
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	485	22	100	596	44	36	1	19	13	2	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	485	22	100	596	44	36	1	19	13	2	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	485	22	100	596	44	36	1	19	13	2	45
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.97	0.03	1.00	1.00	1.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1654	46	1700	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.14	0.01	0.06	0.18	0.03	0.02	0.02	0.01	0.01	0.00	0.03
Crit Moves:		****		****			****					****

Opening Year (2013) With Project – Peak Season

```
--------------------------------------------------------------------------------
                               The Doheny Hotel
                        Opening Year (2013) With Project
                    Weekday Morning Peak Hour - Peak Season
--------------------------------------------------------------------------------

                      Level Of Service Computation Report
         ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):           100                Critical Vol./Cap.(X):         0.567
Loss Time (sec):         5 (Y+R=0.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:         100                Level Of Service:                  A
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:            Ovl             Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        1  0  1  0  2   2  0  1  0  1   1  0  3  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     26    68   217   292   107   119    85  1152    54   397  1532   179
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:  26    68   218   293   108   120    85  1158    54   399  1540   180
Added Vol:     9     6    12     0    11     0     0     0    22    22     0     0
PasserByVol:   0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:  35    74   230   293   119   120    85  1158    76   421  1540   180
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:   35    74   230   293   119   120    85  1158    76   421  1540   180
Reduct Vol:    0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:  35    74   230   293   119   120    85  1158    76   421  1540   180
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
FinalVolume:  35    74   230   293   119   120    85  1158    76   421  1540   180
OvlAdjVol:                 0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  1.00  2.00  2.00  1.00  1.00  1.00  3.00  1.00  2.00  2.69  0.31
Final Sat.:  1700  1700  3400  3400  1700  1700  1700  5100  1700  3400  4566   534
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02  0.04  0.07  0.09  0.07  0.07  0.05  0.23  0.04  0.12  0.34  0.34
OvlAdjV/S:                 0.00
Crit Moves:        ****  ****              ****                          ****
********************************************************************************
```

The Doheny Hotel
Opening Year (2013) With Project
Weekday Evening Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.701
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Street Name:	Del Obispo Street/Dana Point Harb						Pacific Coast Highway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Ovl			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 0 2			2 0 1 0 1			1 0 3 0 1			2 0 2 1 0		
Volume Module:												
Base Vol:	54	152	505	252	114	152	158	1439	77	366	1706	261
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	54	153	508	253	115	153	159	1446	77	368	1715	262
Added Vol:	15	10	20	0	11	0	0	0	22	22	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	69	163	528	253	126	153	159	1446	99	390	1715	262
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	69	163	528	253	126	153	159	1446	99	390	1715	262
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	69	163	528	253	126	153	159	1446	99	390	1715	262
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	69	163	528	253	126	153	159	1446	99	390	1715	262
OvlAdjVol:			138									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	3.00	1.00	2.00	2.60	0.40
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	5100	1700	3400	4423	677
Capacity Analysis Module:												
Vol/Sat:	0.04	0.10	0.16	0.07	0.07	0.09	0.09	0.28	0.06	0.11	0.39	0.39
OvlAdjV/S:			0.04									
Crit Moves:		****		****			****				****	

```
-------------------------------------------------------------------------------
                              The Doheny Hotel
                     Opening Year (2013) With Project
                  Saturday Mid-day Peak Hour - Peak Season
-------------------------------------------------------------------------------

                     Level Of Service Computation Report
      ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*******************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
*******************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):         0.631
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100              Level Of Service:                  B
*******************************************************************************
Street Name:Del Obispo Street/Dana Point Harb      Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:            Ovl            Include          Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        1  0  1  0  2   2  0  1  0  1   1  0  3  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      69  116   436   230  112   145   161 1412   130   515 1388   206
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   69  117   438   231  113   146   162 1419   131   518 1395   207
Added Vol:     15   10    20     0   13     0     0    0    26    26    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   84  127   458   231  126   146   162 1419   157   544 1395   207
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    84  127   458   231  126   146   162 1419   157   544 1395   207
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   84  127   458   231  126   146   162 1419   157   544 1395   207
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   84  127   458   231  126   146   162 1419   157   544 1395   207
OvlAdjVol:                 0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 3.00  1.00  2.00 2.61  0.39
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 5100  1700  3400 4441   659
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.07  0.13  0.07 0.07  0.09  0.10 0.28  0.09  0.16 0.31  0.31
OvlAdjV/S:              0.00
Crit Moves:       ****        ****                  ****        ****
*******************************************************************************
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```
--------------------------------------------------------------------------------
                              The Doheny Hotel
                       Opening Year (2013) With Project
                    Weekday Morning Peak Hour - Peak Season
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):      0.3      Worst Case Level Of Service: B[ 10.2]
********************************************************************************
Street Name:     Dana Point Harbor Drive                   Project Access
Approach:       North Bound      South Bound       East Bound        West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Uncontrolled     Uncontrolled      Stop Sign         Stop Sign
Rights:            Include          Include          Include          Include
Lanes:         0  0  2  0  0   0  0  2  0  1   0  0  0  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0  311     0     0  558     0     0     0     0     0     0     0
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:     0  313     0     0  561     0     0     0     0     0     0     0
Added Vol:       0   28     0     0    0    56     0     0    31     0     0     0
PasserByVol:     0    0     0     0    0     0     0     0     0     0     0     0
Initial Fut:     0  341     0     0  561    56     0     0    31     0     0     0
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:      0  341     0     0  561    56     0     0    31     0     0     0
Reduct Vol:      0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:     0  341     0     0  561    56     0     0    31     0     0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   280  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   723  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   723  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.04  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2WayQ95thQ:  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.1  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.2 xxxxx xxxx xxxxx
LOS by Move:     *    *     *     *    *     *     *    *     B     *    *     *
Movement:      LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      xxxxxx           xxxxxx             10.2           xxxxxx
ApproachLOS:        *                *                  B               *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
```

```
--------------------------------------------------------------------------------
                             The Doheny Hotel
                     Opening Year (2013) With Project
                 Weekday Evening Peak Hour - Peak Season
--------------------------------------------------------------------------------

                   Level Of Service Computation Report
          2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):       0.4      Worst Case Level Of Service: B[ 10.3]
********************************************************************************
Street Name:     Dana Point Harbor Drive                 Project Access
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:          Include          Include          Include          Include
Lanes:         0  0  2  0  0   0  0  2  0  1   0  0  0  0  1   0  0  0  0  0
------------|----------------||----------------||----------------||----------------|
Volume Module:
Base Vol:       0  711     0     0  558     0     0    0     0     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  715     0     0  561     0     0    0     0     0    0     0
Added Vol:      0   44     0     0    0    55     0    0    49     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0  759     0     0  561    55     0    0    49     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  759     0     0  561    55     0    0    49     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0  759     0     0  561    55     0    0    49     0    0     0
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   280  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   723  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   723  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.07  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.3 xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     B     *    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      xxxxxx           xxxxxx             10.3           xxxxxx
ApproachLOS:         *                *                 B                *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
```

```
--------------------------------------------------------------------------------
                             The Doheny Hotel
                     Opening Year (2013) With Project
                 Saturday Mid-day Peak Hour - Peak Season
--------------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):      0.4      Worst Case Level Of Service: B[ 11.3]
********************************************************************************
Street Name:     Dana Point Harbor Drive                  Project Access
Approach:      North Bound     South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled    Uncontrolled      Stop Sign        Stop Sign
Rights:           Include         Include          Include          Include
Lanes:        0  0  2  0  0   0  0  2  0  1   0  0  0  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  620     0     0  757     0     0    0     0     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  623     0     0  761     0     0    0     0     0    0     0
Added Vol:      0   44     0     0    0    65     0    0    49     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0  667     0     0  761    65     0    0    49     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  667     0     0  761    65     0    0    49     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0  667     0     0  761    65     0    0    49     0    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   380  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   623  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   623  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.08  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.3  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  11.3 xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     B     *    *     *
Movement:    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:     xxxxxx            xxxxxx             11.3            xxxxxx
ApproachLOS:        *                 *                 B                *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
```

The Doheny Hotel
Opening Year (2013) With Project
Weekday Morning Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach

Cycle (sec):	100	Critical Vol./Cap.(X):	0.214
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Street Name:	Dana Point Harbor Drive						Park Lantern/Doheny State Beach					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	10	264	11	31	437	90	30	1	14	4	1	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	265	11	31	439	90	30	1	14	4	1	18
Added Vol:	0	0	0	28	3	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	265	11	59	442	90	30	1	14	4	1	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	265	11	59	442	90	30	1	14	4	1	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	265	11	59	442	90	30	1	14	4	1	18
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	265	11	59	442	90	30	1	14	4	1	18
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.97	0.03	1.00	1.00	1.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1645	55	1700	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.08	0.01	0.03	0.13	0.05	0.02	0.02	0.01	0.00	0.00	0.01
Crit Moves:	****				****		****					****

```
----------------------------------------------------------------------------
                           The Doheny Hotel
                    Opening Year (2013) With Project
                 Weekday Evening Peak Hour - Peak Season
----------------------------------------------------------------------------

                   Level Of Service Computation Report
     ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
****************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
****************************************************************************
Cycle (sec):        100               Critical Vol./Cap.(X):         0.357
Loss Time (sec):      5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:      100               Level Of Service:                  A
****************************************************************************
Street Name:     Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:   0     0     0    0     0     0    0     0     0    0     0     0
Lanes:       1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      15  552    14     41  466    51    117    1    21     11    1    42
Growth Adj:  1.00 1.00  1.00   1.00 1.00  1.00   1.00 1.00  1.00   1.00 1.00  1.00
Initial Bse:   15  555    14     41  468    51    118    1    21     11    1    42
Added Vol:      0    0     0     44    5     0      0    0     0      0    0     0
PasserByVol:    0    0     0      0    0     0      0    0     0      0    0     0
Initial Fut:   15  555    14     85  473    51    118    1    21     11    1    42
User Adj:    1.00 1.00  1.00   1.00 1.00  1.00   1.00 1.00  1.00   1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00   1.00 1.00  1.00   1.00 1.00  1.00   1.00 1.00  1.00
PHF Volume:    15  555    14     85  473    51    118    1    21     11    1    42
Reduct Vol:     0    0     0      0    0     0      0    0     0      0    0     0
Reduced Vol:   15  555    14     85  473    51    118    1    21     11    1    42
PCE Adj:     1.00 1.00  1.00   1.00 1.00  1.00   1.00 1.00  1.00   1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00   1.00 1.00  1.00   1.00 1.00  1.00   1.00 1.00  1.00
FinalVolume:   15  555    14     85  473    51    118    1    21     11    1    42
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700   1700 1700  1700   1700 1700  1700   1700 1700  1700
Adjustment:  1.00 1.00  1.00   1.00 1.00  1.00   1.00 1.00  1.00   1.00 1.00  1.00
Lanes:       1.00 2.00  1.00   1.00 2.00  1.00   0.99 0.01  1.00   1.00 1.00  1.00
Final Sat.:  1700 3400  1700   1700 3400  1700   1686   14  1700   1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.16  0.01   0.05 0.14  0.03   0.07 0.07  0.01   0.01 0.00  0.02
Crit Moves:       ****         ****              ****                         ****
****************************************************************************
```

```
-------------------------------------------------------------------------------
                              The Doheny Hotel
                        Opening Year (2013) With Project
                    Saturday Mid-day Peak Hour - Peak Season
-------------------------------------------------------------------------------

                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*******************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
*******************************************************************************
Cycle (sec):        100                Critical Vol./Cap.(X):         0.323
Loss Time (sec):      5 (Y+R=0.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:      100                Level Of Service:                  A
*******************************************************************************
Street Name:     Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected         Permitted        Permitted
Rights:          Include          Include          Include          Include
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Lanes:        1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      12  531   24    62  647   48    40    1   21    14    2   50
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:   12  534   24    62  650   48    40    1   21    14    2   50
Added Vol:      0    0    0    44    5    0     0    0    0     0    0    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:   12  534   24   106  655   48    40    1   21    14    2   50
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    12  534   24   106  655   48    40    1   21    14    2   50
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   12  534   24   106  655   48    40    1   21    14    2   50
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
FinalVolume:   12  534   24   106  655   48    40    1   21    14    2   50
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700 1700  1700 1700 1700  1700 1700 1700  1700 1700 1700
Adjustment:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Lanes:       1.00 2.00 1.00  1.00 2.00 1.00  0.98 0.02 1.00  1.00 1.00 1.00
Final Sat.:  1700 3400 1700  1700 3400 1700  1659   41 1700  1700 1700 1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.16 0.01  0.06 0.19 0.03  0.02 0.02 0.01  0.01 0.00 0.03
Crit Moves:       ****       ****            ****                        ****
*******************************************************************************
```

Year 2025 Without Project

```
--------------------------------------------------------------------------------
                              The Doheny Hotel
                          Year 2025 Without Project
                          Weekday Morning Peak Hour
--------------------------------------------------------------------------------

                    Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100                Critical Vol./Cap.(X):         0.597
Loss Time (sec):        5 (Y+R=0.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100                Level Of Service:                  A
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:           Ovl             Include          Include          Include
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Lanes:       1  0  1  0  2   2  0  1  0  1   1  0  2  1  0   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     24   62   197   265   97   108    77 1047    49   361 1393   163
Growth Adj:  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:  25   64   204   275  100   112    80 1085    51   374 1443   169
Added Vol:     0   21    89    14   13    67    41   68     0   131  116     9
PasserByVol:   0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  25   85   293   289  113   179   121 1153    51   505 1559   178
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   25   85   293   289  113   179   121 1153    51   505 1559   178
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  25   85   293   289  113   179   121 1153    51   505 1559   178
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  25   85   293   289  113   179   121 1153    51   505 1559   178
OvlAdjVol:                  0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 2.87  0.13  2.00 2.69  0.31
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 4885   215  3400 4578   522
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.05  0.09  0.08 0.07  0.11  0.07 0.24  0.24  0.15 0.34  0.34
OvlAdjV/S:                0.00
Crit Moves:       ****        ****             ****                  ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                           The Doheny Hotel
                       Year 2025 Without Project
                       Weekday Evening Peak Hour
--------------------------------------------------------------------------------
                    Level Of Service Computation Report
     ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100                Critical Vol./Cap.(X):        0.785
Loss Time (sec):        5 (Y+R=0.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100                Level Of Service:                 C
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:     North Bound      South Bound       East Bound        West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:           Ovl            Include          Include          Include
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Lanes:       1  0  1  0  2   2  0  1  0  1   1  0  2  1  0   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      49  138   459   229  104   138   144 1308    70   333 1551   237
Growth Adj:  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:   51  143   476   237  108   143   149 1355    73   345 1607   246
Added Vol:      0   37   143    23   18    95   116  189     0   169  142    26
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   51  180   619   260  126   238   265 1544    73   514 1749   272
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    51  180   619   260  126   238   265 1544    73   514 1749   272
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   51  180   619   260  126   238   265 1544    73   514 1749   272
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   51  180   619   260  126   238   265 1544    73   514 1749   272
OvlAdjVol:               105
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 2.87  0.13  2.00 2.60  0.40
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 4871   229  3400 4415   685
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.11  0.18  0.08 0.07  0.14  0.16 0.32  0.32  0.15 0.40  0.40
OvlAdjV/S:              0.03
Crit Moves:       ****        ****             ****                  ****
********************************************************************************
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The Doheny Hotel
Year 2025 Without Project
Saturday Mid-day Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.763
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Street Name:	Del Obispo Street/Dana Point Harb						Pacific Coast Highway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	63	105	396	209	102	132	146	1248	118	468	1262	187
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	65	109	410	217	106	137	151	1293	122	485	1307	194
Added Vol:	0	19	121	32	19	137	138	196	0	146	214	36
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	65	128	531	249	125	274	289	1489	122	631	1521	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	65	128	531	249	125	274	289	1489	122	631	1521	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	128	531	249	125	274	289	1489	122	631	1521	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	65	128	531	249	125	274	289	1489	122	631	1521	230
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	2.77	0.23	2.00	2.61	0.39
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	4713	387	3400	4431	669
Capacity Analysis Module:												
Vol/Sat:	0.04	0.08	0.16	0.07	0.07	0.16	0.17	0.32	0.32	0.19	0.34	0.34
OvlAdjV/S:			0.00									
Crit Moves:	****					****	****				****	

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--------------------------------------------------------------------------------
                          The Doheny Hotel
                     Year 2025 Without Project
                     Weekday Morning Peak Hour
--------------------------------------------------------------------------------

                 Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):          0.238
Loss Time (sec):       5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:       100              Level Of Service:                   A
********************************************************************************
Street Name:      Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Permitted        Permitted
Rights:           Include          Include           Include          Ignore
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:         1  0  2  0  1    1  0  2  0  1    0  1  0  0  1    1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      9   240    10   28   397    82   27     1    13    4     1    16
Growth Adj:  1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04
Initial Bse:   9   249    10   29   411    85   28     1    13    4     1    17
Added Vol:     0   109     0    0   143     0    0     0     0    0     0     0
PasserByVol:   0     0     0    0     0     0    0     0     0    0     0     0
Initial Fut:   9   358    10   29   554    85   28     1    13    4     1    17
User Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  0.00
PHF Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  0.00
PHF Volume:    9   358    10   29   554    85   28     1    13    4     1     0
Reduct Vol:    0     0     0    0     0     0    0     0     0    0     0     0
Reduced Vol:   9   358    10   29   554    85   28     1    13    4     1     0
PCE Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  0.00
MLF Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  0.00
FinalVolume:   9   358    10   29   554    85   28     1    13    4     1     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700  1700
Adjustment:  1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Lanes:       1.00  2.00  1.00 1.00  2.00  1.00 0.96  0.04  1.00 1.00  1.00  1.00
Final Sat.:  1700  3400  1700 1700  3400  1700 1639    61  1700 1700  1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01  0.11  0.01 0.02  0.16  0.05 0.02  0.02  0.01 0.00  0.00  0.00
Crit Moves:  ****                   ****             ****       ****
********************************************************************************
```

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------------------------------------------------------------------------------
                              The Doheny Hotel
                          Year 2025 Without Project
                          Weekday Evening Peak Hour
------------------------------------------------------------------------------

                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
******************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
******************************************************************************
Cycle (sec):          100                  Critical Vol./Cap.(X):        0.350
Loss Time (sec):        5 (Y+R=0.0 sec)    Average Delay (sec/veh):     xxxxxx
Optimal Cycle:        100                  Level Of Service:                 A
******************************************************************************
Street Name:       Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:        North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:          Protected        Protected        Permitted        Permitted
Rights:            Include          Include          Include           Ignore
Min. Green:     0     0     0    0     0     0    0     0     0    0     0     0
Lanes:         1  0  2  0  1    1  0  2  0  1    0  1  0  0  1    1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      14   502    13    37   424    42   106     1    19    10     1    38
Growth Adj:  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04
Initial Bse:   15   520    13    38   439    44   110     1    20    10     1    39
Added Vol:      0   180     0     0   187     0     0     0     0     0     0     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:   15   700    13    38   626    44   110     1    20    10     1    39
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
PHF Volume:    15   700    13    38   626    44   110     1    20    10     1     0
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   15   700    13    38   626    44   110     1    20    10     1     0
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
FinalVolume:   15   700    13    38   626    44   110     1    20    10     1     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  2.00  1.00  1.00  2.00  1.00  0.99  0.01  1.00  1.00  1.00  1.00
Final Sat.:  1700  3400  1700  1700  3400  1700  1684    16  1700  1700  1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01  0.21  0.01  0.02  0.18  0.03  0.06  0.07  0.01  0.01  0.00  0.00
Crit Moves:         ****       ****                    ****        ****
******************************************************************************
```

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--------------------------------------------------------------------------------
                              The Doheny Hotel
                          Year 2025 Without Project
                         Saturday Mid-day Peak Hour
--------------------------------------------------------------------------------

                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100                Critical Vol./Cap.(X):          0.315
Loss Time (sec):        5 (Y+R=0.0 sec)  Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        100                Level Of Service:                   A
********************************************************************************
Street Name:     Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound       East Bound      West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected         Permitted        Permitted
Rights:          Include          Include          Include          Ignore
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:       1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     11   483    22   56   588    44   36     1    19   13     2    45
Growth Adj: 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04
Initial Bse:  11   500    23   58   609    46   37     1    20   13     2    47
Added Vol:     0   140     0    0   166     0    0     0     0    0     0     0
PasserByVol:   0     0     0    0     0     0    0     0     0    0     0     0
Initial Fut:  11   640    23   58   775    46   37     1    20   13     2    47
User Adj:   1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  0.00
PHF Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  0.00
PHF Volume:   11   640    23   58   775    46   37     1    20   13     2     0
Reduct Vol:    0     0     0    0     0     0    0     0     0    0     0     0
Reduced Vol:  11   640    23   58   775    46   37     1    20   13     2     0
PCE Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  0.00
MLF Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  0.00
FinalVolume:  11   640    23   58   775    46   37     1    20   13     2     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700  1700
Adjustment: 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Lanes:      1.00  2.00  1.00 1.00  2.00  1.00 0.97  0.03  1.00 1.00  1.00  1.00
Final Sat.: 1700  3400  1700 1700  3400  1700 1654    46  1700 1700  1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.01  0.19  0.01 0.03  0.23  0.03 0.02  0.02  0.01 0.01  0.00  0.00
Crit Moves: ****                   ****             ****        ****
********************************************************************************
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Year 2025 Without Project – Peak Season

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-----------------------------------------------------------------------------
                            The Doheny Hotel
                      Year 2025 Without Project
                Weekday Morning Peak Hour - Peak Season
-----------------------------------------------------------------------------

                  Level Of Service Computation Report
      ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*****************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
*****************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):          0.645
Loss Time (sec):       5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:       100              Level Of Service:                   B
*****************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:           Ovl            Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:       1  0  1  0  2   2  0  1  0  1   1  0  2  1  0   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      26    68   217   292   107   119    85  1152    54   397  1532   179
Growth Adj:  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04
Initial Bse:   27    70   225   303   111   123    88  1193    56   411  1587   185
Added Vol:      0    21    89    14    13    67    41    68     0   131   116     9
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:   27    91   314   317   124   190   129  1261    56   542  1703   194
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    27    91   314   317   124   190   129  1261    56   542  1703   194
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   27    91   314   317   124   190   129  1261    56   542  1703   194
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
FinalVolume:   27    91   314   317   124   190   129  1261    56   542  1703   194
OvlAdjVol:                  0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  1.00  2.00  2.00  1.00  1.00  1.00  2.87  0.13  2.00  2.69  0.31
Final Sat.:  1700  1700  3400  3400  1700  1700  1700  4883   217  3400  4577   523
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02  0.05  0.09  0.09  0.07  0.11  0.08  0.26  0.26  0.16  0.37  0.37
OvlAdjV/S:               0.00
Crit Moves:        ****  ****              ****                    ****
*****************************************************************************
```

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--------------------------------------------------------------------------------
                              The Doheny Hotel
                          Year 2025 Without Project
                  Weekday Evening Peak Hour - Peak Season
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):        100              Critical Vol./Cap.(X):         0.845
Loss Time (sec):      5 (Y+R=0.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:      100              Level Of Service:                  D
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb      Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:            Ovl            Include          Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:       1  0  1  0  2   2  0  1  0  1   1  0  2  1  0   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     54  152   505   252  114   152   158 1439    77   366 1706   261
Growth Adj: 1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:  56  157   523   261  118   157   164 1491    80   379 1767   270
Added Vol:     0   37     1    23   18    95   116  189     0    21  142    26
PasserByVol:   0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  56  194   524   284  136   252   280 1680    80   400 1909   296
User Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   56  194   524   284  136   252   280 1680    80   400 1909   296
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  56  194   524   284  136   252   280 1680    80   400 1909   296
PCE Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  56  194   524   284  136   252   280 1680    80   400 1909   296
OvlAdjVol:              124
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:      1.00 1.00  2.00  2.00 1.00  1.00  1.00 2.86  0.14  2.00 2.60  0.40
Final Sat.: 1700 1700  3400  3400 1700  1700  1700 4869   231  3400 4415   685
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.03 0.11  0.15  0.08 0.08  0.15  0.16 0.35  0.35  0.12 0.43  0.43
OvlAdjV/S:             0.04
Crit Moves:      ****        ****             ****                  ****
********************************************************************************
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--------------------------------------------------------------------------------
                              The Doheny Hotel
                          Year 2025 Without Project
                   Saturday Mid-day Peak Hour - Peak Season
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):         0.813
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100              Level Of Service:                  D
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb      Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:            Ovl            Include          Include          Include
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Lanes:       1  0  1  0  2   2  0  1  0  1   1  0  2  1  0   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      69  116  436   230  112  145   161 1412  130   515 1388  206
Growth Adj:  1.04 1.04 1.04  1.04 1.04 1.04  1.04 1.04 1.04  1.04 1.04 1.04
Initial Bse:   71  120  452   238  116  150   167 1463  135   534 1438  213
Added Vol:      0   33  107    32   19  137   138  196    0   146  214   36
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:   71  153  559   270  135  287   305 1659  135   680 1652  249
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    71  153  559   270  135  287   305 1659  135   680 1652  249
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   71  153  559   270  135  287   305 1659  135   680 1652  249
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
FinalVolume:   71  153  559   270  135  287   305 1659  135   680 1652  249
OvlAdjVol:                0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700 1700  1700 1700 1700  1700 1700 1700  1700 1700 1700
Adjustment:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Lanes:       1.00 1.00 2.00  2.00 1.00 1.00  1.00 2.77 0.23  2.00 2.61 0.39
Final Sat.:  1700 1700 3400  3400 1700 1700  1700 4717  383  3400 4431  669
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.09 0.16  0.08 0.08 0.17  0.18 0.35 0.35  0.20 0.37 0.37
OvlAdjV/S:                0.00
Crit Moves:  ****                      ****  ****                   ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                               The Doheny Hotel
                          Year 2025 Without Project
                   Weekday Morning Peak Hour - Peak Season
--------------------------------------------------------------------------------

                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):         0.253
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100               Level Of Service:                  A
********************************************************************************
Street Name:     Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected         Permitted        Permitted
Rights:          Include          Include          Include           Ignore
Min. Green:   0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        1  0  2  0  1    1  0  2  0  1    0  1  0  0  1    1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      10  264    11    31  437    90    30    1    14     4    1    18
Growth Adj:  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:   10  274    11    32  453    93    31    1    15     4    1    19
Added Vol:      0  109     0     0  143     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   10  383    11    32  596    93    31    1    15     4    1    19
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    10  383    11    32  596    93    31    1    15     4    1     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   10  383    11    32  596    93    31    1    15     4    1     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   10  383    11    32  596    93    31    1    15     4    1     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 2.00  1.00  1.00 2.00  1.00  0.97 0.03  1.00  1.00 1.00  1.00
Final Sat.:  1700 3400  1700  1700 3400  1700  1645   55  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.11  0.01  0.02 0.18  0.05  0.02 0.02  0.01  0.00 0.00  0.00
Crit Moves:  ****                  ****             ****        ****
********************************************************************************
```

The Doheny Hotel
Year 2025 Without Project
Weekday Evening Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach

Cycle (sec):	100	Critical Vol./Cap.(X):	0.333
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Street Name:	Dana Point Harbor Drive		Park Lantern/Doheny State Beach	
Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Protected	Protected	Permitted	Permitted
Rights:	Include	Include	Include	Ignore
Lanes:	1 0 2 0 1	1 0 2 0 1	0 1 0 0 1	1 0 1 0 1

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	15	552	14	41	466	51	117	1	21	11	1	42
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	16	572	15	42	483	53	121	1	22	11	1	44
Added Vol:	0	39	0	0	39	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	611	15	42	522	53	121	1	22	11	1	44
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	16	611	15	42	522	53	121	1	22	11	1	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	611	15	42	522	53	121	1	22	11	1	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	16	611	15	42	522	53	121	1	22	11	1	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.99	0.01	1.00	1.00	1.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1686	14	1700	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.18	0.01	0.02	0.15	0.03	0.07	0.07	0.01	0.01	0.00	0.00
Crit Moves:		****		****				****		****		

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--------------------------------------------------------------------------------
                            The Doheny Hotel
                        Year 2025 Without Project
                 Saturday Mid-day Peak Hour - Peak Season
--------------------------------------------------------------------------------

                   Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):        100               Critical Vol./Cap.(X):        0.337
Loss Time (sec):      5 (Y+R=0.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:      100               Level Of Service:                 A
********************************************************************************
Street Name:     Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected         Permitted        Permitted
Rights:         Include          Include           Include          Ignore
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      12   531    24    62   647    48    40     1    21    14     2    50
Growth Adj:  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04
Initial Bse:   12   550    25    64   670    50    41     1    22    15     2    52
Added Vol:      0   140     0     0   166     0     0     0     0     0     0     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:   12   690    25    64   836    50    41     1    22    15     2    52
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
PHF Volume:    12   690    25    64   836    50    41     1    22    15     2     0
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   12   690    25    64   836    50    41     1    22    15     2     0
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
FinalVolume:   12   690    25    64   836    50    41     1    22    15     2     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  2.00  1.00  1.00  2.00  1.00  0.98  0.02  1.00  1.00  1.00  1.00
Final Sat.:  1700  3400  1700  1700  3400  1700  1659    41  1700  1700  1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01  0.20  0.01  0.04  0.25  0.03  0.02  0.02  0.01  0.01  0.00  0.00
Crit Moves:  ****                    ****              ****        ****
********************************************************************************
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Year 2025 With Project

The Doheny Hotel
Year 2025 With Project
Weekday Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.600
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	Del Obispo Street/Dana Point Harb						Pacific Coast Highway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	24	62	197	265	97	108	77	1047	49	361	1393	163
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	25	64	204	275	100	112	80	1085	51	374	1443	169
Added Vol:	9	27	101	14	24	67	41	68	22	153	116	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	34	91	305	289	124	179	121	1153	73	527	1559	178
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	91	305	289	124	179	121	1153	73	527	1559	178
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	91	305	289	124	179	121	1153	73	527	1559	178
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	91	305	289	124	179	121	1153	73	527	1559	178
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	3.00	1.00	2.00	2.69	0.31
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	5100	1700	3400	4578	522
Capacity Analysis Module:												
Vol/Sat:	0.02	0.05	0.09	0.08	0.07	0.11	0.07	0.23	0.04	0.15	0.34	0.34
OvlAdjV/S:			0.00									
Crit Moves:		****		****			****				****	

The Doheny Hotel
Year 2025 With Project
Weekday Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.790
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Street Name:	Del Obispo Street/Dana Point Harb						Pacific Coast Highway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	49	138	459	229	104	138	144	1308	70	333	1551	237
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	51	143	476	237	108	143	149	1355	73	345	1607	246
Added Vol:	15	47	162	23	29	95	116	189	22	191	142	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	66	190	638	260	137	238	265	1544	95	536	1749	272
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	66	190	638	260	137	238	265	1544	95	536	1749	272
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	190	638	260	137	238	265	1544	95	536	1749	272
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	66	190	638	260	137	238	265	1544	95	536	1749	272
OvlAdjVol:			102									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	3.00	1.00	2.00	2.60	0.40
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	5100	1700	3400	4415	685
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.19	0.08	0.08	0.14	0.16	0.30	0.06	0.16	0.40	0.40
OvlAdjV/S:			0.03									
Crit Moves:		****		****			****				****	

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--------------------------------------------------------------------------------
                           The Doheny Hotel
                       Year 2025 With Project
                      Saturday Mid-day Peak Hour
--------------------------------------------------------------------------------

                   Level Of Service Computation Report
      ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):        100              Critical Vol./Cap.(X):        0.772
Loss Time (sec):      5 (Y+R=0.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:      100              Level Of Service:                 C
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected         Protected         Protected
Rights:           Ovl            Include           Include           Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:       1  0  1  0  2    2  0  1  0  1    1  0  3  0  1    2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     63   105   396   209   102   132   146  1248   118   468  1262   187
Growth Adj:  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04
Initial Bse:  65   109   410   217   106   137   151  1293   122   485  1307   194
Added Vol:    15    29   140    32    32   137   138   196    26   172   214    36
PasserByVol:   0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:  80   138   550   249   138   274   289  1489   148   657  1521   230
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:   80   138   550   249   138   274   289  1489   148   657  1521   230
Reduct Vol:    0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:  80   138   550   249   138   274   289  1489   148   657  1521   230
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
FinalVolume:  80   138   550   249   138   274   289  1489   148   657  1521   230
OvlAdjVol:                 0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  1.00  2.00  2.00  1.00  1.00  1.00  3.00  1.00  2.00  2.61  0.39
Final Sat.:  1700  1700  3400  3400  1700  1700  1700  5100  1700  3400  4431   669
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05  0.08  0.16  0.07  0.08  0.16  0.17  0.29  0.09  0.19  0.34  0.34
OvlAdjV/S:               0.00
Crit Moves:  ****                          ****  ****                    ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                              The Doheny Hotel
                           Year 2025 With Project
                 Weekday Morning Peak Hour - With Improvements
--------------------------------------------------------------------------------

                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):          0.570
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        100               Level Of Service:                   A
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb      Pacific Coast Highway
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected         Protected        Protected
Rights:           Ovl            Include           Include          Include
Min. Green:    0    0    0    0    0    0     0    0    0     0    0    0
Lanes:        1  0  1  0  2   2  0  1  0  2    2  0  3  0  1    2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      24   62  197   265   97  108     77 1047   49    361 1393  163
Growth Adj:  1.04 1.04 1.04  1.04 1.04 1.04   1.04 1.04 1.04   1.04 1.04 1.04
Initial Bse:   25   64  204   275  100  112     80 1085   51    374 1443  169
Added Vol:      9   27  101    14   24   67     41   68   22    153  116    9
PasserByVol:    0    0    0     0    0    0      0    0    0      0    0    0
Initial Fut:   34   91  305   289  124  179    121 1153   73    527 1559  178
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
PHF Volume:    34   91  305   289  124  179    121 1153   73    527 1559  178
Reduct Vol:     0    0    0     0    0    0      0    0    0      0    0    0
Reduced Vol:   34   91  305   289  124  179    121 1153   73    527 1559  178
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
FinalVolume:   34   91  305   289  124  179    121 1153   73    527 1559  178
OvlAdjVol:                0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700 1700  1700 1700 1700   1700 1700 1700   1700 1700 1700
Adjustment:  1.00 1.00 1.00  1.00 1.00 1.00   1.00 1.00 1.00   1.00 1.00 1.00
Lanes:       1.00 1.00 2.00  2.00 1.00 2.00   2.00 3.00 1.00   2.00 2.69 0.31
Final Sat.:  1700 1700 3400  3400 1700 3400   3400 5100 1700   3400 4578  522
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.05 0.09  0.08 0.07 0.05   0.04 0.23 0.04   0.15 0.34 0.34
OvlAdjV/S:                0.00
Crit Moves:       ****       ****                  ****         ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                              The Doheny Hotel
                           Year 2025 With Project
                 Weekday Evening Peak Hour - With Improvements
--------------------------------------------------------------------------------

                      Level Of Service Computation Report
      ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):        0.712
Loss Time (sec):       5 (Y+R=0.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100              Level Of Service:                 C
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb      Pacific Coast Highway
Approach:     North Bound     South Bound     East Bound      West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected       Protected       Protected       Protected
Rights:           Ovl           Include         Include         Include
Min. Green:   0    0    0    0    0    0    0    0    0    0    0    0
Lanes:       1  0  1  0  2   2  0  1  0  2   2  0  3  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     49  138   459   229  104   138   144 1308    70   333 1551   237
Growth Adj: 1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:  51  143   476   237  108   143   149 1355    73   345 1607   246
Added Vol:    15   47   162    23   29    95   116  189    22   191  142    26
PasserByVol:   0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  66  190   638   260  137   238   265 1544    95   536 1749   272
User Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   66  190   638   260  137   238   265 1544    95   536 1749   272
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  66  190   638   260  137   238   265 1544    95   536 1749   272
PCE Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  66  190   638   260  137   238   265 1544    95   536 1749   272
OvlAdjVol:              102
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:      1.00 1.00  2.00  2.00 1.00  2.00  2.00 3.00  1.00  2.00 2.60  0.40
Final Sat.: 1700 1700  3400  3400 1700  3400  3400 5100  1700  3400 4415   685
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.04 0.11  0.19  0.08 0.08  0.07  0.08 0.30  0.06  0.16 0.40  0.40
OvlAdjV/S:             0.03
Crit Moves:      ****        ****             ****                   ****
********************************************************************************
```

The Doheny Hotel
Year 2025 With Project
Saturday Mid-day Peak Hour - With Improvements

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.689
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	Del Obispo Street/Dana Point Harb						Pacific Coast Highway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	2	2 0	1 0	2	2 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	63	105	396	209	102	132	146	1248	118	468	1262	187
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	65	109	410	217	106	137	151	1293	122	485	1307	194
Added Vol:	15	29	140	32	32	137	138	196	26	172	214	36
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	80	138	550	249	138	274	289	1489	148	657	1521	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	138	550	249	138	274	289	1489	148	657	1521	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	138	550	249	138	274	289	1489	148	657	1521	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	138	550	249	138	274	289	1489	148	657	1521	230
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	2.00	2.00	3.00	1.00	2.00	2.61	0.39
Final Sat.:	1700	1700	3400	3400	1700	3400	3400	5100	1700	3400	4431	669
Capacity Analysis Module:												
Vol/Sat:	0.05	0.08	0.16	0.07	0.08	0.08	0.09	0.29	0.09	0.19	0.34	0.34
OvlAdjV/S:			0.00									
Crit Moves:		****		****				****		****		

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------------------------------------------------------------------------------
                              The Doheny Hotel
                           Year 2025 With Project
                         Weekday Morning Peak Hour
------------------------------------------------------------------------------

                    Level Of Service Computation Report
          2000 HCM Unsignalized Method (Future Volume Alternative)
******************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
******************************************************************************
Average Delay (sec/veh):       0.3       Worst Case Level Of Service: B[ 10.7]
******************************************************************************
Street Name:      Dana Point Harbor Drive                Project Access
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:            Include          Include          Include          Include
Lanes:         0  0  2  0  0   0  0  2  0  1   0  0  0  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0  283     0     0  507     0     0     0     0     0     0     0
Growth Adj:   1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:     0  293     0     0  525     0     0     0     0     0     0     0
Added Vol:       0  137     0     0  143    56     0     0    31     0     0     0
PasserByVol:     0    0     0     0    0     0     0     0     0     0     0     0
Initial Fut:     0  430     0     0  668    56     0     0    31     0     0     0
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:      0  430     0     0  668    56     0     0    31     0     0     0
Reduct Vol:      0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:     0  430     0     0  668    56     0     0    31     0     0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   334  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   668  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   668  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.05  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.1  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.7 xxxxx xxxx xxxxx
LOS by Move:     *    *     *     *    *     *     *    *     B     *    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      xxxxxx           xxxxxx            10.7           xxxxxx
ApproachLOS:         *                *                B                *
******************************************************************************
Note: Queue reported is the number of cars per lane.
******************************************************************************
```

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--------------------------------------------------------------------------------
                              The Doheny Hotel
                          Year 2025 With Project
                          Weekday Evening Peak Hour
--------------------------------------------------------------------------------

                      Level Of Service Computation Report
          2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):       0.3      Worst Case Level Of Service: B[ 11.0]
********************************************************************************
Street Name:      Dana Point Harbor Drive                Project Access
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Lanes:         0  0  2  0  0   0  0  2  0  1   0  0  0  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0  646     0     0  507     0     0     0     0     0     0     0
Growth Adj:   1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:     0  669     0     0  525     0     0     0     0     0     0     0
Added Vol:       0  224     0     0  187    55     0     0    49     0     0     0
PasserByVol:     0    0     0     0    0     0     0     0     0     0     0     0
Initial Fut:     0  893     0     0  712    55     0     0    49     0     0     0
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:      0  893     0     0  712    55     0     0    49     0     0     0
Reduct Vol:      0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:     0  893     0     0  712    55     0     0    49     0     0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   356  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   646  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   646  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.08  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  11.0 xxxxx xxxx xxxxx
LOS by Move:     *    *     *     *    *     *     *    *     B     *    *     *
Movement:      LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:        xxxxxx           xxxxxx             11.0           xxxxxx
ApproachLOS:           *                *                 B                *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
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-------------------------------------------------------------------------------
                             The Doheny Hotel
                          Year 2025 With Project
                        Saturday Mid-day Peak Hour
-------------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):       0.3       Worst Case Level Of Service: B[ 11.9]
********************************************************************************
Street Name:      Dana Point Harbor Drive               Project Access
Approach:       North Bound       South Bound       East Bound        West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Uncontrolled      Uncontrolled       Stop Sign         Stop Sign
Rights:            Include           Include           Include           Include
Lanes:         0  0  2  0  0    0  0  2  0  1    0  0  0  0  1    0  0  0  0  0
------------|----------------||----------------||----------------||----------------|
Volume Module:
Base Vol:        0  564     0     0  688     0     0     0     0     0     0     0
Growth Adj:   1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:     0  584     0     0  713     0     0     0     0     0     0     0
Added Vol:       0  184     0     0  166    65     0     0    49     0     0     0
PasserByVol:     0    0     0     0    0     0     0     0     0     0     0     0
Initial Fut:     0  768     0     0  879    65     0     0    49     0     0     0
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:      0  768     0     0  879    65     0     0    49     0     0     0
Reduct Vol:      0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:     0  768     0     0  879    65     0     0    49     0     0     0
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   439  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   571  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   571  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.09  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.3  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  11.9 xxxxx xxxx xxxxx
LOS by Move:     *    *     *     *    *     *     *    *     B     *    *     *
Movement:      LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      xxxxxx            xxxxxx             11.9            xxxxxx
ApproachLOS:         *                 *                 B                 *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
```

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---------------------------------------------------------------------------------
                              The Doheny Hotel
                           Year 2025 With Project
                          Weekday Morning Peak Hour
---------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
*********************************************************************************
Cycle (sec):          100                Critical Vol./Cap.(X):          0.246
Loss Time (sec):        5 (Y+R=0.0 sec)  Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        100                Level Of Service:                   A
*********************************************************************************
Street Name:     Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Permitted        Permitted
Rights:          Include          Include          Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:       1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      9  240    10    28  397    82    27    1    13     4    1    16
Growth Adj:  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:   9  249    10    29  411    85    28    1    13     4    1    17
Added Vol:     0  109     0    28  147     0     0    0     0     0    0     0
PasserByVol:   0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   9  358    10    57  558    85    28    1    13     4    1    17
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    9  358    10    57  558    85    28    1    13     4    1    17
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   9  358    10    57  558    85    28    1    13     4    1    17
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   9  358    10    57  558    85    28    1    13     4    1    17
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 2.00  1.00  1.00 2.00  1.00  0.96 0.04  1.00  1.00 1.00  1.00
Final Sat.:  1700 3400  1700  1700 3400  1700  1639   61  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.11  0.01  0.03 0.16  0.05  0.02 0.02  0.01  0.00 0.00  0.01
Crit Moves:  ****                  ****        ****                         ****
*********************************************************************************
```

```
--------------------------------------------------------------------------------
                              The Doheny Hotel
                            Year 2025 With Project
                          Weekday Evening Peak Hour
--------------------------------------------------------------------------------

                       Level Of Service Computation Report
      ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):          0.392
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        100              Level Of Service:                   A
********************************************************************************
Street Name:      Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Permitted        Permitted
Rights:          Include          Include          Include          Include
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Lanes:        1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     14  502    13    37  424    42   106    1    19    10    1    38
Growth Adj: 1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:  15  520    13    38  439    44   110    1    20    10    1    39
Added Vol:     0  180     0    44  192     0     0    0     0     0    0     0
PasserByVol:   0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  15  700    13    82  631    44   110    1    20    10    1    39
User Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   15  700    13    82  631    44   110    1    20    10    1    39
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  15  700    13    82  631    44   110    1    20    10    1    39
PCE Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  15  700    13    82  631    44   110    1    20    10    1    39
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:      1.00 2.00  1.00  1.00 2.00  1.00  0.99 0.01  1.00  1.00 1.00  1.00
Final Sat.: 1700 3400  1700  1700 3400  1700  1684   16  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.01 0.21  0.01  0.05 0.19  0.03  0.06 0.07  0.01  0.01 0.00  0.02
Crit Moves:      ****        ****             ****                         ****
********************************************************************************
```

```
------------------------------------------------------------------------------
                              The Doheny Hotel
                           Year 2025 With Project
                         Saturday Mid-day Peak Hour
------------------------------------------------------------------------------

                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
******************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
******************************************************************************
Cycle (sec):          100                Critical Vol./Cap.(X):         0.348
Loss Time (sec):        5 (Y+R=0.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100                Level Of Service:                  A
******************************************************************************
Street Name:       Dana Point Harbor Drive        Park Lantern/Doheny State Beach
Approach:        North Bound      South Bound       East Bound        West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected         Protected         Permitted         Permitted
Rights:           Include           Include           Include           Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:         1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       11   483    22    56   588    44    36     1    19    13     2    45
Growth Adj:   1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04
Initial Bse:    11   500    23    58   609    46    37     1    20    13     2    47
Added Vol:       0   140     0    44   171     0     0     0     0     0     0     0
PasserByVol:     0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:    11   640    23   102   780    46    37     1    20    13     2    47
User Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:      1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:     11   640    23   102   780    46    37     1    20    13     2    47
Reduct Vol:      0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:    11   640    23   102   780    46    37     1    20    13     2    47
PCE Adj:      1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:      1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
FinalVolume:    11   640    23   102   780    46    37     1    20    13     2    47
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700
Adjustment:   1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:        1.00  2.00  1.00  1.00  2.00  1.00  0.97  0.03  1.00  1.00  1.00  1.00
Final Sat.:   1700  3400  1700  1700  3400  1700  1654    46  1700  1700  1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.01  0.19  0.01  0.06  0.23  0.03  0.02  0.02  0.01  0.01  0.00  0.03
Crit Moves:         ****        ****              ****                          ****
******************************************************************************
```

Year 2025 With Project – Peak Season

The Doheny Hotel
Year 2025 With Project
Weekday Morning Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.648
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	Del Obispo Street/Dana Point Harb						Pacific Coast Highway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	26	68	217	292	107	119	85	1152	54	397	1532	179
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	27	70	225	303	111	123	88	1193	56	411	1587	185
Added Vol:	9	27	101	14	24	67	41	68	22	153	116	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	97	326	317	135	190	129	1261	78	564	1703	194
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	36	97	326	317	135	190	129	1261	78	564	1703	194
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	97	326	317	135	190	129	1261	78	564	1703	194
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	97	326	317	135	190	129	1261	78	564	1703	194
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	3.00	1.00	2.00	2.69	0.31
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	5100	1700	3400	4577	523
Capacity Analysis Module:												
Vol/Sat:	0.02	0.06	0.10	0.09	0.08	0.11	0.08	0.25	0.05	0.17	0.37	0.37
OvlAdjV/S:			0.00									
Crit Moves:		****		****			****				****	

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--------------------------------------------------------------------------------
                           The Doheny Hotel
                        Year 2025 With Project
                 Weekday Evening Peak Hour - Peak Season
--------------------------------------------------------------------------------
                  Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):         0.851
Loss Time (sec):       5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              Level Of Service:                  D
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:       Protected        Protected        Protected        Protected
Rights:           Ovl            Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:       1  0  1  0  2   2  0  1  0  1   1  0  3  0  1   2  0  2  1  0
------------|----------------||----------------||----------------||----------------|
Volume Module:
Base Vol:      54  152   505   252  114   152   158 1439    77   366 1706   261
Growth Adj:  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:   56  157   523   261  118   157   164 1491    80   379 1767   270
Added Vol:     15   47    21    23   29    95   116  189    22    43  142    26
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   71  204   544   284  147   252   280 1680   102   422 1909   296
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    71  204   544   284  147   252   280 1680   102   422 1909   296
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   71  204   544   284  147   252   280 1680   102   422 1909   296
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   71  204   544   284  147   252   280 1680   102   422 1909   296
OvlAdjVol:               122
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 3.00  1.00  2.00 2.60  0.40
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 5100  1700  3400 4415   685
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.12  0.16  0.08 0.09  0.15  0.16 0.33  0.06  0.12 0.43  0.43
OvlAdjV/S:              0.04
Crit Moves:       ****  ****              ****                   ****
********************************************************************************
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--------------------------------------------------------------------------------
                              The Doheny Hotel
                           Year 2025 With Project
                  Saturday Mid-day Peak Hour - Peak Season
--------------------------------------------------------------------------------

                       Level Of Service Computation Report
     ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100                 Critical Vol./Cap.(X):        0.822
Loss Time (sec):        5 (Y+R=0.0 sec)   Average Delay (sec/veh):     xxxxxx
Optimal Cycle:        100                 Level Of Service:                 D
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:      North Bound       South Bound       East Bound        West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected         Protected         Protected         Protected
Rights:           Ovl             Include           Include           Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:       1  0  1  0  2    2  0  1  0  1    1  0  3  0  1    2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     69   116   436   230   112   145   161  1412   130   515  1388   206
Growth Adj:  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04
Initial Bse:  71   120   452   238   116   150   167  1463   135   534  1438   213
Added Vol:    15    43   126    32    32   137   138   196    26   172   214    36
PasserByVol:   0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:  86   163   578   270   148   287   305  1659   161   706  1652   249
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:   86   163   578   270   148   287   305  1659   161   706  1652   249
Reduct Vol:    0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:  86   163   578   270   148   287   305  1659   161   706  1652   249
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
FinalVolume:  86   163   578   270   148   287   305  1659   161   706  1652   249
OvlAdjVol:                 0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  1.00  2.00  2.00  1.00  1.00  1.00  3.00  1.00  2.00  2.61  0.39
Final Sat.:  1700  1700  3400  3400  1700  1700  1700  5100  1700  3400  4431   669
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05  0.10  0.17  0.08  0.09  0.17  0.18  0.33  0.09  0.21  0.37  0.37
OvlAdjV/S:               0.00
Crit Moves:  ****                          ****  ****                     ****
********************************************************************************
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--------------------------------------------------------------------------------
                              The Doheny Hotel
                           Year 2025 With Project
                 Weekday Morning Peak Hour - Peak Season
--------------------------------------------------------------------------------

                    Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):         0.648
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100              Level Of Service:                  B
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:           Ovl            Include          Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:       1  0  1  0  2   2  0  1  0  2   1  0  3  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     26   68   217   292  107   119    85 1152    54   397 1532   179
Growth Adj: 1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:  27   70   225   303  111   123    88 1193    56   411 1587   185
Added Vol:     9   27   101    14   24    67    41   68    22   153  116     9
PasserByVol:   0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  36   97   326   317  135   190   129 1261    78   564 1703   194
User Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   36   97   326   317  135   190   129 1261    78   564 1703   194
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  36   97   326   317  135   190   129 1261    78   564 1703   194
PCE Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  36   97   326   317  135   190   129 1261    78   564 1703   194
OvlAdjVol:                  0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:      1.00 1.00  2.00  2.00 1.00  2.00  1.00 3.00  1.00  2.00 2.69  0.31
Final Sat.: 1700 1700  3400  3400 1700  3400  1700 5100  1700  3400 4577   523
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.02 0.06  0.10  0.09 0.08  0.06  0.08 0.25  0.05  0.17 0.37  0.37
OvlAdjV/S:             0.00
Crit Moves:      ****  ****              ****                        ****
********************************************************************************
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The Doheny Hotel
Year 2025 With Project
Weekday Evening Peak Hour - Peak Season - With Improvements

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100		Critical Vol./Cap.(X):	0.769
Loss Time (sec):	5	(Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100		Level Of Service:	C

Street Name: Del Obispo Street/Dana Point Harb — Pacific Coast Highway

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	2	2 0	1 0	2	2 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	54	152	505	252	114	152	158	1439	77	366	1706	261
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	56	157	523	261	118	157	164	1491	80	379	1767	270
Added Vol:	15	47	21	23	29	95	116	189	22	43	142	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	71	204	544	284	147	252	280	1680	102	422	1909	296
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	71	204	544	284	147	252	280	1680	102	422	1909	296
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	204	544	284	147	252	280	1680	102	422	1909	296
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	71	204	544	284	147	252	280	1680	102	422	1909	296
OvlAdjVol:			122									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	2.00	2.00	3.00	1.00	2.00	2.60	0.40
Final Sat.:	1700	1700	3400	3400	1700	3400	3400	5100	1700	3400	4415	685
Capacity Analysis Module:												
Vol/Sat:	0.04	0.12	0.16	0.08	0.09	0.07	0.08	0.33	0.06	0.12	0.43	0.43
OvlAdjV/S:			0.04									
Crit Moves:		****		****			****				****	

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-----------------------------------------------------------------------------
                             The Doheny Hotel
                          Year 2025 With Project
         Saturday Mid-day Peak Hour - Peak Season - With Improvements
-----------------------------------------------------------------------------
                    Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*****************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
*****************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):        0.758
Loss Time (sec):       5 (Y+R=0.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100               Level Of Service:                 C
*****************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:           Ovl            Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:       1  0  1  0  2   2  0  1  0  2   2  0  3  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      69  116   436   230  112   145   161 1412   130   515 1388   206
Growth Adj:  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:   71  120   452   238  116   150   167 1463   135   534 1438   213
Added Vol:     15   43   126    32   32   137   138  196    26   172  214    36
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   86  163   578   270  148   287   305 1659   161   706 1652   249
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    86  163   578   270  148   287   305 1659   161   706 1652   249
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   86  163   578   270  148   287   305 1659   161   706 1652   249
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   86  163   578   270  148   287   305 1659   161   706 1652   249
OvlAdjVol:                 0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  2.00  2.00 3.00  1.00  2.00 2.61  0.39
Final Sat.:  1700 1700  3400  3400 1700  3400  3400 5100  1700  3400 4431   669
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.10  0.17  0.08 0.09  0.08  0.09 0.33  0.09  0.21 0.37  0.37
OvlAdjV/S:                0.00
Crit Moves:       ****        ****                   ****        ****
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--------------------------------------------------------------------------------
                              The Doheny Hotel
                           Year 2025 With Project
                   Weekday Morning Peak Hour - Peak Season
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
          2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):       0.3       Worst Case Level Of Service: B[ 10.9]
********************************************************************************
Street Name:       Dana Point Harbor Drive                Project Access
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:            Include          Include          Include          Include
Lanes:         0  0  2  0  0   0  0  2  0  1   0  0  0  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0  311     0     0  558     0     0     0     0     0     0     0
Growth Adj:   1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:     0  322     0     0  578     0     0     0     0     0     0     0
Added Vol:       0  137     0     0  143    56     0     0    31     0     0     0
PasserByVol:     0    0     0     0    0     0     0     0     0     0     0     0
Initial Fut:     0  459     0     0  721    56     0     0    31     0     0     0
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:      0  459     0     0  721    56     0     0    31     0     0     0
Reduct Vol:      0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:     0  459     0     0  721    56     0     0    31     0     0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   361  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   642  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   642  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.05  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.9 xxxxx xxxx xxxxx
LOS by Move:     *    *     *     *    *     *     *    *     B     *    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      xxxxxx           xxxxxx             10.9            xxxxxx
ApproachLOS:         *                *                 B                *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
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--------------------------------------------------------------------------------
                              The Doheny Hotel
                          Year 2025 With Project
                   Weekday Evening Peak Hour - Peak Season
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
         2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):       0.3       Worst Case Level Of Service: B[ 10.6]
********************************************************************************
Street Name:     Dana Point Harbor Drive                  Project Access
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:      Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:          Include          Include          Include          Include
Lanes:        0  0  2  0  0   0  0  2  0  1   0  0  0  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  711     0     0  558     0     0    0     0     0    0     0
Growth Adj:  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:    0  737     0     0  578     0     0    0     0     0    0     0
Added Vol:      0   83     0     0   39    55     0    0    49     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0  820     0     0  617    55     0    0    49     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  820     0     0  617    55     0    0    49     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0  820     0     0  617    55     0    0    49     0    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   309  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   693  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   693  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.07  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.6 xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     B     *    *     *
Movement:      LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:     xxxxxx           xxxxxx            10.6            xxxxxx
ApproachLOS:        *                *                B                *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
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-------------------------------------------------------------------------------
                              The Doheny Hotel
                           Year 2025 With Project
                 Saturday Mid-day Peak Hour - Peak Season
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Unsignalized Method (Future Volume Alternative)
*******************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
*******************************************************************************
Average Delay (sec/veh):       0.3       Worst Case Level Of Service: B[ 12.3]
*******************************************************************************
Street Name:      Dana Point Harbor Drive                 Project Access
Approach:       North Bound      South Bound       East Bound        West Bound
Movement:      L  -  T  -  R   L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Uncontrolled     Uncontrolled       Stop Sign         Stop Sign
Rights:            Include          Include          Include           Include
Lanes:         0  0  2  0  0   0  0  2  0  1    0  0  0  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0  620     0     0  757     0     0     0     0     0     0     0
Growth Adj:   1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:     0  642     0     0  784     0     0     0     0     0     0     0
Added Vol:       0  184     0     0  166    65     0     0    49     0     0     0
PasserByVol:     0    0     0     0    0     0     0     0     0     0     0     0
Initial Fut:     0  826     0     0  950    65     0     0    49     0     0     0
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:      0  826     0     0  950    65     0     0    49     0     0     0
Reduct Vol:      0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:     0  826     0     0  950    65     0     0    49     0     0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   475  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   541  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   541  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.09  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.3  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  12.3 xxxxx xxxx xxxxx
LOS by Move:     *    *     *     *    *     *     *    *     B     *    *     *
Movement:      LT - LTR - RT   LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      xxxxxx           xxxxxx              12.3            xxxxxx
ApproachLOS:         *                *                  B                *
*******************************************************************************
Note: Queue reported is the number of cars per lane.
*******************************************************************************
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--------------------------------------------------------------------------------
                              The Doheny Hotel
                           Year 2025 With Project
                    Weekday Morning Peak Hour - Peak Season
--------------------------------------------------------------------------------

                      Level Of Service Computation Report
      ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):         0.262
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100              Level Of Service:                  A
********************************************************************************
Street Name:     Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected         Permitted        Permitted
Rights:          Include          Include           Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      10  264    11    31  437    90    30    1    14     4    1    18
Growth Adj:  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:   10  274    11    32  453    93    31    1    15     4    1    19
Added Vol:      0  109     0    28  147     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   10  383    11    60  600    93    31    1    15     4    1    19
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    10  383    11    60  600    93    31    1    15     4    1    19
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   10  383    11    60  600    93    31    1    15     4    1    19
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   10  383    11    60  600    93    31    1    15     4    1    19
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 2.00  1.00  1.00 2.00  1.00  0.97 0.03  1.00  1.00 1.00  1.00
Final Sat.:  1700 3400  1700  1700 3400  1700  1645   55  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.11  0.01  0.04 0.18  0.05  0.02 0.02  0.01  0.00 0.00  0.01
Crit Moves:  ****                  ****        ****                         ****
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--------------------------------------------------------------------------------
                             The Doheny Hotel
                          Year 2025 With Project
                  Weekday Evening Peak Hour - Peak Season
--------------------------------------------------------------------------------

                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):         0.377
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100               Level Of Service:                  A
********************************************************************************
Street Name:      Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:    0     0     0   0     0     0   0     0     0   0     0     0
Lanes:         1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      15  552    14    41  466    51   117    1    21    11    1    42
Growth Adj:  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:   16  572    15    42  483    53   121    1    22    11    1    44
Added Vol:      0   39     0    44   44     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   16  611    15    86  527    53   121    1    22    11    1    44
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    16  611    15    86  527    53   121    1    22    11    1    44
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   16  611    15    86  527    53   121    1    22    11    1    44
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   16  611    15    86  527    53   121    1    22    11    1    44
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 2.00  1.00  1.00 2.00  1.00  0.99 0.01  1.00  1.00 1.00  1.00
Final Sat.:  1700 3400  1700  1700 3400  1700  1686   14  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.18  0.01  0.05 0.15  0.03  0.07 0.07  0.01  0.01 0.00  0.03
Crit Moves:       ****        ****             ****                         ****
********************************************************************************
```

The Doheny Hotel
Year 2025 With Project
Saturday Mid-day Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach

Cycle (sec):	100	Critical Vol./Cap.(X):	0.371
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Street Name:	Dana Point Harbor Drive						Park Lantern/Doheny State Beach					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2 0 1			1 0 2 0 1			0 1 0 0 1			1 0 1 0 1		
Volume Module:												
Base Vol:	12	531	24	62	647	48	40	1	21	14	2	50
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	12	550	25	64	670	50	41	1	22	15	2	52
Added Vol:	0	140	0	44	171	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	690	25	108	841	50	41	1	22	15	2	52
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	690	25	108	841	50	41	1	22	15	2	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	690	25	108	841	50	41	1	22	15	2	52
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	12	690	25	108	841	50	41	1	22	15	2	52
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.98	0.02	1.00	1.00	1.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1659	41	1700	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.20	0.01	0.06	0.25	0.03	0.02	0.02	0.01	0.01	0.00	0.03
Crit Moves:		****		****			****					****

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Appendix J

Arch Beach Traffic Report

Kunzman Associates, Inc.

DOHENY HOTEL

TRAFFIC IMPACT ANALYSIS (REVISED)

August 2, 2012

Traffic Engineering | Transportation Planning | Parking | Noise/Vibration | Expert Witness
Air Quality | Global Climate Change | Health Risk Assessment

KUNZMAN ASSOCIATES, INC.

DOHENY HOTEL

TRAFFIC IMPACT ANALYSIS (REVISED)

August 2, 2012

Prepared by:

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Carl Ballard, LEED GA, and
William Kunzman, P.E.

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Doheny Hotel

Traffic Impact Analysis (Revised)

This report contains the revised traffic impact analysis for the Doheny Hotel project. The proposed development is located at the southwest corner of Del Obispo Street/Dana Point Harbor Drive and Pacific Coast Highway (SR-1) in the City of Dana Point. The proposed development consists of a 258 room hotel with a 12,103 square foot conference center/banquet facility and a 7,087 square foot restaurant. Parking for the proposed hotel totals 325 parking spaces and consists of 275 on-site parking spaces and 50 off-site overflow parking spaces.

The traffic report contains documentation of existing traffic conditions, existing traffic generated by the project, future traffic generated by the project, distribution of the project traffic to roads outside the project, and an analysis of Existing Plus Project traffic conditions, Opening Year (2013) traffic conditions without and with the project, and Year 2025 traffic conditions without and with the project. Each of these topics is contained in a separate section of the report. The first section is "Executive Summary", and subsequent sections expand upon this section. In this way, information on any particular aspect of the study can be easily located by the reader.

Although this is a technical report, every effort has been made to write the report clearly and concisely. To assist the reader with those terms unique to transportation engineering, a glossary of terms is provided within Appendix A.

I. Executive Summary

This section summarizes the existing traffic conditions, project traffic impacts, and the proposed mitigation measures.

A. Existing Traffic Conditions

1. The project site is currently developed with a 46 room hotel and a 1,277 square foot fast food restaurant with drive-thru and an approximately 1,000 square foot vacant commercial building.

2. Pursuant to the scoping agreement with the City of Dana Point staff, the study area includes the following intersections:

   Del Obispo Street/Dana Point Harbor Drive (NS) at:
   - Pacific Coast Highway (SR-1) (EW) - #1
   - Project Access (EW) - #2
   - Park Lantern (EW) - #3

3. The study area intersections currently operate within acceptable Levels of Service during the peak hours for Existing traffic conditions (see Table 1).

B. Traffic Impacts

1. The proposed development consists of a 258 room hotel with a 12,103 square foot conference center/banquet facility and a 7,087 square foot restaurant. Parking for the proposed hotel totals 325 parking spaces and consists of 275 on-site parking spaces and 50 off-site overflow parking spaces. The project site will continue to have access to Del Obispo Street/Dana Point Harbor Drive.

2. The proposed development is projected to generate approximately 1,409 additional daily vehicle trips on a weekday, 87 of which will occur during the morning peak hour and 104 of which will occur during the evening peak hour (see Table 2).

3. The proposed development is projected to generate approximately 1,266 additional daily vehicle trips on a Saturday, 114 of which will occur during the mid-day peak hour (see Table 2).

4. The study area intersections are projected to operate within acceptable Levels of Service during the peak hours for Existing Plus Project traffic conditions (see Table 3).

5. The study area intersections are projected to operate within acceptable Levels of Service during the peak hours for Opening Year (2013) Without Project traffic conditions (see Table 4).

6. The study area intersections are projected to operate within acceptable Levels of Service during the peak hours for Opening Year (2013) With Project traffic conditions (see Table 5).

7. Table 6 depicts the Opening Year (2013) With Project intersection traffic contribution at the study area intersections. As shown in Table 7, the project site does not significantly impact any study area intersections.

8. This traffic impact analysis other development information relies on the approved traffic impact analyses prepared for the Dana Point Harbor Revitalization Project, the Town Center Specific Plan, and the Makar project. The other development data from these studies have been approved and provided by the City of Dana Point. This data is the best available at the time the study was prepared.

9. The study area intersections are projected to operate within acceptable Levels of Service during the peak hours for Year 2025 Without Project traffic conditions (see Table 8).

10. The study area intersections are projected to operate within acceptable Levels of Service during the peak hours for Year 2025 With Project traffic conditions (see Table 9).

11. Table 10 depicts the Year 2025 With Project intersection traffic contribution at the study area intersections. As shown in Table 10, the project site does not significantly impact any study area intersections.

C. Recommendations

The following measures are recommended traffic conditions for the project:

1. Site-specific circulation and access recommendations are depicted on Figure 83.

2. Construct Del Obispo Street/Dana Point Harbor Drive from Pacific Coast Highway (SR-1) to the project south boundary at its ultimate half-section width as a Primary Arterial (100 foot right-of-way) including landscaping and parkway improvements in conjunction with development, as necessary.

3. Construct Pacific Coast Highway from the project west boundary to Del Obispo Street/Dana Point Harbor Drive at its ultimate half-section width as a Major Arterial (120 foot right-of-way) including landscaping and parkway improvements in conjunction with development, as necessary.

4. Construct an eastbound right turn lane at the intersection of Pacific Coast Highway and Del Obispo Street/Dana Point Harbor Drive. This is in conjunction with Item #3. The project applicant did submit street improvement plans (plan) that showed the construction of the southerly curb line along the proposed right turn lane. The dimensions shown on the plans shall be reviewed and approved by the City Engineer to assure that an additional eastbound left turn lane can be added at a later date as

needed. This is necessary to try to reduce the Level of Service impacts in Year 2025 for the weekday PM Peak Period and the Weekend Mid-day Peak Period, both shown to become Level of Service “D”. With the mitigation measures, the Level of Service would be reduced to Level of Service C or better for all periods.

5. Modify the intersection of Dana Point Harbor Drive at Park Lantern to allow for southbound u-turns which are currently prohibited. Implementation of this improvement will require the elimination of the existing westbound free right turn lane, physical modifications to the northeast corner of the intersection and the existing traffic signal. Implementation of these improvements will require review and approval from the City of Dana Point.

6. Sufficient on-site parking shall be provided to meet City of Dana Point parking code requirements.

7. Sight distance at the project access should be reviewed with respect to California Department of Transportation/City of Dana Point standards in conjunction with the preparation of final grading, landscaping, and street improvement plans.

8. On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project.

9. As is the case for any roadway design, the City of Dana Point should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

II. Project Description

This section discusses the project's location and proposed development. Figure 1 shows the project location map. Figure 2 illustrates the site plan.

A. <u>Location</u>

The proposed development is located at the southwest corner of Del Obispo Street/Dana Point Harbor Drive and Pacific Coast Highway (SR-1) in the City of Dana Point.

B. <u>Proposed Development</u>

The proposed development consists of a 258 room hotel with a 12,103 square foot conference center/banquet facility and a 7,087 square foot restaurant. Parking for the proposed hotel totals 325 parking spaces and consists of 275 on-site parking spaces and 50 off-site overflow parking spaces. The project site will continue to have access to Del Obispo Street/Dana Point Harbor Drive.

C. <u>Congestion Management Program Compliance</u>

The Orange County Congestion Management Program was established in 1991 to reduce traffic congestion and to provide a mechanism for coordinating land use development decisions. Compliance with the Congestion Management Program requirements ensures a city's eligibility to compete for State gas tax funds for local transportation projects.

Within the study area, the Congestion Management Program Highway System includes two arterials: Del Obispo Street/Dana Point Harbor Drive, Pacific Coast Highway (SR-1), and includes one intersection: Del Obispo Street/Dana Point Harbor Drive at Pacific Coast Highway (SR-1).

The Orange County Congestion Management Program states that "a Traffic Impact Analysis be required for congestion management purposes for all proposed developments generating 2,400 or more daily trips" and that "for developments which will directly access a Congestion Management Program Highway System link, the threshold for requiring a Traffic Impact Analysis should be reduced to 1,600 or more trips per day".

The Doheny Hotel project is estimated to generate 1,409 daily trips. Thus, the project is not required to comply with the Congestion Management Program Traffic Impact Analysis Guidelines.

Figure 1
Project Location Map

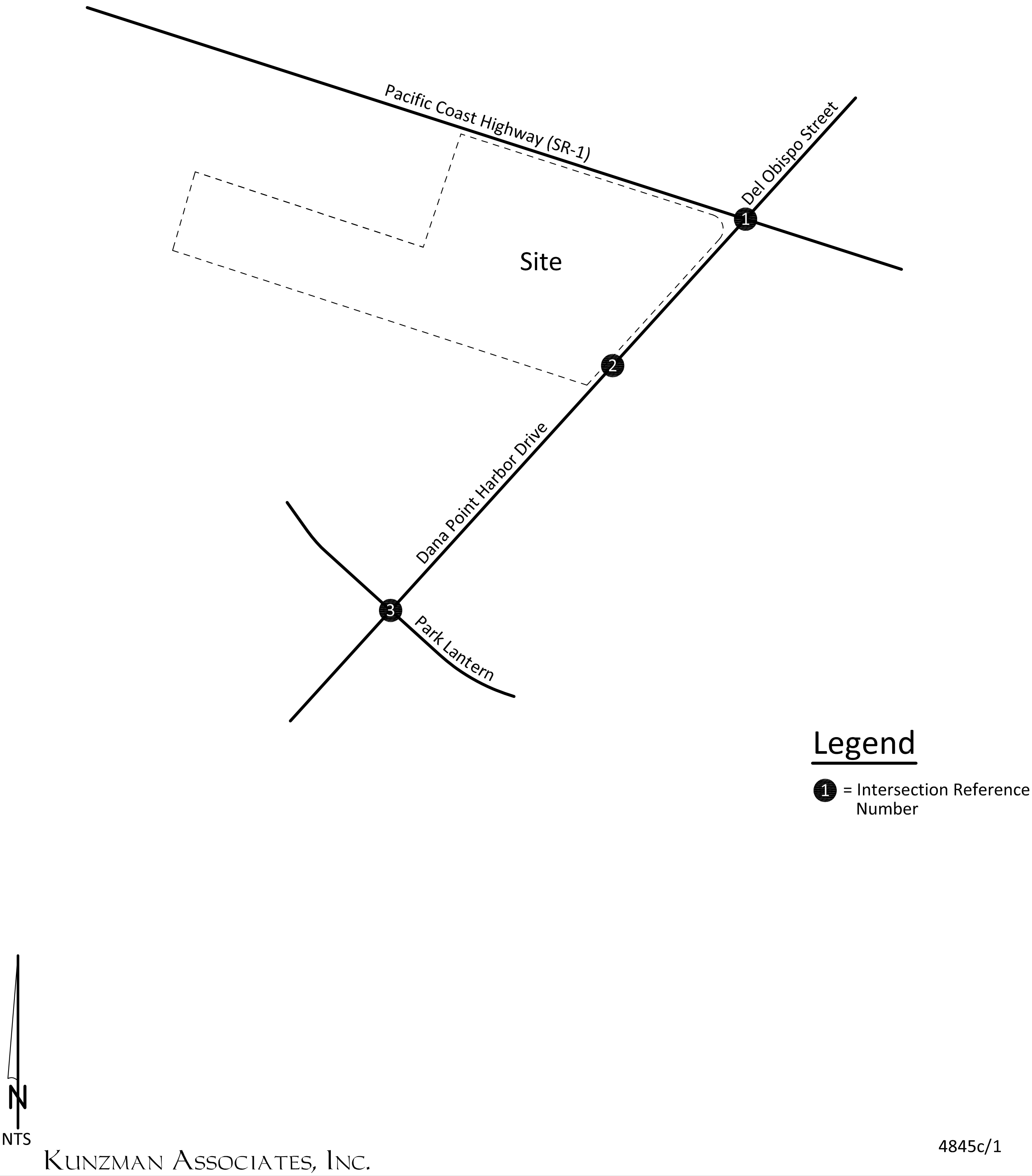

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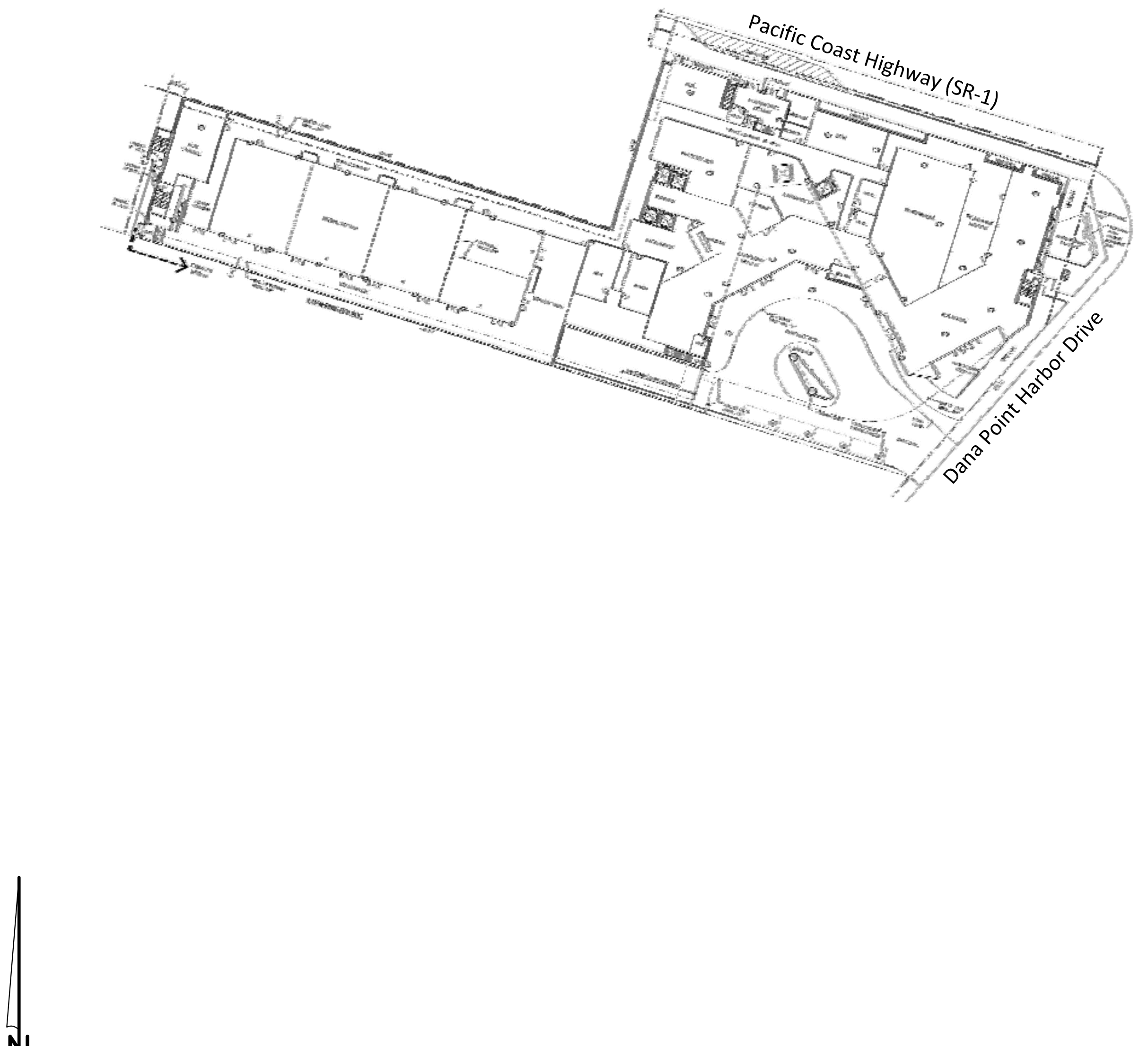
Figure 2
Site Plan



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III. Existing Traffic Conditions

The traffic conditions as they exist today are discussed below and illustrated on Figures 3 to 15.

A. Surrounding Street System

Study area roadways that will be utilized by the development include Del Obispo Street/Dana Point Harbor Drive, Pacific Coast Highway (SR-1), and Park Lantern.

Del Obispo Street/Dana Point Harbor Drive: This north-south roadway currently is four lanes divided in the study area. It is classified as a Primary Arterial (100 foot right-of-way) on the City of Dana Point General Plan Circulation Element. Del Obispo Street/Dana Point Harbor Drive currently carries approximately 10,600 to 11,900 vehicles per day in the study area during a weekday, 8,800 to 12,500 vehicles per day in the study area during a Saturday, 11,800 to 13,300 vehicles per day in the study area during a weekday during peak season, 9,700 to 13,800 vehicles per day in the study area during a Saturday during peak season.

Pacific Coast Highway (SR-1): This east-west roadway currently is six lanes divided in the study area. It is classified as a Major Arterial (120 foot right-of-way) on the City of Dana Point General Plan Circulation Element. Pacific Coast Highway (SR-1) currently carries approximately 33,000 to 41,600 vehicles per day in the study area during a weekday, 29,700 to 37,700 vehicles per day in the study area during a Saturday, 36,700 to 46,300 vehicles per day in the study area during a weekday during peak season, 33,100 to 41,900 vehicles per day in the study area during a Saturday during peak season.

Park Lantern: This east-west roadway currently is two lanes undivided to four lanes undivided in the study area. It is not classified on the City of Dana Point General Plan Circulation Element. Park Lantern currently carries approximately 1,000 to 1,800 vehicles per day in the study area during a weekday, 1,100 to 1,400 vehicles per day in the study area during a Saturday, 1,100 to 2,100 vehicles per day in the study area during a weekday during peak season, 1,200 to 1,500 vehicles per day in the study area during a Saturday during peak season.

B. Existing Travel Lanes and Intersection Controls

Figure 3 identifies the existing roadway conditions for study area roadways. The number of through lanes for existing roadways and the existing intersection controls are identified.

C. Existing Weekday Average Daily Traffic Volumes

Figure 4 depicts the existing weekday average daily traffic volumes. The existing weekday average daily traffic volumes have been obtained from the City of Dana Point 2011 Traffic Flow Map reduced by the peak season factor and factored from peak hour counts obtained by Kunzman Associates, Inc. in March 2011 (see Appendix B and C) using the following formula for each intersection leg:

Weekday PM Peak Hour (Approach Volume + Exit Volume) x 10.0 = Leg Volume.

D. Existing Saturday Daily Traffic Volumes

Figure 5 depicts the existing Saturday daily traffic volumes. The existing Saturday daily traffic volumes have been obtained from factored peak hour counts obtained by Kunzman Associates, Inc. in March 2011 (see Appendix B) using the following formula for each intersection leg:

Saturday Mid-day Peak Hour (Approach Volume + Exit Volume) x 10.0 = Leg Volume.

E. Existing Weekday Peak Season Average Daily Traffic Volumes

Figure 6 depicts the existing weekday peak season average daily traffic volumes. The existing weekday peak season average daily traffic volumes have been obtained from the City of Dana Point 2011 Traffic Flow Map and factored from peak season factored peak hour counts obtained by Kunzman Associates, Inc. in March 2011 (see Appendix B and C) using the following formula for each intersection leg:

Weekday Peak Season PM Peak Hour (Approach Volume + Exit Volume) x 10.0 = Leg Volume.

F. Existing Saturday Peak Season Daily Traffic Volumes

Figure 7 depicts the existing Saturday peak season daily traffic volumes. The existing Saturday peak season traffic volumes have been obtained from factored peak season factored peak hour counts obtained by Kunzman Associates, Inc. in March 2011 (see Appendix B and C) using the following formula for each intersection leg:

Saturday Peak Season Mid-day Peak Hour (Approach Volume + Exit Volume) x 10.0 = Leg Volume.

G. Existing Intersection Levels of Service

The technique used to assess the operation of an intersection is known as Intersection Capacity Utilization, as described in Appendix D. To calculate an Intersection Capacity Utilization value, the volume of traffic using the intersection is compared with the capacity of the intersection. The Intersection Capacity Utilization represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity.

The technique used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization. To calculate an Intersection Capacity Utilization value, the volume of traffic using the intersection is compared with the capacity of the intersection. The Intersection Capacity Utilization represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. The technique used to assess the operation of an unsignalized intersection is known as the Intersection Delay Method based on the 2000 Highway Capacity Manual – Transportation Research Board Special Report 209. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection. The signalized intersections are considered deficient (Level of Service F) if the overall intersection critical volume to capacity ratio equals or exceeds 1.0, even if the Level of Service defined by the delay value is below the defined Level of Service standard. The volume to capacity ratio is defined as the critical volumes divided by the intersection capacity. A volume to capacity ratio greater than 1.0 implies an infinite queue. Both methodologies are described in Appendix C.

The Intersection Capacity Utilization calculations assume a per-lane capacity of 1,700 vehicles per hour for each travel lane (through or turning) through an intersection. A clearance factor of 0.05 or five (5) percent of the total intersection capacity is included in the Intersection Capacity Utilization calculation.

The Levels of Service for the existing traffic conditions have been calculated and are shown in Table 1. Existing Levels of Service are based upon manual weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement counts obtained by Kunzman Associates, Inc. in March 2011 (see Figures 8 to 10). Existing peak season Levels of Service for are based upon factored manual weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement counts obtained by Kunzman Associates, Inc. in March 2011 (see Figures 11 to 13). A peak season factor has been applied to the existing traffic counts to account for non peak season conditions when the traffic counts were conducted. The City of Dana Point staff provided a ten (10) percent peak season factor to be utilized. A verification of this factor was calculated using the last ten (10) years of available California Department of Transportation data. The calculated peak season verse non peak season factor is nine (9) percent. The conservative ten (10) percent peak season factor provided by the City of Dana Point has been utilized in this analysis. Traffic count worksheets are provided in Appendix B and peak season factor calculations are located in Appendix C.

There are two peak hours in a weekday. The morning peak hour is between 7:00 AM and 9:00 AM, and the evening peak hour is between 4:00 PM and 6:00 PM. There is one peak hours on a Saturday. The mid-day peak hour is between 10:00 AM and 2:00 PM. The actual peak hour within the two-hour interval is the four consecutive 15-minute periods with the highest total volume when all movements are added together. Thus, the evening peak hour at one intersection may be 4:45 PM to 5:45 PM if those four consecutive 15-minute periods have the highest combined volume.

The study area intersections currently operate within acceptable Levels of Service during the peak hours for Existing traffic conditions (see Table 1). Existing Level of Service worksheets are provided in Appendix D.

H. <u>Existing General Plan Circulation Element</u>

Figure 14 shows the current City of Dana Point General Plan Circulation Element. Both existing and future roadways are included in the Circulation Element of the General Plan and are graphically depicted on Figure 14. This figure shows the nature and extent of arterial highways that are needed to adequately serve the ultimate development depicted by the land use element of the General Plan. Figure 15 depicts the current City of Dana Point General Plan roadway cross-sections.

I. <u>Performance Criteria</u>

The following are the performance criteria used for comparing volumes and capacities on the City street and highway system:

PEAK HOUR INTERSECTION VOLUMES
- Level of Service C – Primary arterials, secondary arterials and local streets.
- Level of Service D – Major arterials and State highways.
- Level of Service E – Congestion Management Plan evaluations

Table 1

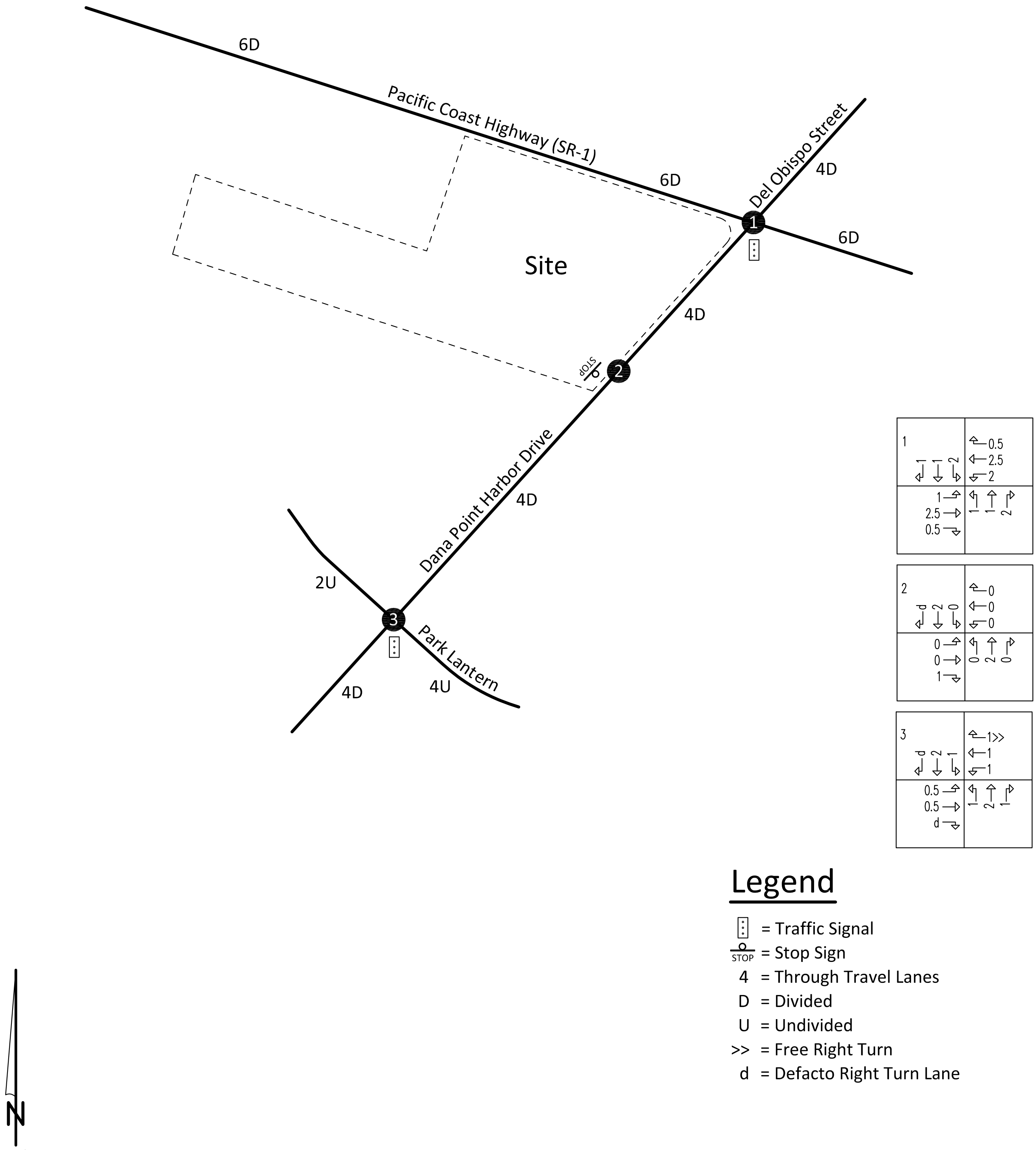
Existing Intersection Delay and Level of Service

Intersection	Traffic Control [2]	Intersection Approach Lanes [1]																								Intersection Capacity Utilization - Level of Service					
		Northbound						Southbound						Eastbound						Westbound						Non-peak Season			Peak Season		
																										Weekday		Weekend	Weekday		Weekend
		L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	Morning	Evening	Midday	Morning	Evening	Midday
Del Obispo Street/Dana Point Harbor Drive (NS) at:																															
Pacific Coast Highway (EW) - #1	TS	1	0	1	0	2	0	2	0	1	0	1	0	1	0	2	1	0	0	2	0	2	1	0	0	0.515-A	0.634-B	0.579-A	0.561-A	0.692-B	0.640-B
Park Lantern (EW) - #3	TS	1	0	2	0	1	0	1	0	2	0	d	0	0	1	0	0	d	0	1	0	1	0	1>>	0	0.191-A	0.288-A	0.259-A	0.205-A	0.312-A	0.280-A

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right;
>> = Free Right Turn; d = Defacto Right Turn Lane

[2] TS = Traffic Signal

Figure 3
Existing Through Travel Lanes and Intersection Controls



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KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

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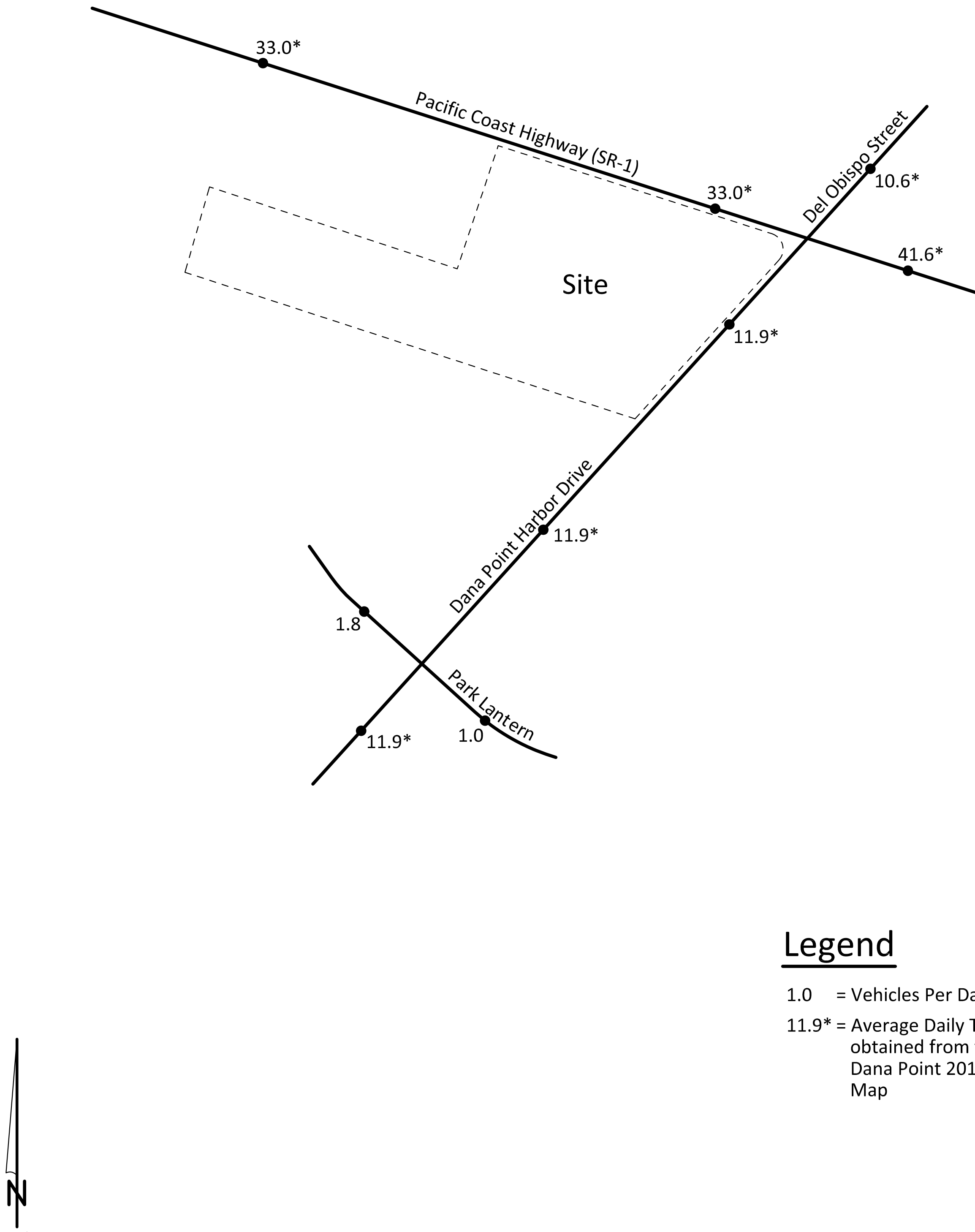
Figure 4
Existing Weekday Average Daily Traffic Volumes



Legend

1.0 = Vehicles Per Day (1,000's)

11.9* = Average Daily Traffic Volume obtained from the City of Dana Point 2011 Traffic Flow Map

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Figure 5
Existing Saturday Daily Traffic Volumes

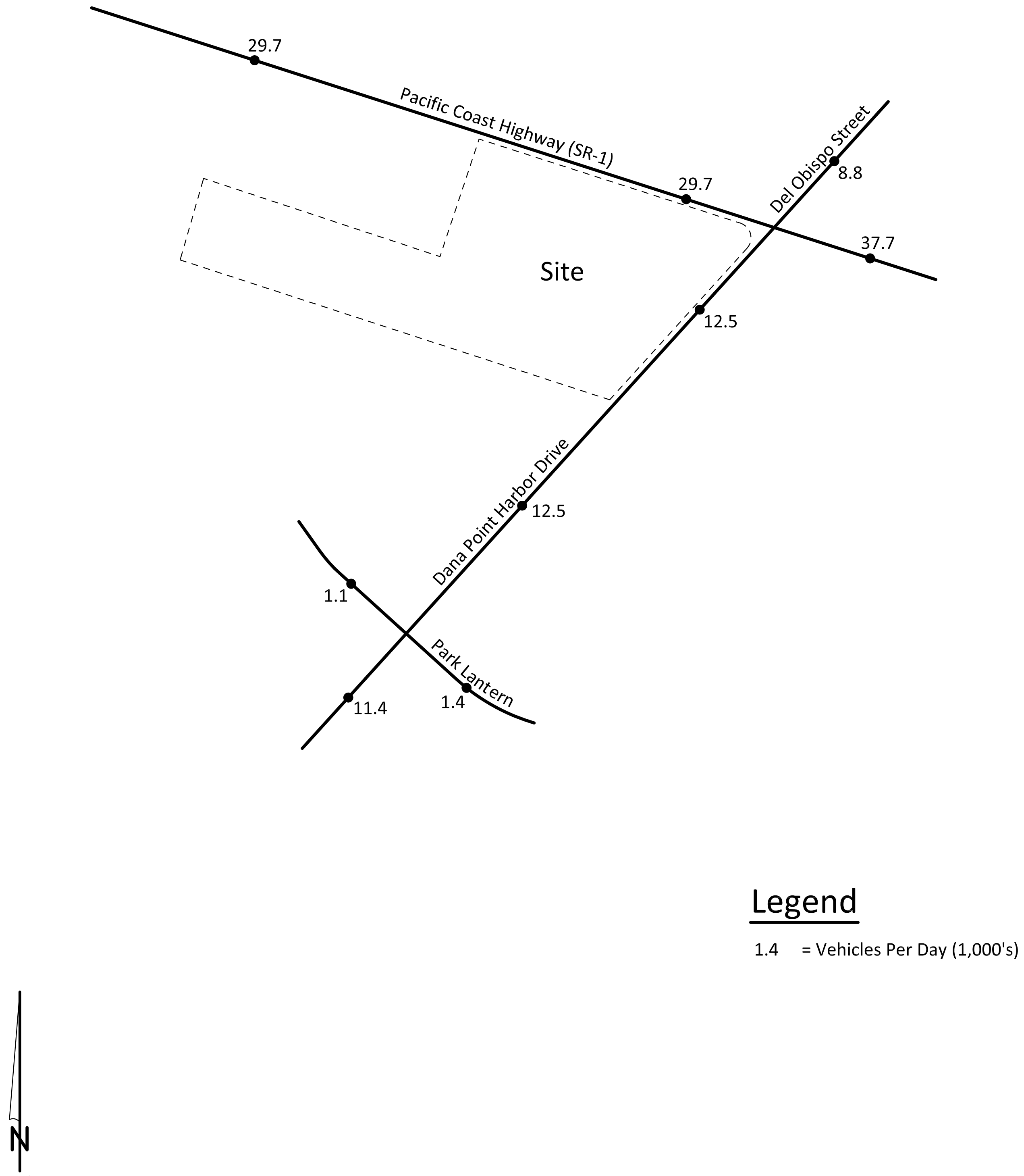

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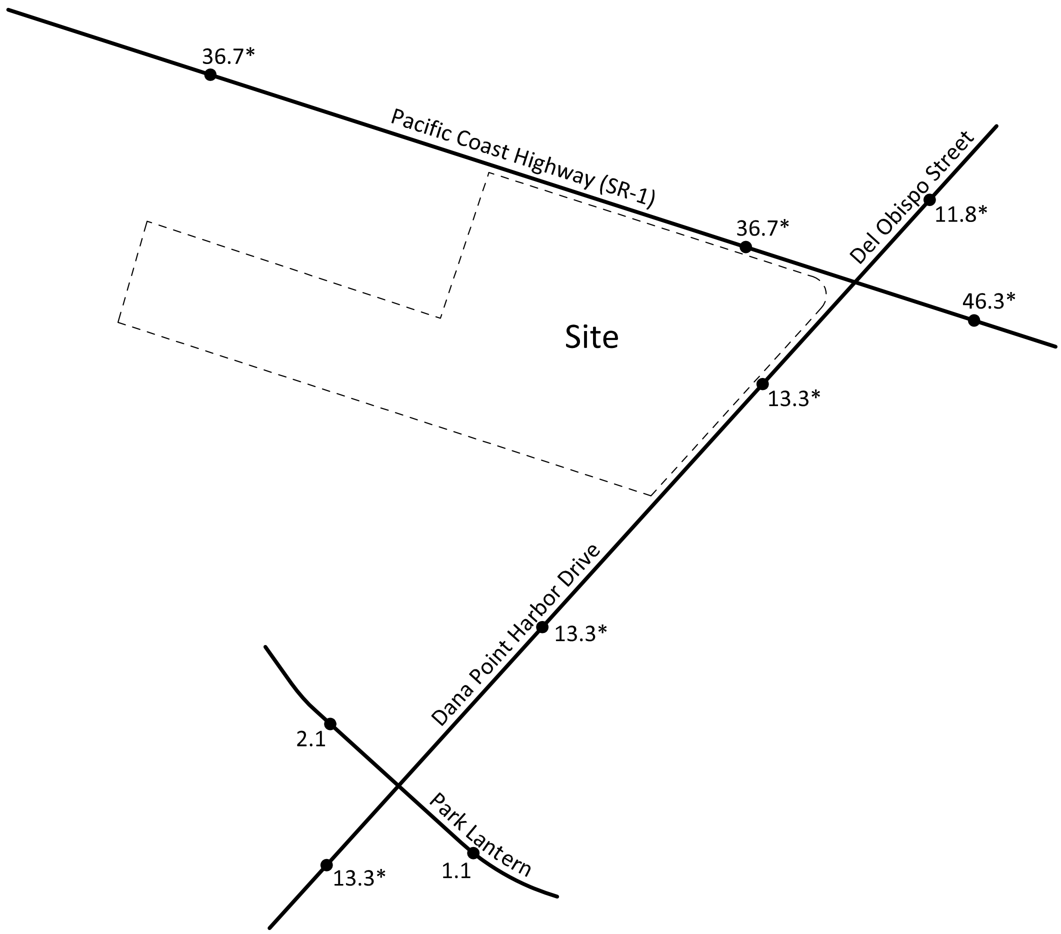
Figure 6
Existing Weekday Peak Season Average Daily Traffic Volumes



Legend

1.1 = Vehicles Per Day (1,000's)

13.3* = Average Daily Traffic Volume obtained from the City of Dana Point 2011 Traffic Flow Map

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NTS

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Figure 7
Existing Saturday Peak Season Daily Traffic Volumes

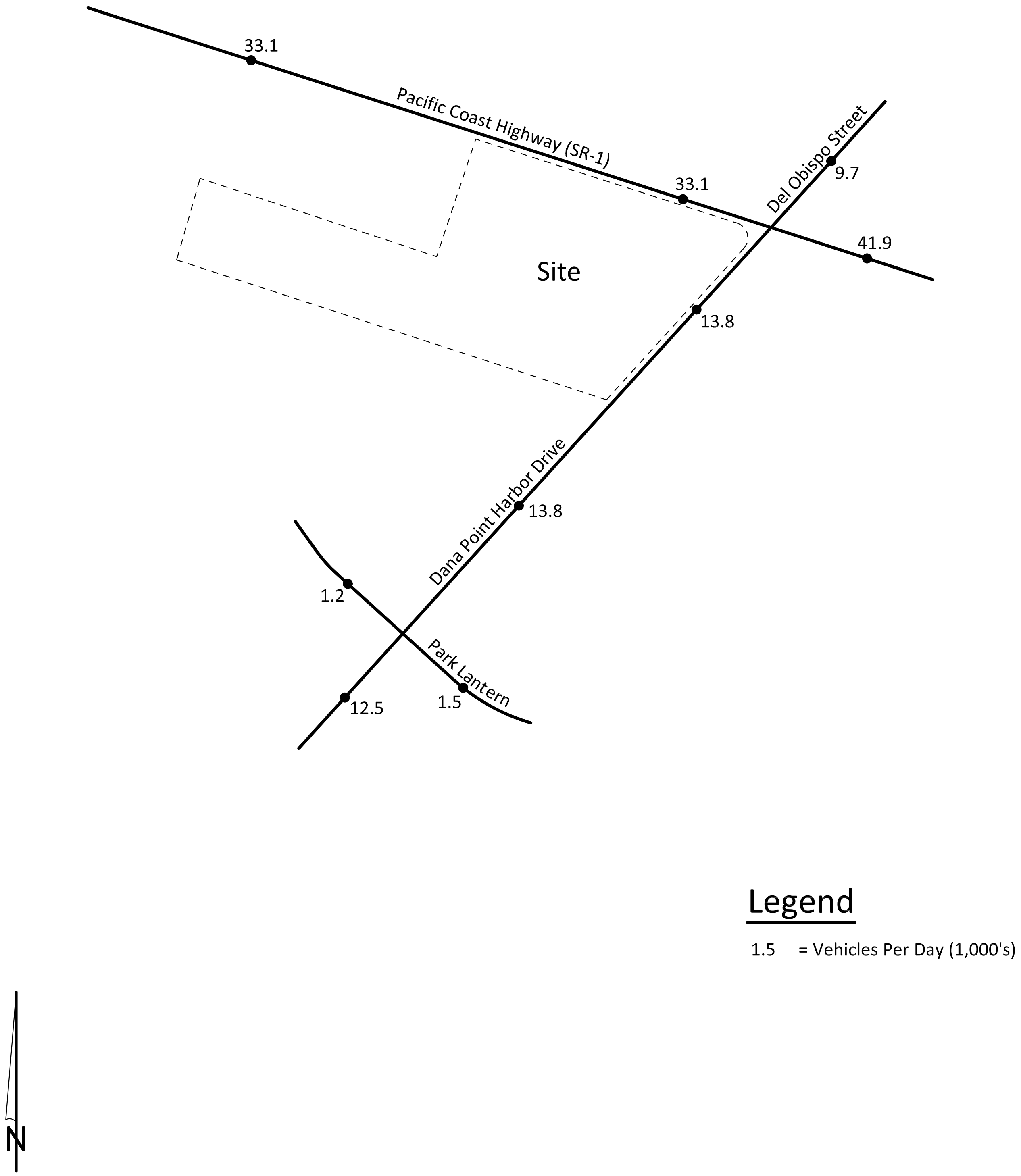

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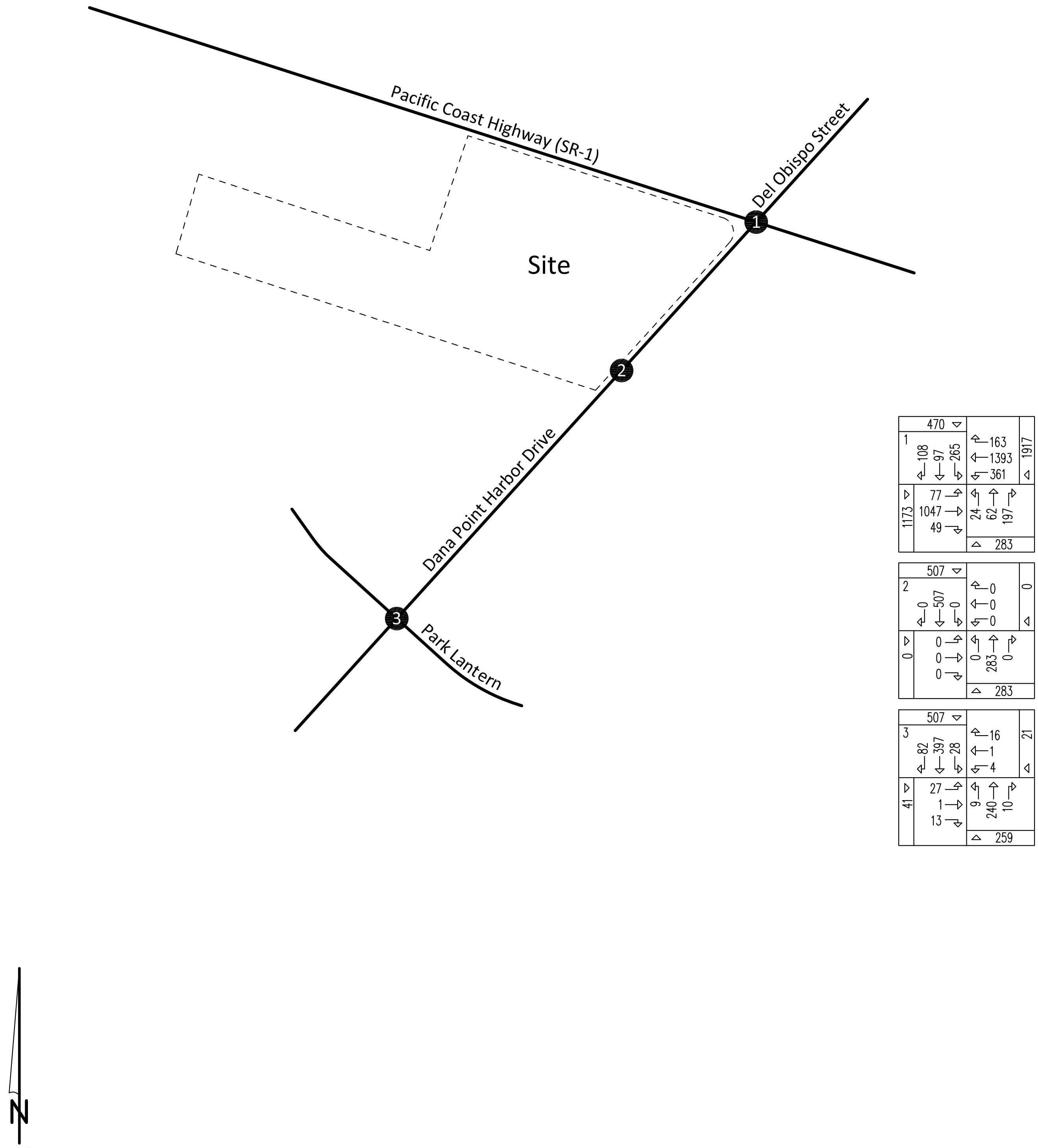
Figure 8
Existing Weekday Morning Peak Hour Turning Movement Volumes



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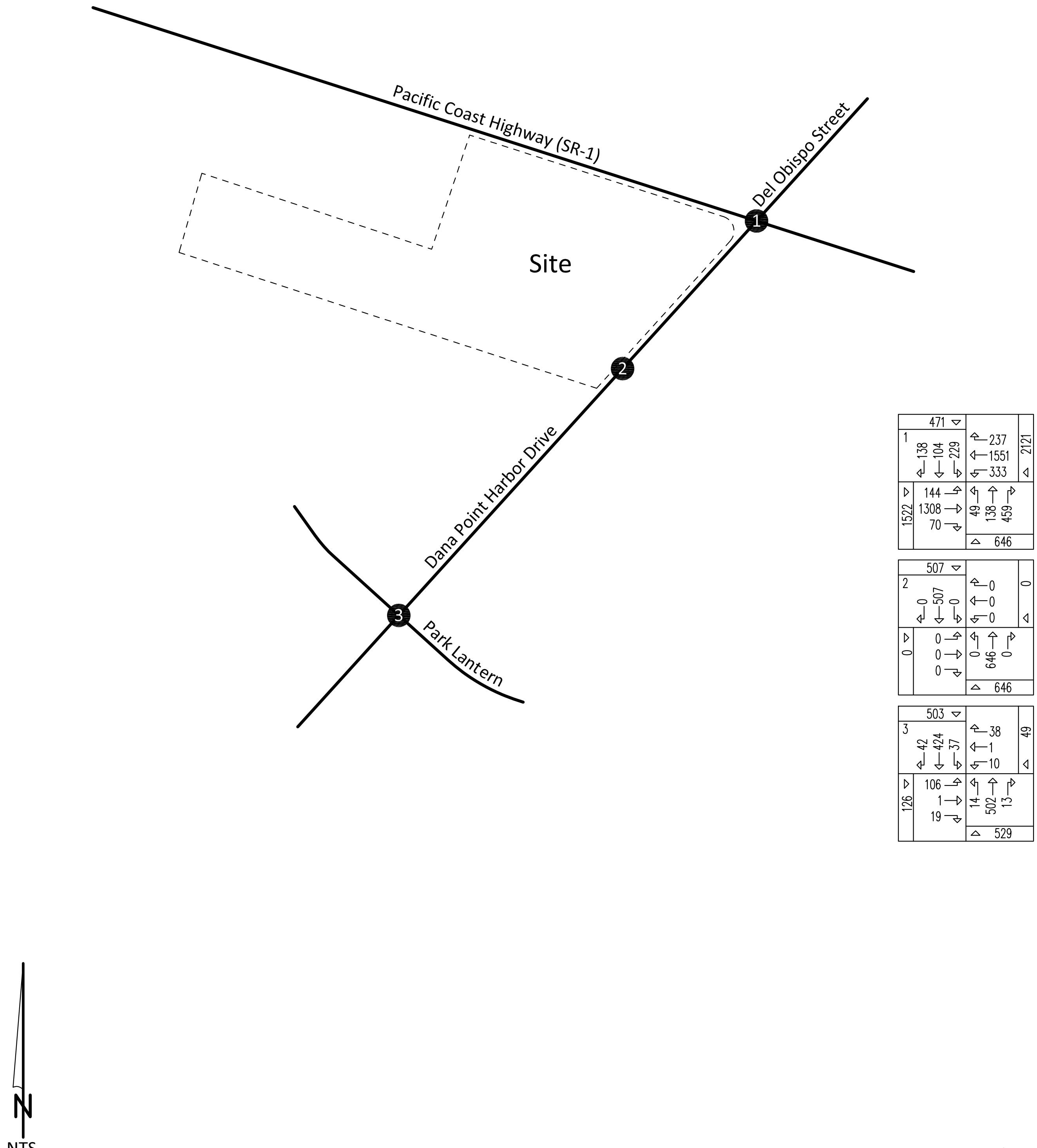
Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 9
Existing Weekday Evening Peak Hour Turning Movement Volumes



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KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

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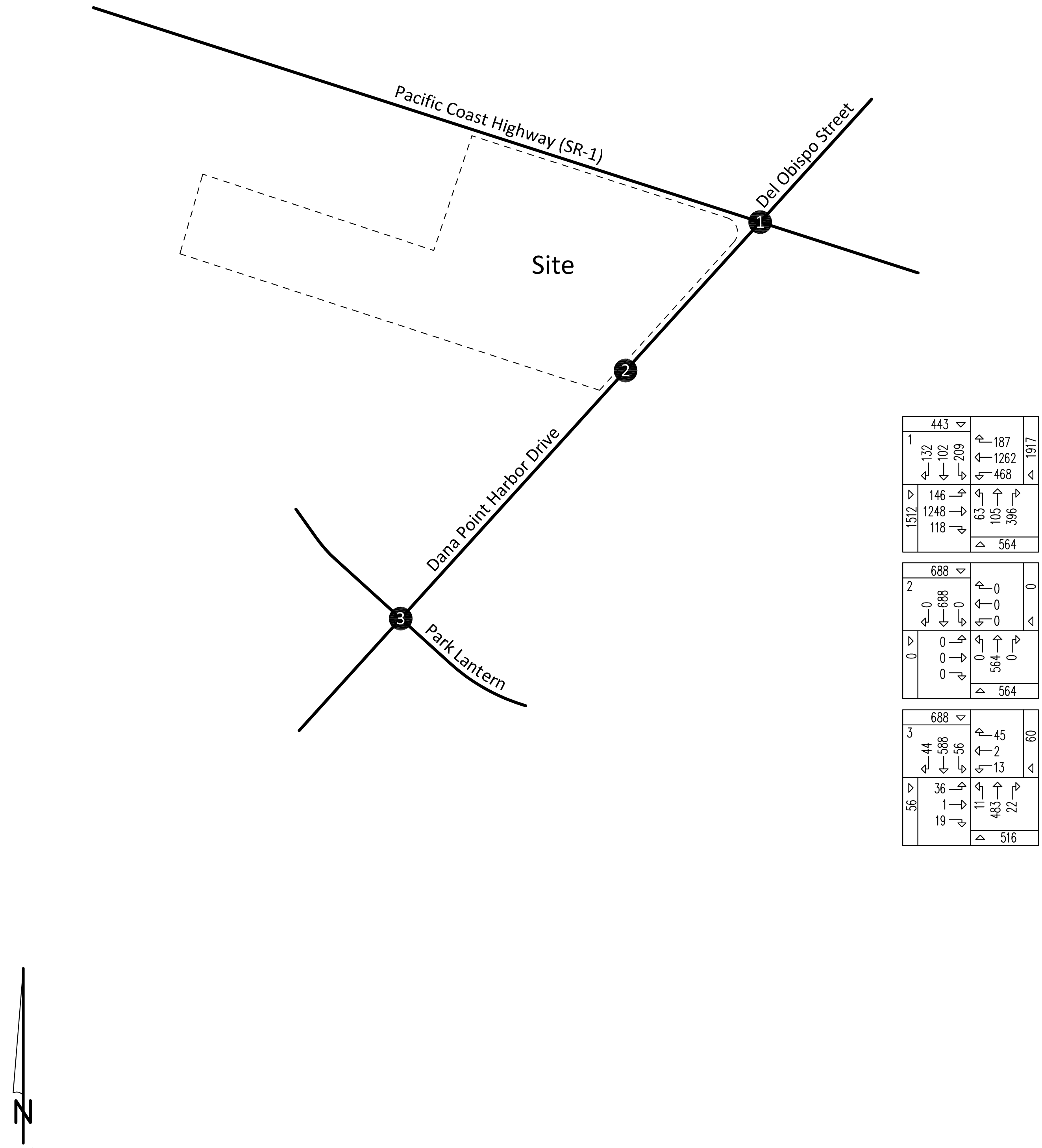
Figure 10
Existing Saturday Mid-day Peak Hour Turning Movement Volumes



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KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

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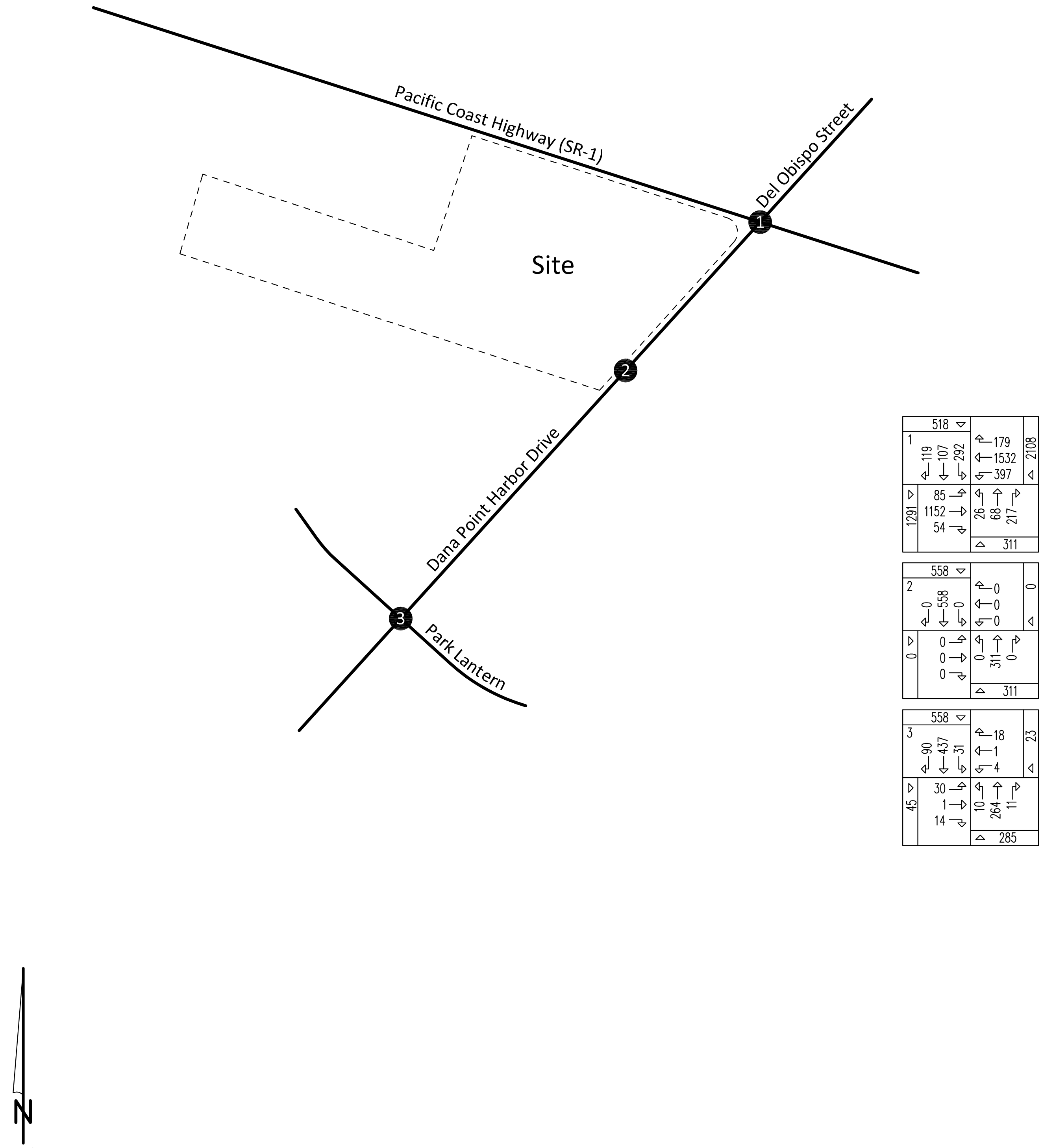
Figure 11
Existing Weekday Peak Season
Morning Peak Hour Turning Movement Volumes



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KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

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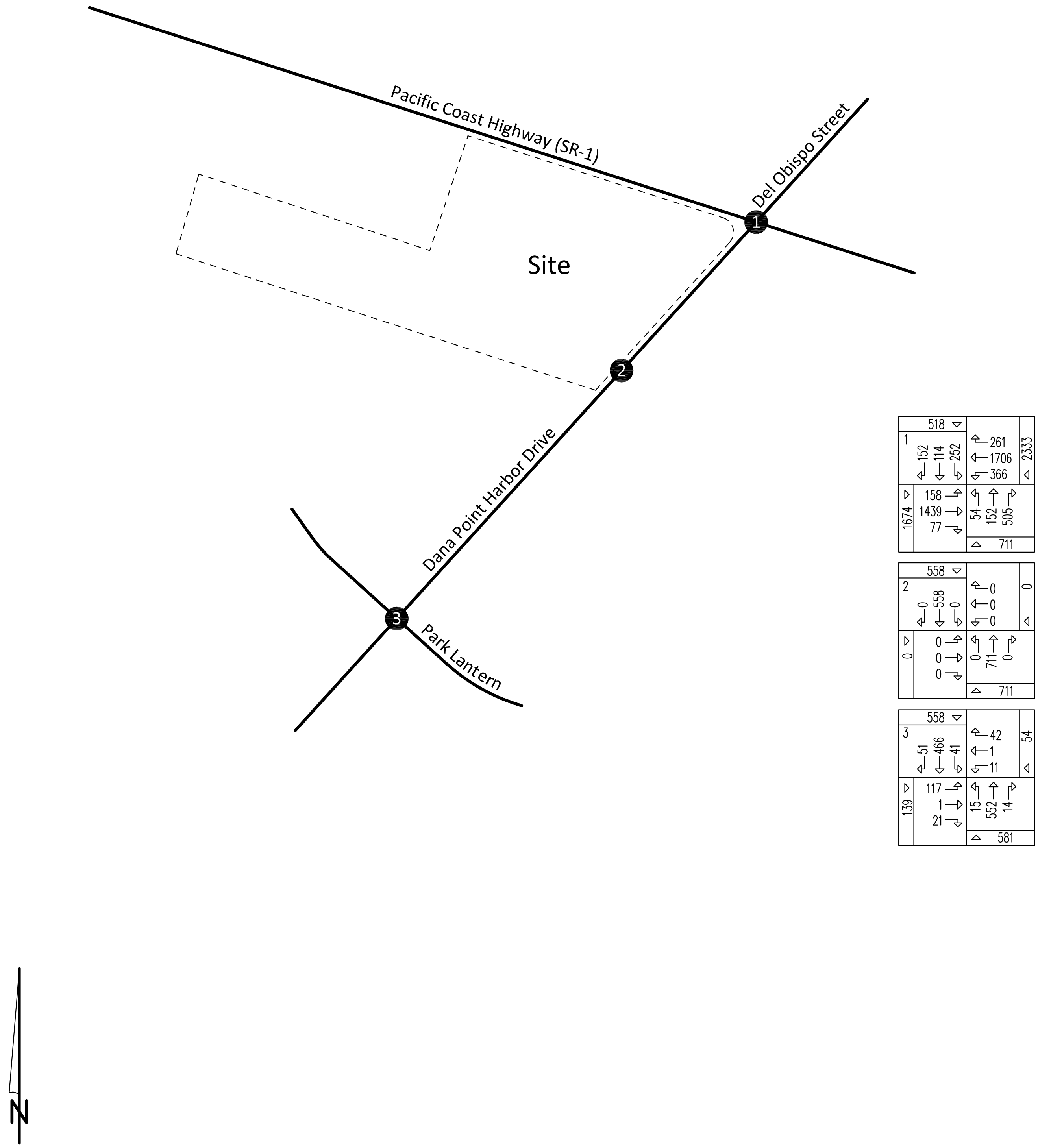
Figure 12
Existing Weekday Peak Season
Evening Peak Hour Turning Movement Volumes



4845c/12

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

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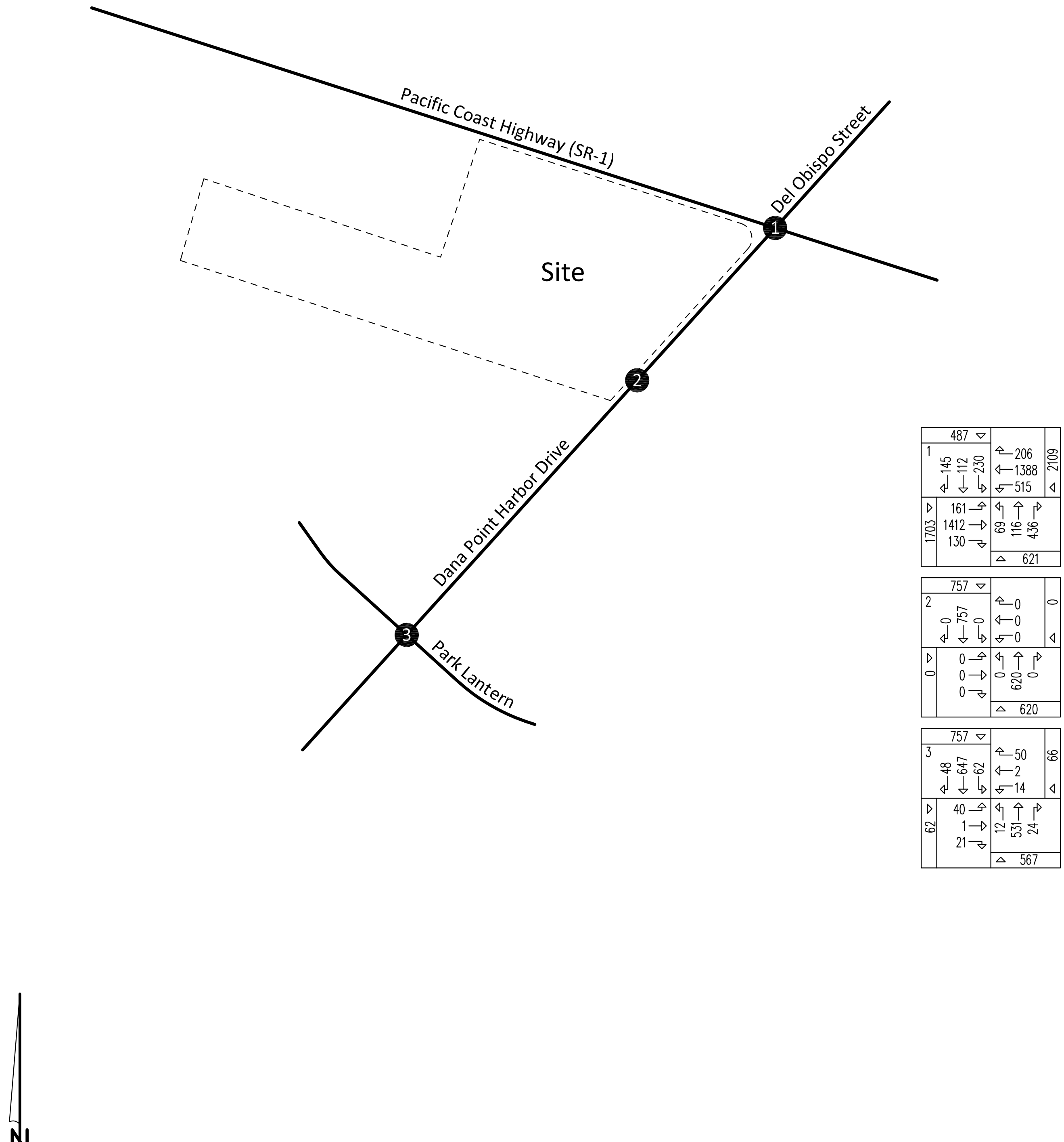
Figure 13
Existing Saturday Peak Season
Mid-day Peak Hour Turning Movement Volumes

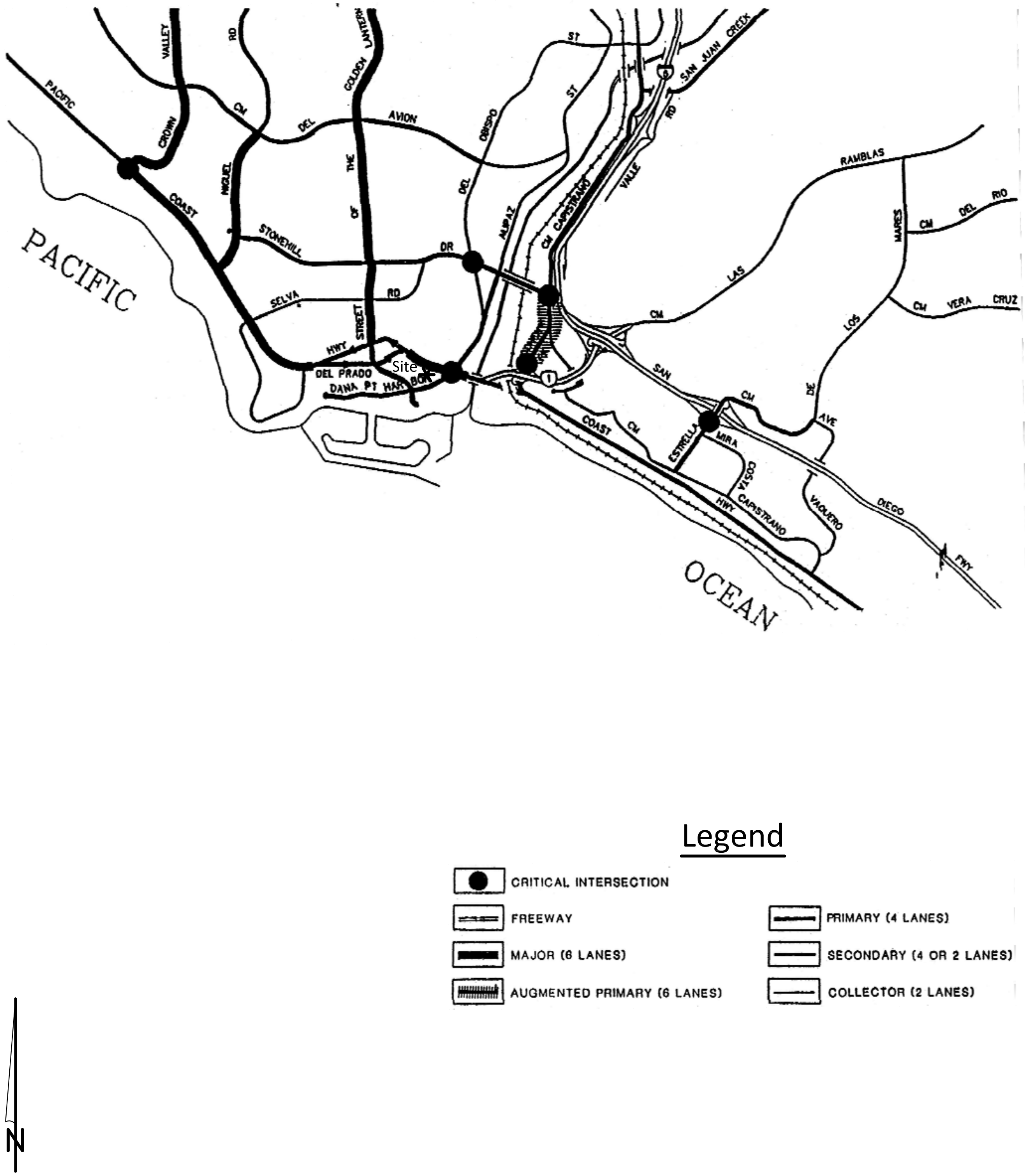


4845c/13

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

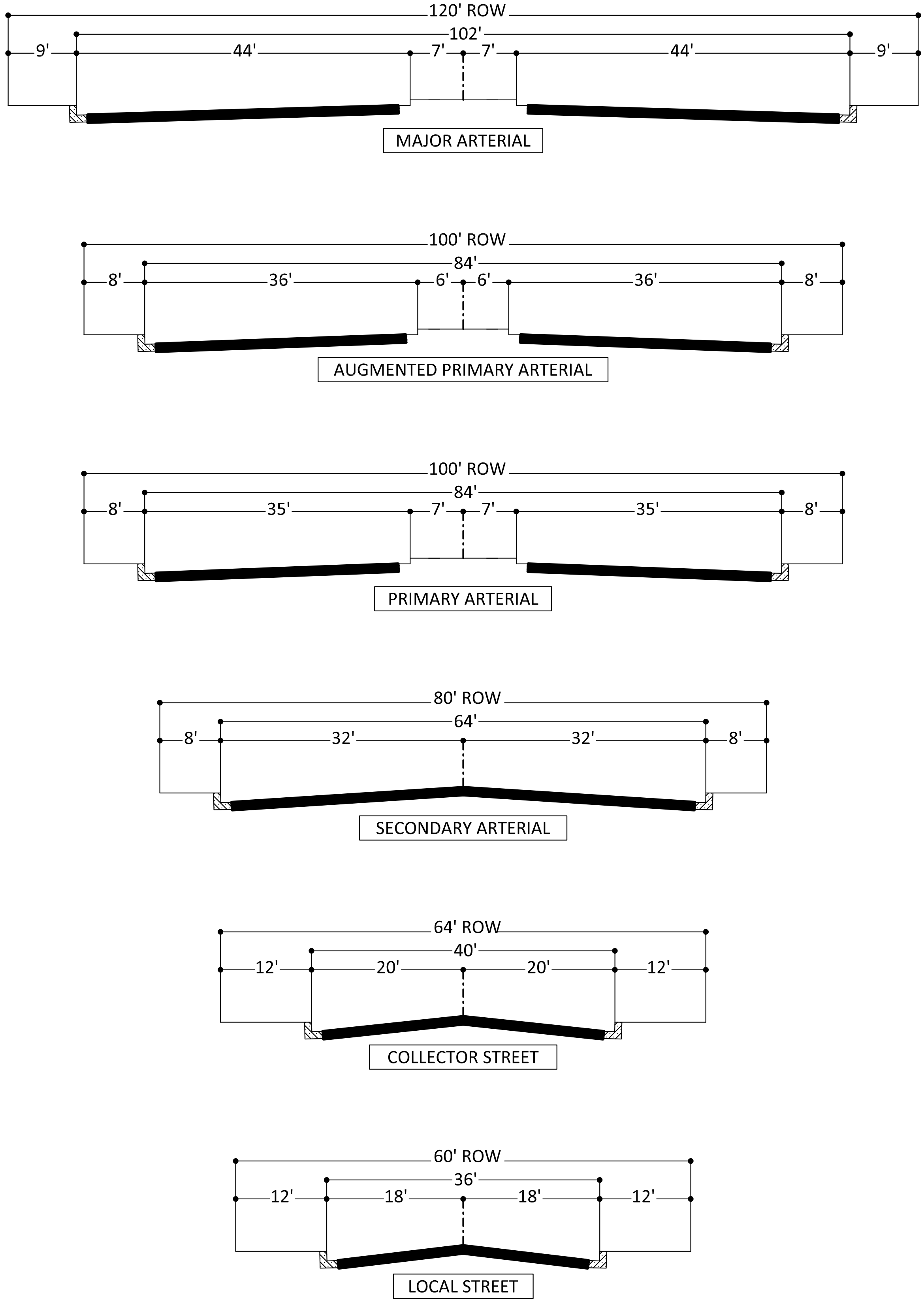
Figure 14
City of Dana Point General Plan Circulation Element



Source: City of Dana Point

4845c/14

Figure 15
City of Dana Point General Plan Roadway Cross-Sections



Source: City of Dana Point

4845c/15

IV. Project Traffic

The proposed development consists of a 258 room hotel with a 12,103 square foot conference center/banquet facility and a 7,087 square foot restaurant. Parking for the proposed hotel totals 325 parking spaces and consists of 275 on-site parking spaces and 50 off-site overflow parking spaces. The project site will continue to have access to Del Obispo Street/Dana Point Harbor Drive.

A. Trip Generation

The traffic generated by the project is determined by multiplying an appropriate trip generation rate by the quantity of land use. Trip generation rates are predicated on the assumption that energy costs, the availability of roadway capacity, the availability of vehicles to drive, and our life styles remain similar to what we know today. A major change in these variables may affect trip generation rates.

Trip generation rates were determined for daily traffic, weekday morning peak hour inbound and outbound traffic, weekday evening peak hour inbound and outbound traffic, and Saturday mid-day peak hour inbound and outbound traffic for the proposed land use. By multiplying the traffic generation rates by the land use quantity, the traffic volumes are determined. Table 2 exhibits the traffic generation rates and peak hour volumes and project daily traffic volumes. The traffic generation rates are from the Institute of Transportation Engineers, Trip Generation, 8th Edition, 2008.

The existing development currently generates approximately 699 daily vehicle trips during the week, 58 of which will occur during the morning peak hour and 48 of which will occur during the evening peak hour.

The existing development currently generates approximately 847 daily vehicle trips on a Saturday, 72 of which will occur during the mid-day peak hour.

The proposed development is projected to generate approximately 2,108 daily vehicle trips on a weekday, 145 of which will occur during the morning peak hour and 152 of which will occur during the evening peak hour.

The proposed development is projected to generate approximately 2,113 additional daily vehicle trips on a Saturday, 186 of which will occur during the mid-day peak hour.

The proposed development is projected to generate approximately 1,409 additional daily vehicle trips on a weekday, 87 of which will occur during the morning peak hour and 104 of which will occur during the evening peak hour.

The proposed development is projected to generate approximately 1,266 additional daily vehicle trips on a Saturday, 144 of which will occur during the mid-day peak hour.

B. Trip Distribution

Figures 16 and 17 contain the directional distributions of the project traffic for the proposed land use. To determine the traffic distributions for the proposed project, peak hour traffic counts of the existing directional distribution of traffic for existing areas in the vicinity of the site, and other additional information on future development and traffic impacts in the area were reviewed. The project's trip distribution pattern assumes that a southbound u-turn movement will be allowed at the intersection of Dana Point Harbor Drive/Park Lantern. This improvement is to be implemented by the project with the review and approval from the City of Dana Point.

It is assumed that the 10 percent of the project traffic exiting the project site and heading south on Dana Point Harbor Drive will potentially be utilizing the Dana Point Harbor facilities and/or utilizing Golden Lantern.

C. Trip Assignment

Based on the identified traffic generation and distributions, project weekday average daily traffic volumes have been calculated and shown on Figure 18 and project Saturday daily traffic volumes have been calculated and shown on Figure 19. Weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes expected from the project are shown on Figures 20 to 22, respectively.

Table 2

Project Traffic Generation[1]

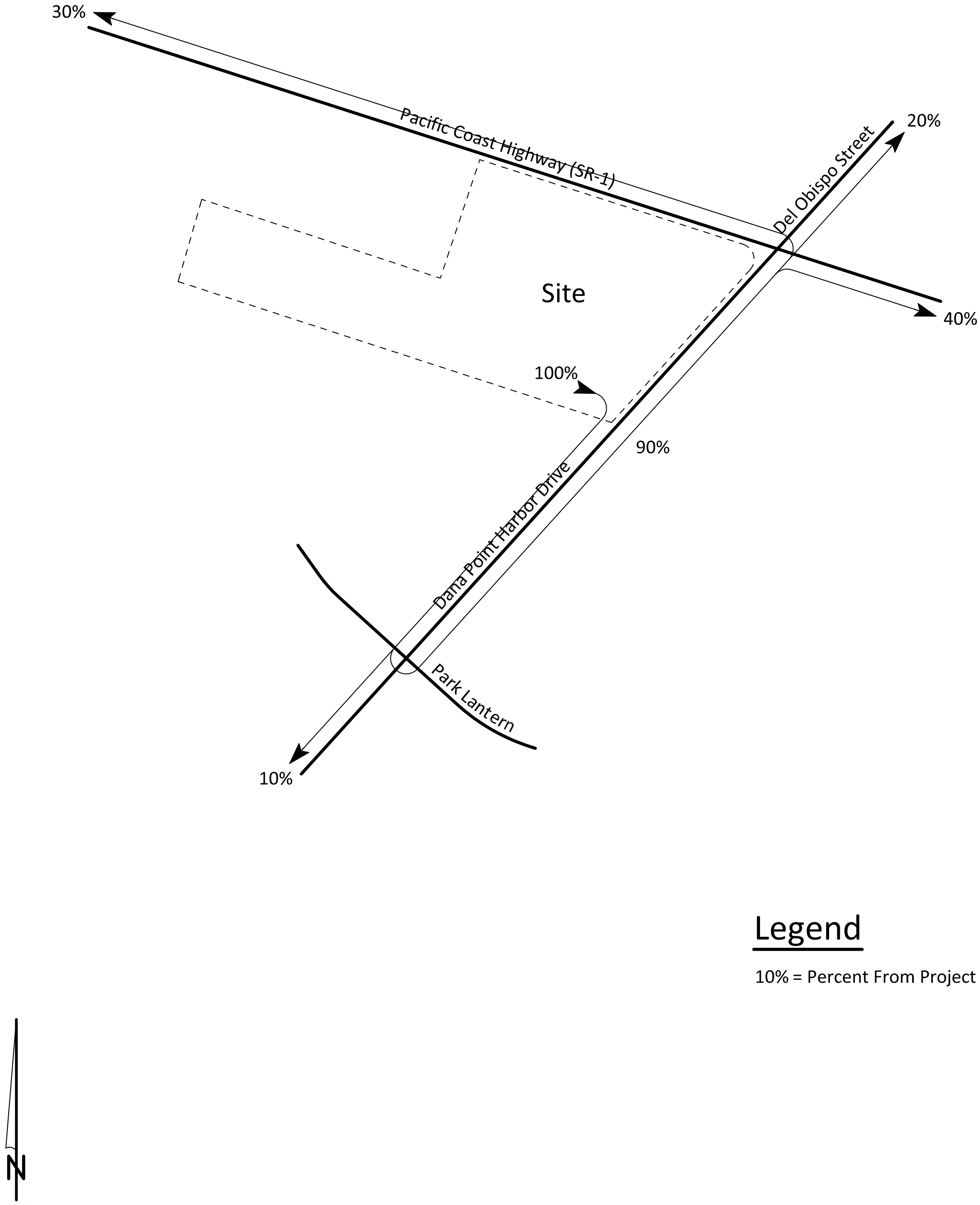
Land Use	Quantity	Units[2]	Weekday							Weekend			
			Peak Hour							Peak Hour			
			Morning			Evening				Mid-day			
			Inbound	Outbound	Total	Inbound	Outbound	Total	Daily	Inbound	Outbound	Total	Daily
Trip Generation Rates													
Hotel		RM	0.34	0.22	0.56	0.31	0.28	0.59	8.17	0.40	0.32	0.72	8.19
Fast Food With Drive-Thru		TSF	25.17	24.18	49.35	17.60	16.24	33.84	496.12	30.29	29.10	59.39	722.00
Trips Generated													
Existing Hotel	-46	RM	-16	-10	-26	-14	-13	-27	-376	-18	-15	-33	-377
Existing Fast Food With Drive-Thru	-1.277	TSF	-32	-31	-63	-22	-21	-43	-634	-39	-37	-76	-922
Pass-by Percentages[3]			49%	49%	49%	50%	50%	50%	49%	49%	49%	49%	49%
Pass-by Trips[3]			16	15	31	11	11	22	311	19	18	37	452
Subtotal			-32	-26	-58	-25	-23	-48	-699	-38	-34	-72	-847
Proposed Hotel	258	RM	88	57	145	80	72	152	2,108	103	83	186	2,113
Difference			56	31	87	55	49	104	1,409	65	49	114	1,266

[1] Source: Institute of Transportation Engineers, Trip Generation, 8th Edition, 2008, Land Use Categories 310 and 934.

[2] RM = Room; TSF = Thousand Square Feet.

[3] Source: Institute of Transportation Engineers, Trip Generation Handbook, 2nd Edition, 2004, Land Use Category 934.

Figure 16
Project Outbound Traffic Distribution



4845c/16

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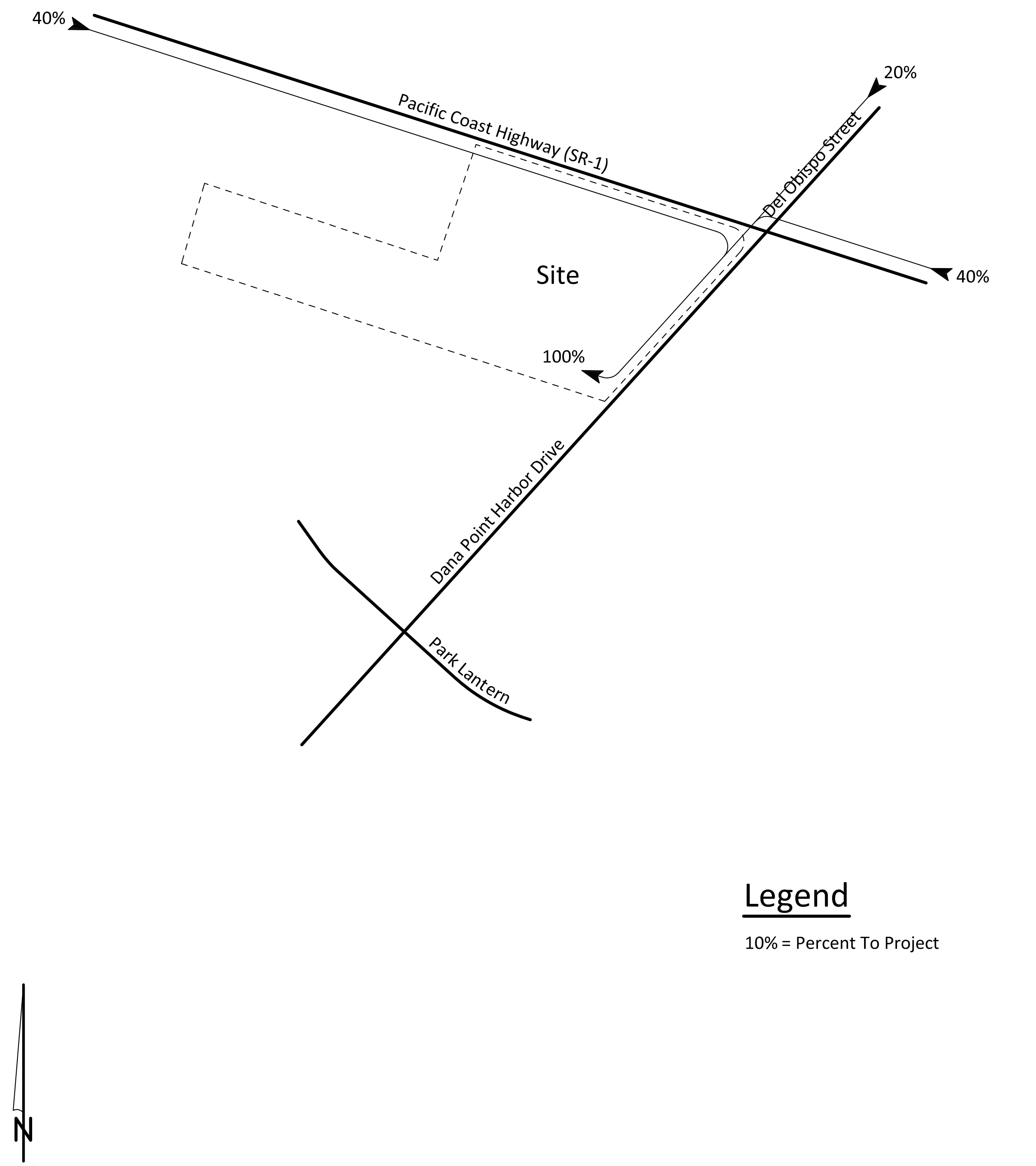
Figure 17
Project Inbound Traffic Distribution



4845c/17

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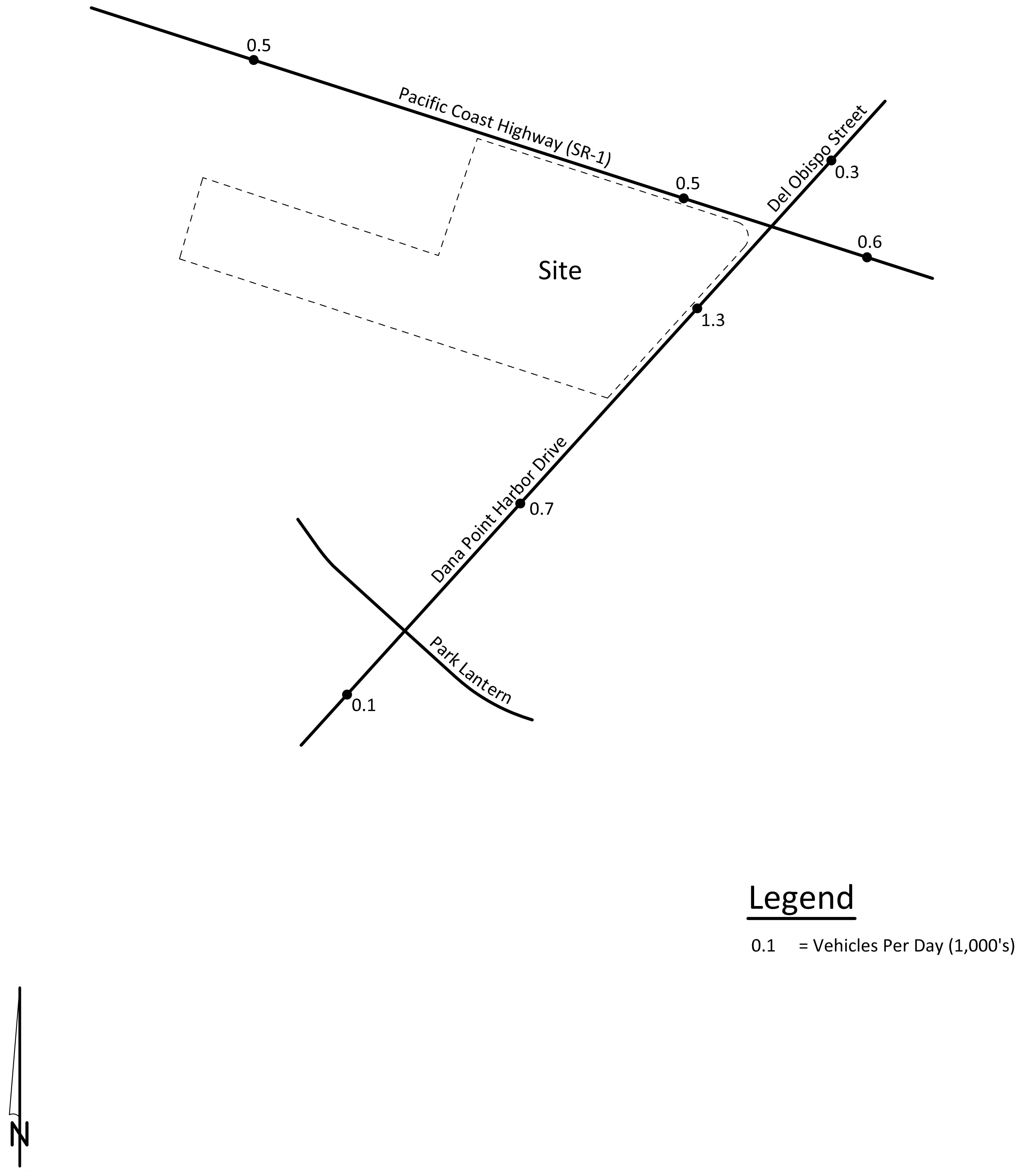
OVER 35 YEARS OF EXCELLENT SERVICE

Figure 18
Project Weekday Average Daily Traffic Volumes



4845c/18

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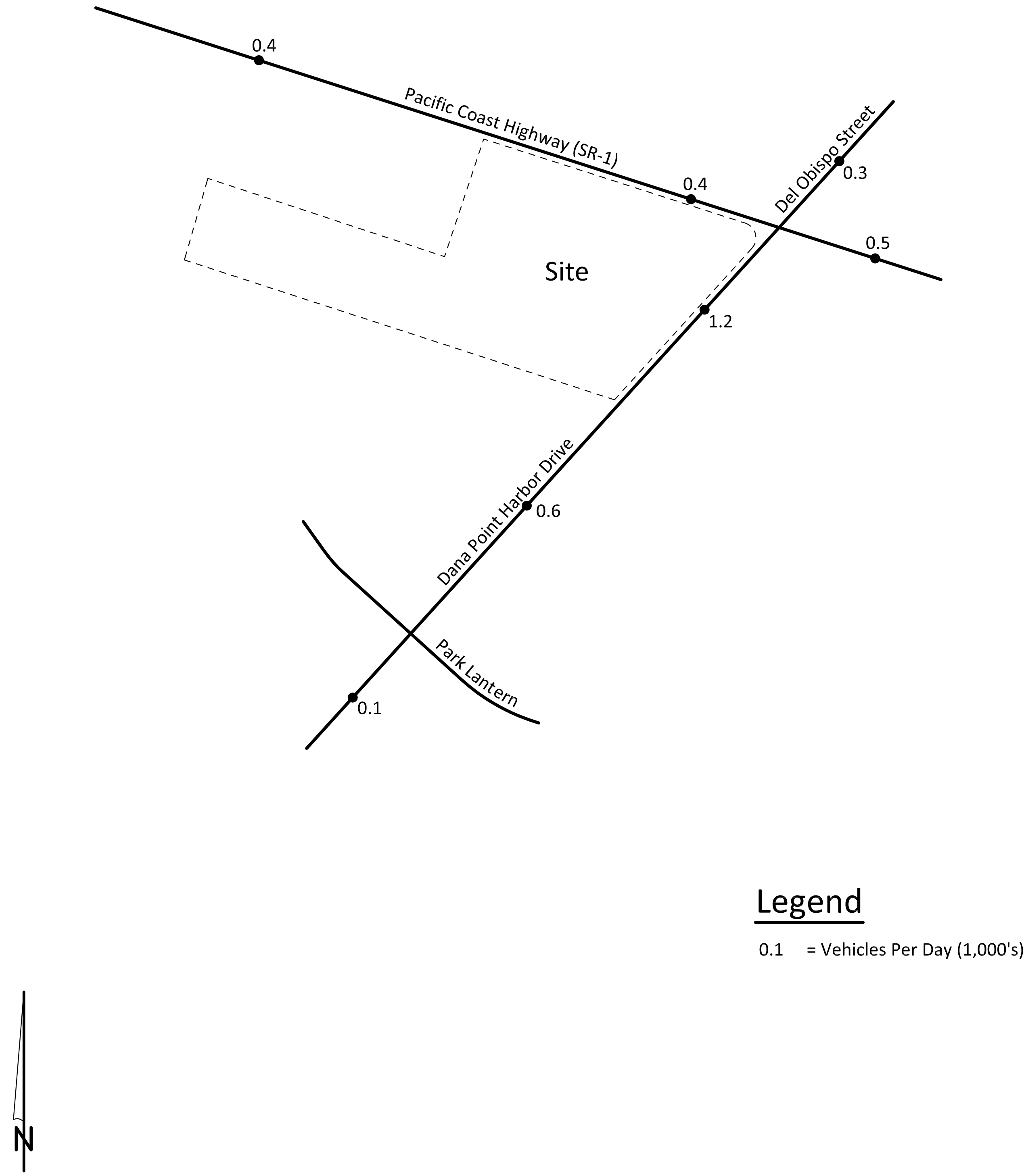
Figure 19
Project Saturday Daily Traffic Volumes



4845c/19

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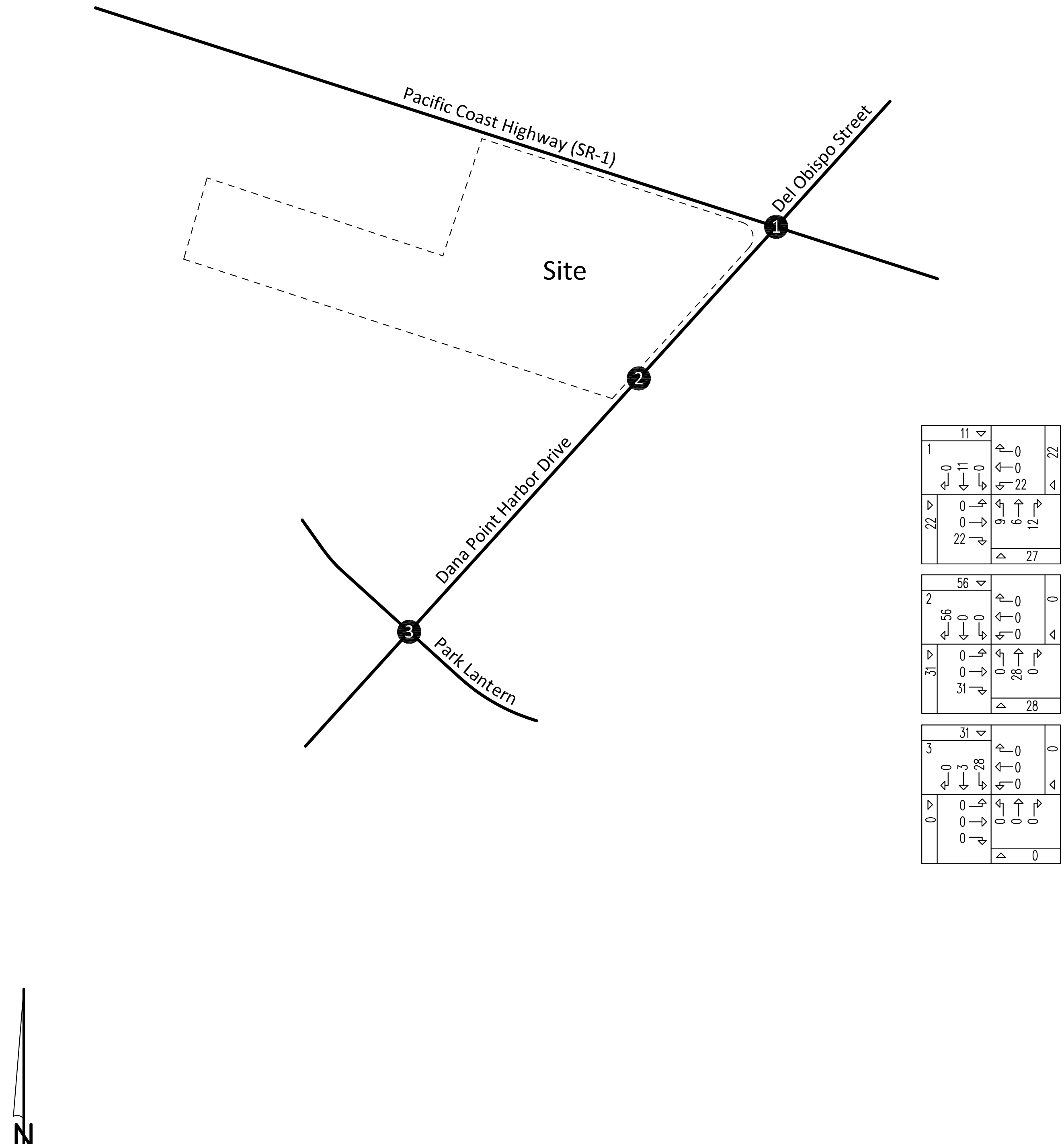
Figure 20
Project Weekday Morning Peak Hour Turning Movement Volumes



Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

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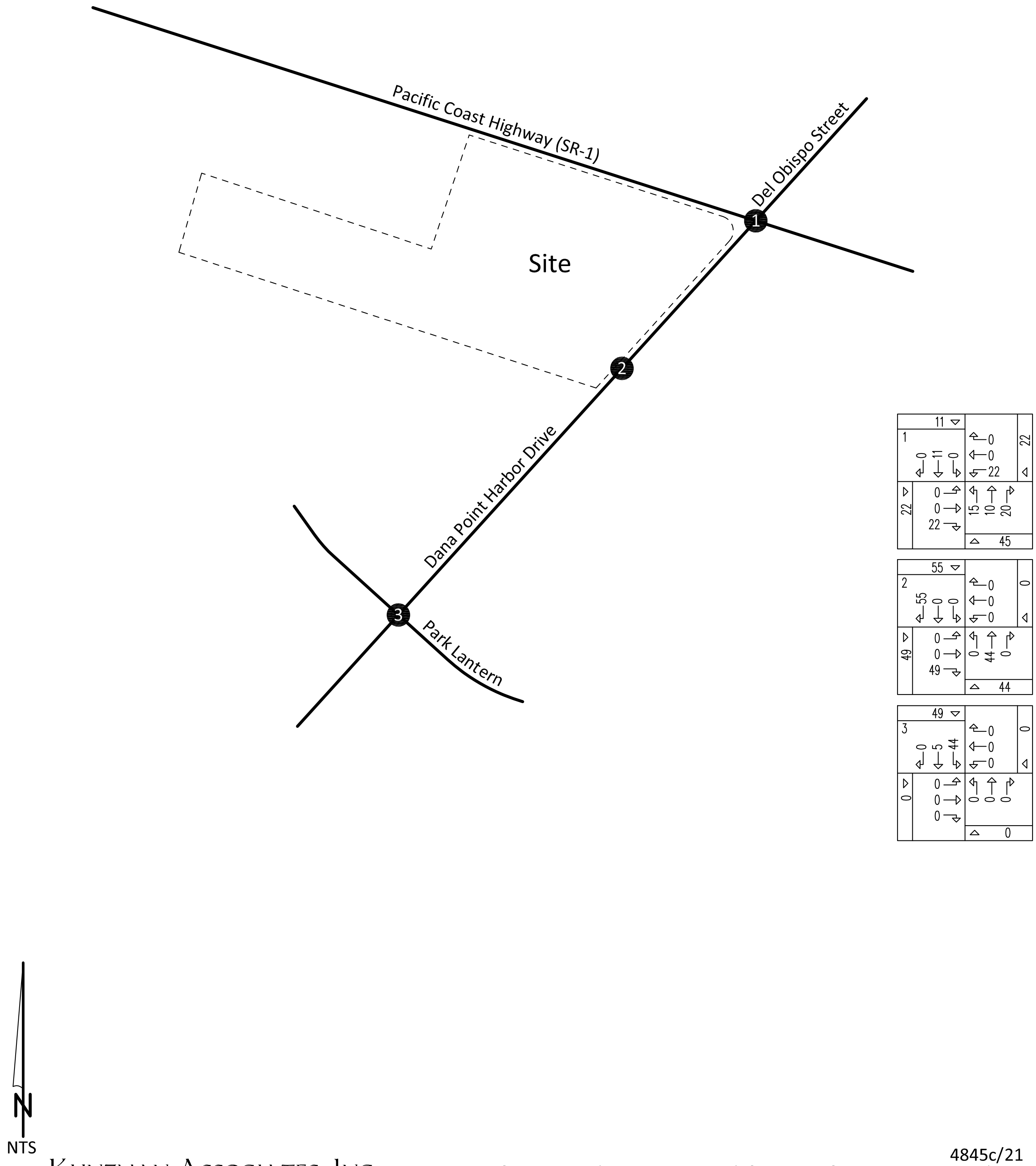
Figure 21
Project Weekday Evening Peak Hour Turning Movement Volumes



4845c/21

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

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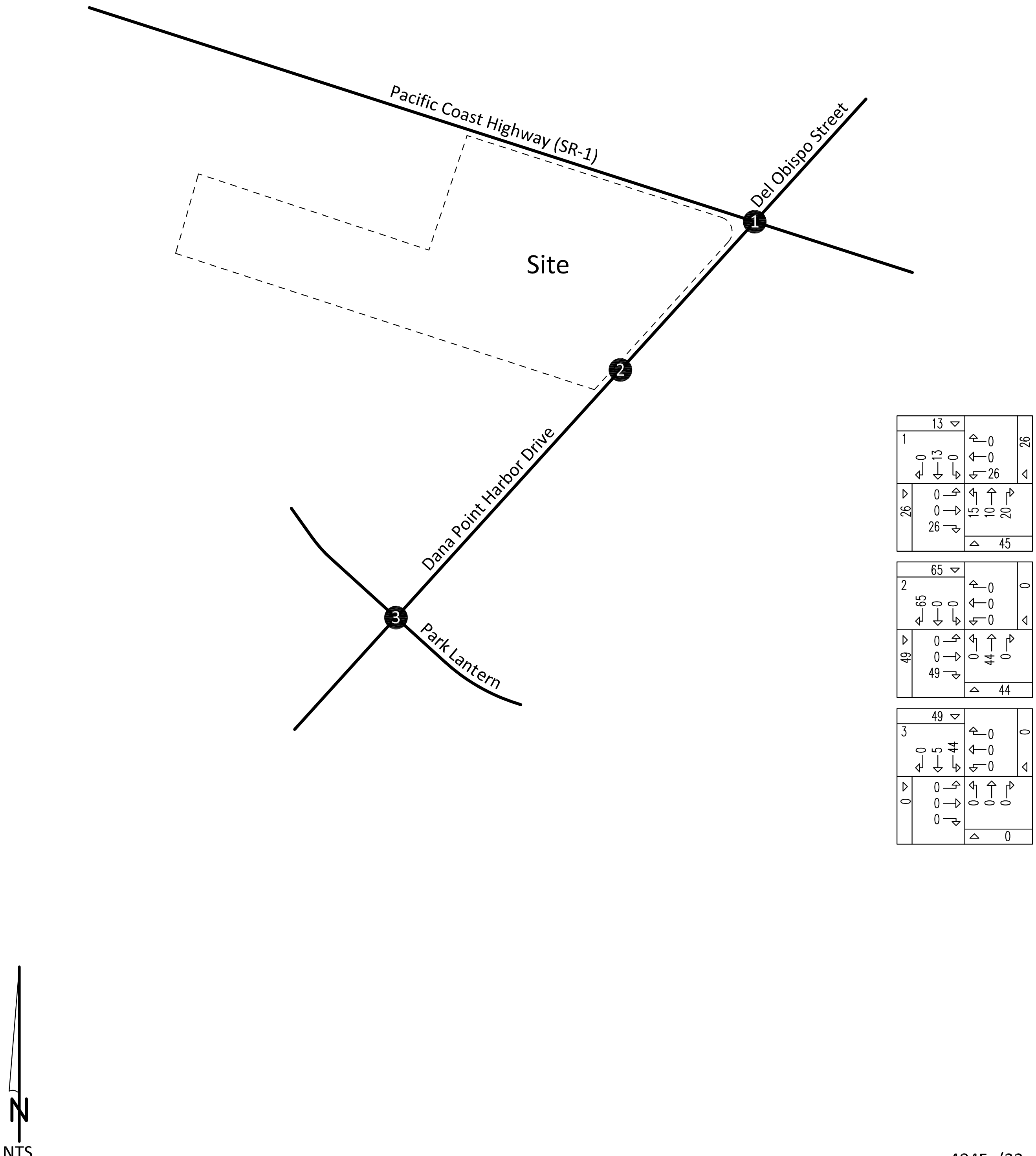
Figure 22
Project Saturday Mid-day Peak Hour Turning Movement Volumes



4845c/22

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

V. Existing Plus Project Traffic Conditions

In this section, Existing Plus Project traffic conditions are discussed. Figures 23 to 32 depict the Existing Plus Project traffic conditions.

A. Method of Projection

To assess Existing Plus Project traffic conditions, existing traffic is combined with project traffic.

B. Existing Plus Project Weekday Average Daily Traffic Volumes

Existing Plus Project weekday average daily traffic volumes are as illustrated on Figure 23.

C. Existing Plus Project Saturday Daily Traffic Volumes

Existing Plus Project Saturday daily traffic volumes are as illustrated on Figure 24.

D. Existing Plus Project Weekday Peak Season Average Daily Traffic Volumes

Existing Plus Project weekday peak season average daily traffic volumes are as illustrated on Figure 25.

E. Existing Plus Project Saturday Peak Season Daily Traffic Volumes

Existing Plus Project Saturday peak season daily traffic volumes are as illustrated on Figure 26.

F. Existing Plus Project Intersection Levels of Service

The technique used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization. To calculate an Intersection Capacity Utilization value, the volume of traffic using the intersection is compared with the capacity of the intersection. The Intersection Capacity Utilization represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. The technique used to assess the operation of an unsignalized intersection is known as the Intersection Delay Method based on the 2000 Highway Capacity Manual – Transportation Research Board Special Report 209. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection. The signalized intersections are considered deficient (Level of Service F) if the overall intersection critical volume to capacity ratio equals or exceeds 1.0, even if the Level of Service defined by the delay value is below the defined Level of Service standard. The volume to capacity ratio is defined as the critical volumes divided by the intersection capacity. A volume to capacity ratio greater than 1.0 implies an infinite queue. Both methodologies are described in Appendix C.

The Intersection Capacity Utilization calculations assume a per-lane capacity of 1,700 vehicles per hour for each travel lane (through or turning) through an intersection. A clearance factor of 0.05 or five (5) percent of the total intersection capacity is included in the Intersection Capacity Utilization calculation.

The Levels of Service for the Existing Plus Project traffic conditions have been calculated and are shown in Table 3. Existing Plus Project weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes are shown on Figures 27 to 29, respectively. Existing Plus Project peak season weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes are shown on Figures 30 to 32, respectively.

The study area intersections are projected to operate at within acceptable Levels of Service during the peak hours for Existing Plus Project traffic conditions (see Table 3). Existing Plus Project Level of Service worksheets are provided in Appendix D.

Table 3

Existing Plus Project Intersection Delay and Level of Service

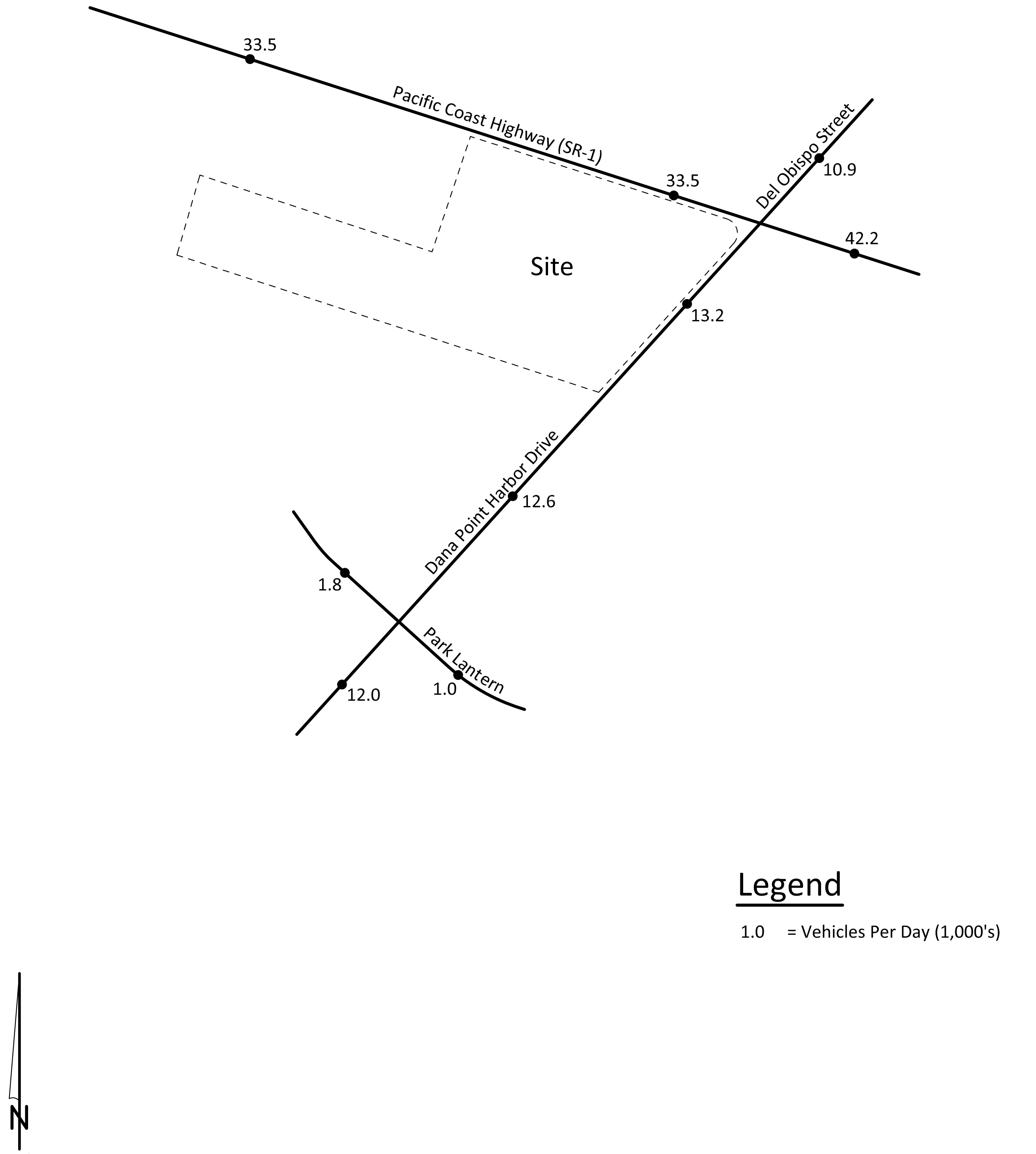
Intersection	Traffic Control [2]	Intersection Approach Lanes [1]																								Intersection Capacity Utilization - Level of Service					
																										Non-peak Season			Peak Season		
		Northbound						Southbound						Eastbound						Westbound						Weekday		Weekend	Weekday		Weekend
		L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	Morning	Evening	Midday	Morning	Evening	Midday
Del Obispo Street/Dana Point Harbor Drive (NS) at:																															
Pacific Coast Highway (EW) - #1	TS	1	0	1	0	2	0	2	0	1	0	1	0	1	0	2	1	0	0	2	0	2	1	0	0	0.518-A	0.640-B	0.569-A	0.565-A	0.698-B	0.628-A
Project Access (EW) - #2[3]	CSS	0	0	2	0	0	0	0	0	2	0	d	0	0	0	0	0	1	0	0	0	0	0	0	0	10.0-A	10.1-B	10.9-B	10.2-B	10.3-B	11.2-B
Park Lantern (EW) - #3	TS	1	0	2	0	1	0	1	0	2	0	d	0	0	1	0	0	d	0	1	0	1	0	1	0	0.198-A	0.330-A	0.299-A	0.214-A	0.356-A	0.321-A

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = Defacto Right Turn Lane

[2] TS = Traffic Signal; CSS = Cross Street Stop

[3] Level of Service calculations for nonsignalized intersections are based on the Highway Capacity Manual delay methodology. Values reported are shown in terms of seconds of delay per vehicle.

Figure 23
Existing Plus Project Weekday Average Daily Traffic Volumes



4845c/23

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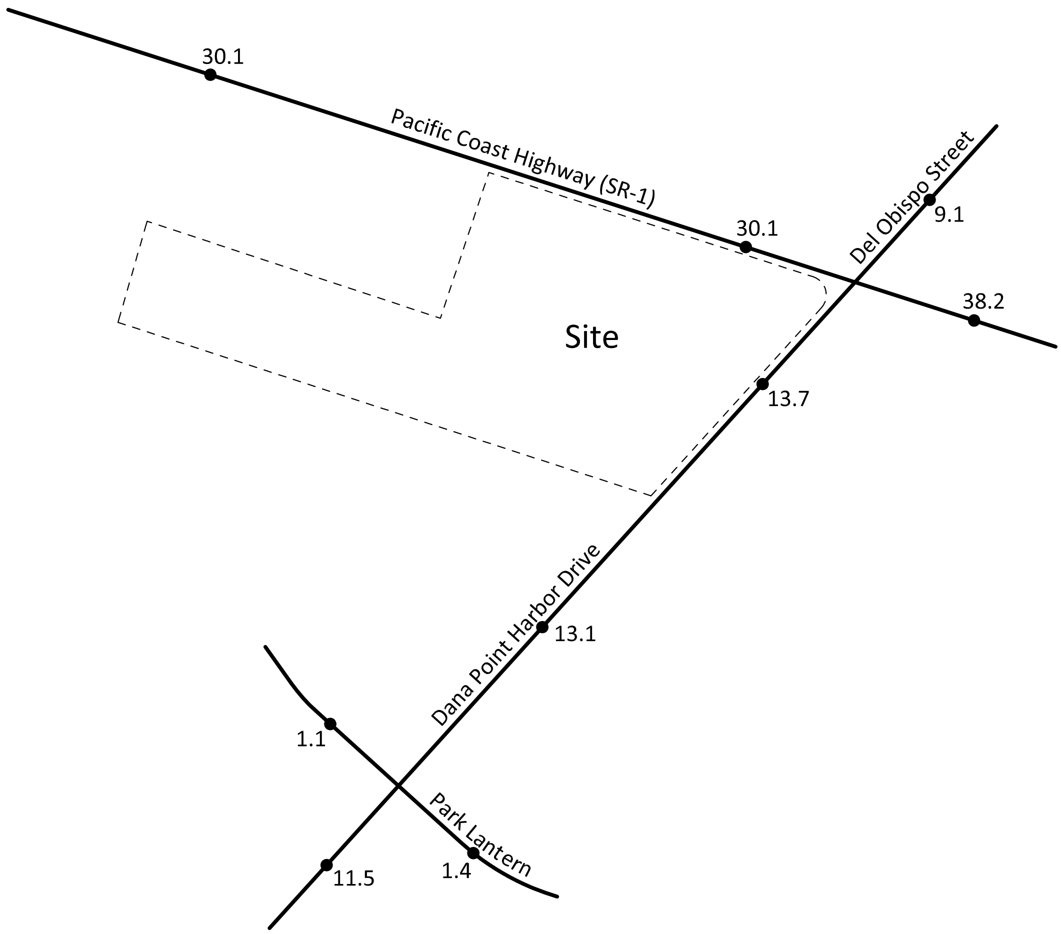
Figure 24
Existing Plus Project Saturday Daily Traffic Volumes



Legend

1.4 = Vehicles Per Day (1,000's)

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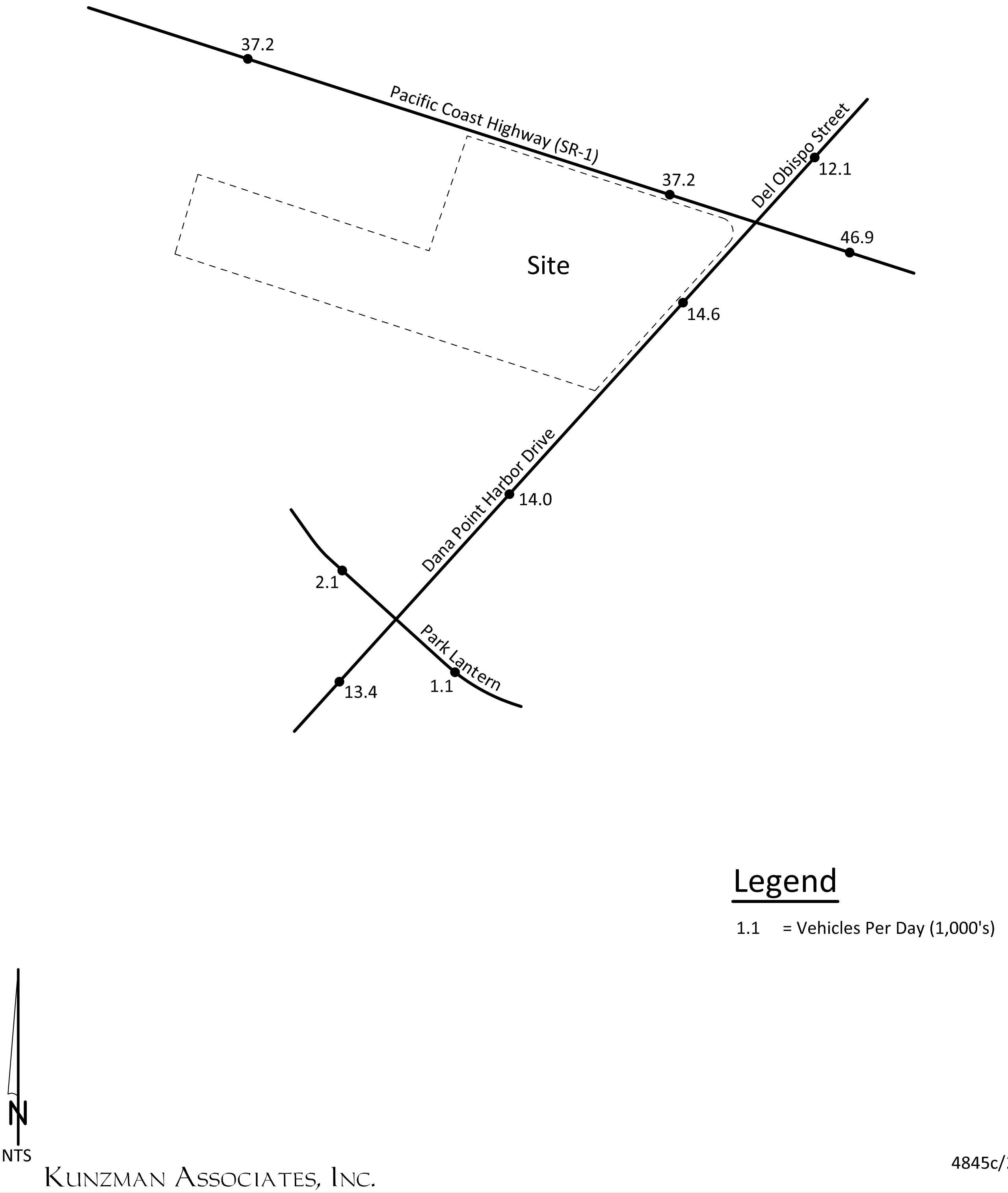
Figure 25
Existing Plus Project Weekday Peak Season Average Daily Traffic Volumes



4845c/25

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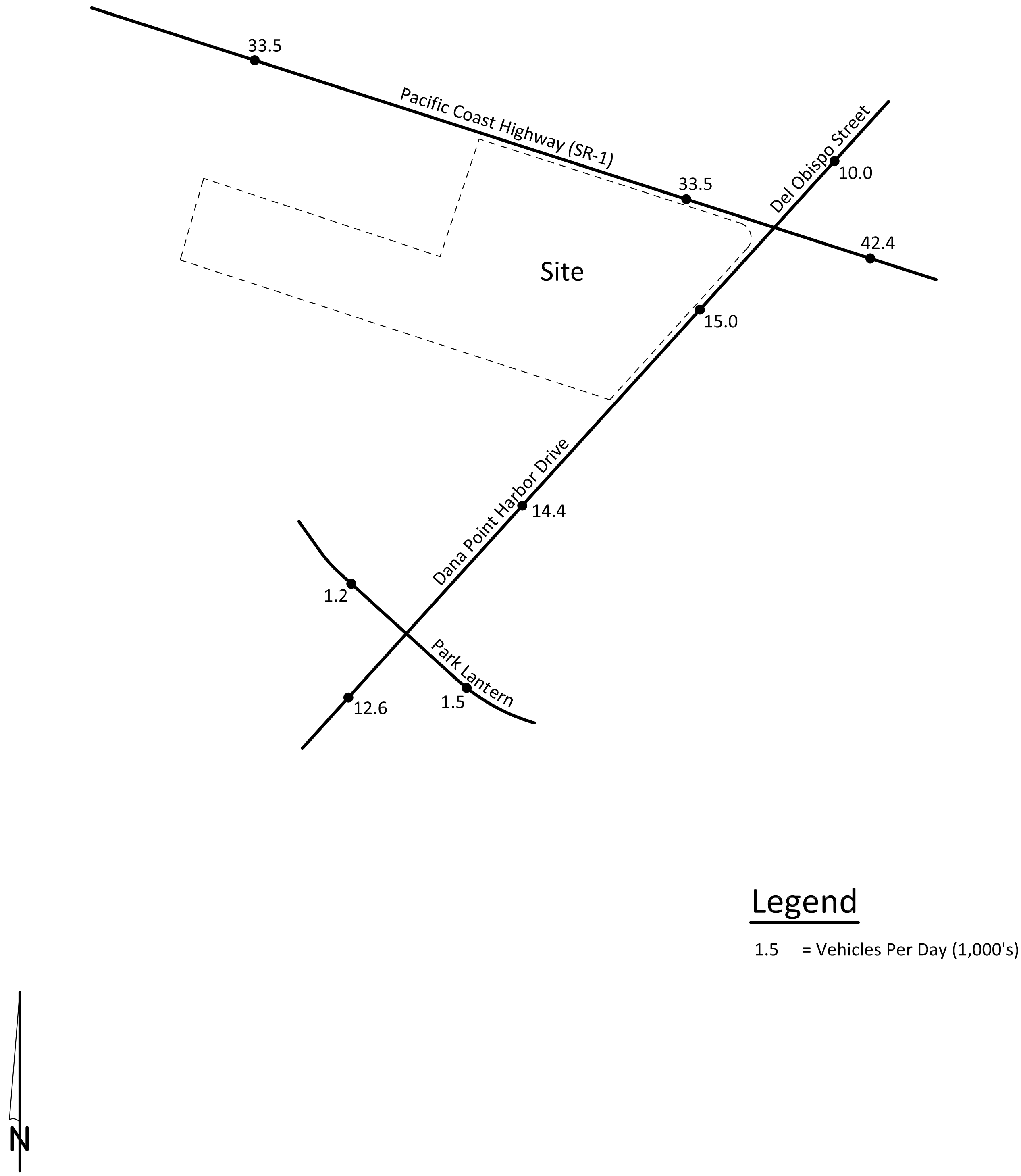
Figure 26
Existing Plus Project Saturday Peak Season Traffic Volumes



4845c/26

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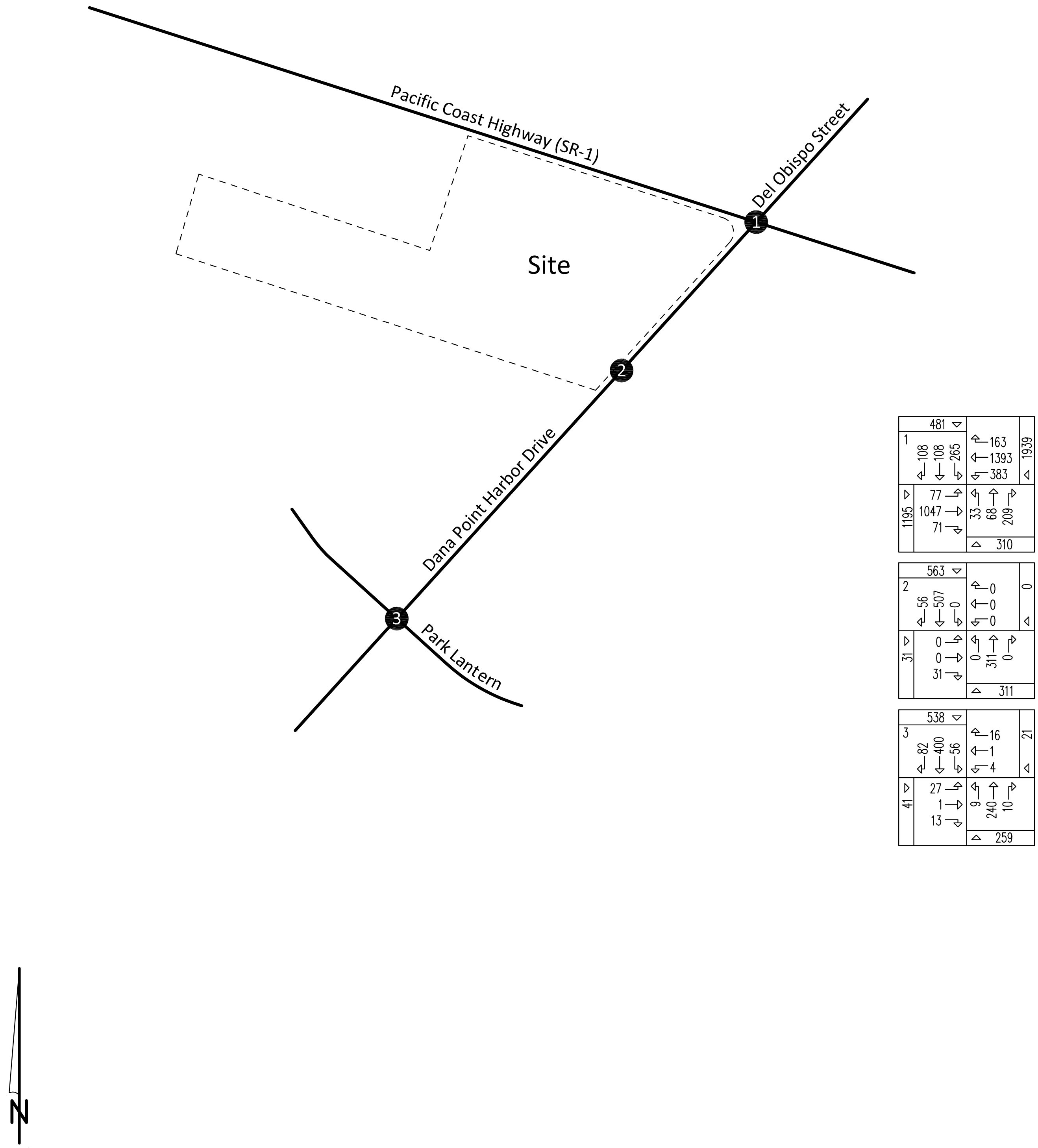
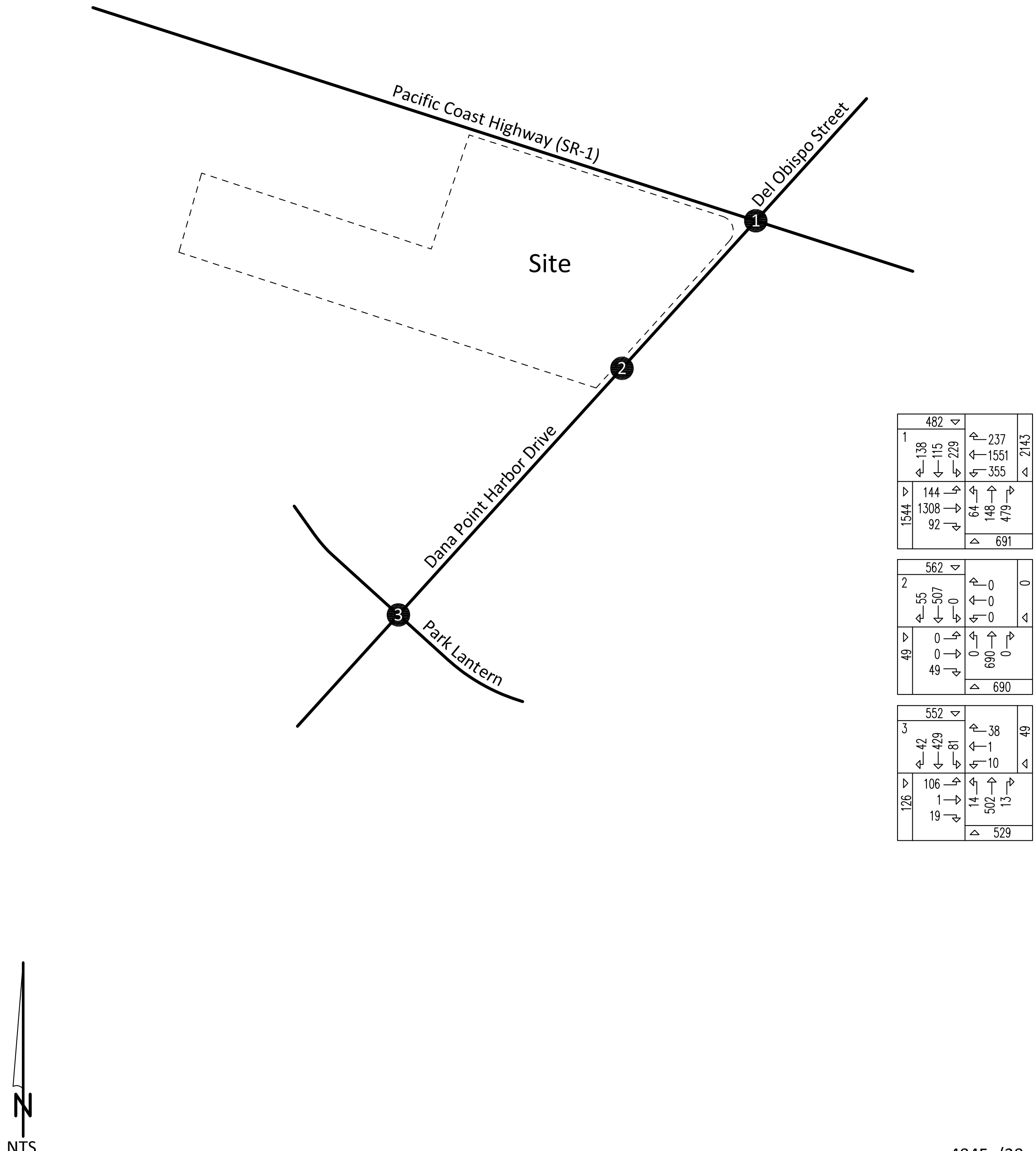
Figure 27
Existing Plus Project
Weekday Morning Peak Hour Turning Movement Volumes



4845c/27

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

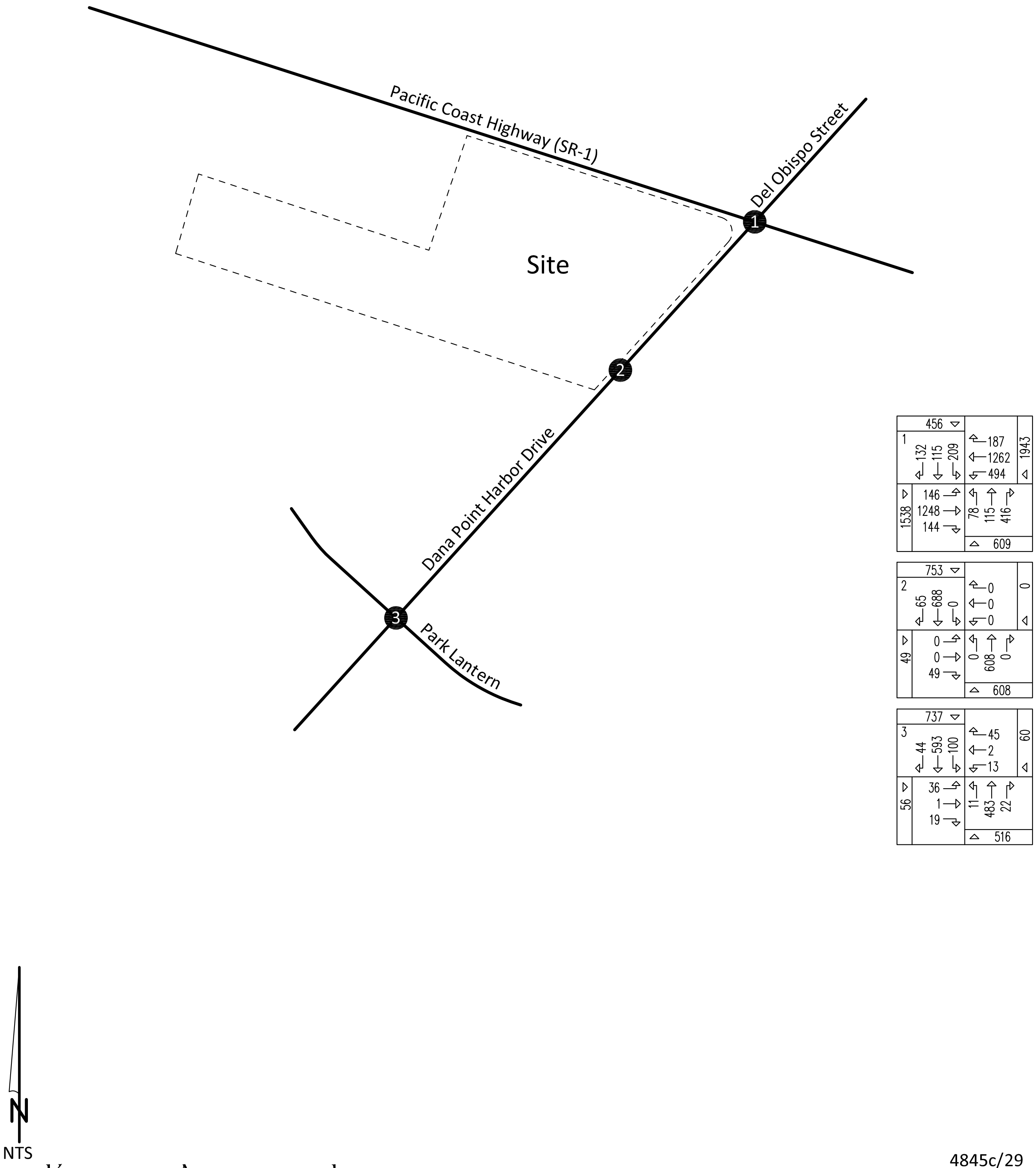
Figure 28
Existing Plus Project
Weekday Evening Peak Hour Turning Movement Volumes



4845c/28

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

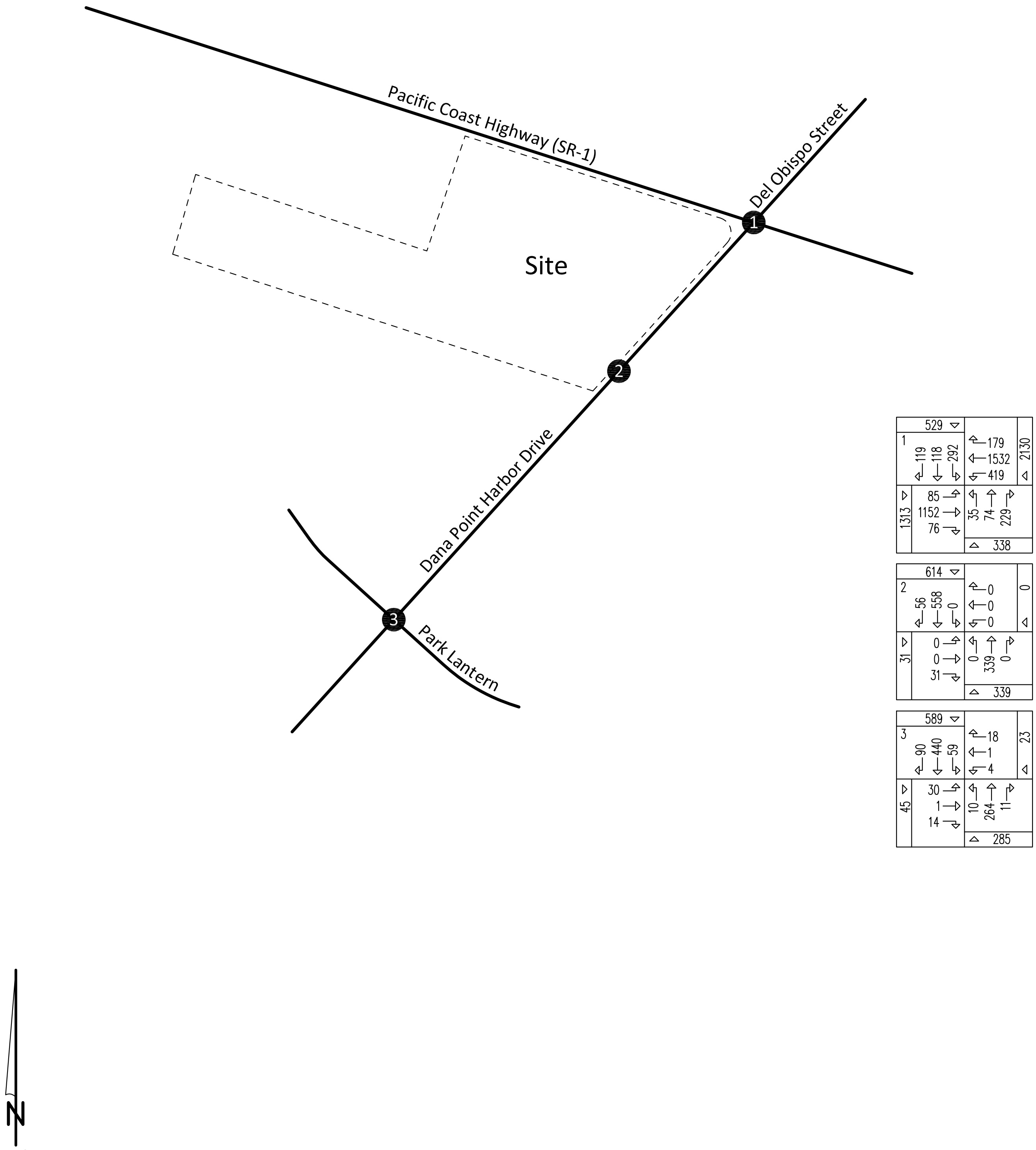
Figure 29
Existing Plus Project
Saturday Mid-day Peak Hour Turning Movement Volumes



4845c/29

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

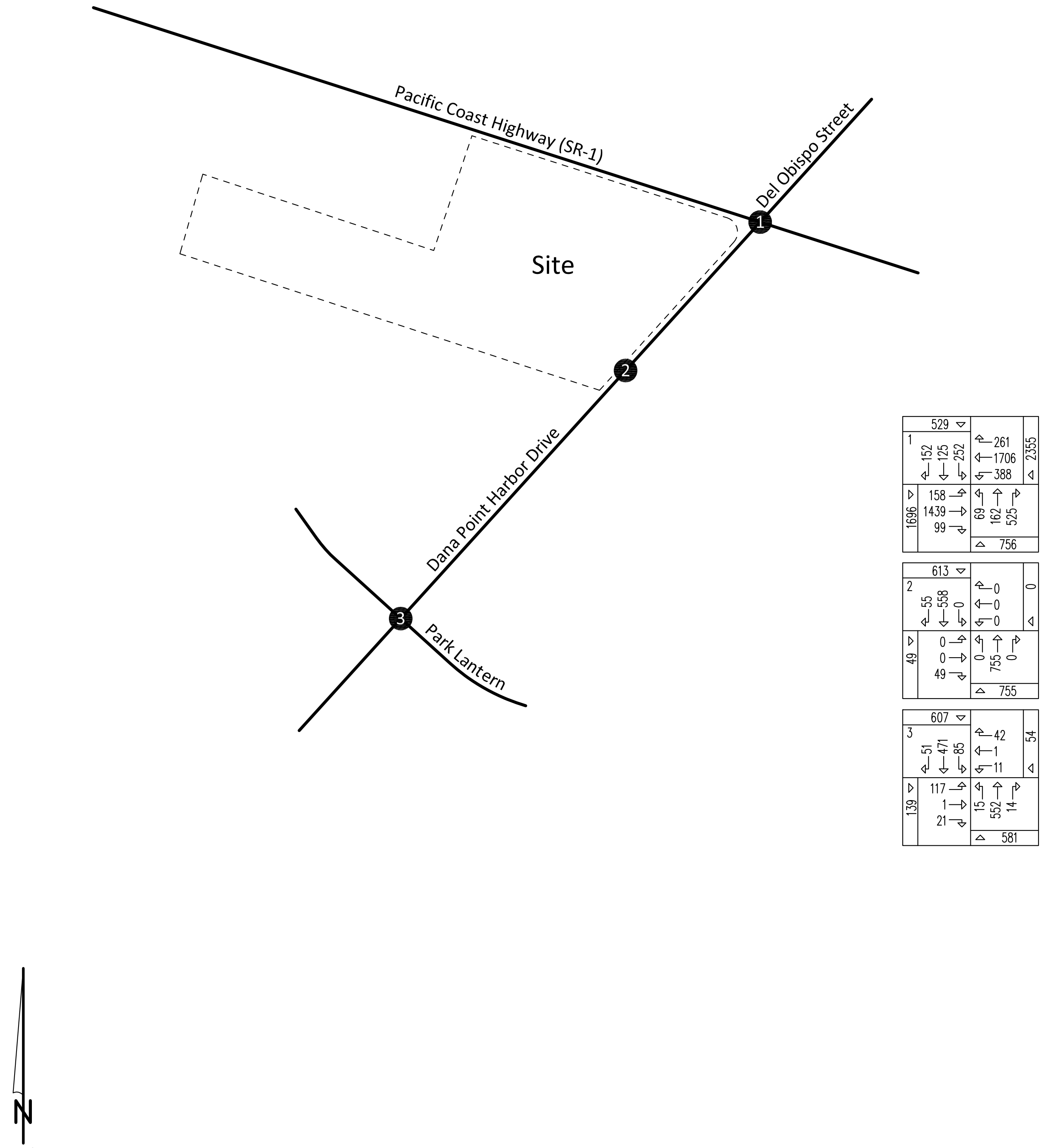
Figure 30
Existing Plus Project
Weekday Peak Season Morning Peak Hour Turning Movement Volumes



4845c/30

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

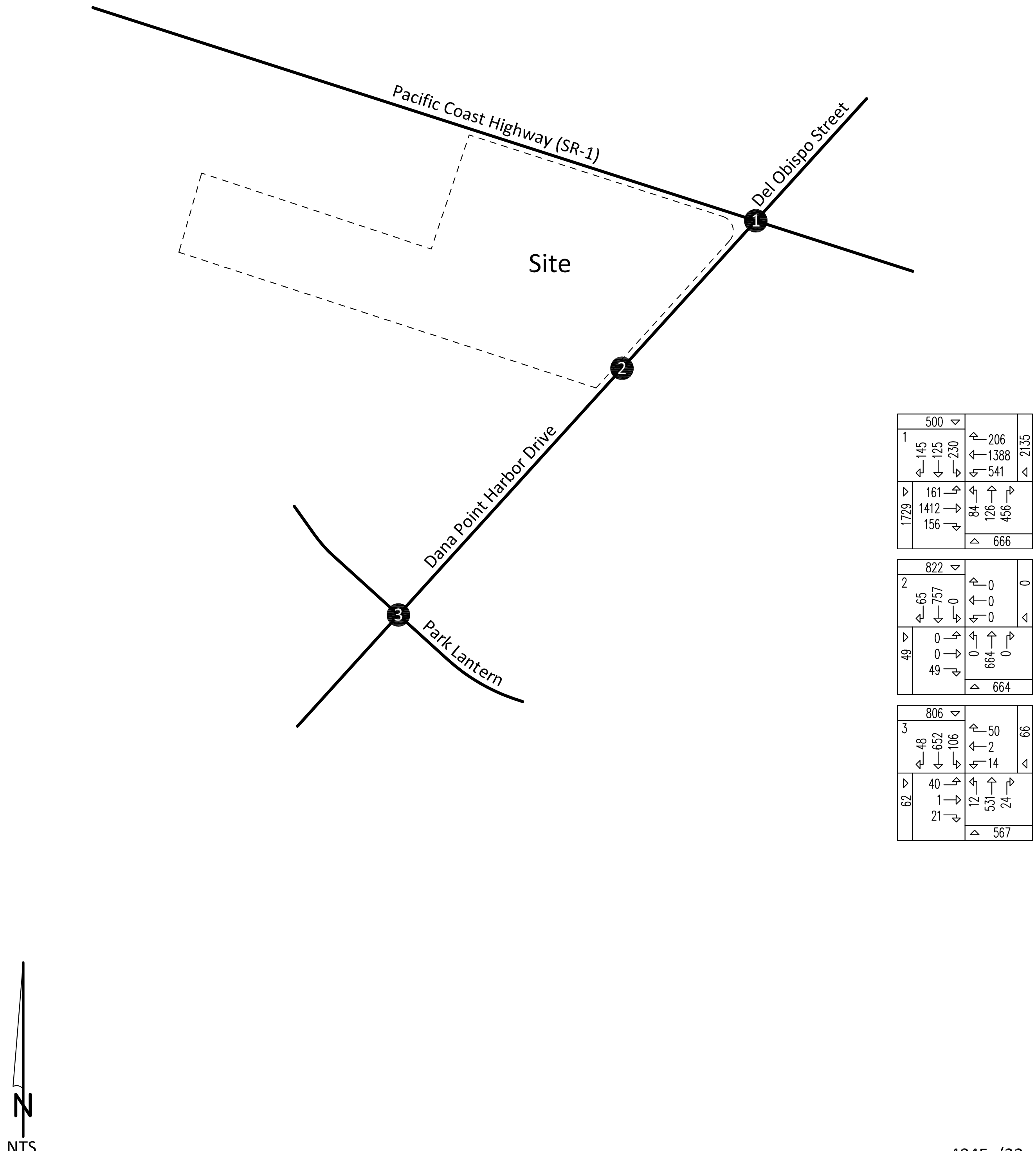
Figure 31
Existing Plus Project
Weekday Peak Season Evening Peak Hour Turning Movement Volumes



4845c/31

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 32
Existing Plus Project
Saturday Peak Season Mid-day Peak Hour Turning Movement Volumes



4845c/32

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

VI. Opening Year (2013) Without Project Traffic Conditions

In this section, Opening Year (2013) Without Project traffic conditions are discussed. Figures 33 to 42 depict the Opening Year (2013) Without Project traffic conditions.

A. Method of Projection

To assess Opening Year (2013) Without Project traffic conditions, existing traffic is combined with areawide growth.

For Opening Year (2013) Without Project traffic conditions, an areawide growth rate has been utilized to account for areawide growth on study area roadways. Opening Year (2013) Without Project traffic volumes have been calculated based on a quarter (0.25) percent annual growth over existing traffic volumes over a two (2) year period. The areawide growth rate has been obtained from the City of Dana Point staff and the City's third party traffic engineering consultant.

Areawide growth has been added to daily and peak hour traffic volumes on surrounding roadways.

B. Opening Year (2013) Without Project Weekday Average Daily Traffic Volumes

Opening Year (2013) Without Project weekday average daily traffic volumes are as illustrated on Figure 33.

C. Opening Year (2013) Without Project Saturday Daily Traffic Volumes

Opening Year (2013) Without Project Saturday daily traffic volumes are as illustrated on Figure 34.

D. Opening Year (2013) Without Project Weekday Peak Season Average Daily Traffic Volumes

Opening Year (2013) Without Project weekday peak season average daily traffic volumes are as illustrated on Figure 35.

E. Opening Year (2013) Without Project Saturday Peak Season Daily Traffic Volumes

Opening Year (2013) Without Project Saturday peak season daily traffic volumes are as illustrated on Figure 36.

F. Opening Year (2013) Without Project Levels of Service

The technique used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization. To calculate an Intersection Capacity Utilization value, the volume of traffic using the intersection is compared with the capacity of the intersection. The Intersection Capacity Utilization represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at

capacity. The technique used to assess the operation of an unsignalized intersection is known as the Intersection Delay Method based on the 2000 Highway Capacity Manual – Transportation Research Board Special Report 209. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection. The signalized intersections are considered deficient (Level of Service F) if the overall intersection critical volume to capacity ratio equals or exceeds 1.0, even if the Level of Service defined by the delay value is below the defined Level of Service standard. The volume to capacity ratio is defined as the critical volumes divided by the intersection capacity. A volume to capacity ratio greater than 1.0 implies an infinite queue. Both methodologies are described in Appendix C.

The Intersection Capacity Utilization calculations assume a per-lane capacity of 1,700 vehicles per hour for each travel lane (through or turning) through an intersection. A clearance factor of 0.05 or five (5) percent of the total intersection capacity is included in the Intersection Capacity Utilization calculation.

The Levels of Service for the Opening Year (2013) Without Project traffic conditions have been calculated and are shown in Table 4. Opening Year (2013) Without Project weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes are shown on Figures 37 to 39, respectively. Opening Year (2013) Without Project peak season weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes are shown on Figures 40 to 42, respectively.

The study area intersections are projected to operate within acceptable Levels of Service during peak hours for Opening Year (2013) Without Project traffic conditions (see Table 4). Opening Year (2013) Without Project Level of Service worksheets are provided in Appendix D.

Table 4

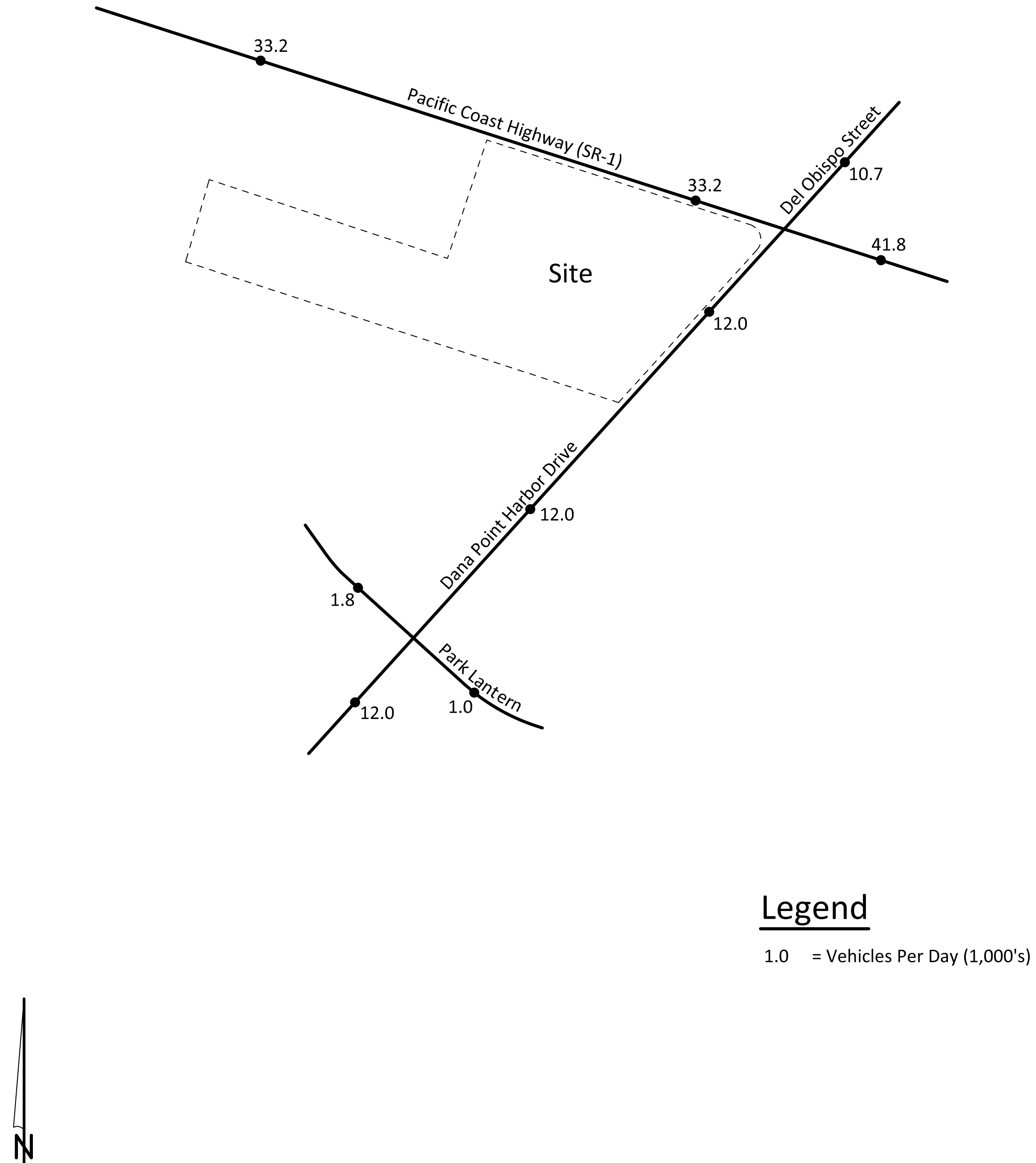
Opening Year (2013) Without Project Intersection Delay and Level of Service

																										Intersection Capacity Utilization - Level of Service					
		Intersection Approach Lanes[1]																								Non-peak Season			Peak Season		
	Traffic	Northbound						Southbound						Eastbound						Westbound						Weekday		Weekend	Weekday		Weekend
Intersection	Control[2]	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	Morning	Evening	Midday	Morning	Evening	Midday
Del Obispo Street/Dana Point Harbor Drive (NS) at:																															
Pacific Coast Highway (EW) - #1	TS	1	0	1	0	2	0	2	0	1	0	1	0	1	0	2	1	0	0	2	0	2	1	0	0	0.517-A	0.627-B	0.581-A	0.564-A	0.695-B	0.643-B
Park Lantern (EW) - #3	TS	1	0	2	0	1	0	1	0	2	0	d	0	0	1	0	0	d	0	1	0	1	0	1>>	0	0.192-A	0.289-A	0.260-A	0.206-A	0.314-A	0.281-A

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; >> = Free Right Turn; d = Defacto Right Turn Lane

[2] TS = Traffic Signal

Figure 33
Opening Year (2013) Without Project
Weekday Average Daily Traffic Volumes



4845c/33

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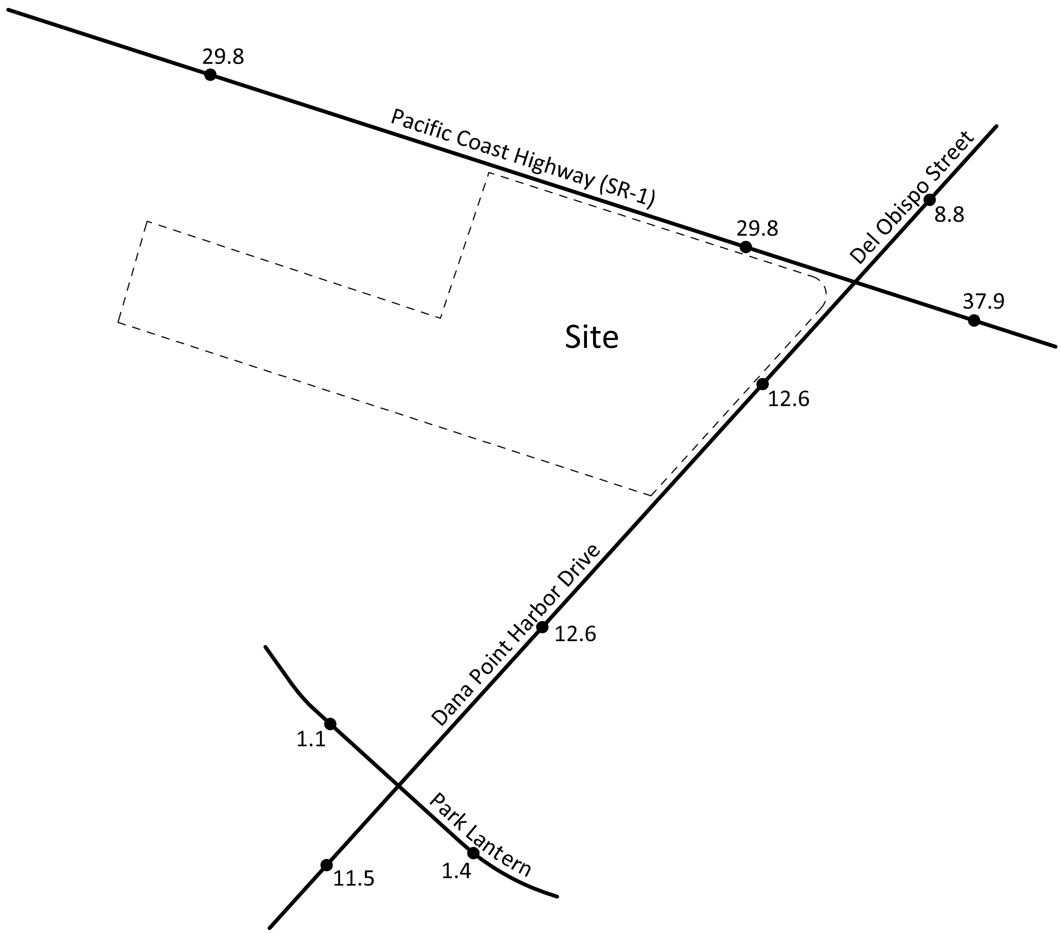
Figure 34
Opening Year (2013) Without Project
Saturday Daily Traffic Volumes



Legend
1.4 = Vehicles Per Day (1,000's)

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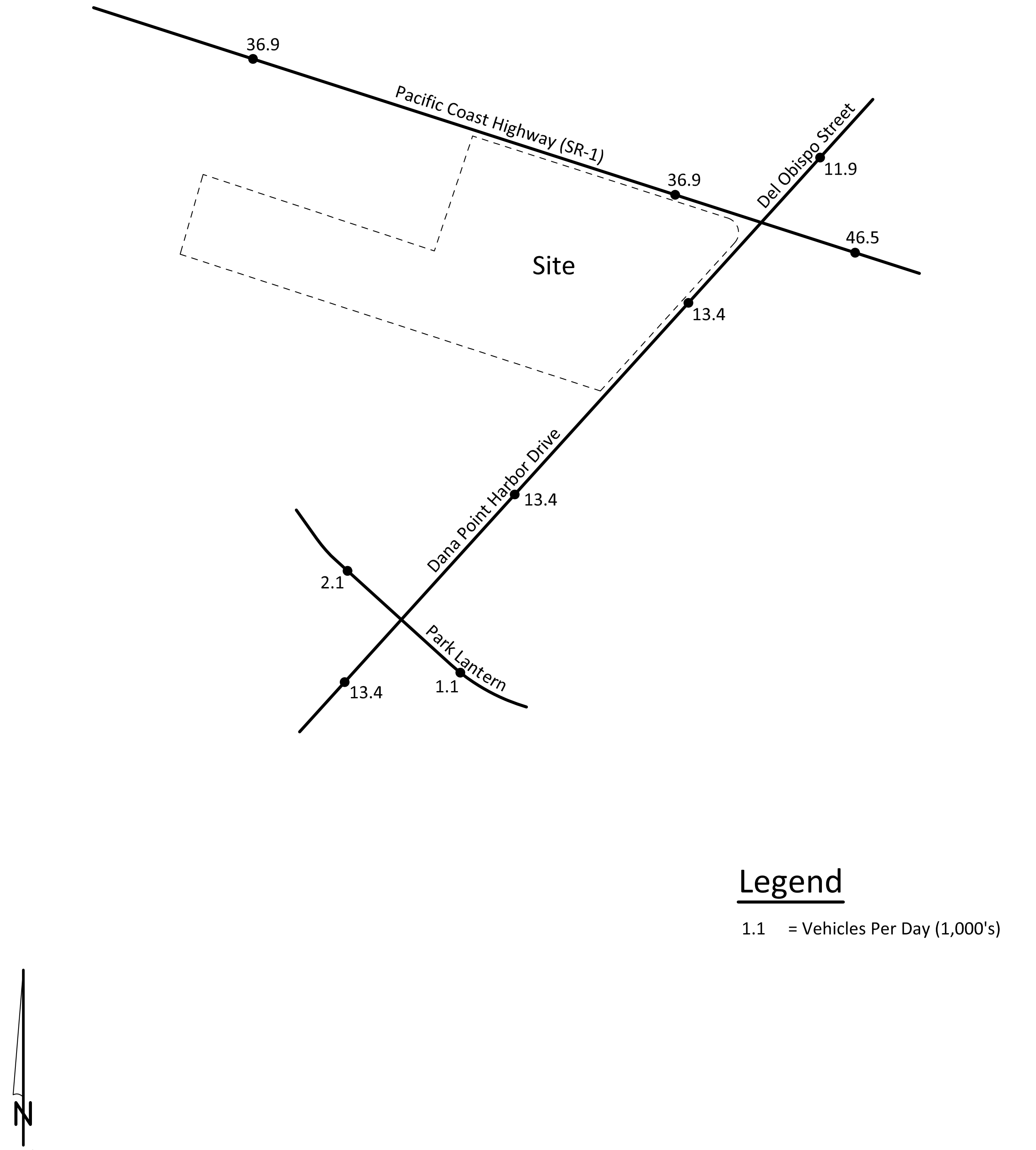
Figure 35
Opening Year (2013) Without Project
Weekday Peak Season Average Daily Traffic Volumes



4845c/35

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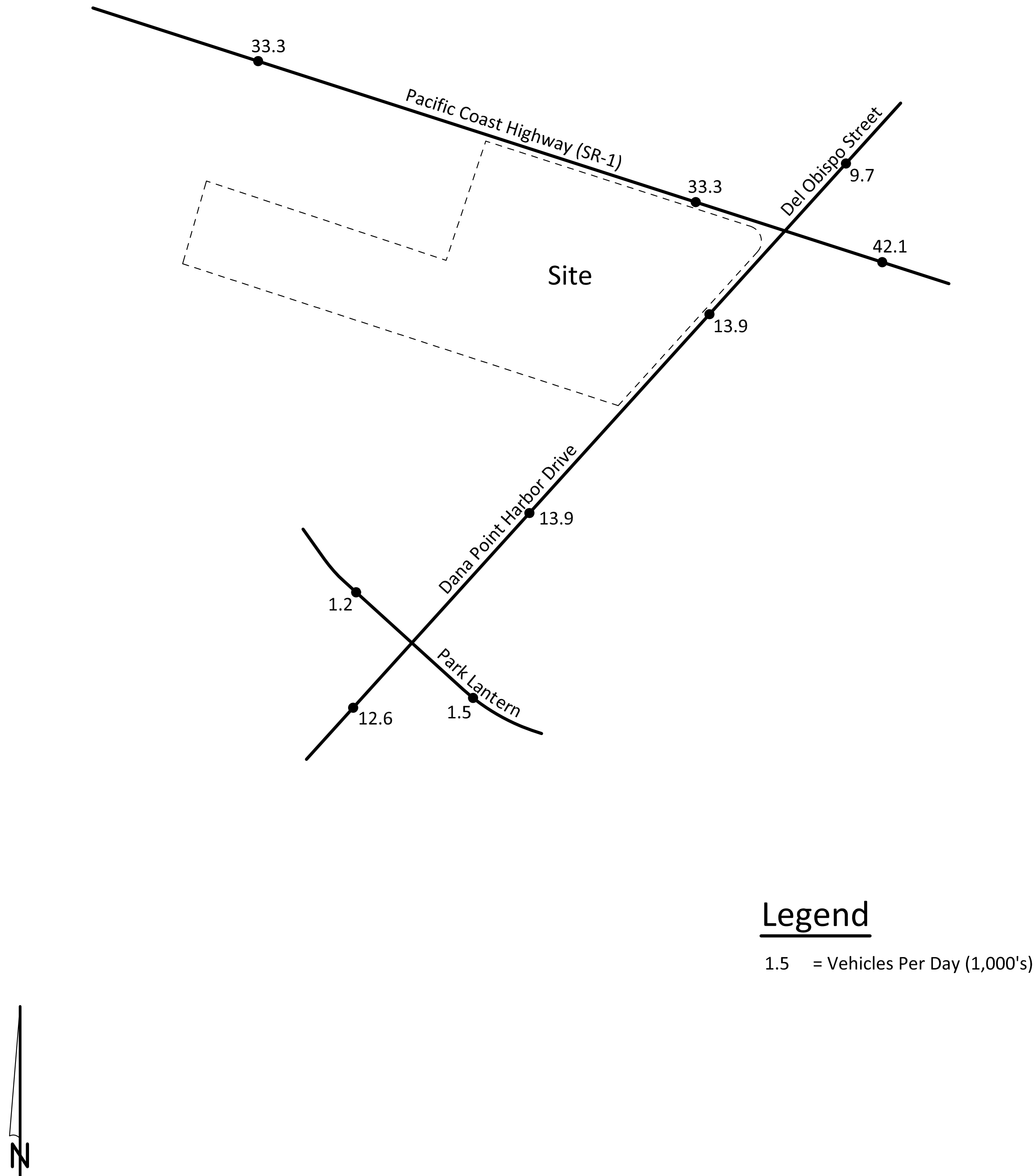
Figure 36
Opening Year (2013) Without Project
Saturday Peak Season Daily Traffic Volumes



4845c/36

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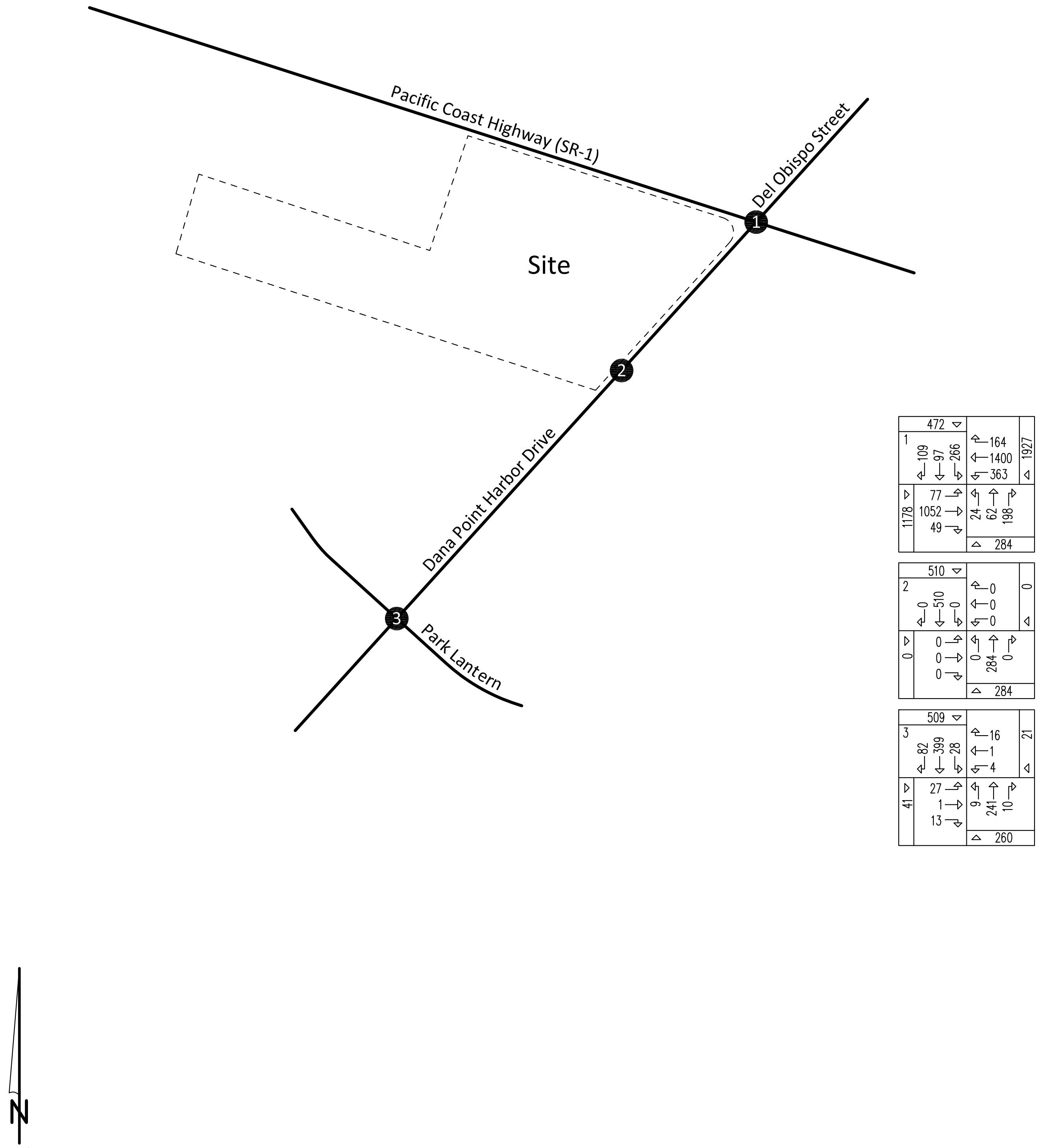
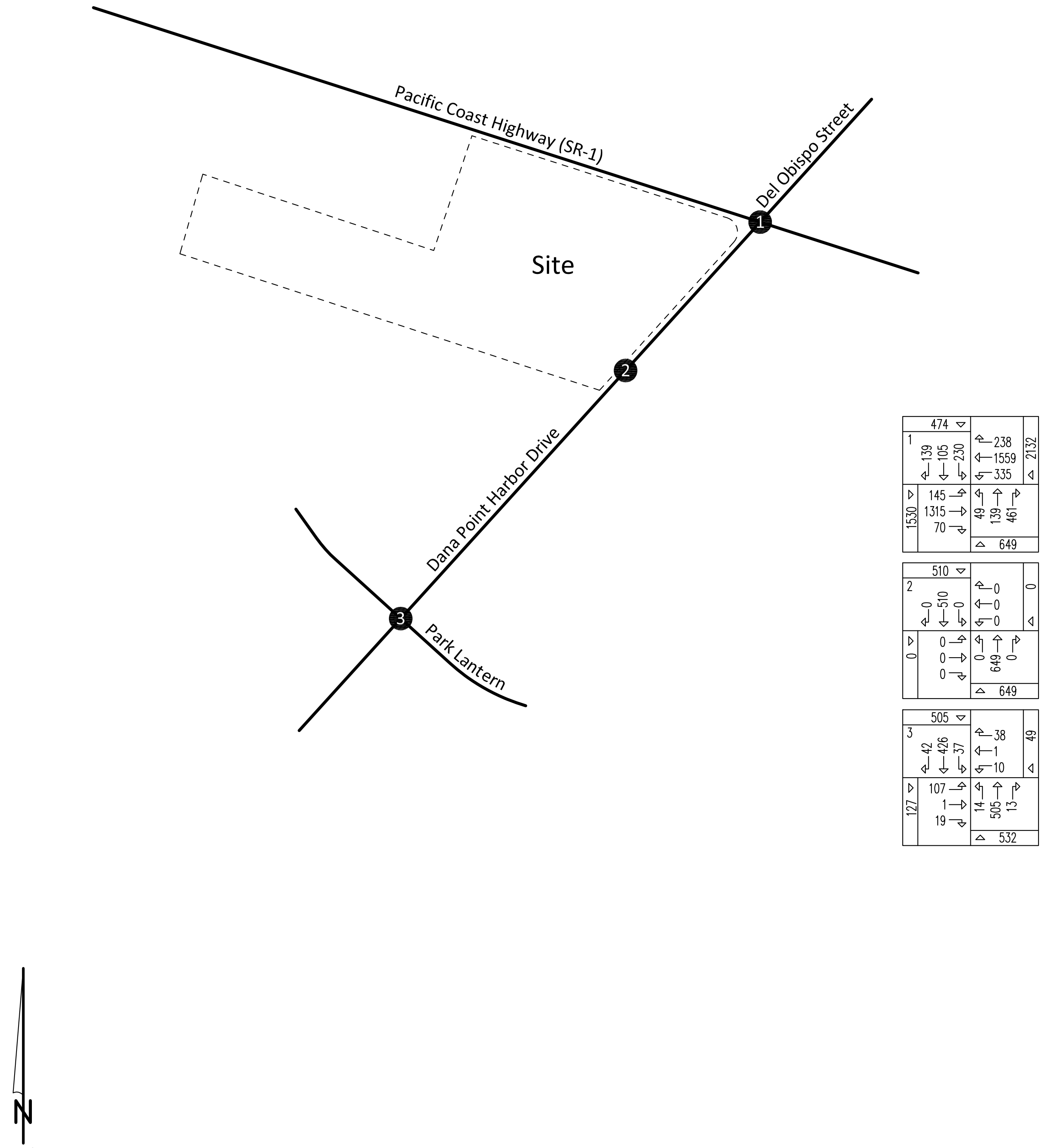
Figure 37
Opening Year (2013) Without Project
Weekday Morning Peak Hour Turning Movement Volumes



4845c/37

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 38
Opening Year (2013) Without Project
Weekday Evening Peak Hour Turning Movement Volumes



4845c/38

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

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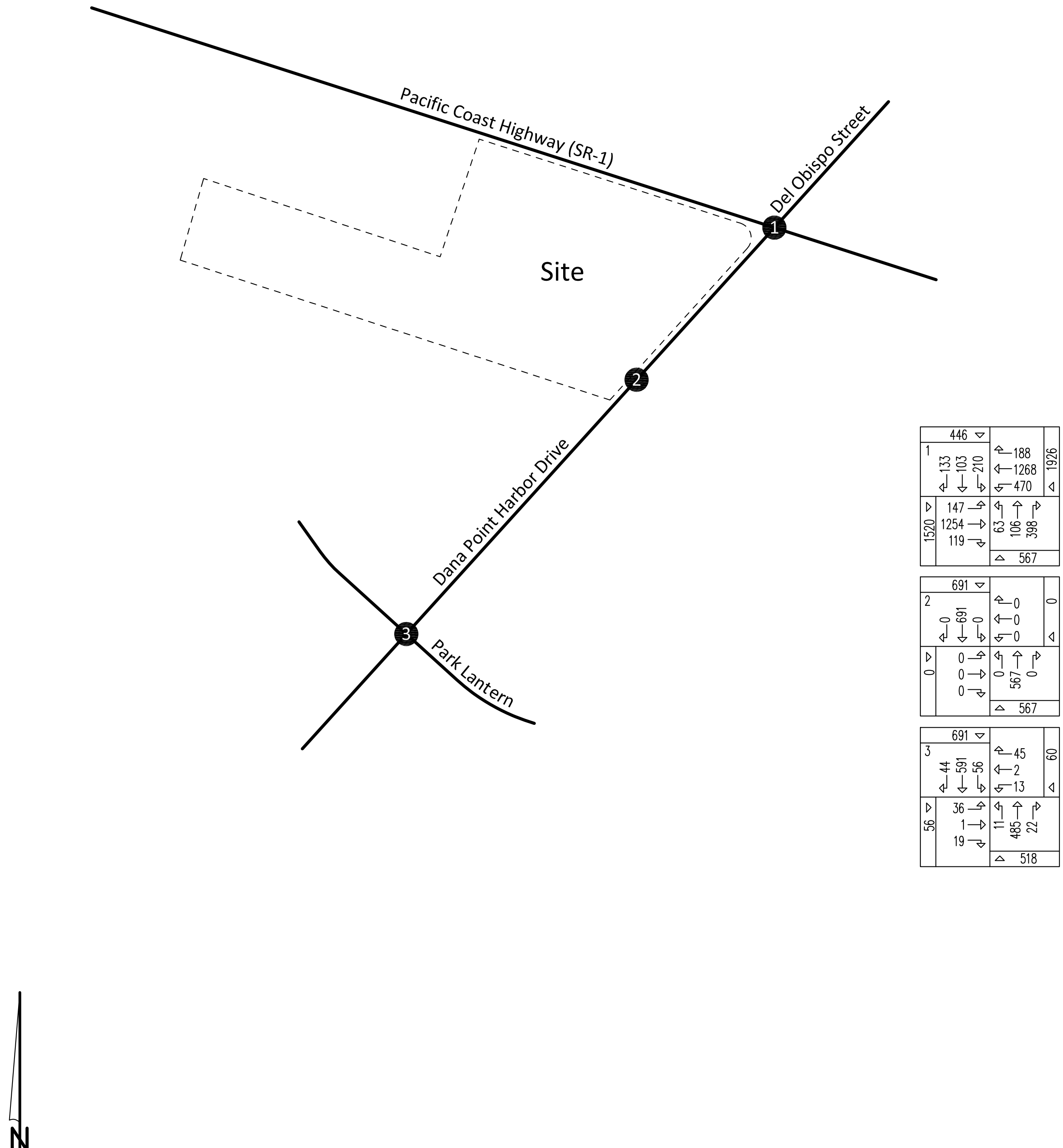
Figure 39
Opening Year (2013) Without Project
Saturday Mid-day Peak Hour Turning Movement Volumes

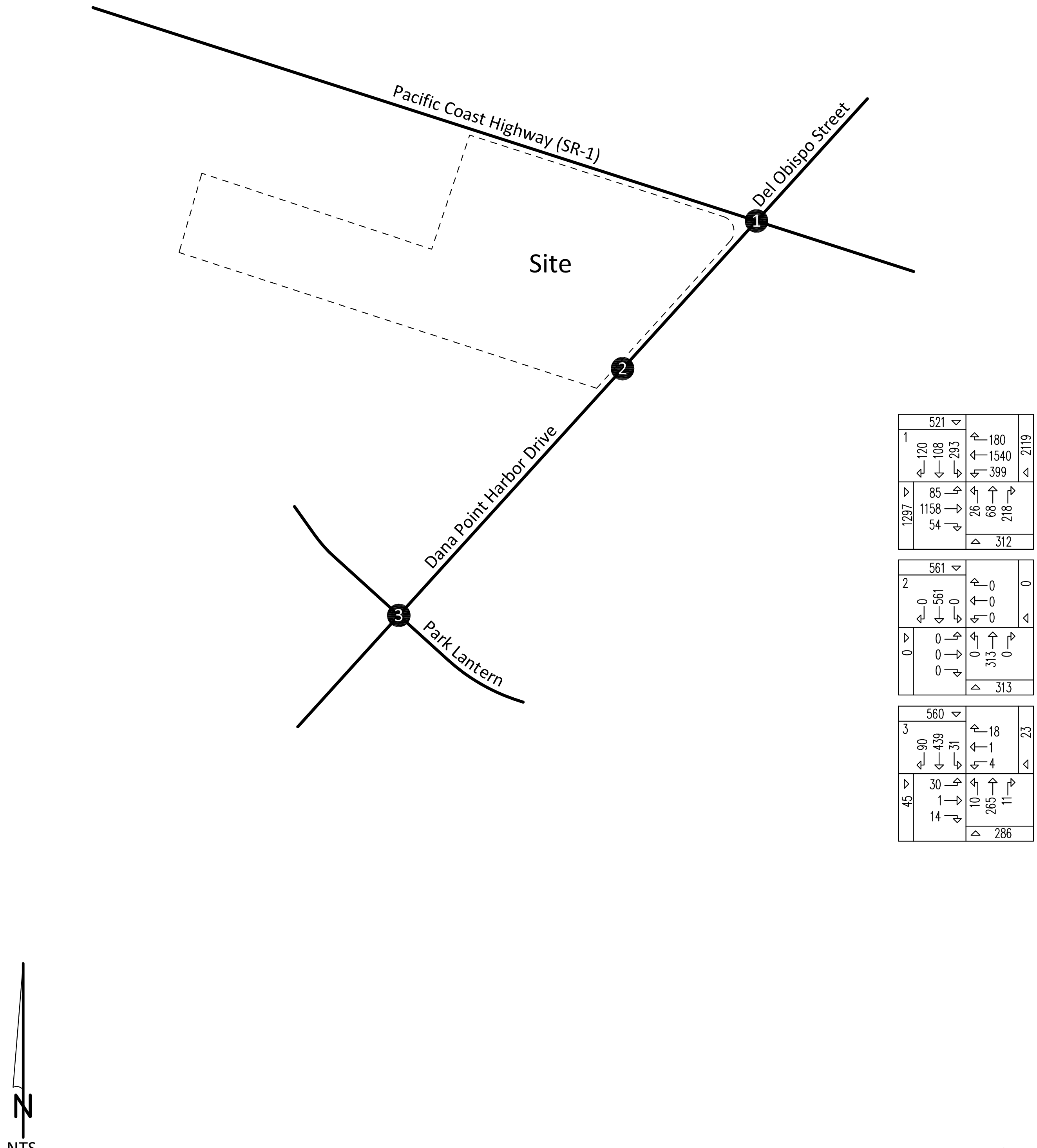


4845c/39

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

Over 35 Years of Excellent Service

Figure 40
Opening Year (2013) Without Project
Weekday Peak Season Morning Peak Hour Turning Movement Volumes

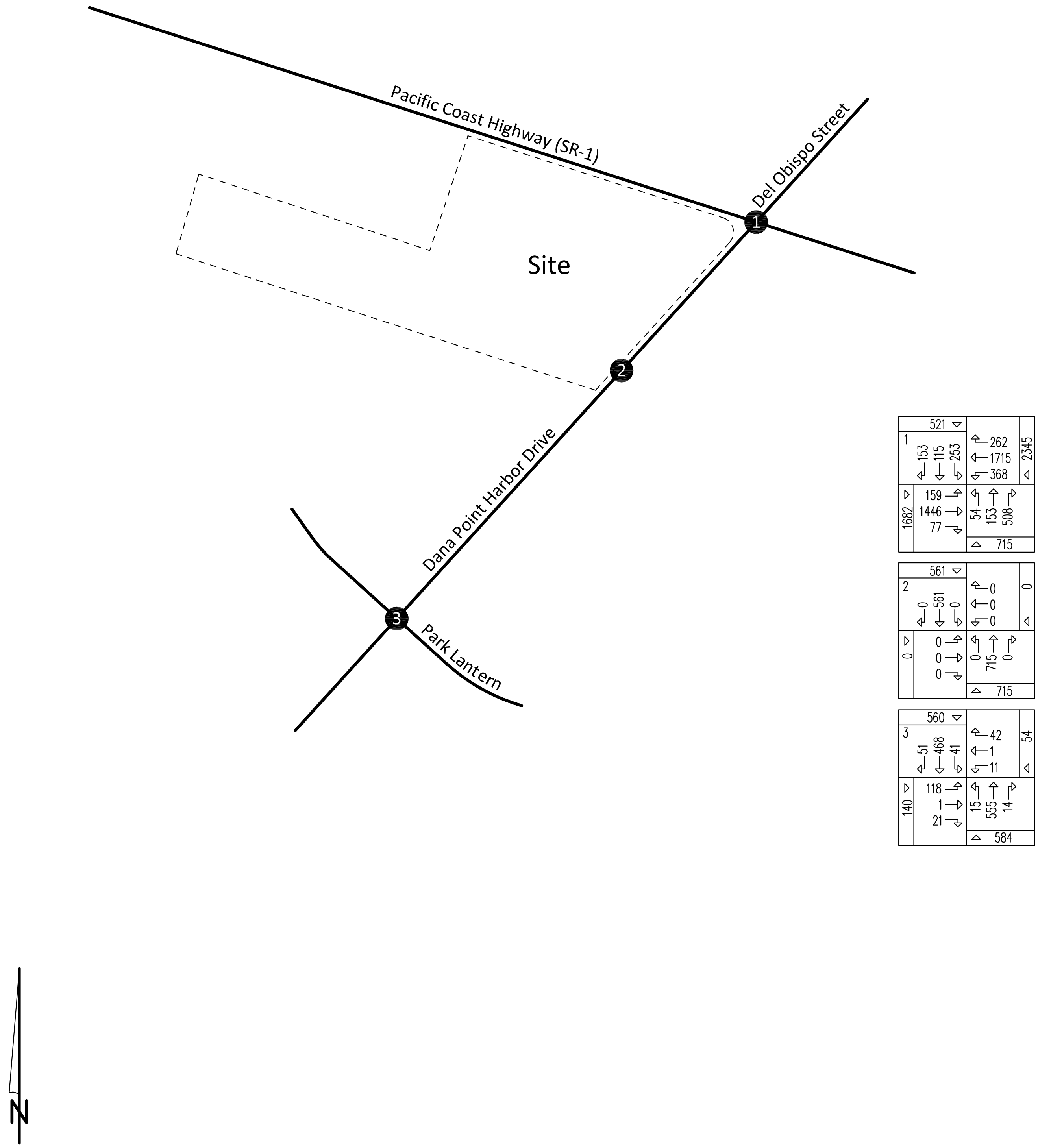


4845c/40

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 41
Opening Year (2013) Without Project
Weekday Peak Season Evening Peak Hour Turning Movement Volumes

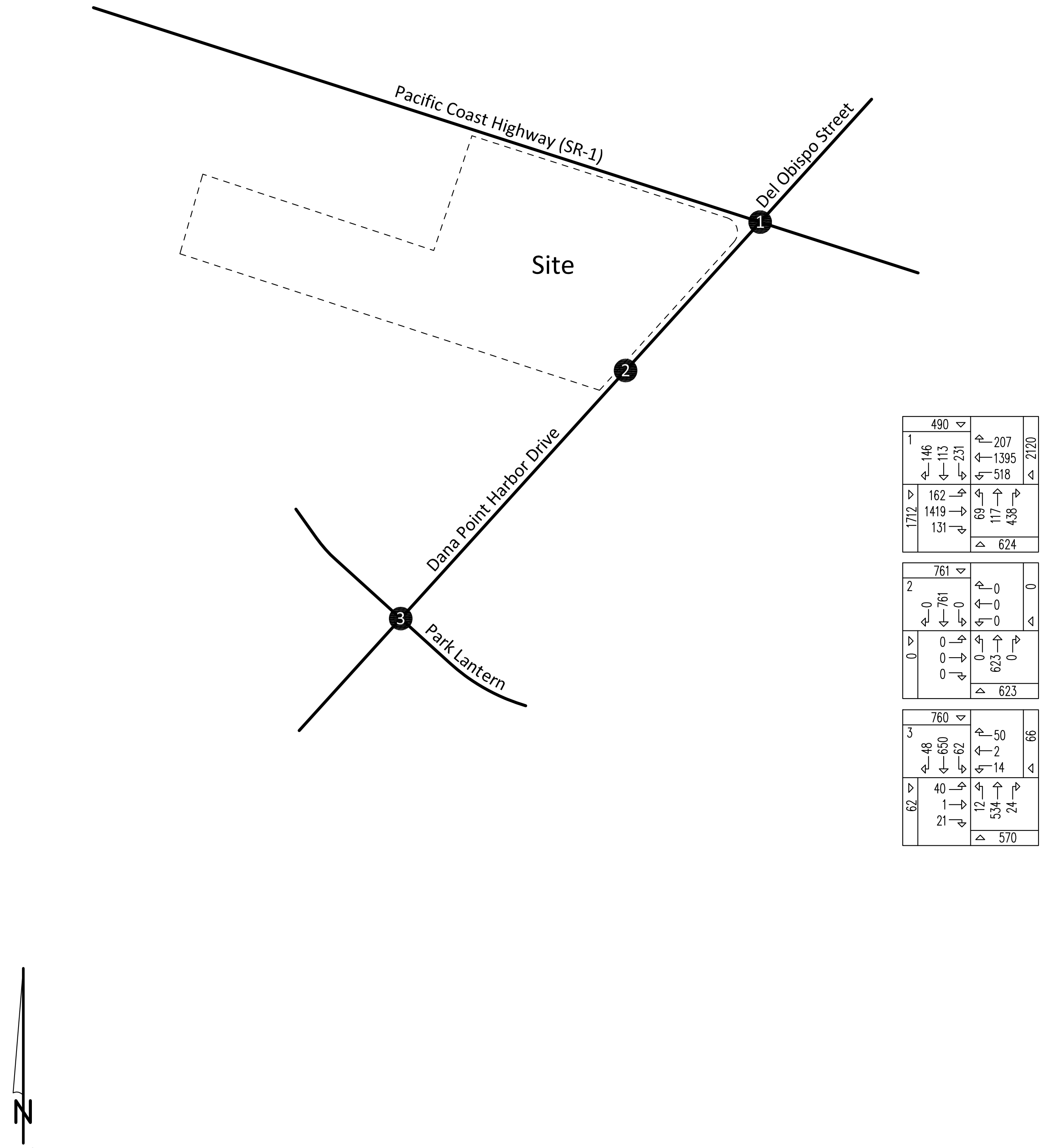


4845c/41

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

Over 35 Years of Excellent Service

Figure 42
Opening Year (2013) Without Project
Saturday Peak Season Mid-day Peak Hour Turning Movement Volumes



4845c/42

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

VII. Opening Year (2013) With Project Traffic Conditions

In this section, Opening Year (2013) With Project traffic conditions without and with the project are discussed. Figures 43 to 52 depict the Opening Year (2013) With Project traffic conditions.

A. Method of Projection

To assess Opening Year (2013) With Project traffic conditions, existing traffic is combined with the project and areawide growth.

For Opening Year (2013) With Project traffic conditions, an areawide growth rate has been utilized to account for areawide growth on study area roadways. Opening Year (2013) With Project traffic volumes have been calculated based on a quarter (0.25) percent annual growth rate of existing traffic volumes over a two (2) year period. The areawide growth rate has been obtained from the City of Dana Point staff and the City's third party traffic engineering consultant.

Areawide growth has been added to daily and peak hour traffic volumes on surrounding roadways.

B. Opening Year (2013) With Project Weekday Average Daily Traffic Volumes

Opening Year (2013) With Project weekday average daily traffic volumes are as illustrated on Figure 43.

C. Opening Year (2013) With Project Saturday Daily Traffic Volumes

Opening Year (2013) With Project Saturday daily traffic volumes are as illustrated on Figure 44.

D. Opening Year (2013) With Project Weekday Peak Season Average Daily Traffic Volumes

Opening Year (2013) With Project weekday peak season average daily traffic volumes are as illustrated on Figure 45.

E. Opening Year (2013) With Project Saturday Peak Season Daily Traffic Volumes

Opening Year (2013) With Project Saturday peak season daily traffic volumes are as illustrated on Figure 46.

F. Opening Year (2013) With Project Levels of Service

The technique used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization. To calculate an Intersection Capacity Utilization value, the volume of traffic using the intersection is compared with the capacity of the intersection. The Intersection Capacity Utilization represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at

capacity. The technique used to assess the operation of an unsignalized intersection is known as the Intersection Delay Method based on the 2000 Highway Capacity Manual – Transportation Research Board Special Report 209. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection. The signalized intersections are considered deficient (Level of Service F) if the overall intersection critical volume to capacity ratio equals or exceeds 1.0, even if the Level of Service defined by the delay value is below the defined Level of Service standard. The volume to capacity ratio is defined as the critical volumes divided by the intersection capacity. A volume to capacity ratio greater than 1.0 implies an infinite queue. Both methodologies are described in Appendix C.

The Intersection Capacity Utilization calculations assume a per-lane capacity of 1,700 vehicles per hour for each travel lane (through or turning) through an intersection. A clearance factor of 0.05 or five (5) percent of the total intersection capacity is included in the Intersection Capacity Utilization calculation.

The Levels of Service for the Opening Year (2013) With Project traffic conditions have been calculated and are shown in Table 5. Opening Year (2013) With Project weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes are shown on Figures 47 to 49, respectively. Opening Year (2013) With Project peak season weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes are shown on Figures 50 to 52, respectively.

The study area intersections are projected to operate within acceptable Levels of Service during peak hours for Opening Year (2013) With Project traffic conditions (see Table 5). Opening Year (2013) With Project Level of Service worksheets are provided in Appendix D.

G. Significant Transportation Impact

The significant traffic impact criteria used by the City of Dana Point is as follows:

1. If a project causes a change in Level of Service from acceptable to unacceptable.
2. If a project causes an increase in Volume to Capacity or Intersection Capacity Utilization of 0.010 or more, causing or worsening an unacceptable Level of Service.

If a proposed projects traffic causes the conditions above, then the impacts are deemed significant and the project shall identify feasible mitigation to bring the facility back to the level of service held by the facility prior to the projects significant impact.

Table 6 depicts the Opening Year (2013) With Project intersection traffic contribution at the study area intersections. As shown in Table 6, the project site does not significantly impact any study area intersections.

Table 5

Opening Year (2013) With Project Intersection Delay and Level of Service

		Intersection Approach Lanes[1]																								Intersection Capacity Utilization - Level of Service					
																										Non-peak Season			Peak Season		
	Traffic	Northbound						Southbound						Eastbound						Westbound						Weekday		Weekend	Weekday		Weekend
Intersection	Control[2]	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	Morning	Evening	Midday	Morning	Evening	Midday
Del Obispo Street/Dana Point Harbor Drive (NS) at:																															
Pacific Coast Highway (EW) - #1	TS	1	0	1	0	2	0	2	0	1	0	1	0	1	0	3	0	1	0	2	0	2	1	0	0	0.521-A	0.643-B	0.572-A	0.567-A	0.701-C	0.631-B
Project Access (EW) - #2[3]	CSS	0	0	2	0	0	0	0	0	2	0	d	0	0	0	0	0	1	0	0	0	0	0	0	0	10.0-B	10.1-B	10.9-B	10.2-B	10.3-B	11.3-B
Park Lantern (EW) - #3	TS	1	0	2	0	1	0	1	0	2	0	d	0	0	1	0	0	d	0	1	0	1	0	1	0	0.199-A	0.331-A	0.300-A	0.214-A	0.357-A	0.323-A

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = Defacto Right Turn Lane

[2] TS = Traffic Signal; CSS = Cross Street Stop

[3] Level of Service calculations for nonsignalized intersections are based on the Highway Capacity Manual delay methodology. Values reported are shown in terms of seconds of delay per vehicle.

Table 6

Opening year (2013) With Project Traffic Contribution

Intersection	Peak Hour	Opening Year (2013) Without Project		Opening Year (2013) With Project								Acceptable Level of Service
				Without Mitigation				With Mitigation				
		Intersection Capacity Utilization	Level of Service	Intersection Capacity Utilization	Level of Service	Project Impact	Significant Impact[1]	Intersection Capacity Utilization	Level of Service	Project Impact	Significant Impact	
Dana Point Harbor Drive (NS) at:												
Pacific Coast Highway (EW) - #1	Morning	0.517	A	0.521	A	0.004	No					D
	Evening	0.627	B	0.643	B	0.016	No					D
	Mid-day	0.581	A	0.572	A	-0.009	No					D
	Morning - Peak Season	0.564	A	0.567	A	0.003	No					D
	Evening - Peak Season	0.695	B	0.701	C	0.006	No					D
	Mid-day - Peak Season	0.643	B	0.631	B	-0.012	No					D
Park Lantern (EW) - #3	Morning	0.192	A	0.199	A	0.007	No					C
	Evening	0.289	A	0.331	A	0.042	No					C
	Mid-day	0.260	A	0.300	A	0.040	No					C
	Morning - Peak Season	0.206	A	0.214	A	0.008	No					C
	Evening - Peak Season	0.314	A	0.357	A	0.043	No					C
	Mid-day - Peak Season	0.281	A	0.323	A	0.042	No					C

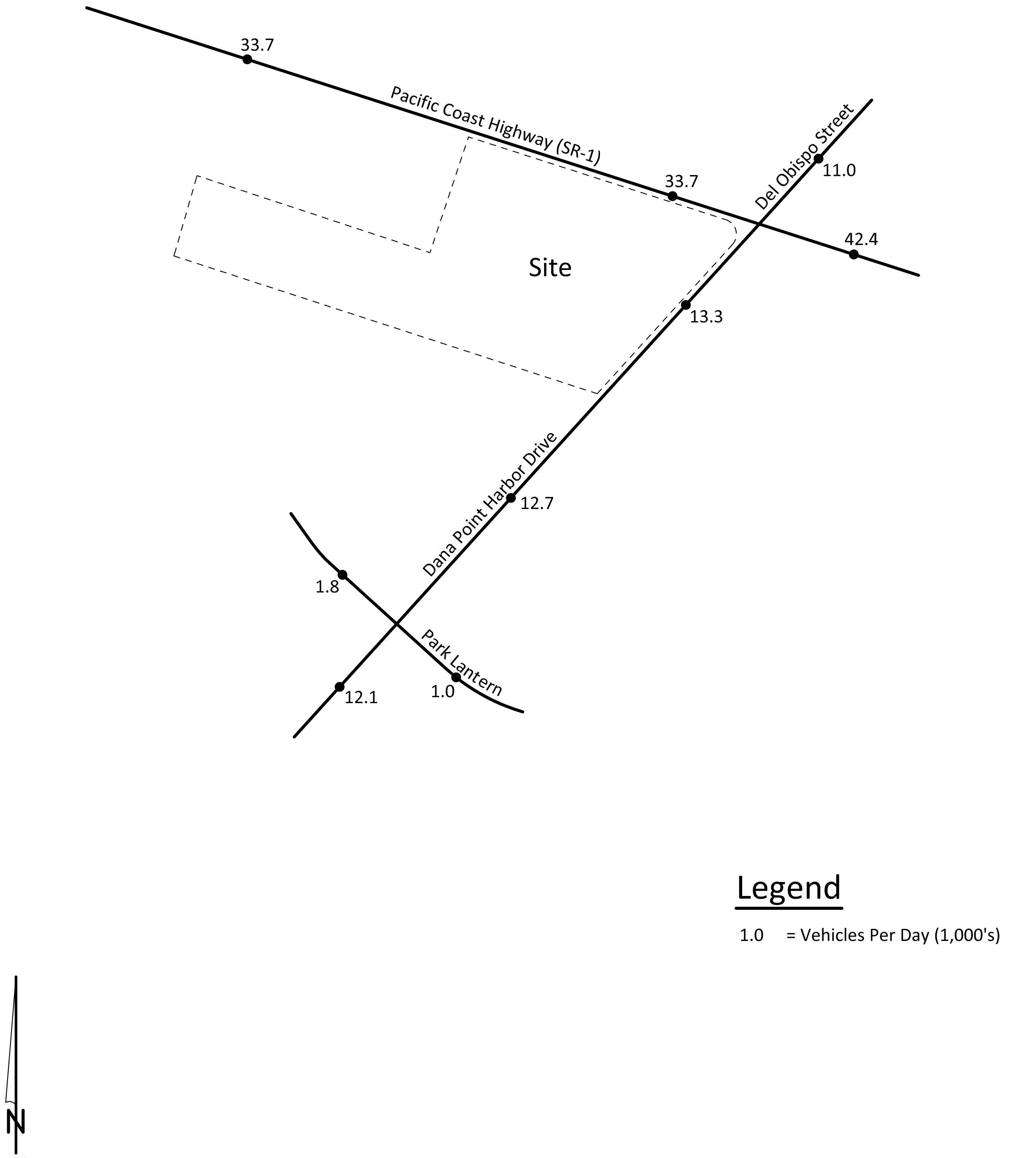
[1]The significant traffic impact criteria used by the City of Dana Point is as follows:

1. If a project causes a change in Level of Service from acceptable to unacceptable.

2. If a project causes an increase in Volume to Capacity or Intersection Capacity Utilization of 0.010 or more, causing or worsening an unacceptable Level of Service.

If a proposed projects traffic causes the conditions above, then the impacts are deemed significant and the project shall identify feasible mitigation to bring the facility back to the level of service held by the facility prior to the projects significant impact.

Figure 43
Opening Year (2013) With Project
Weekday Average Daily Traffic Volumes



4845c/43

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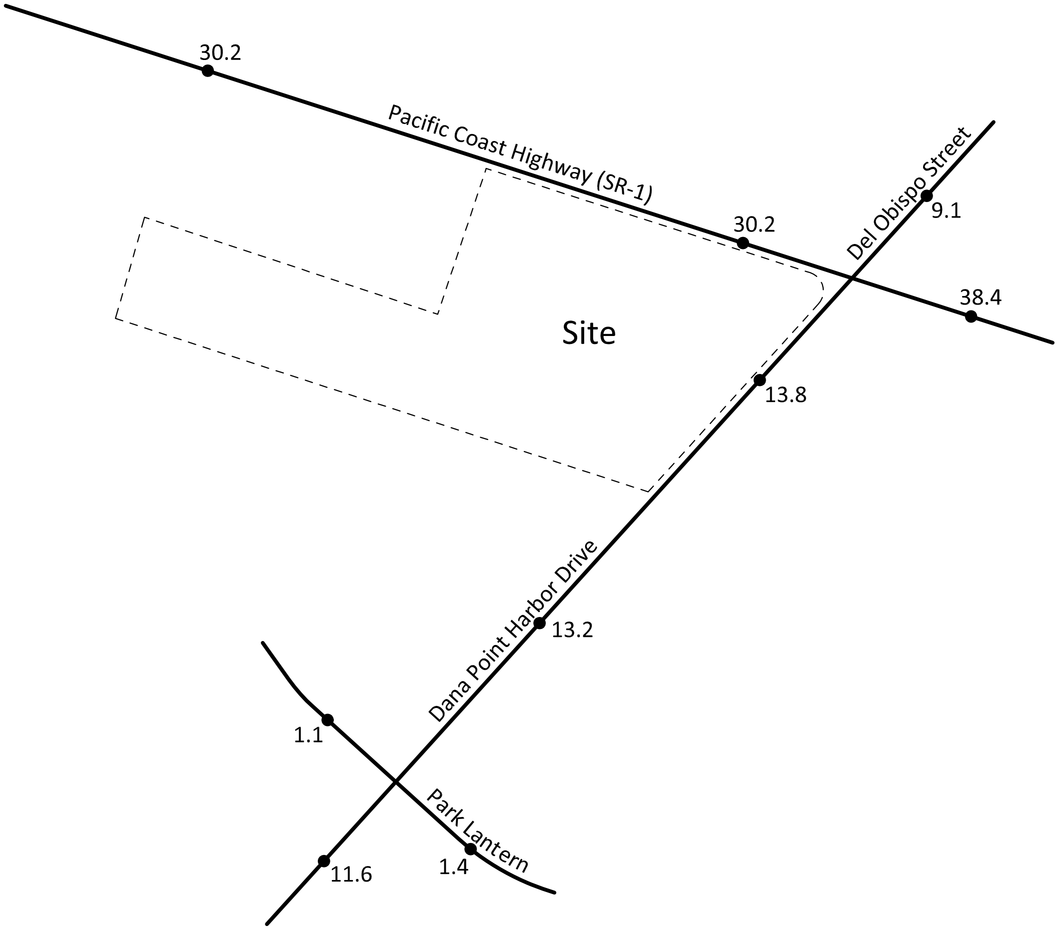
OVER 35 YEARS OF EXCELLENT SERVICE

Figure 44
Opening Year (2013) With Project
Saturday Daily Traffic Volumes



Legend

1.4 = Vehicles Per Day (1,000's)

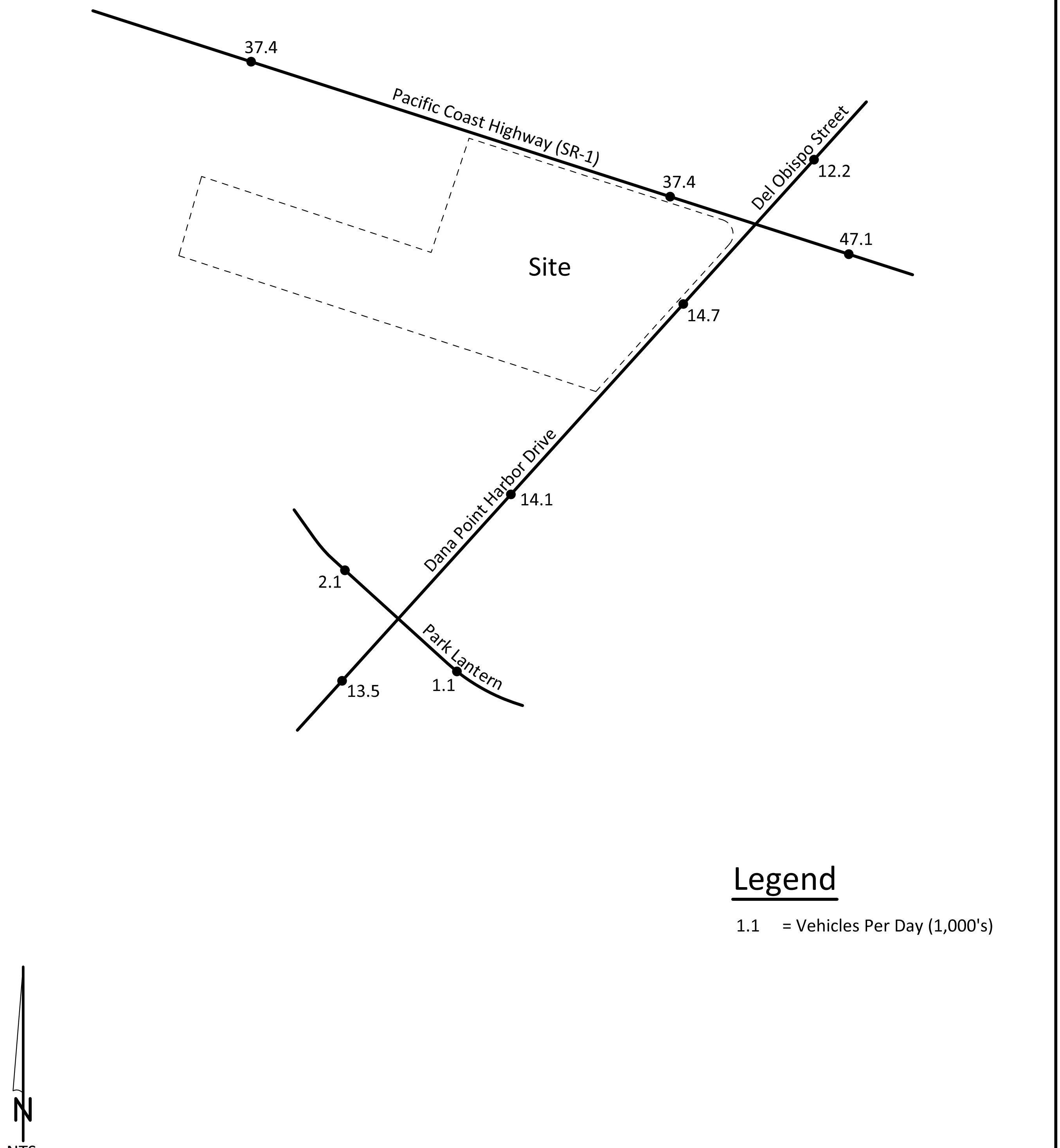
NTS

4845c/44

Kunzman Associates, Inc.

Over 35 Years of Excellent Service

Figure 45
Opening Year (2013) With Project
Weekday Peak Season Average Daily Traffic Volumes

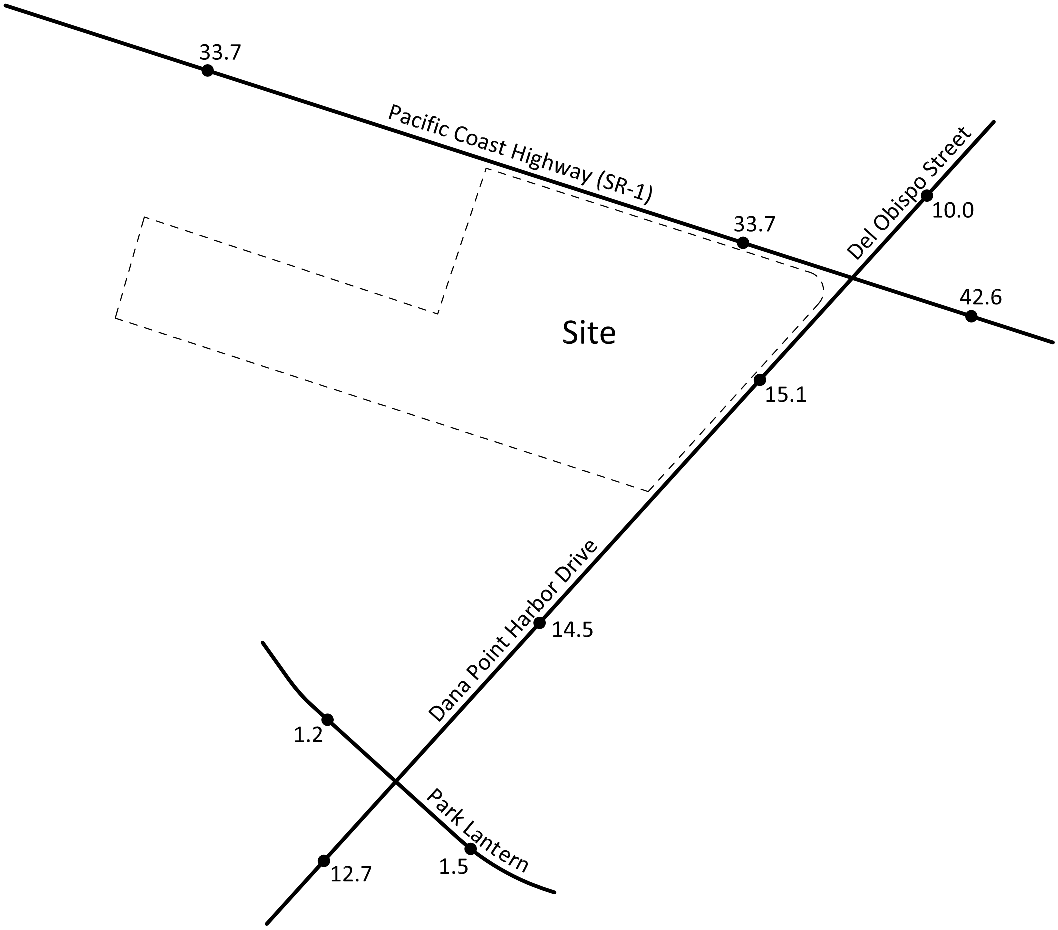


4845c/45

Kunzman Associates, Inc.

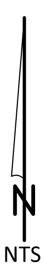
Over 35 Years of Excellent Service

Figure 46
Opening Year (2013) With Project
Saturday Peak Season Daily Traffic Volumes



Legend

1.5 = Vehicles Per Day (1,000's)

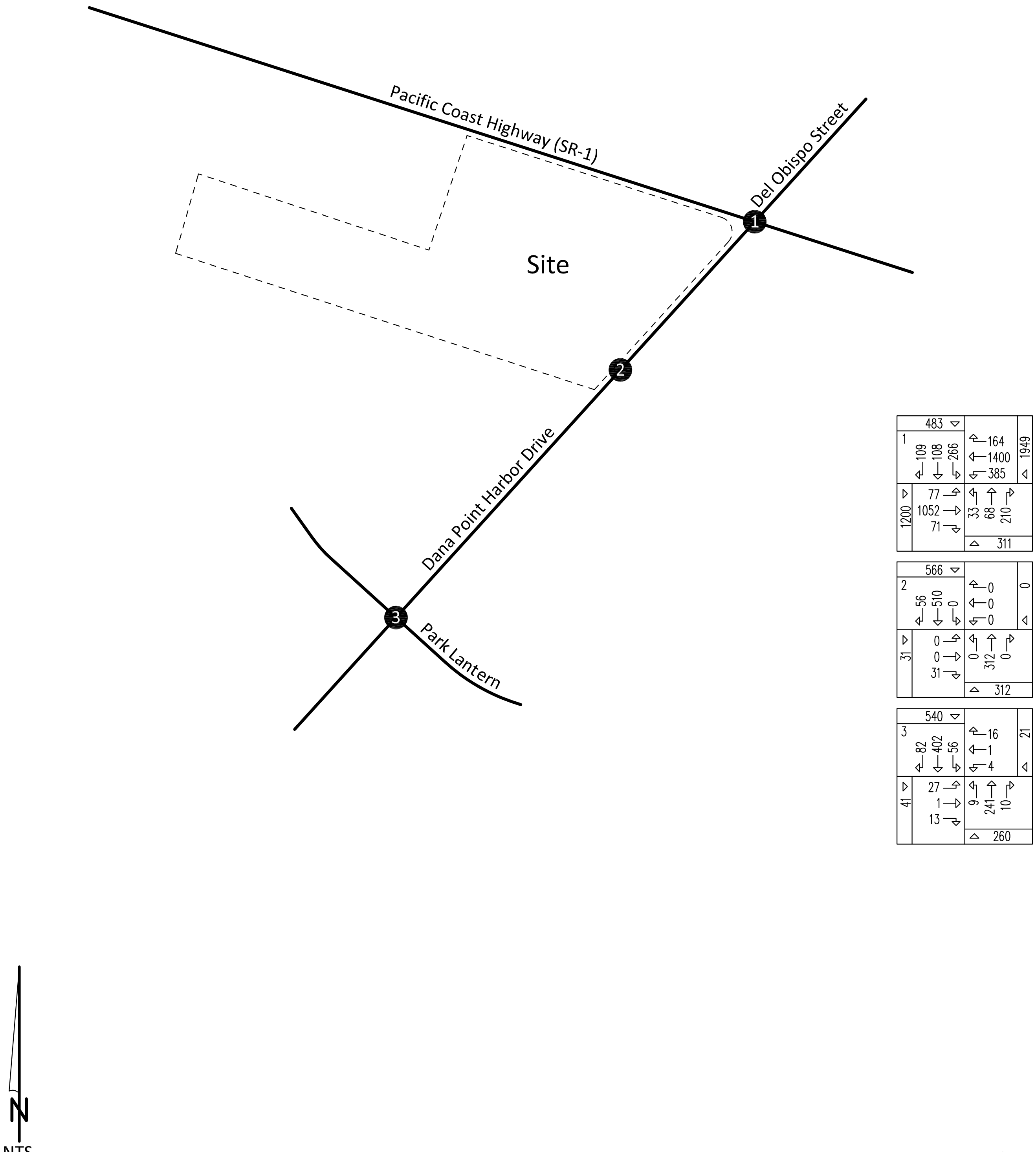


4845c/46

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 47
Opening Year (2013) With Project
Weekday Morning Peak Hour Turning Movement Volumes

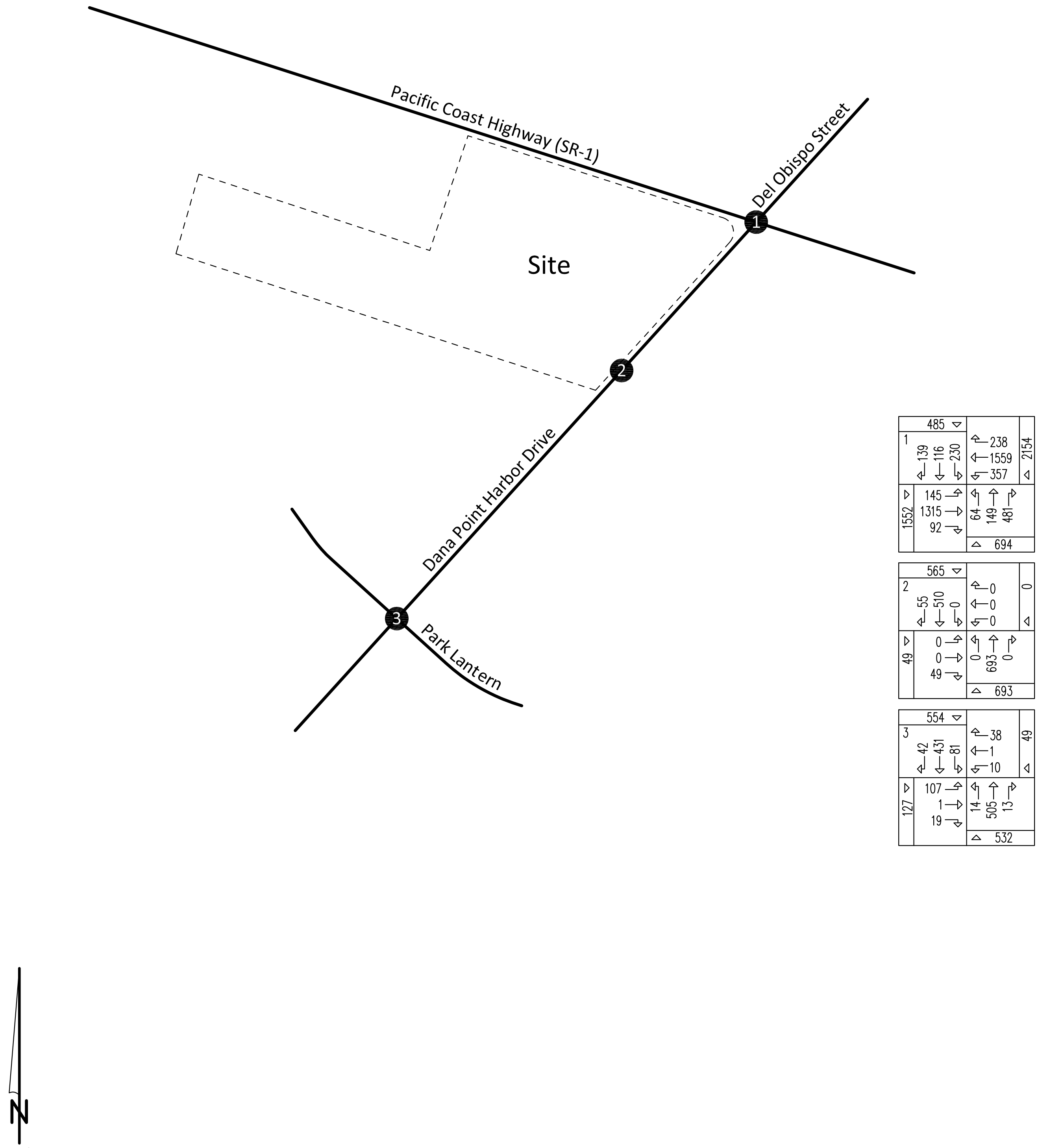


4845c/47

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

Over 35 Years of Excellent Service

Figure 48
Opening Year (2013) With Project
Weekday Evening Peak Hour Turning Movement Volumes

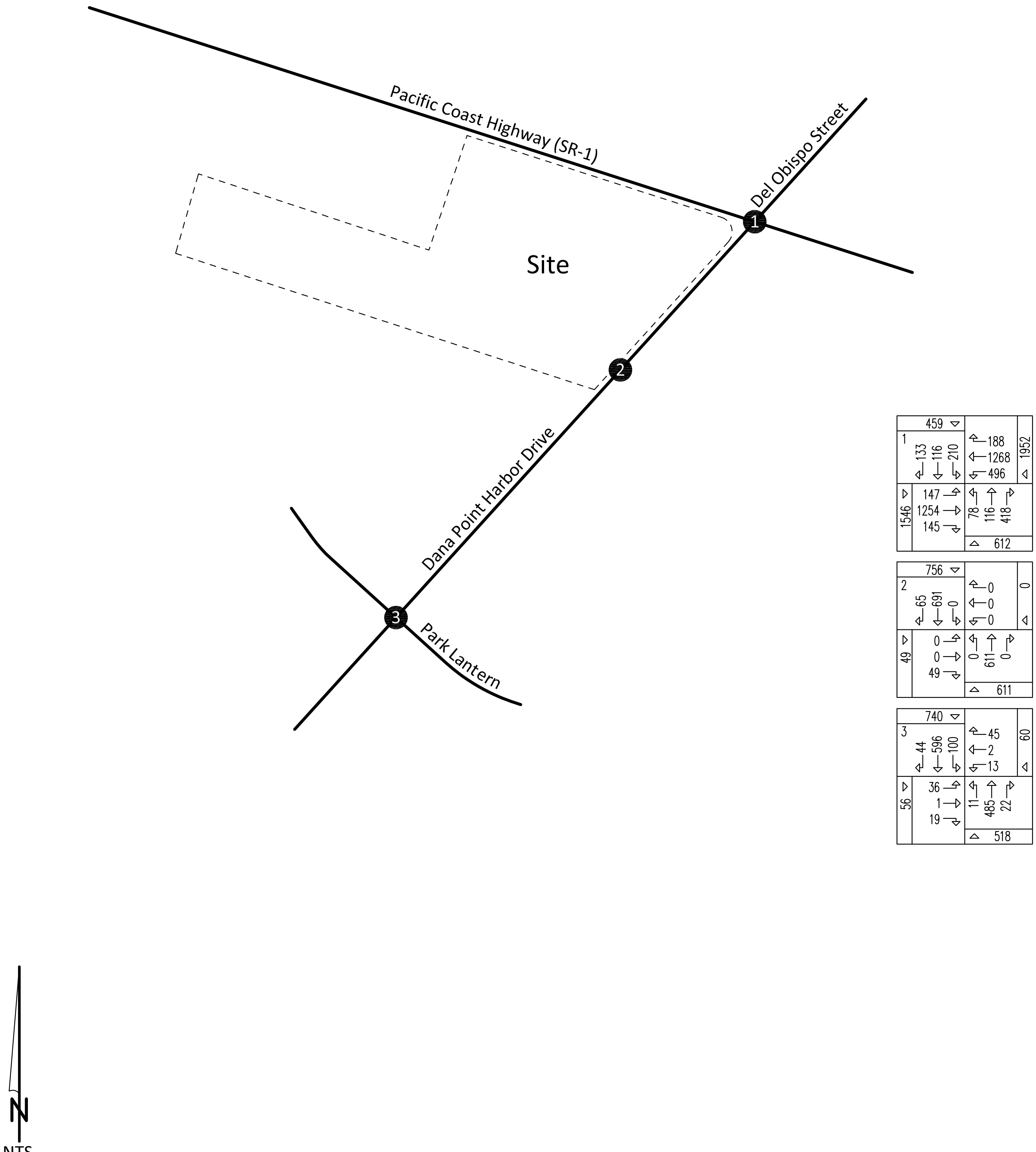


4845c/48

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 49
Opening Year (2013) With Project
Saturday Mid-day Peak Hour Turning Movement Volumes

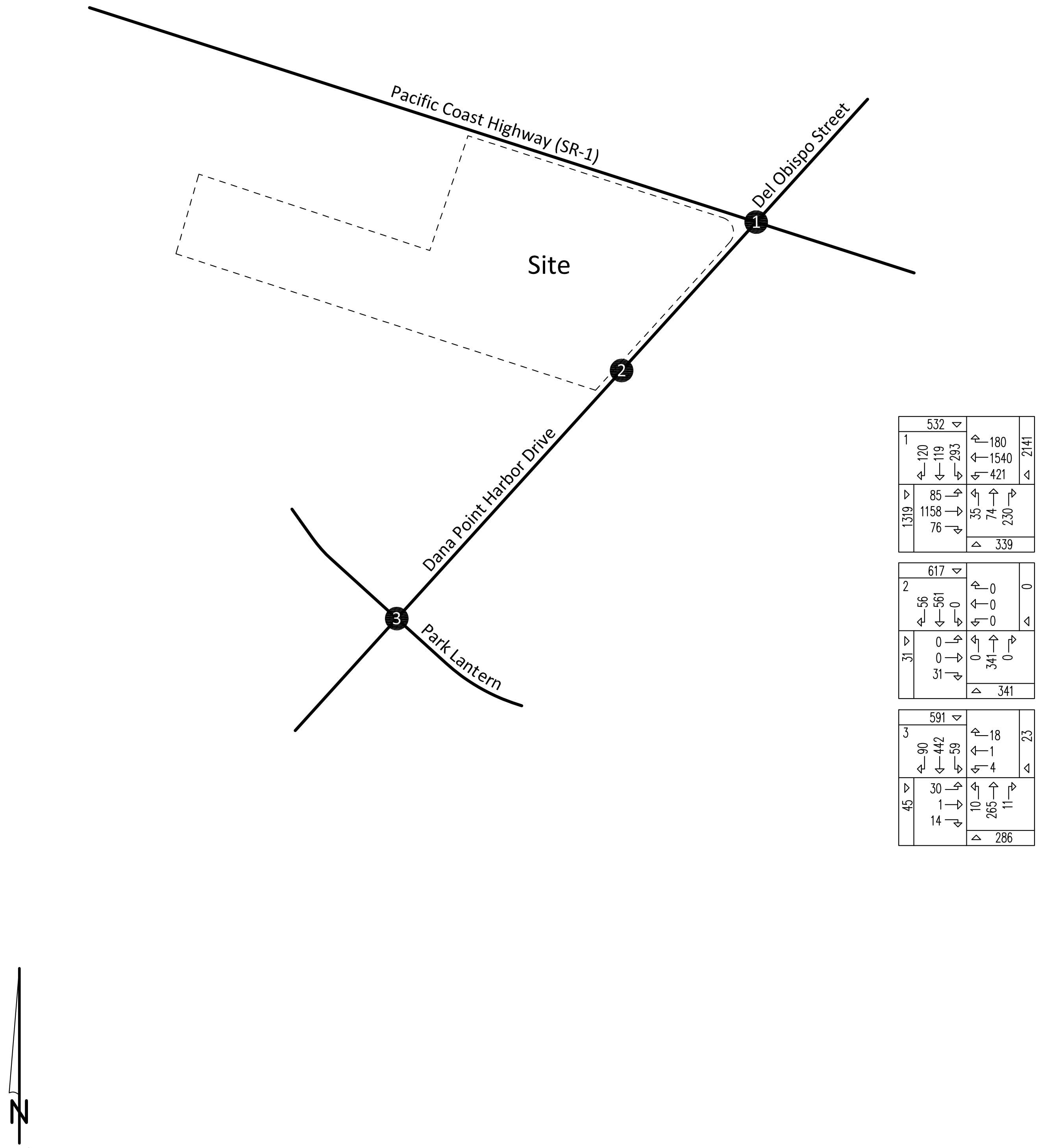


4845c/49

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

Over 35 Years of Excellent Service

Figure 50
Opening Year (2013) With Project
Weekday Peak Season Morning Peak Hour Turning Movement Volumes

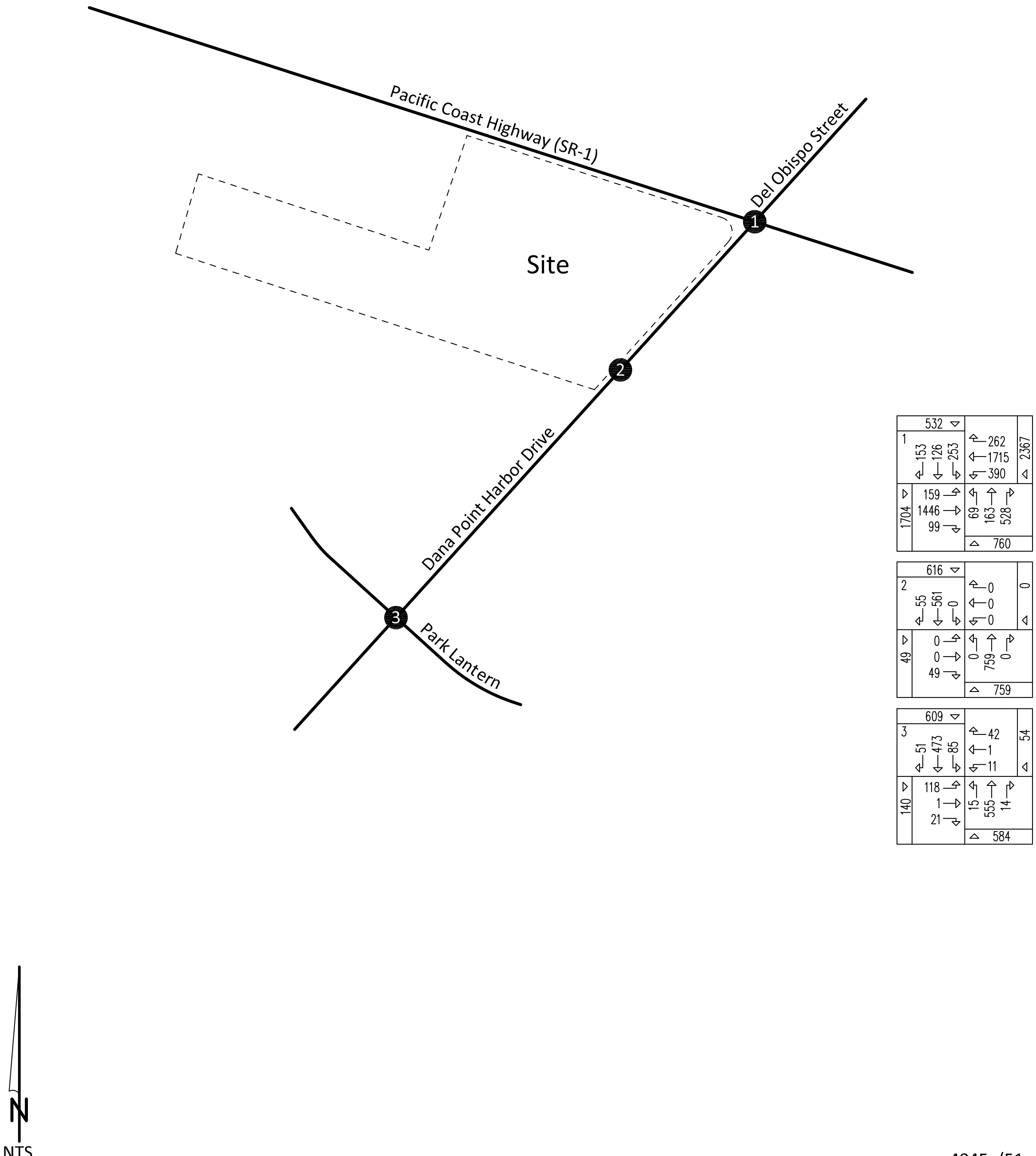


4845c/50

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 51
Opening Year (2013) With Project
Weekday Peak Season Evening Peak Hour Turning Movement Volumes

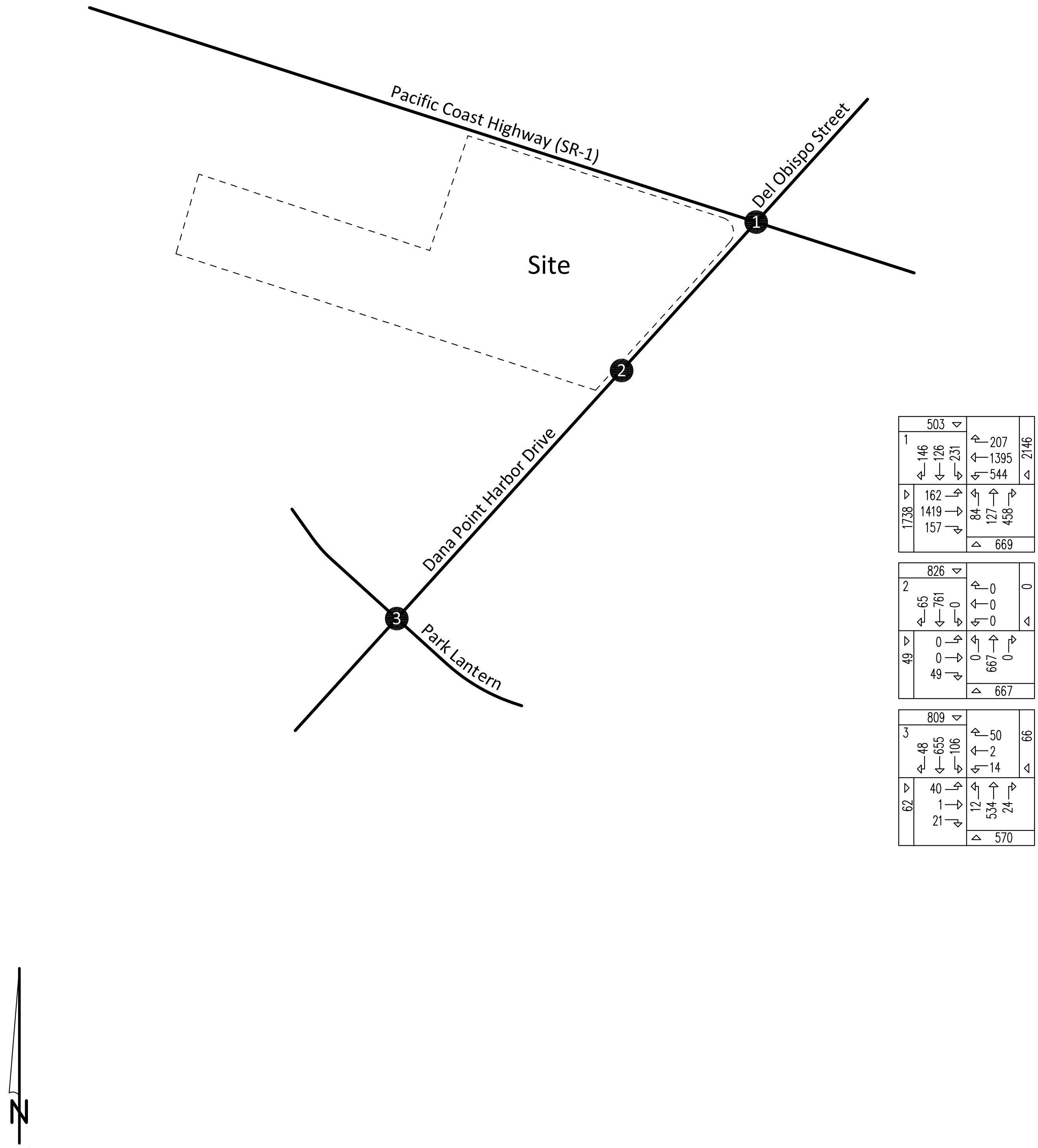


4845c/51

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 52
Opening Year (2013) With Project
Saturday Peak Season Mid-day Peak Hour Turning Movement Volumes



4845c/52

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

Over 35 Years of Excellent Service

VIII. Year 2025 Without Project Traffic Conditions

In this section, Year 2025 Without Project traffic conditions are discussed. Figures 53 to 72 depict the Year 2025 Without Project traffic conditions.

A. Method of Projection

To assess Year 2025 Without Project traffic conditions, existing traffic is combined with other development and areawide growth.

For Year 2025 Without Project traffic conditions, an areawide growth rate has been utilized to account for areawide growth on study area roadways. Year 2025 Without Project traffic volumes have been calculated based on a quarter (0.25) percent annual growth over existing traffic volumes over a fourteen (14) year period. The areawide growth rate has been obtained from the City of Dana Point staff and the City's third party traffic engineering consultant.

Areawide growth has been added to daily and peak hour traffic volumes on surrounding roadways, in addition to traffic generated by other development.

B. Other Development

The City of Dana Point staff has provided the other development information. Table 7 lists the proposed land uses for the other development. Table 7 shows the peak hour vehicle trips generated by the other development in the study area. The data that populates this table has been provided by the City of Dana Point Planning Department. Figure 53 depicts the other development location map. Figures 54 to 57 show the other development traffic distributions. Other development weekday average daily traffic volumes are shown on Figure 58 and Saturday daily traffic volumes are shown on Figure 59. Other development weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes are shown on Figures 60 to 62, respectively.

C. Year 2025 Without Project Weekday Average Daily Traffic Volumes

Year 2025 Without Project weekday average daily traffic volumes are as illustrated on Figure 63.

D. Year 2025 Without Project Saturday Daily Traffic Volumes

Year 2025 Without Project Saturday daily traffic volumes are as illustrated on Figure 64.

E. Year 2025 Without Project Weekday Peak Season Average Daily Traffic Volumes

Year 2025 Without Project weekday peak season average daily traffic volumes are as illustrated on Figure 65.

F. Year 2025 Without Project Saturday Peak Season Daily Traffic Volumes

Year 2025 Without Project Saturday peak season daily traffic volumes are as illustrated on Figure 66.

G. Year 2025 Without Project Levels of Service

The technique used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization. To calculate an Intersection Capacity Utilization value, the volume of traffic using the intersection is compared with the capacity of the intersection. The Intersection Capacity Utilization represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. The technique used to assess the operation of an unsignalized intersection is known as the Intersection Delay Method based on the 2000 Highway Capacity Manual – Transportation Research Board Special Report 209. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection. The signalized intersections are considered deficient (Level of Service F) if the overall intersection critical volume to capacity ratio equals or exceeds 1.0, even if the Level of Service defined by the delay value is below the defined Level of Service standard. The volume to capacity ratio is defined as the critical volumes divided by the intersection capacity. A volume to capacity ratio greater than 1.0 implies an infinite queue. Both methodologies are described in Appendix C.

The Intersection Capacity Utilization calculations assume a per-lane capacity of 1,700 vehicles per hour for each travel lane (through or turning) through an intersection. A clearance factor of 0.05 or five (5) percent of the total intersection capacity is included in the Intersection Capacity Utilization calculation.

The Levels of Service for the Year 2025 Without Project traffic conditions have been calculated and are shown in Table 8. Year 2025 Without Project weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes are shown on Figures 67 to 69, respectively. Year 2025 Without Project peak season weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes are shown on Figures 70 to 72, respectively.

The study area intersections are projected to operate within acceptable Levels of Service during peak hours for Year 2025 Without Project traffic conditions (see Table 8). Year 2025 Without Project Level of Service worksheets are provided in Appendix D.

Table 7

Other Development Traffic Generation

Project	Weekday							Weekend			
	Peak Hour							Peak Hour			
	Morning			Evening				Mid-day			
	Inbound	Outbound	Total	Inbound	Outbound	Total	Daily	Inbound	Outbound	Total	Daily
GPA07-01/ZTA07-02/ZC07-01/LCPA07-013[1]	61	96	157	175	156	331	3,716	238	216	454	4,922
Dana Point Harbor Revitalization[2]	154	118	272	199	190	389	4,980	172	142	314	3,186
Dana Point Town Center[3]	306	180	486	374	498	872	11,748	562	517	1,079	9,497
Total	521	394	915	748	844	1,592	20,444	972	875	1,847	17,605

[1] Source: GPA07-01/ZTA07-02/ZC07-01/LCPA07-01 Traffic Impact Analysis Report, dated March 17, 2009, prepared by LLG Engineers.

[2] Source: Dana Point Harbor Revitalization Traffic and Parking Analysis, dated September 2005, prepared by RBF Consulting.

[3] Source: Dana Point Town Center Plan Traffic Impact Analysis, dated August 2006, prepared by Kimley-Horn and Associates, Inc.

Table 8

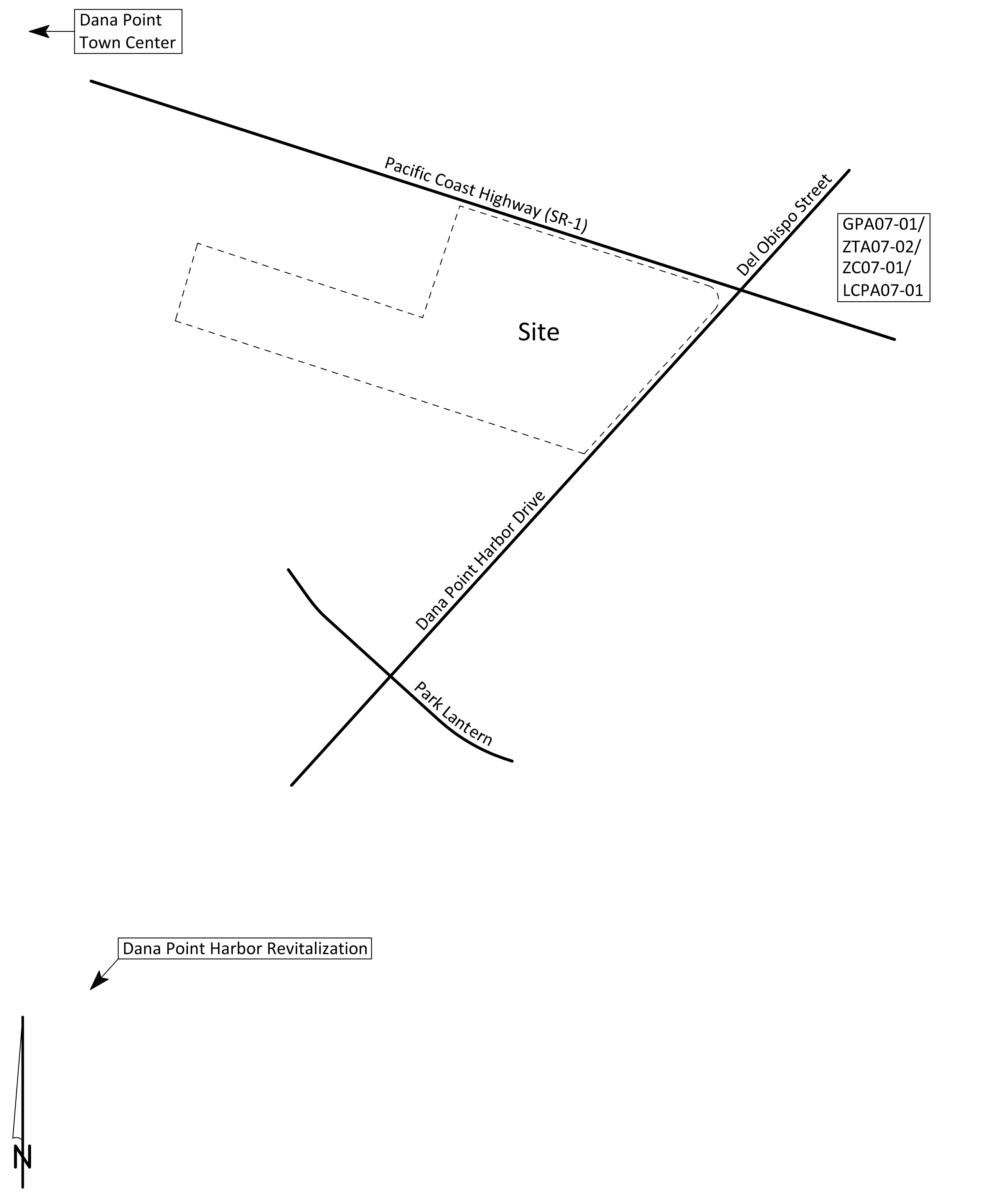
Year 2025 Without Project Intersection Delay and Level of Service

Intersection	Traffic Control[2]	Intersection Approach Lanes[1]																								Intersection Capacity Utilization - Level of Service					
		Northbound						Southbound						Eastbound						Westbound						Non-peak Season			Peak Season		
																										Weekday		Weekend	Weekday		Weekend
		L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	Morning	Evening	Midday	Morning	Evening	Midday
Del Obispo Street/Dana Point Harbor Drive (NS) at:																															
Pacific Coast Highway (EW) - #1	TS	1	0	1	0	2	0	2	0	1	0	1	0	1	0	2	1	0	0	2	0	2	1	0	0	0.597-A	0.785-C	0.763-C	0.645-B	0.845-D	0.813-D
Park Lantern (EW) - #3	TS	1	0	2	0	1	0	1	0	2	0	d	0	0	1	0	0	d	0	1	0	1	0	1>>	0	0.238-A	0.350-A	0.315-A	0.253-A	0.333-A	0.337-A

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right;
>> = Free Right Turn; d = Defacto Right Turn Lane

[2] TS = Traffic Signal

Figure 53
Other Development Location Map



4845c/53

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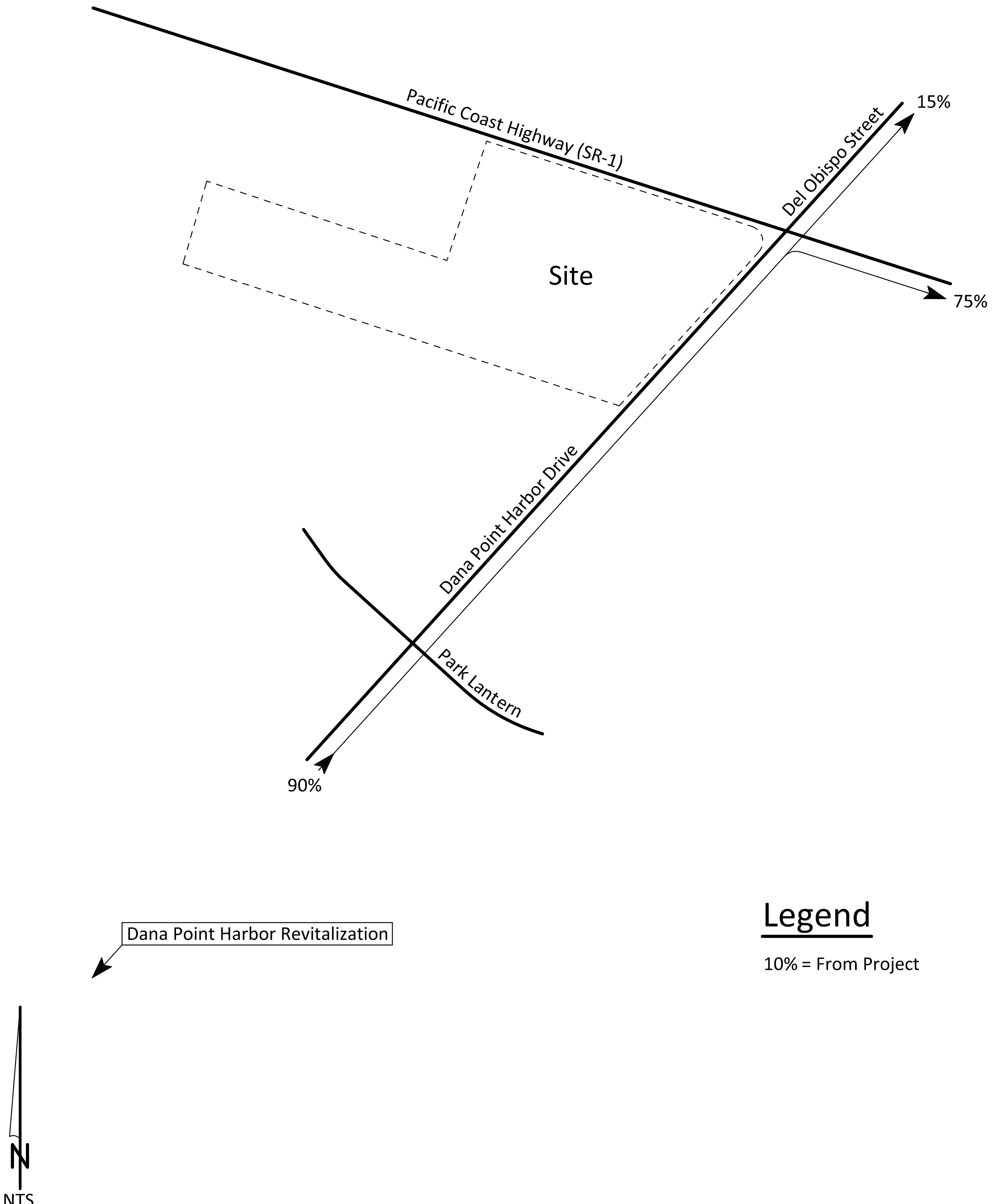
Figure 54
Other Development Traffic Distribution
(Dana Point Harbor Revitalization) - Outbound

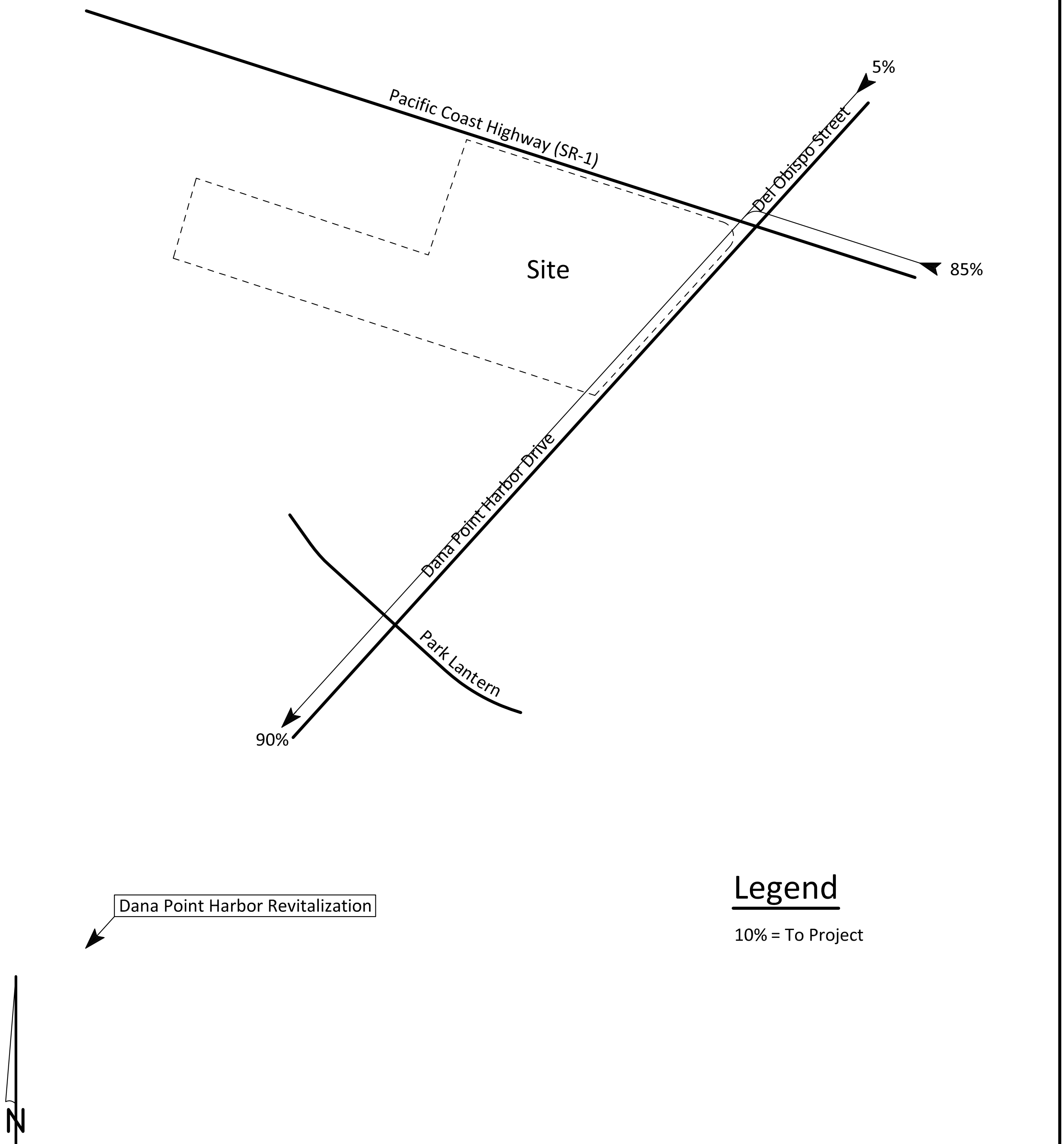


4845c/54

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 55
Other Development Traffic Distribution
(Dana Point Harbor Revitalization) - Inbound



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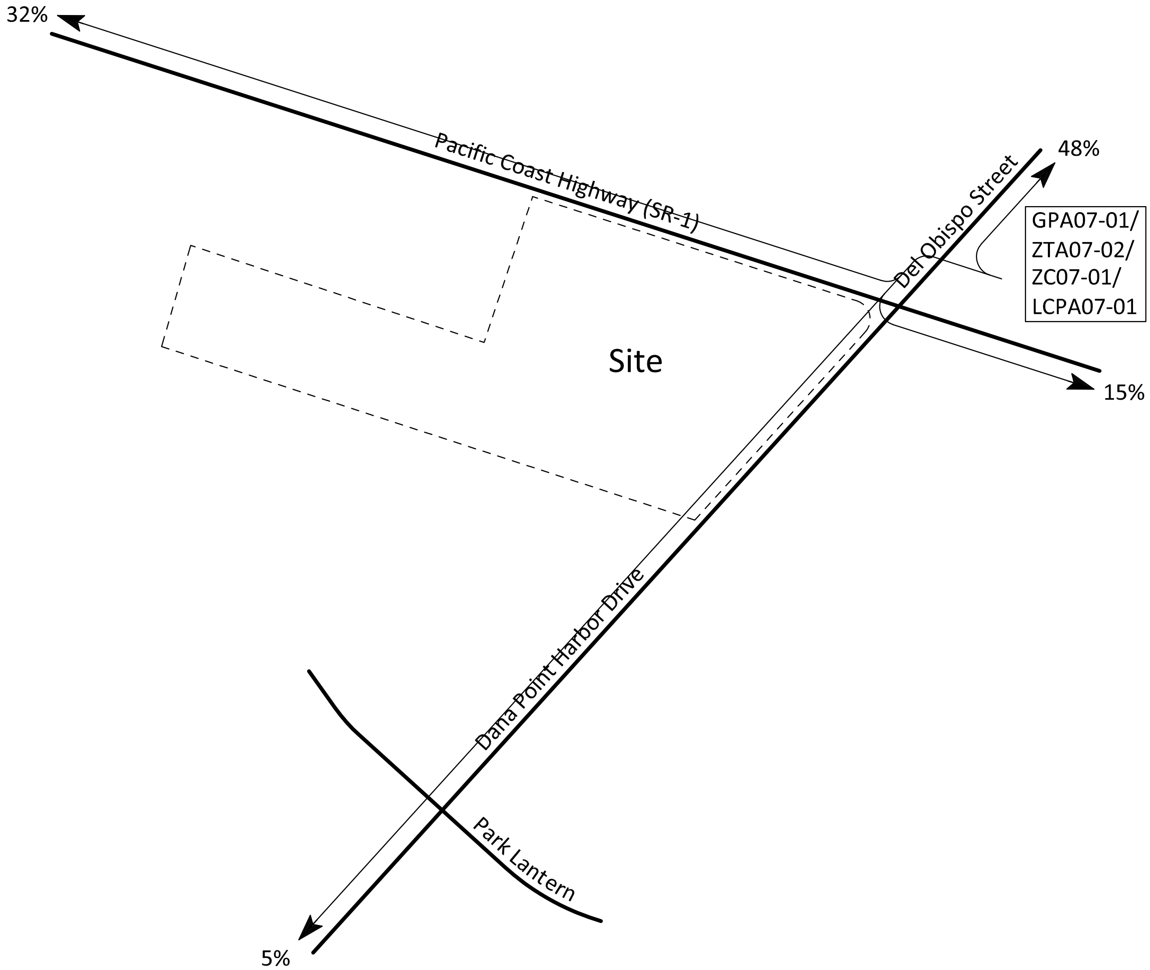
4845c/55

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 56
Other Development Traffic Distribution
(GPA07-01/ZTA07-02/ZC07-01/LCPA07-01)

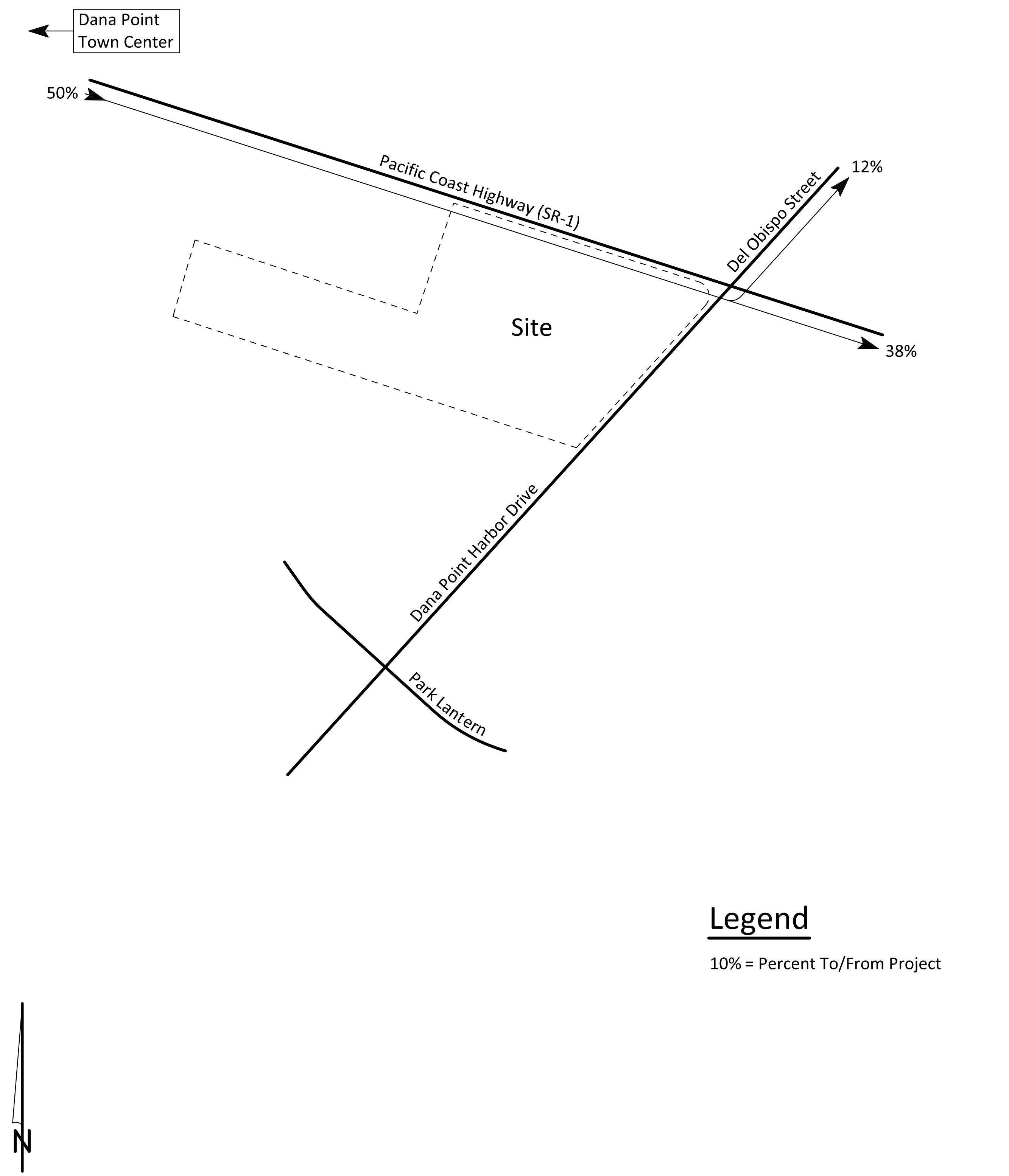


Legend

10% = Percent To/From Project

4845c/56

Figure 57
Other Development Traffic Distribution
(Dana Point Town Center)

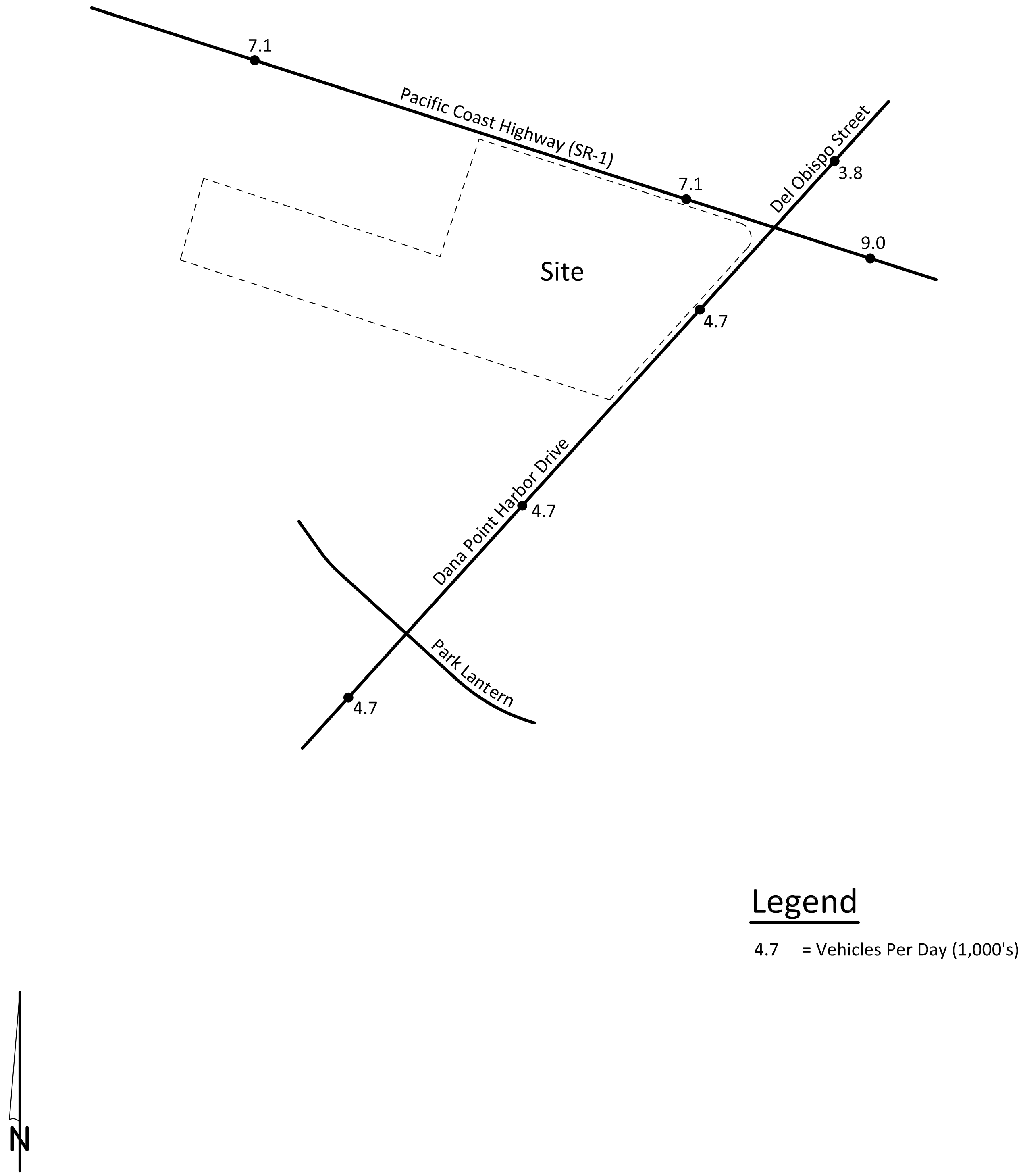


4845c/57

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 58
Other Development Weekday Average Daily Traffic Volumes

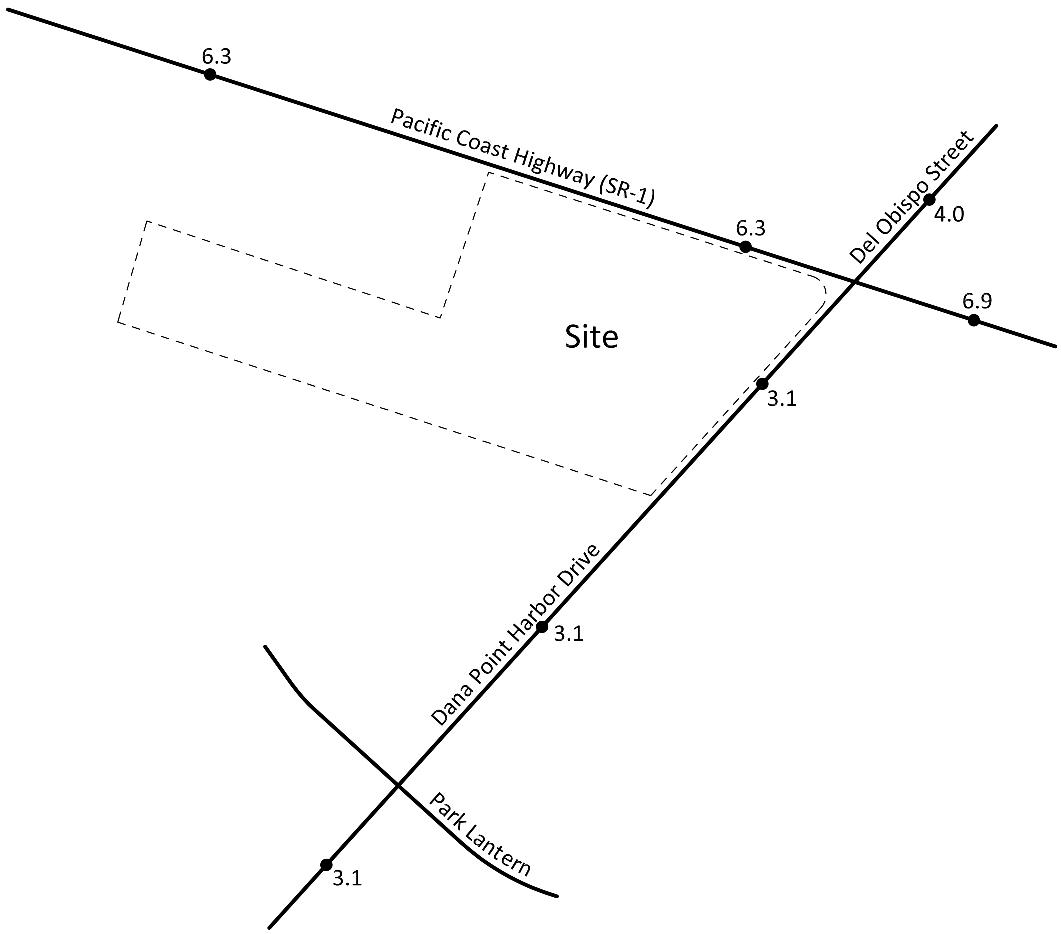


4845c/58

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 59
Other Development Saturday Daily Traffic Volumes



Legend

3.1 = Vehicles Per Day (1,000's)

NTS

4845c/59

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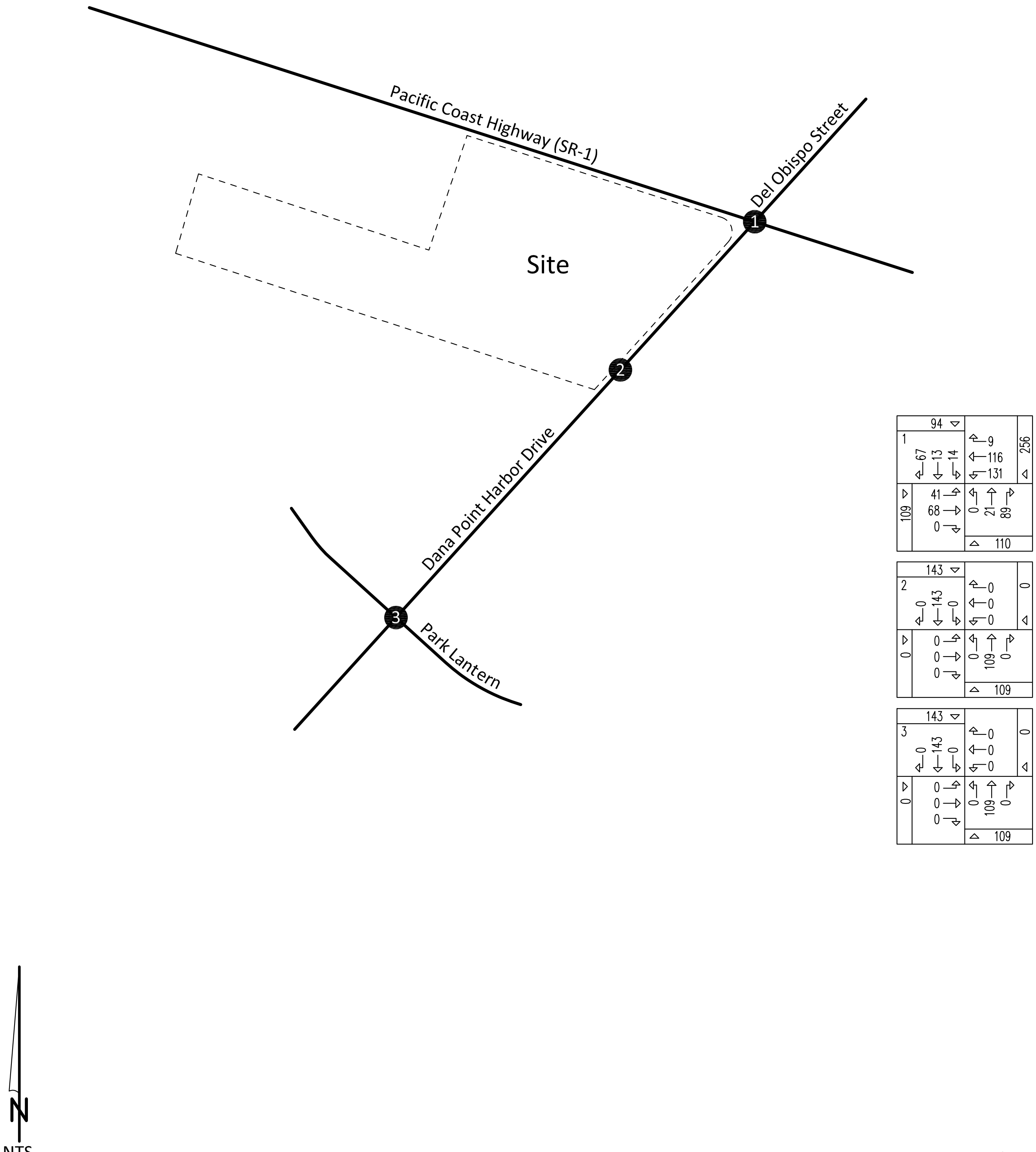
Over 35 Years of Excellent Service

Figure 60
Other Development
Weekday Morning Peak Hour Turning Movement Volumes

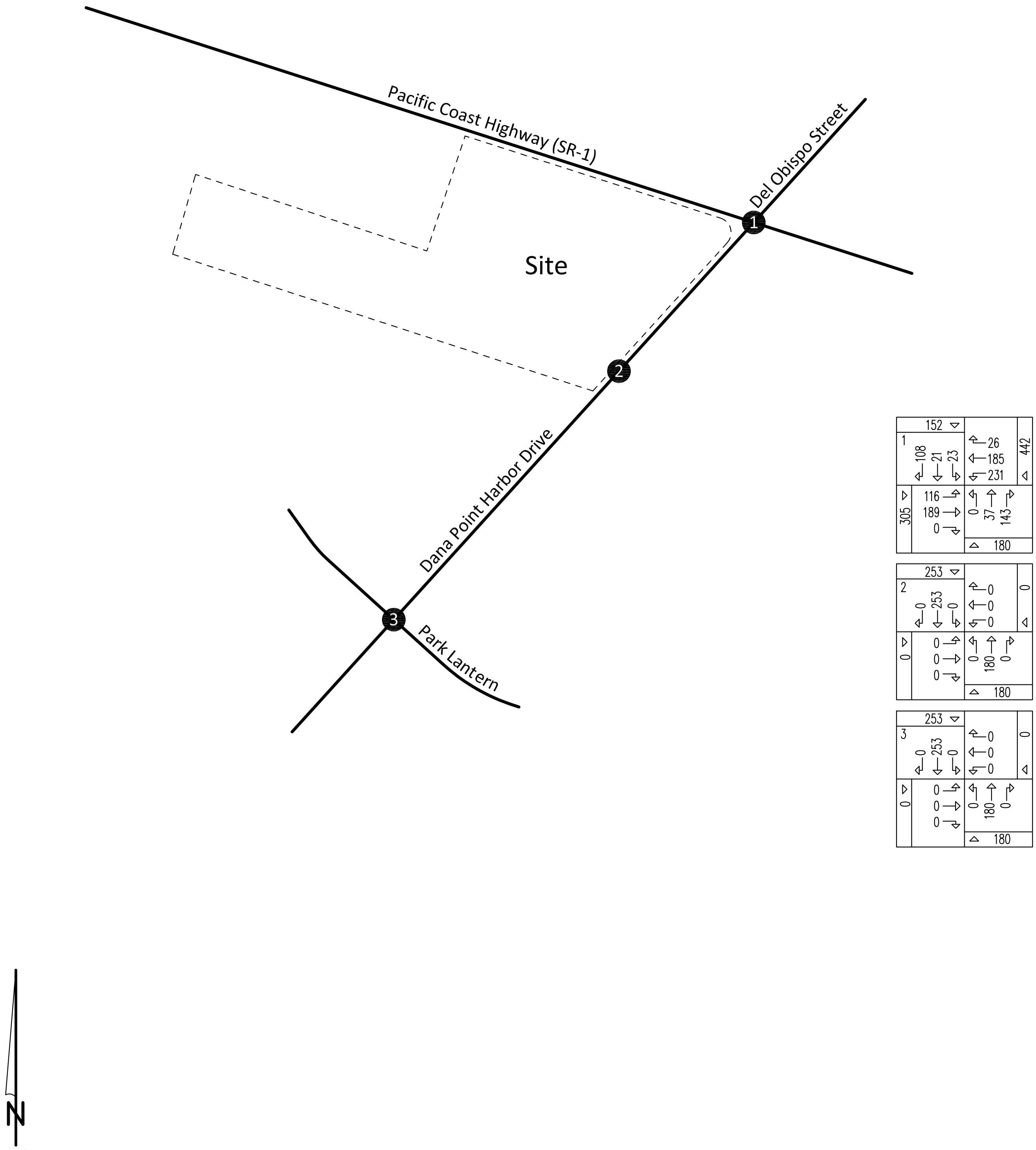


4845c/60

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

Over 35 Years of Excellent Service

Figure 61
Other Development
Weekday Evening Peak Hour Turning Movement Volumes

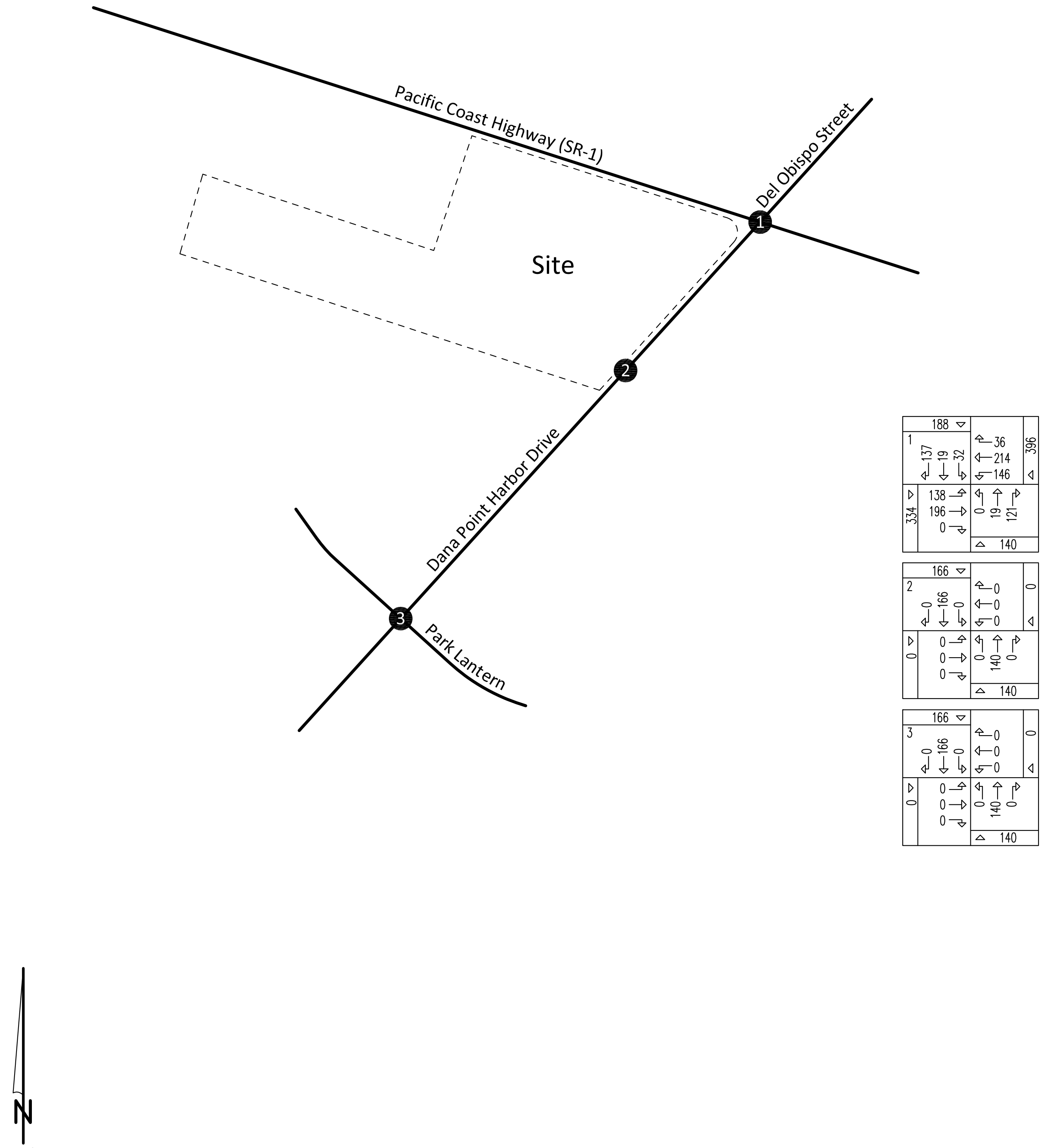


4845c/61

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 62
Other Development
Saturday Mid-day Peak Hour Turning Movement Volumes



4845c/62

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

Over 35 Years of Excellent Service

Figure 63
Year 2025 Without Project
Weekday Average Daily Traffic Volumes

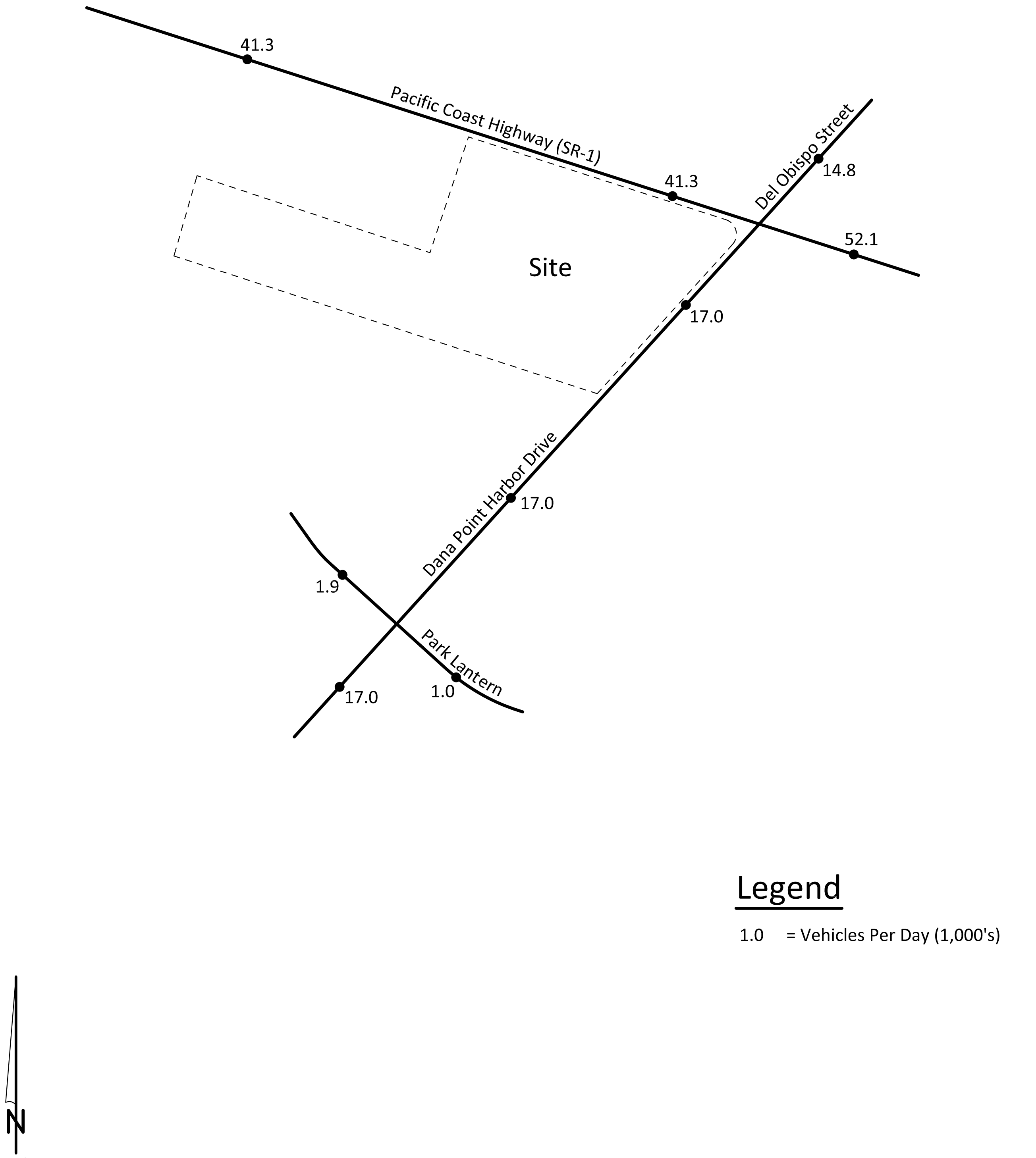


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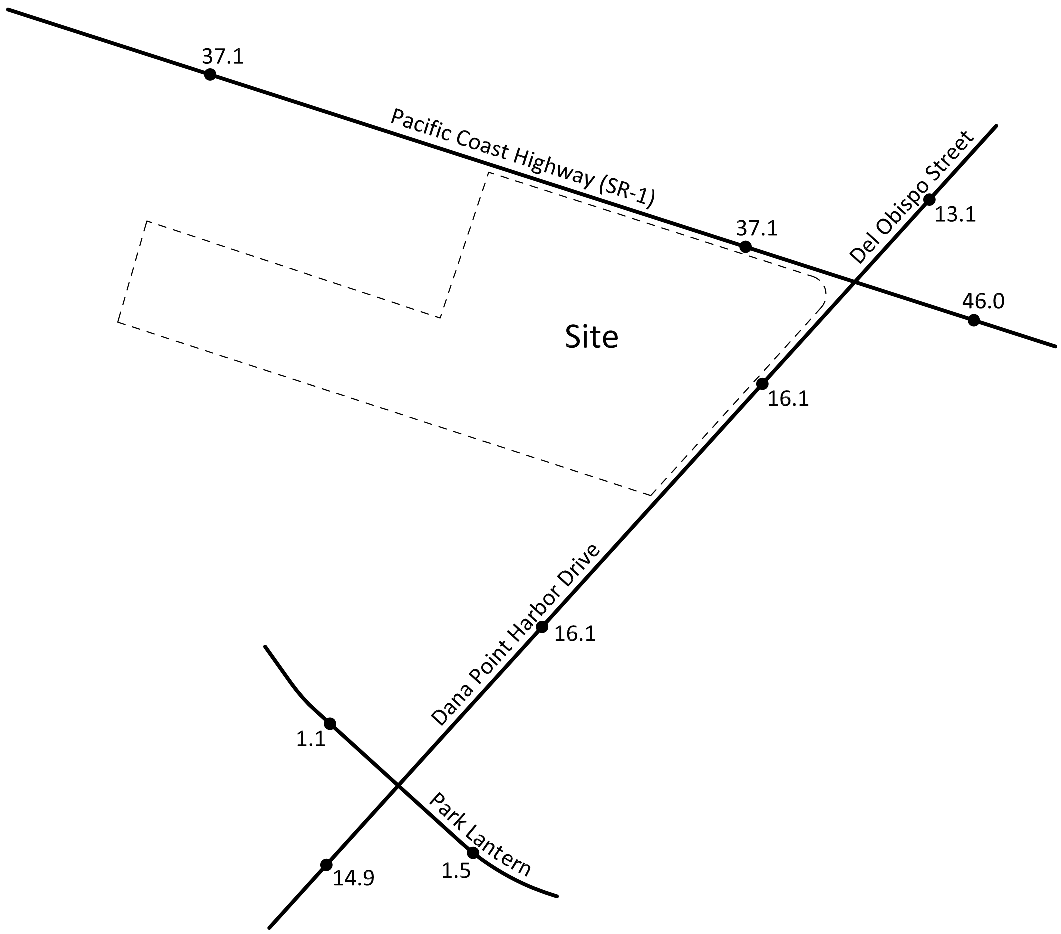
Figure 64
Year 2025 Without Project
Saturday Daily Traffic Volumes



Legend
1.5 = Vehicles Per Day (1,000's)

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OVER 35 YEARS OF EXCELLENT SERVICE

Figure 65
Year 2025 Without Project
Weekday Peak Season Average Daily Traffic Volumes

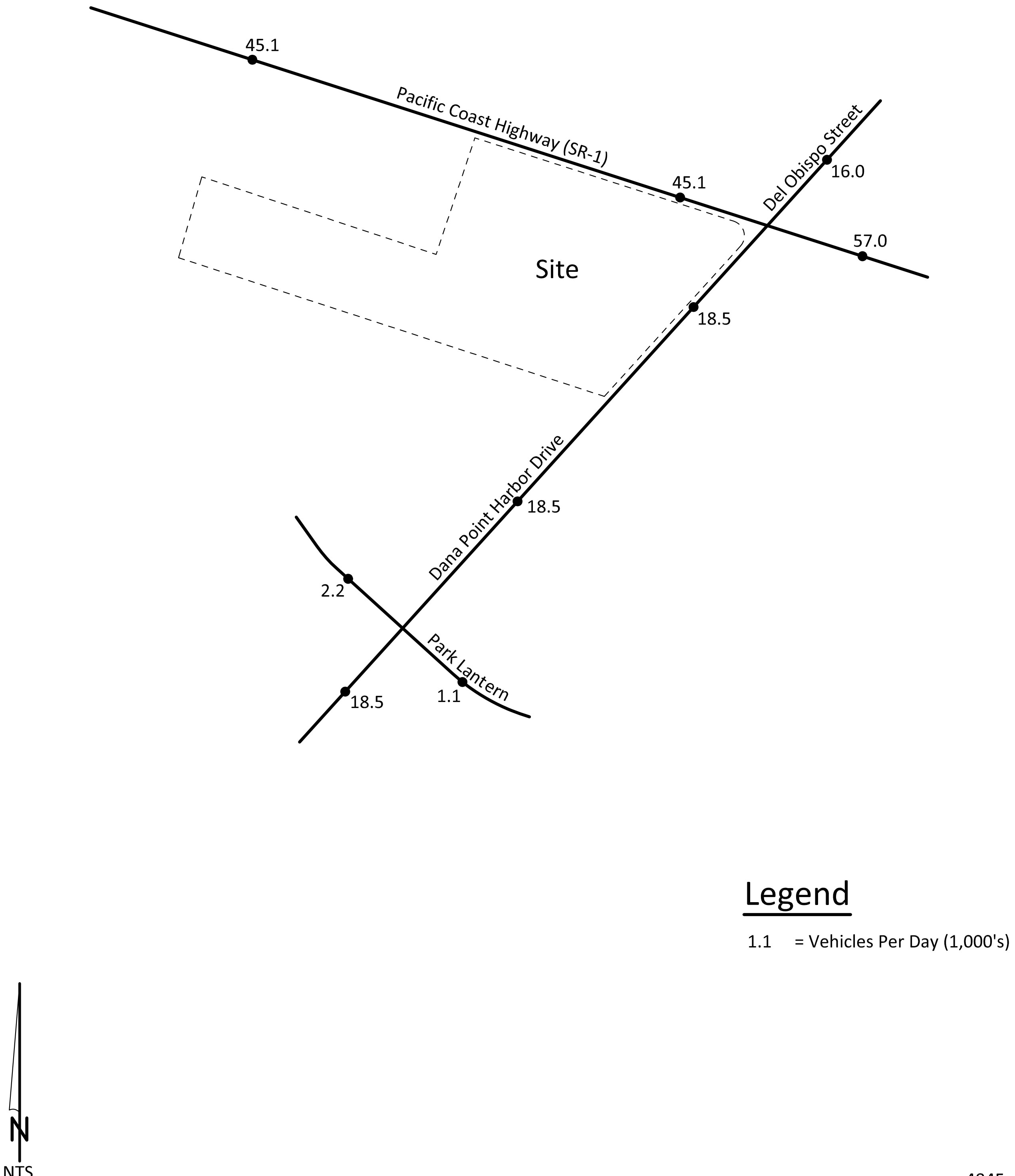

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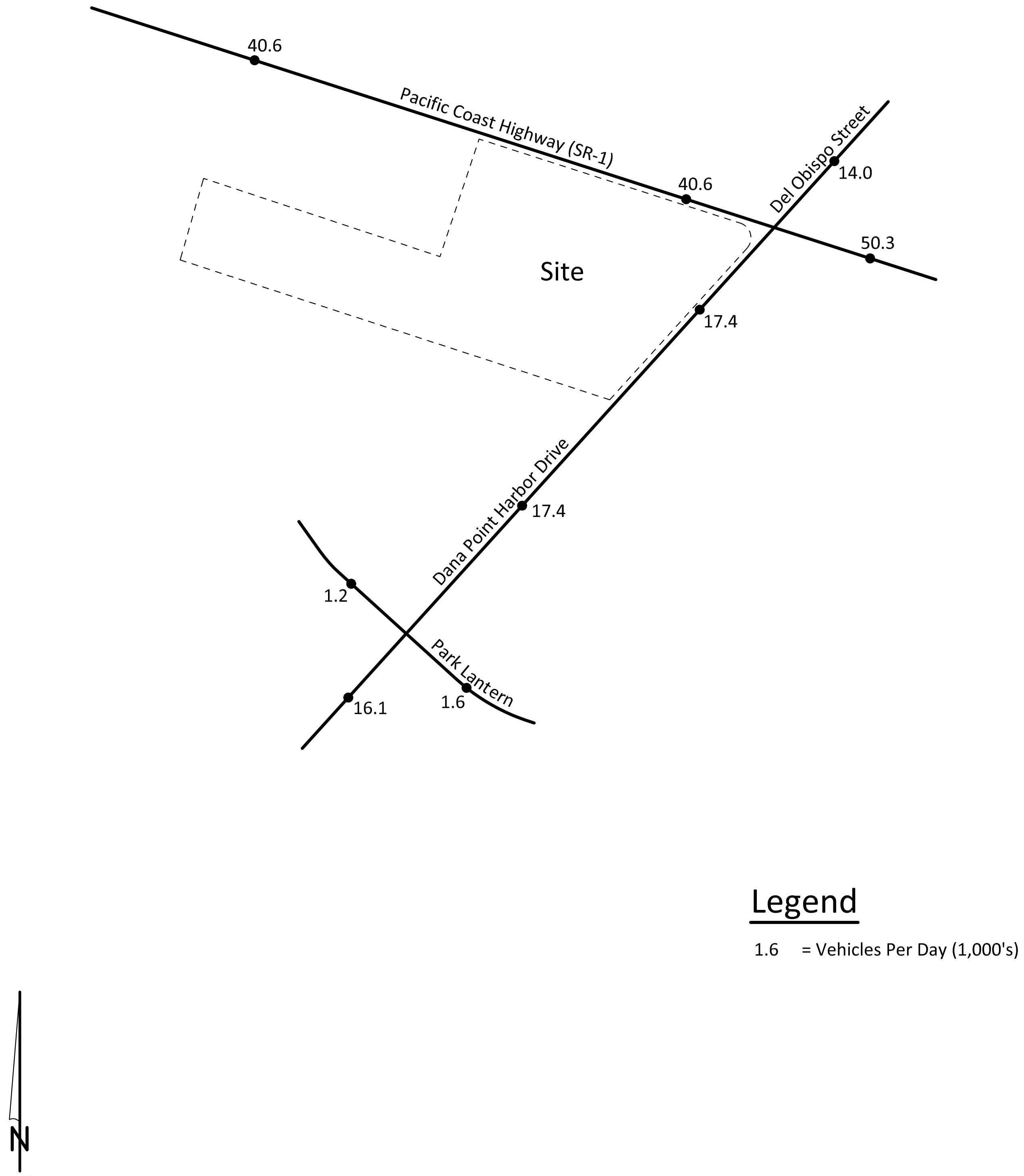
Figure 66
Year 2025 Without Project
Saturday Peak Season Daily Traffic Volumes



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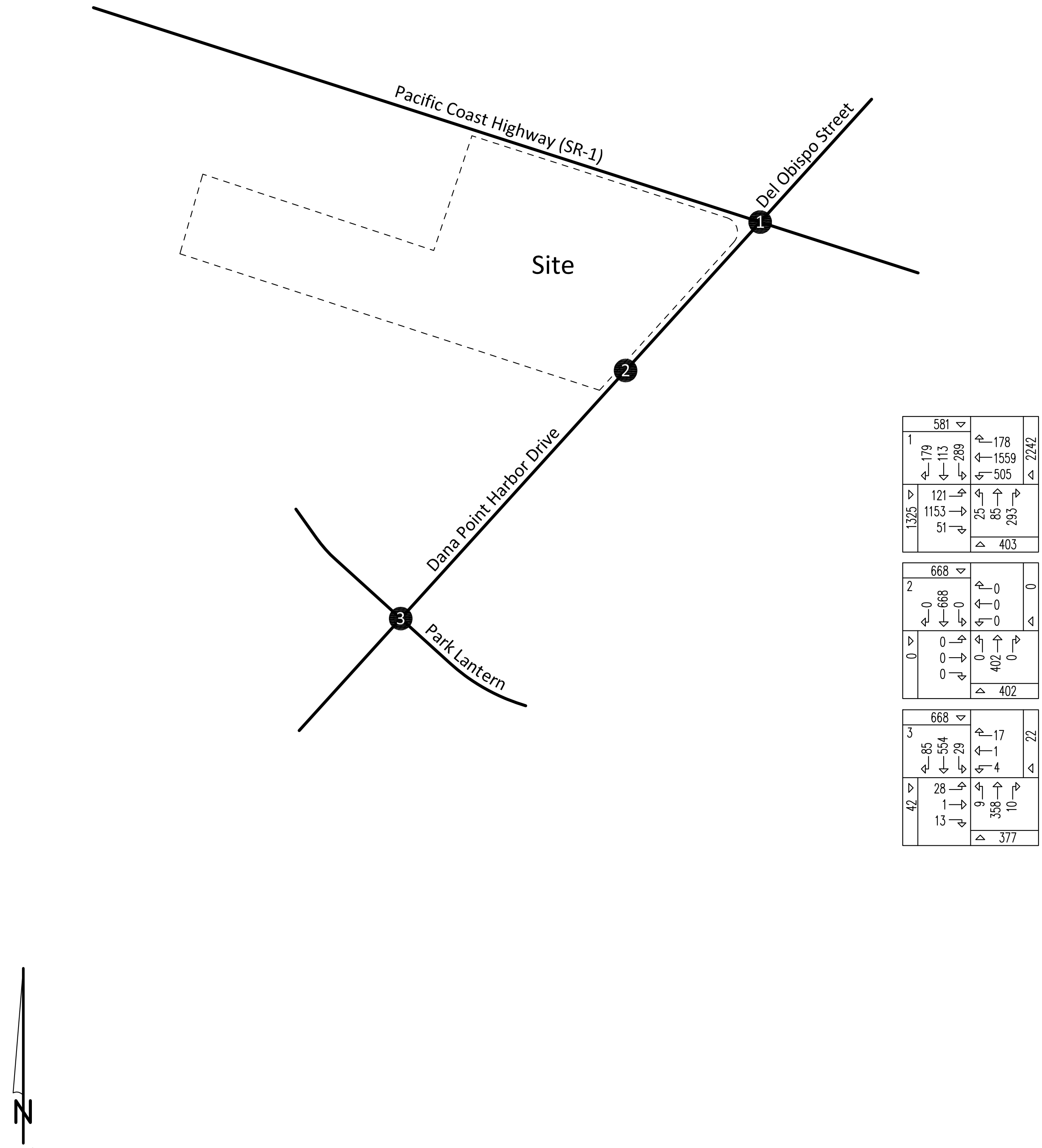
OVER 35 YEARS OF EXCELLENT SERVICE

Figure 67
Year 2025 Without Project
Weekday Morning Peak Hour Turning Movement Volumes

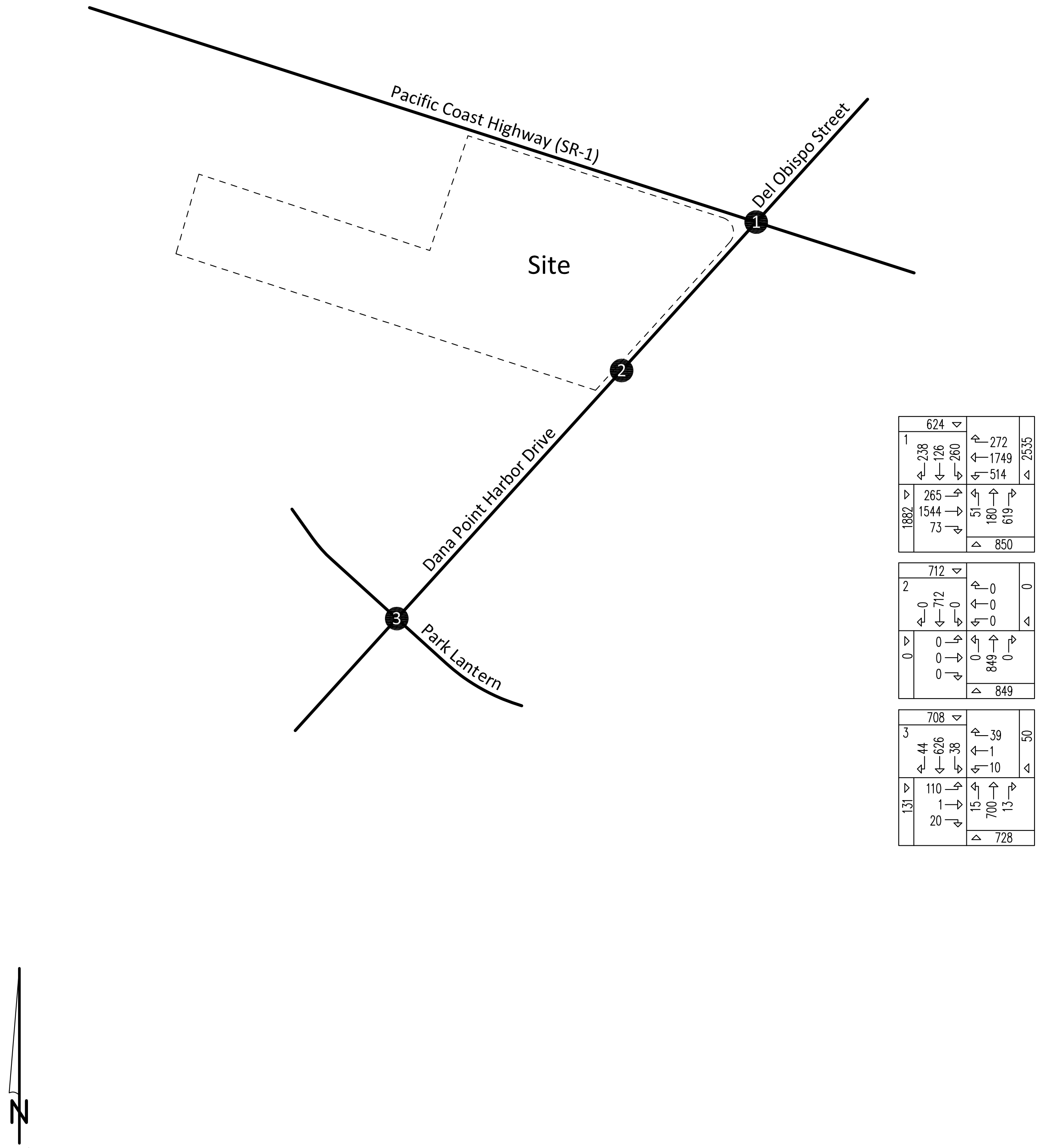


4845c/67

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

Over 35 Years of Excellent Service

Figure 68
Year 2025 Without Project
Weekday Evening Peak Hour Turning Movement Volumes

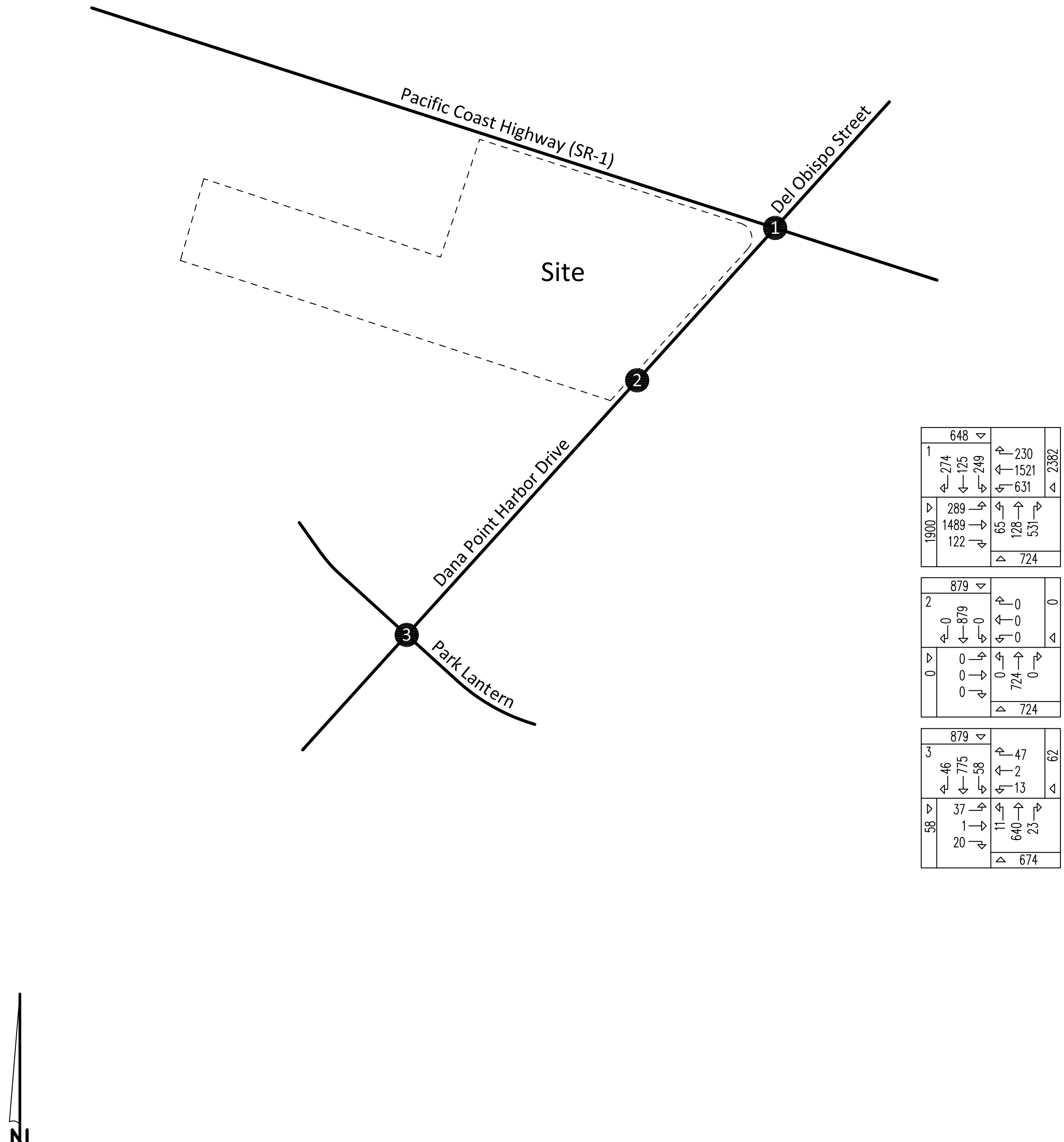


4845c/68

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

Over 35 Years of Excellent Service

Figure 69
Year 2025 Without Project
Saturday Mid-day Peak Hour Turning Movement Volumes



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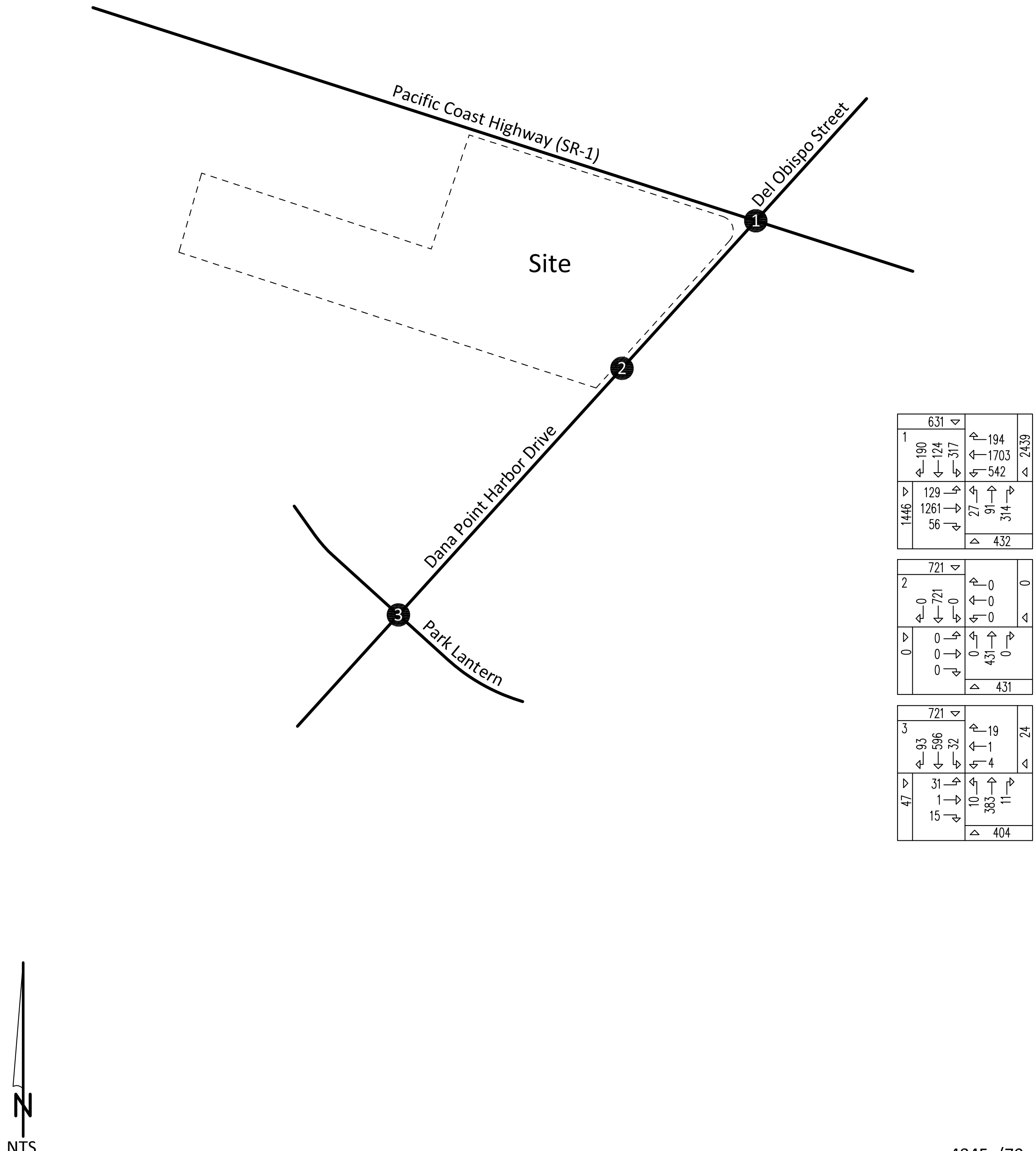
Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 70
Year 2025 Without Project
Weekday Peak Season Morning Peak Hour Turning Movement Volumes

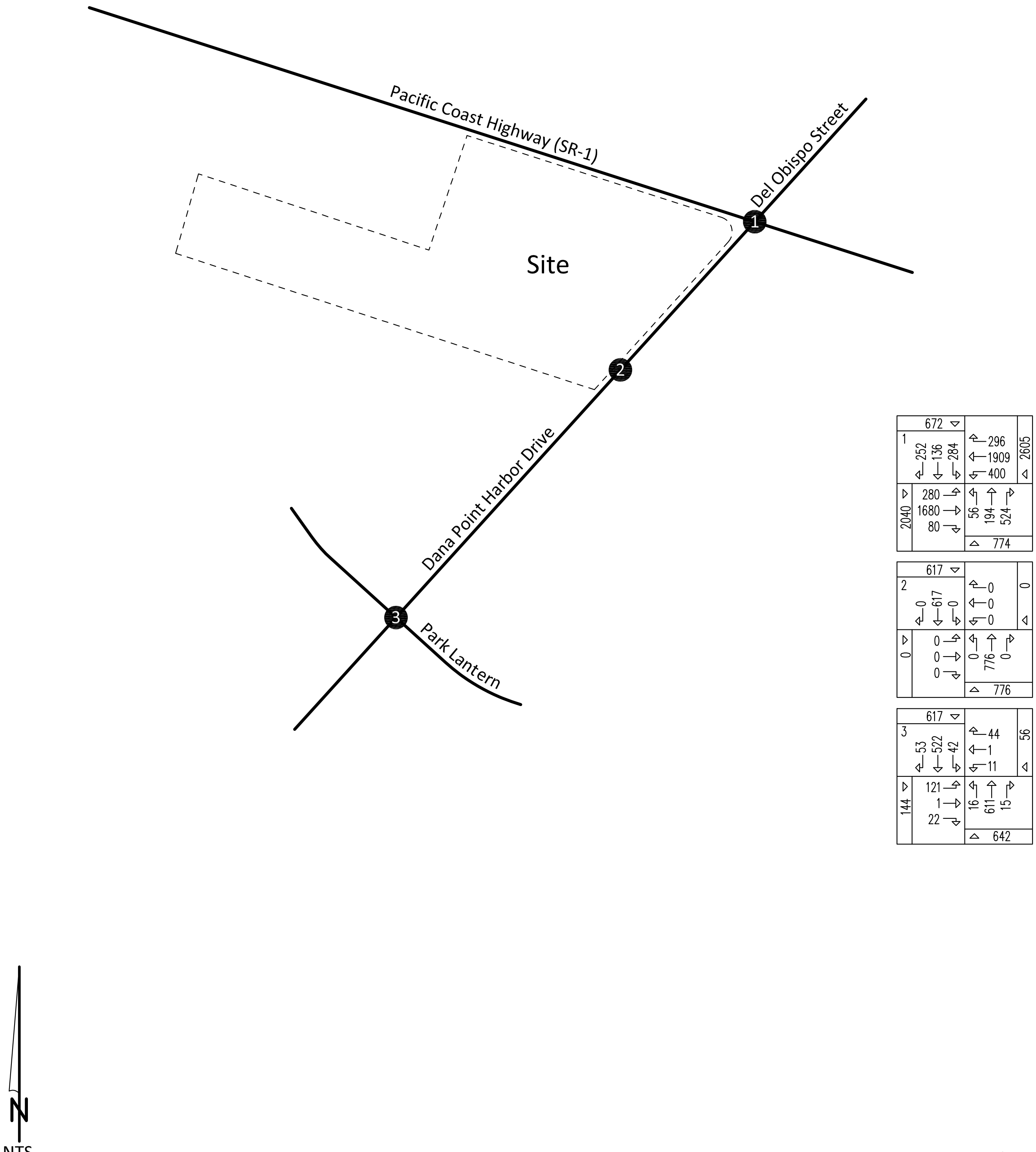


4845c/70

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 71
Year 2025 Without Project
Weekday Peak Season Evening Peak Hour Turning Movement Volumes

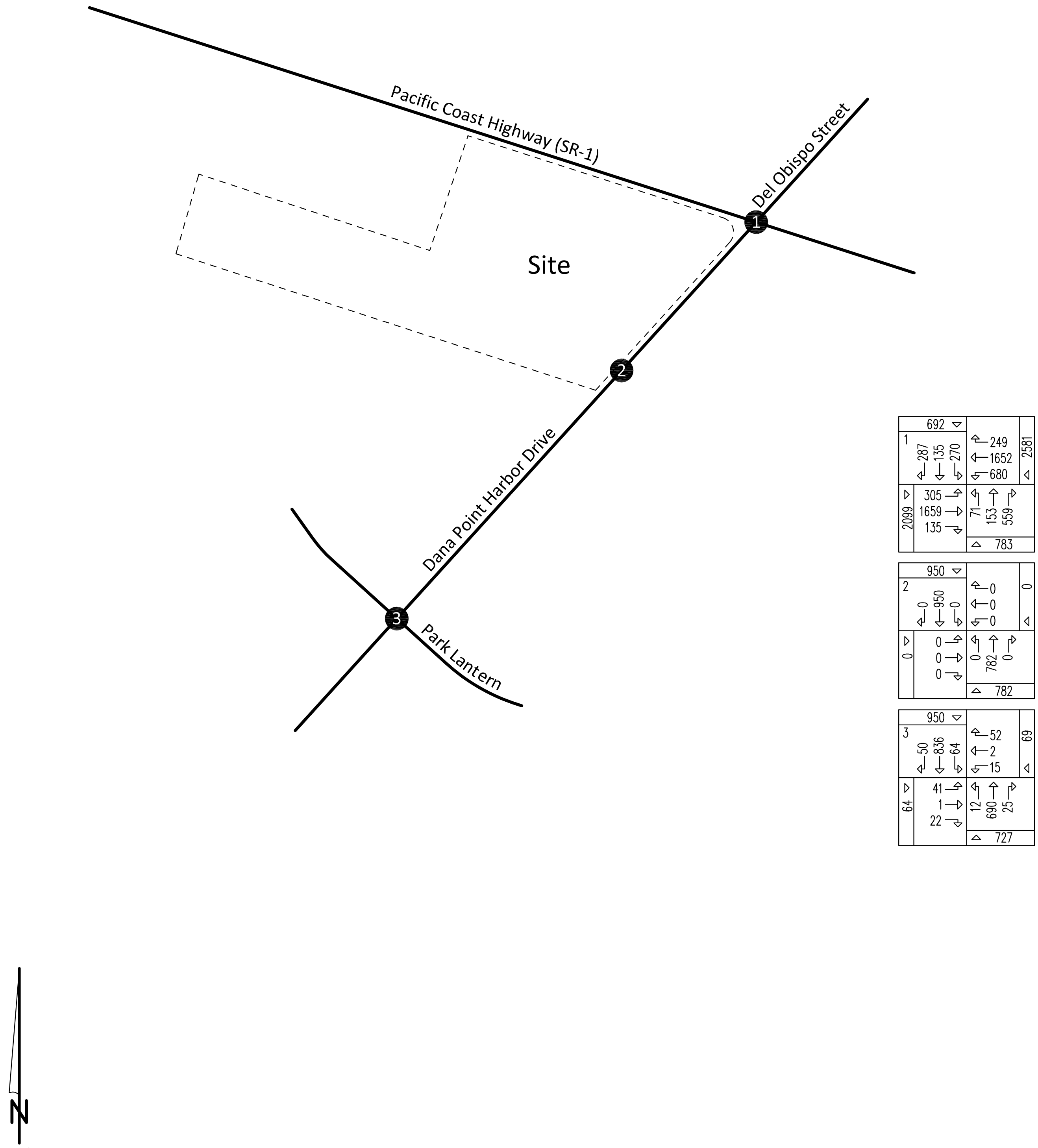


4845c/71

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 72
Year 2025 Without Project
Saturday Peak Season Mid-day Peak Hour Turning Movement Volumes



4845c/72

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

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IX. Year 2025 With Project Traffic Conditions

In this section, Year 2025 With Project traffic conditions without and with the project are discussed. Figures 73 to 82 depict the Year 2025 With Project traffic conditions.

A. Method of Projection

To assess Year 2025 With Project traffic conditions, existing traffic is combined with the project, other development, and areawide growth.

For Year 2025 With Project traffic conditions, an areawide growth rate has been utilized to account for areawide growth on study area roadways. Year 2025 With Project traffic volumes have been calculated based on a quarter (0.25) percent annual growth rate of existing traffic volumes over a fourteen (14) year period. The areawide growth rate has been obtained from the City of Dana Point staff and the City's third party traffic engineering consultant.

Areawide growth has been added to daily and peak hour traffic volumes on surrounding roadways, in addition to traffic generated by the project and other development.

B. Year 2025 With Project Weekday Average Daily Traffic Volumes

Year 2025 With Project weekday average daily traffic volumes are as illustrated on Figure 73.

C. Year 2025 With Project Saturday Daily Traffic Volumes

Year 2025 With Project Saturday daily traffic volumes are as illustrated on Figure 74.

D. Year 2025 With Project Weekday Peak Season Average Daily Traffic Volumes

Year 2025 With Project weekday peak season average daily traffic volumes are as illustrated on Figure 75.

E. Year 2025 With Project Saturday Peak Season Daily Traffic Volumes

Year 2025 With Project Saturday peak season daily traffic volumes are as illustrated on Figure 76.

F. Year 2025 With Project Levels of Service

The technique used to assess the operation of a signalized intersection is known as Intersection Capacity Utilization. To calculate an Intersection Capacity Utilization value, the volume of traffic using the intersection is compared with the capacity of the intersection. The Intersection Capacity Utilization represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. The technique used to assess the operation of an unsignalized intersection is known as the Intersection Delay Method based on the 2000 Highway Capacity Manual – Transportation Research Board Special Report 209. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection. The signalized intersections are considered deficient (Level of Service F) if the overall intersection critical volume to capacity ratio equals or exceeds 1.0, even if the Level of Service defined by the delay value is below the defined Level of Service standard. The volume to capacity ratio is defined as the critical volumes divided by the intersection capacity. A volume to capacity ratio greater than 1.0 implies an infinite queue. Both methodologies are described in Appendix C.

The Intersection Capacity Utilization calculations assume a per-lane capacity of 1,700 vehicles per hour for each travel lane (through or turning) through an intersection. A clearance factor of 0.05 or five (5) percent of the total intersection capacity is included in the Intersection Capacity Utilization calculation.

The Levels of Service for the Year 2025 With Project traffic conditions have been calculated and are shown in Table 9. Year 2025 With Project weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes are shown on Figures 77 to 79, respectively. Year 2025 With Project peak season weekday morning, weekday evening, and Saturday mid-day peak hour intersection turning movement volumes are shown on Figures 80 to 82, respectively.

The study area intersections are projected to operate within acceptable Levels of Service during peak hours for Year 2025 With Project traffic conditions (see Table 9). Year 2025 With Project Level of Service worksheets are provided in Appendix D.

G. Significant Transportation Impact

The significant traffic impact criteria used by the City of Dana Point is as follows:

1. If a project causes a change in Level of Service from acceptable to unacceptable.
2. If a project causes an increase in Volume to Capacity or Intersection Capacity Utilization of 0.010 or more, causing or worsening an unacceptable Level of Service.

If a proposed projects traffic causes the conditions above, then the impacts are deemed significant and the project shall identify feasible mitigation to bring the facility back to the level of service held by the facility prior to the projects significant impact.

Table 10 depicts the Year 2025 With Project intersection traffic contribution at the study area intersections. As shown in Table 10, the project site does not significantly impact any study area intersections.

Table 9

Year 2025 With Project Intersection Delay and Level of Service

Intersection	Traffic Control [2]	Intersection Approach Lanes [1]																								Intersection Capacity Utilization - Level of Service					
		Northbound						Southbound						Eastbound						Westbound						Non-peak Season			Peak Season		
																										Weekday		Weekend	Weekday		Weekend
		L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	L	LT	T	RT	R	LTR	Morning	Evening	Midday	Morning	Evening	Midday
Del Obispo Street/Dana Point Harbor Drive (NS) at:																															
Pacific Coast Highway (EW) - #1																															
- Without Improvements	TS	1	0	1	0	2	0	2	0	1	0	1	0	1	0	3	0	1	0	2	0	2	1	0	0	0.600-B	0.790-C	0.772-C	0.648-B	0.851-D[3]	0.822-D[3]
- With Improvements	TS	1	0	1	0	2	0	2	0	1	0	**2**	0	**2**	0	3	0	1	0	2	0	2	1	0	0	0.570-A	0.712-C	0.689-B	0.648-B	0.769-C[3]	0.758-C[3]
Project Access (EW) - #2[4]	CSS	0	0	2	0	0	0	0	0	2	0	d	0	0	0	0	0	1	0	0	0	0	0	0	0	10.7-B	11.0-B	11.9-B	10.9-B	10.6-B	12.3-B
Park Lantern (EW) - #3	TS	1	0	2	0	1	0	1	0	2	0	d	0	0	1	0	0	d	0	1	0	1	0	1	0	0.246-A	0.392-A	0.348-A	0.262-A	0.377-A	0.371-A

[1] When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = Defacto Right Turn Lane; **1** = Improvements

[2] TS = Traffic Signal; CSS = Cross Street Stop

[3] Mitigation has been provided to address the expected Level of Service during these periods. That mitigation is to provide adequate roadway width for eastbound Pacific Coast Highway as part of this development project to allow for the construction of an additional eastbound left turn lane. This should reduce the expected Level of Service in the future.

[4] Level of Service calculations for nonsignalized intersections are based on the Highway Capacity Manual delay methodology. Values reported are shown in terms of seconds of delay per vehicle.

Table 10

Project Traffic Contribution

Intersection	Peak Hour	Year 2025 Without Project: Intersection Capacity Utilization	Year 2025 Without Project: Level of Service	Year 2025 With Project, Without Mitigation: Intersection Capacity Utilization	Without Mitigation: Level of Service	Without Mitigation: Project Impact	Without Mitigation: Significant Impact[1]	With Mitigation: Intersection Capacity Utilization	With Mitigation: Level of Service	With Mitigation: Project Impact	With Mitigation: Significant Impact	Acceptable Level of Service
Dana Point Harbor Drive (NS) at:												
Pacific Coast Highway (EW) - #1	Morning	0.597	A	0.600	B	0.003	No	0.570	A	-0.027	No	D
	Evening	0.785	C	0.790	C	0.005	No	0.712	C	-0.073	No	D
	Mid-day	0.763	C	0.772	C	0.009	No	0.689	B	-0.074	No	D
	Morning - Peak Season	0.645	B	0.648	B	0.003	No	0.648	B	0.003	No	D
	Evening - Peak Season	0.845	D[2]	0.851	D[2]	0.006	No	0.769	C[2]	-0.076	No	D
	Mid-day - Peak Season	0.813	D[2]	0.822	D[2]	0.009	No	0.758	C[2]	-0.055	No	D
Park Lantern (EW) - #3	Morning	0.238	A	0.246	A	0.008	No					C
	Evening	0.350	A	0.392	A	0.042	No					C
	Mid-day	0.315	A	0.348	A	0.033	No					C
	Morning - Peak Season	0.253	A	0.262	A	0.009	No					C
	Evening - Peak Season	0.333	A	0.377	A	0.044	No					C
	Mid-day - Peak Season	0.337	A	0.371	A	0.034	No					C

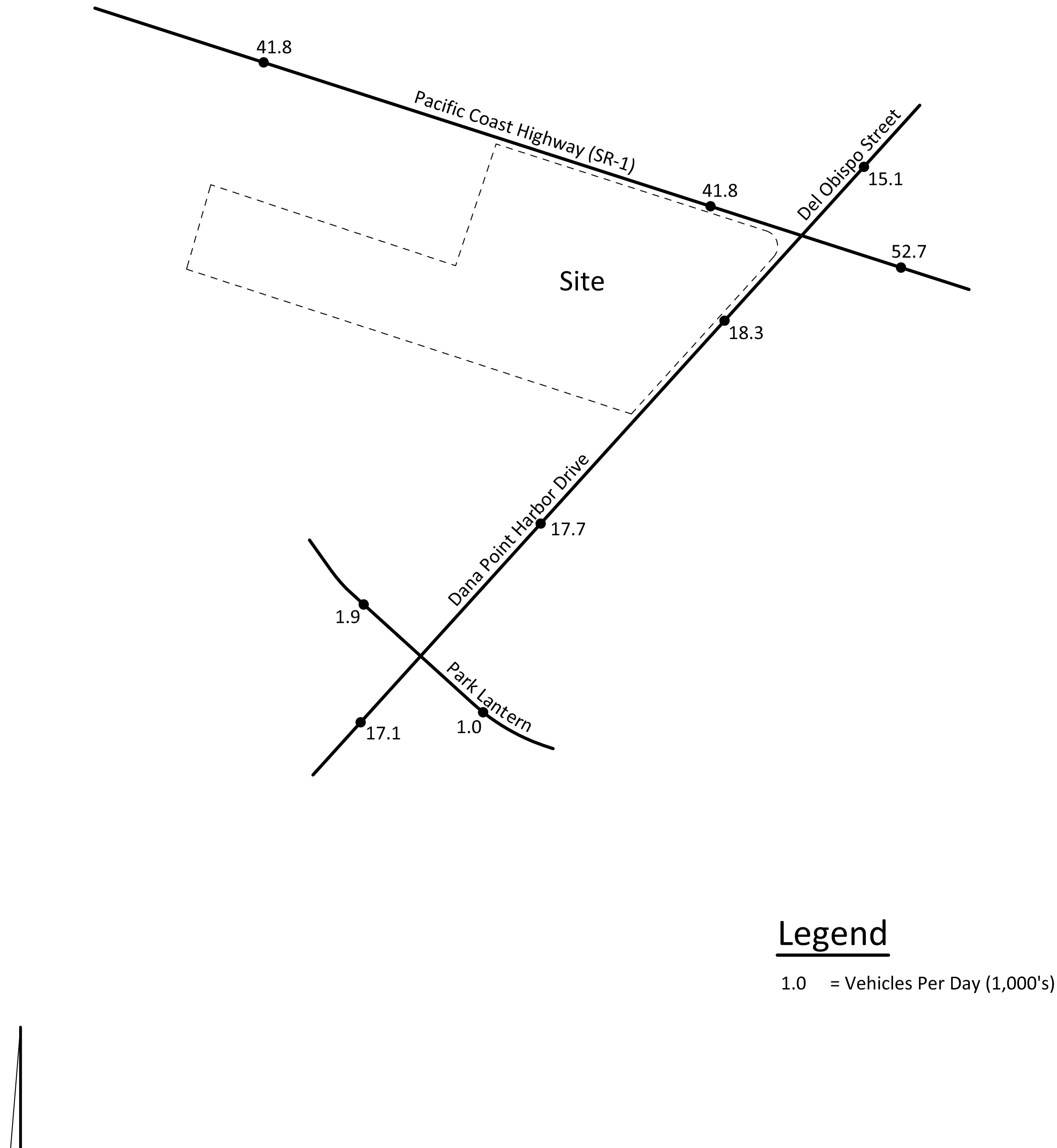
[1]The significant traffic impact criteria used by the City of Dana Point is as follows:

1. If a project causes a change in Level of Service from acceptable to unacceptable.
2. If a project causes an increase in Volume to Capacity or Intersection Capacity Utilization of 0.010 or more, causing or worsening an unacceptable Level of Service.

If a proposed projects traffic causes the conditions above, then the impacts are deemed significant and the project shall identify feasible mitigation to bring the facility back to the level of service held by the facility prior to the projects significant impact.

[2]Mitigation has been provided to address the expected Level of Service during these periods. That mitigation is to provide adequate roadway width for eastbound Pacific Coast Highway as part of this development project to allow for the construction of an additional eastbound left turn lane. This should reduce the expected Level of Service in the future.

Figure 73
Year 2025 With Project
Weekday Average Daily Traffic Volumes



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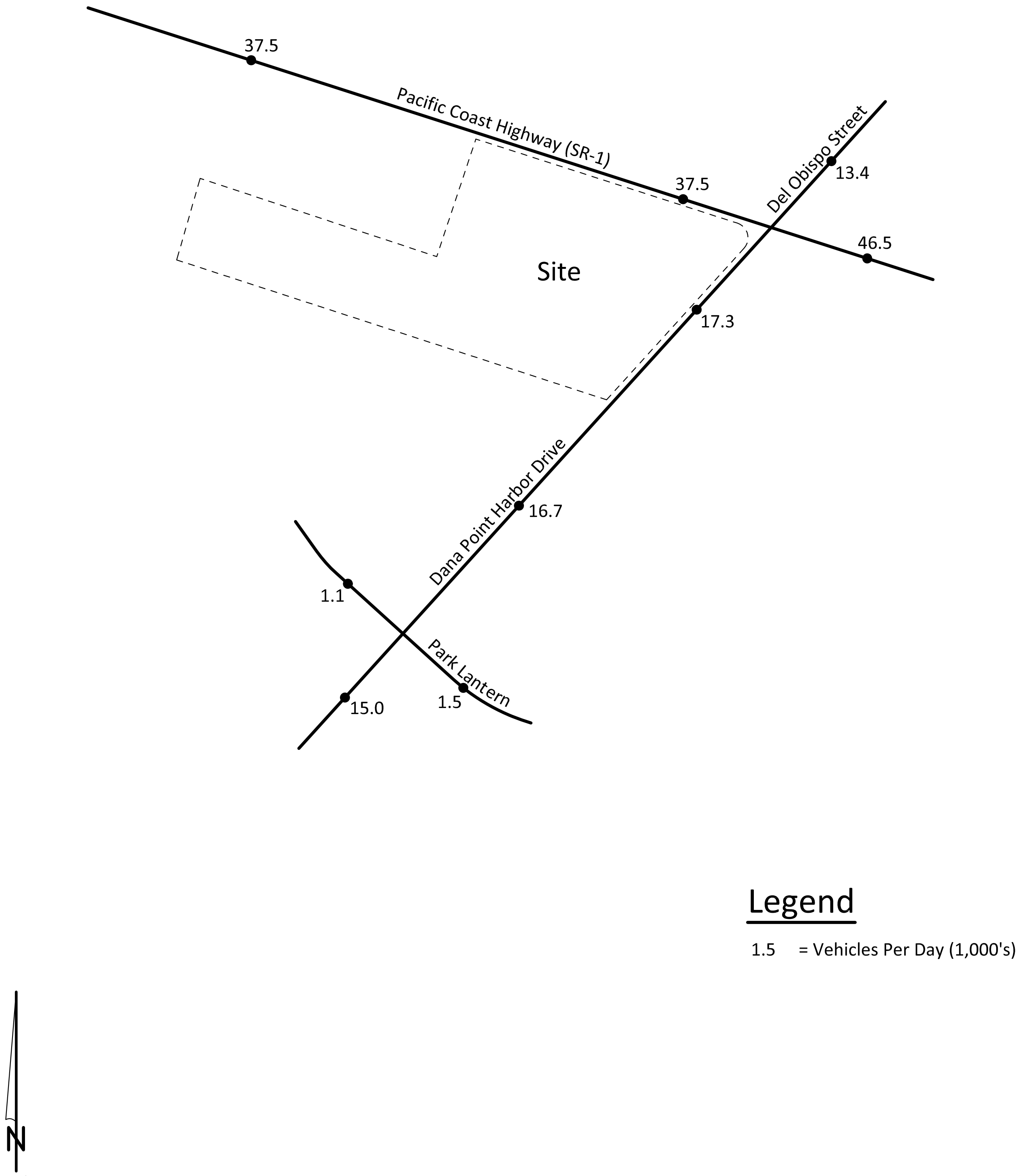
OVER 35 YEARS OF EXCELLENT SERVICE

Figure 74
Year 2025 With Project
Saturday Daily Traffic Volumes

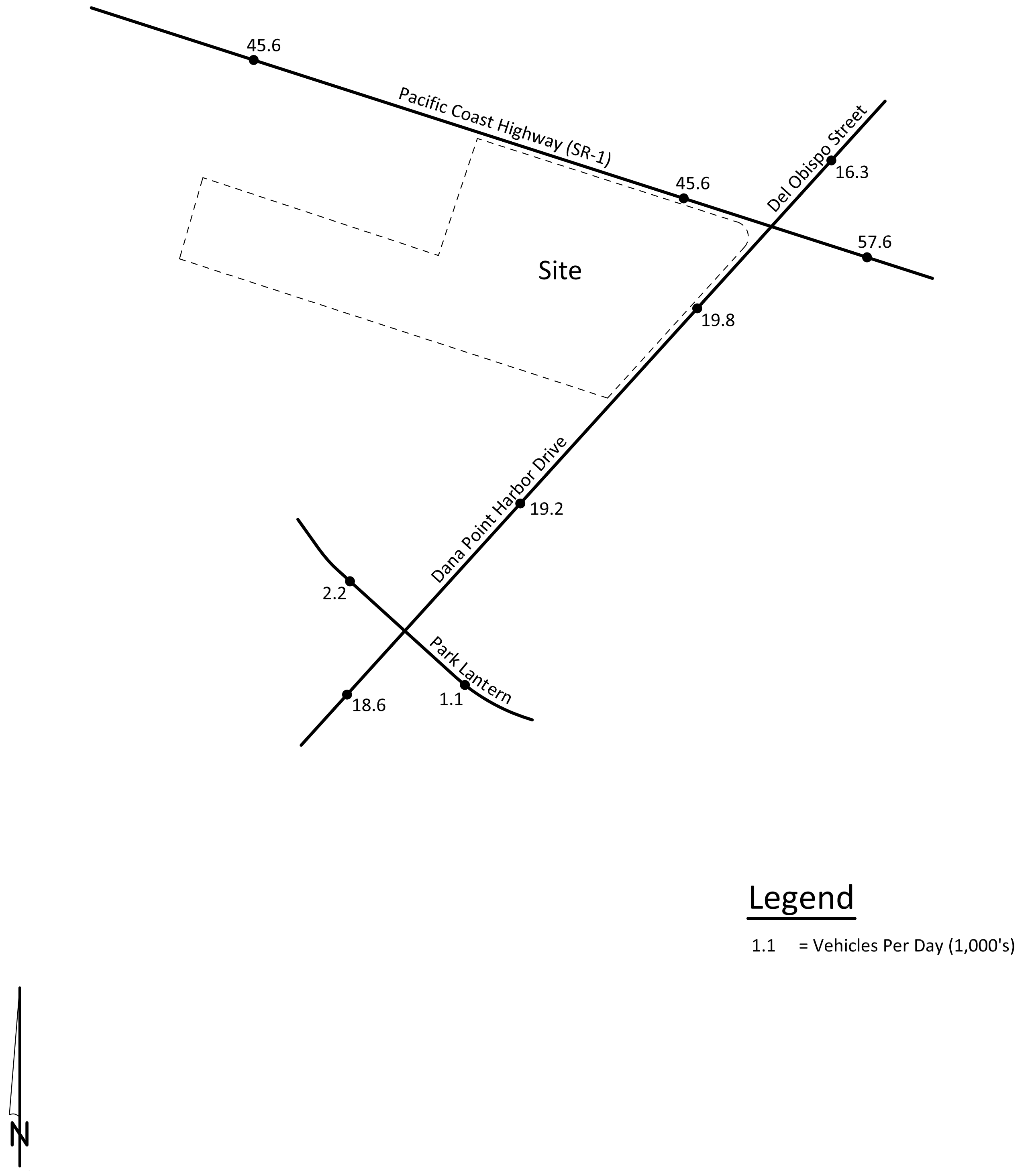


4845c/74

KUNZMAN ASSOCIATES, INC.

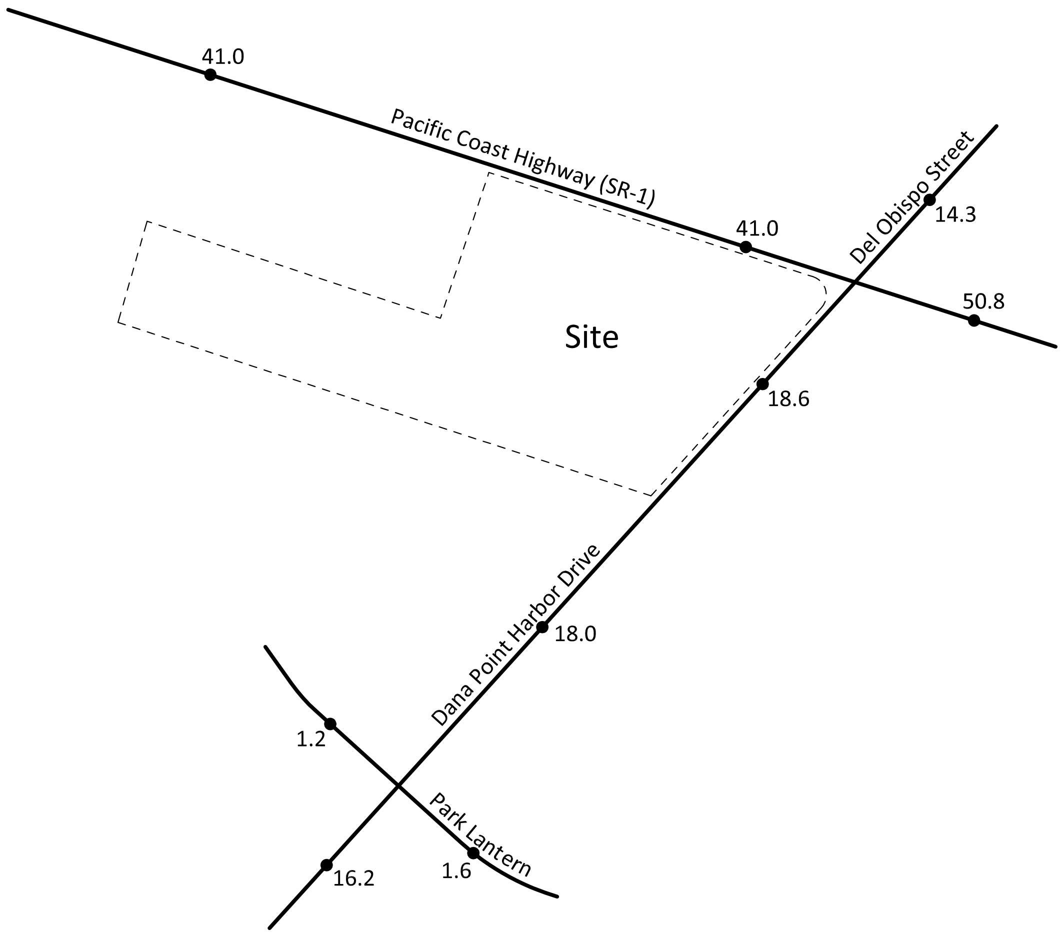
OVER 35 YEARS OF EXCELLENT SERVICE

Figure 75
Year 2025 With Project
Weekday Peak Season Average Daily Traffic Volumes



4845c/75

Figure 76
Year 2025 With Project
Saturday Peak Season Daily Traffic Volumes



Legend

1.6 = Vehicles Per Day (1,000's)

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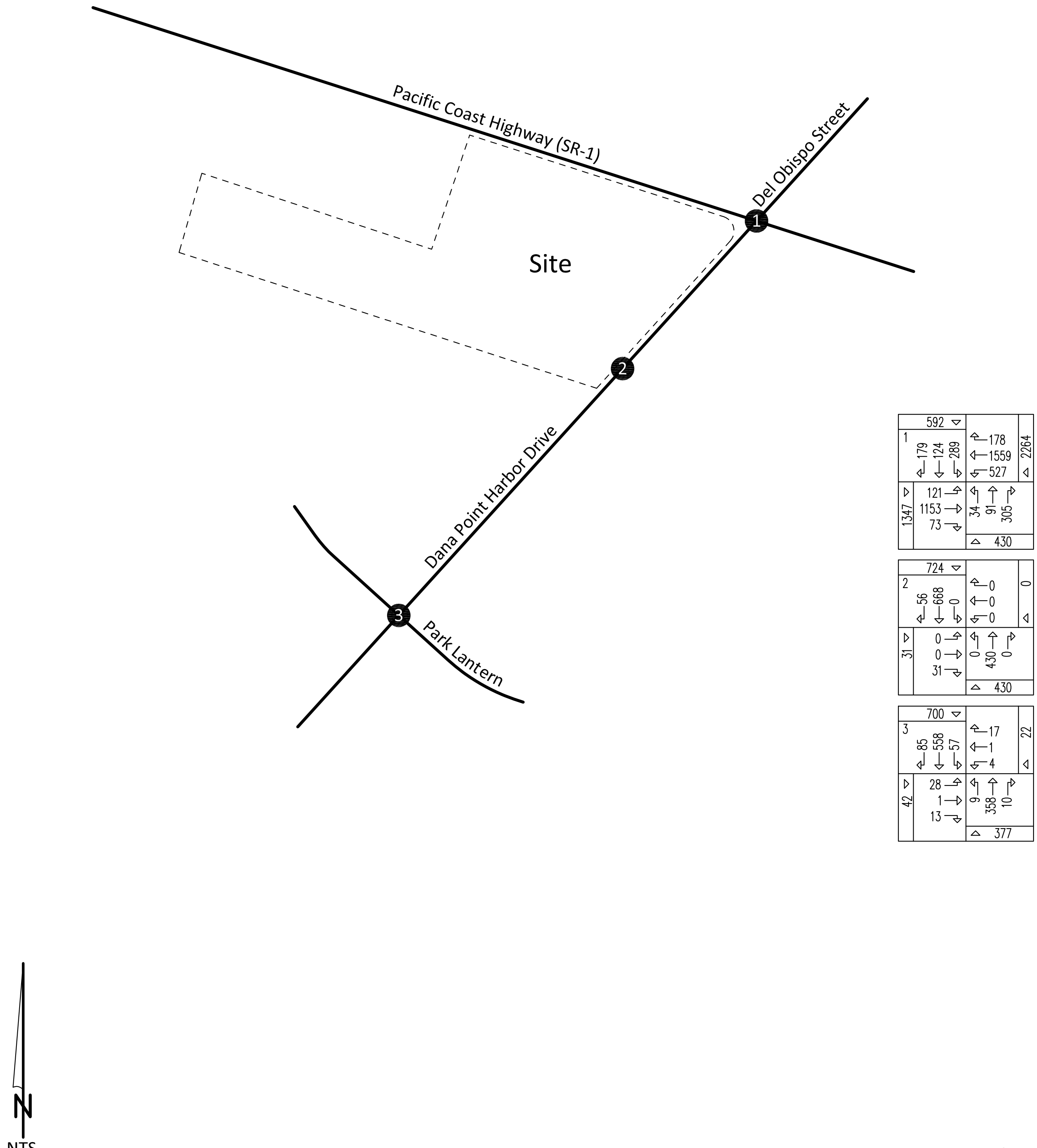
Over 35 Years of Excellent Service

Figure 77
Year 2025 With Project
Weekday Morning Peak Hour Turning Movement Volumes

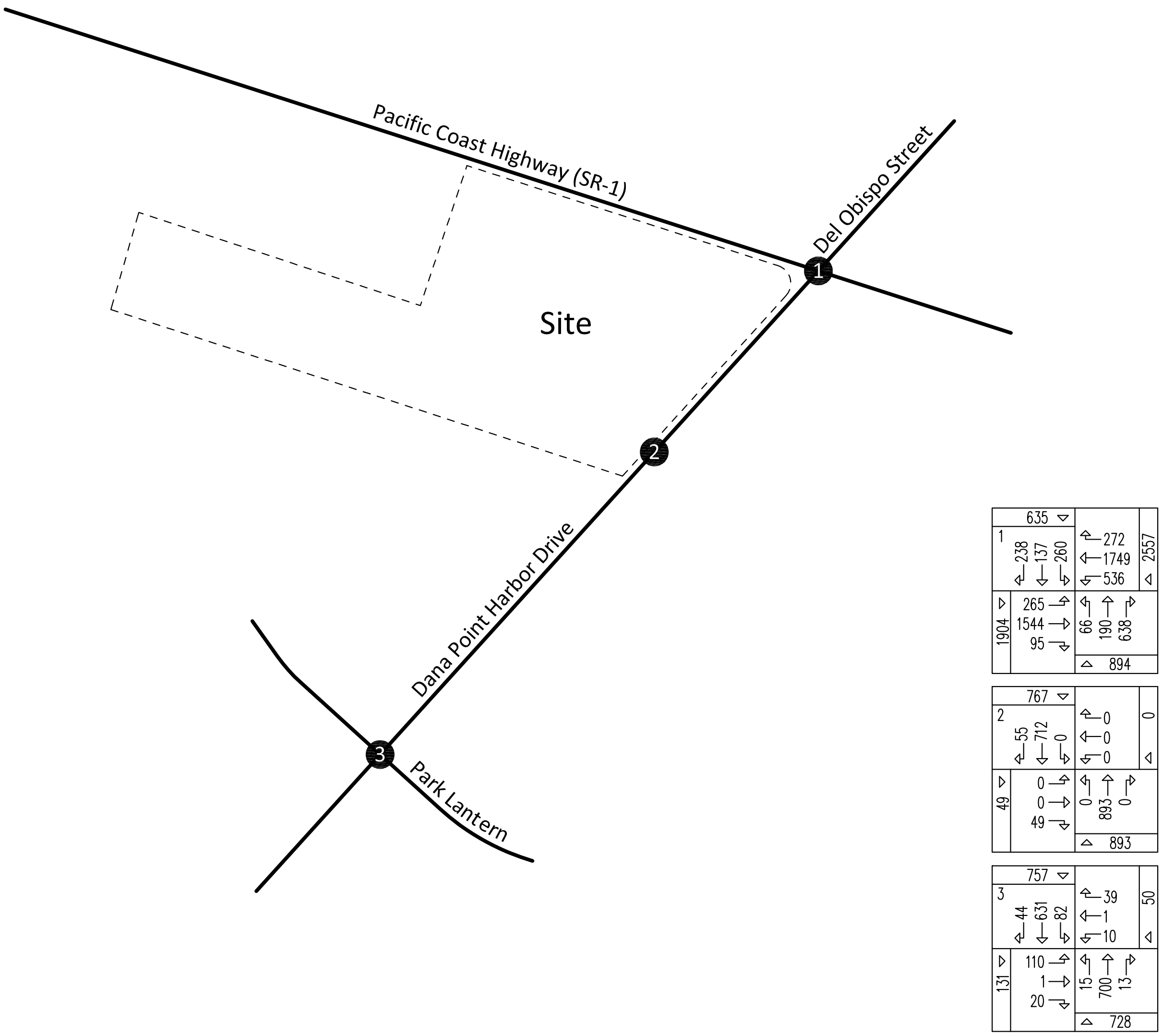


4845c/77

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 78
Year 2025 With Project
Weekday Evening Peak Hour Turning Movement Volumes



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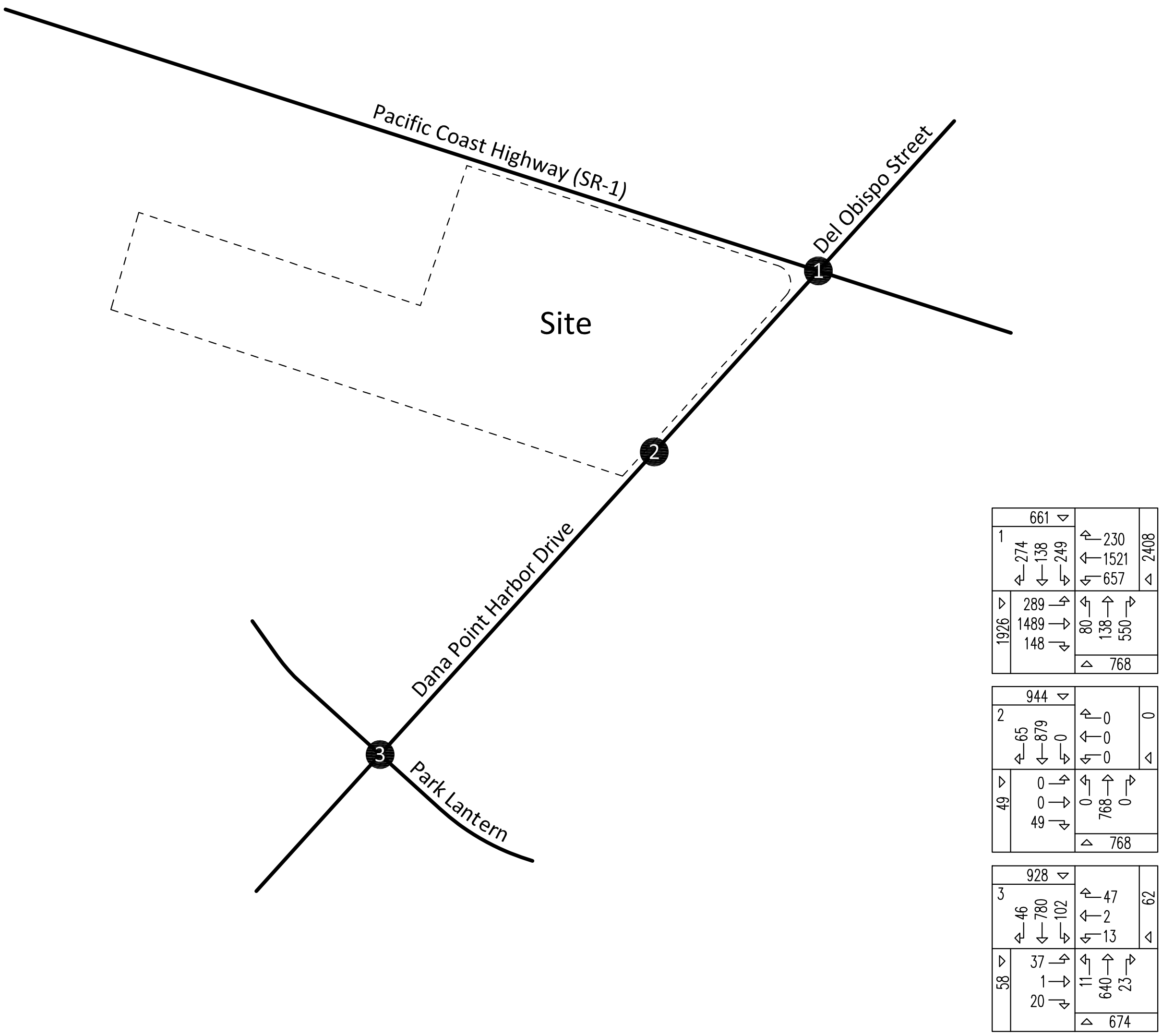
KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 79
Year 2025 With Project
Saturday Mid-day Peak Hour Turning Movement Volumes



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Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

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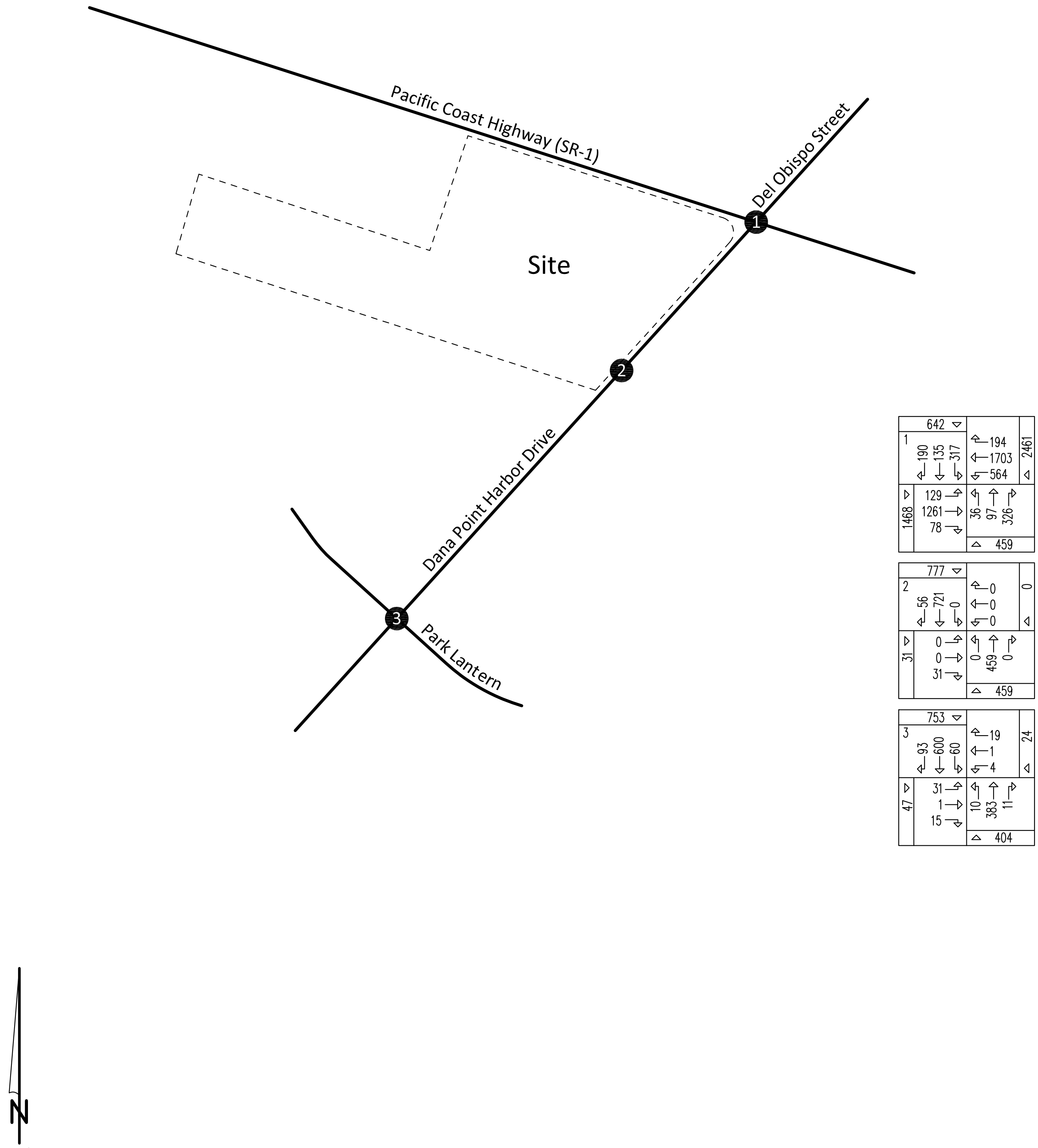
Figure 80
Year 2025 With Project
Weekday Peak Season Morning Peak Hour Turning Movement Volumes

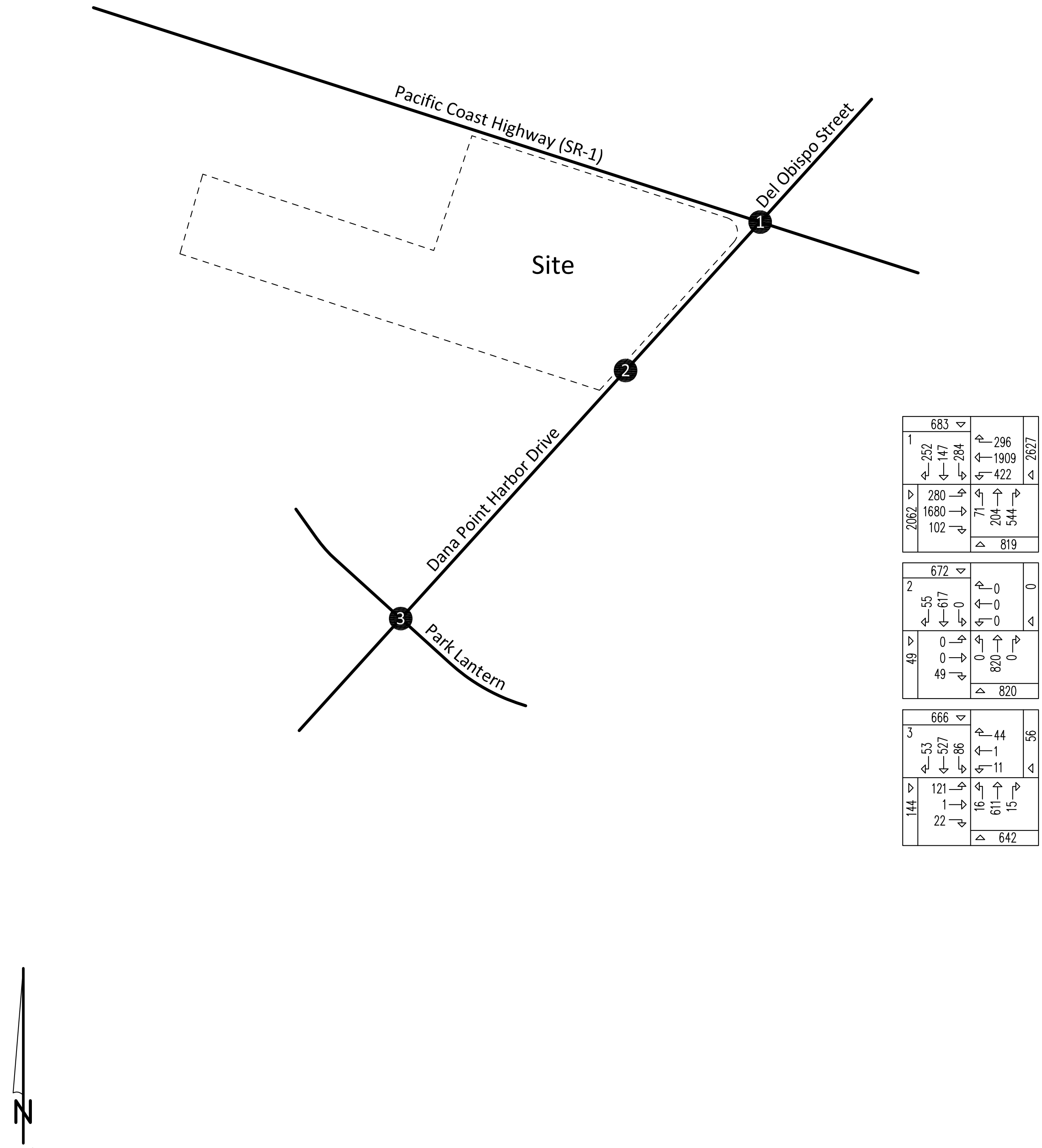


4845c/80

KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

OVER 35 YEARS OF EXCELLENT SERVICE

Figure 81
Year 2025 With Project
Weekday Peak Season Evening Peak Hour Turning Movement Volumes



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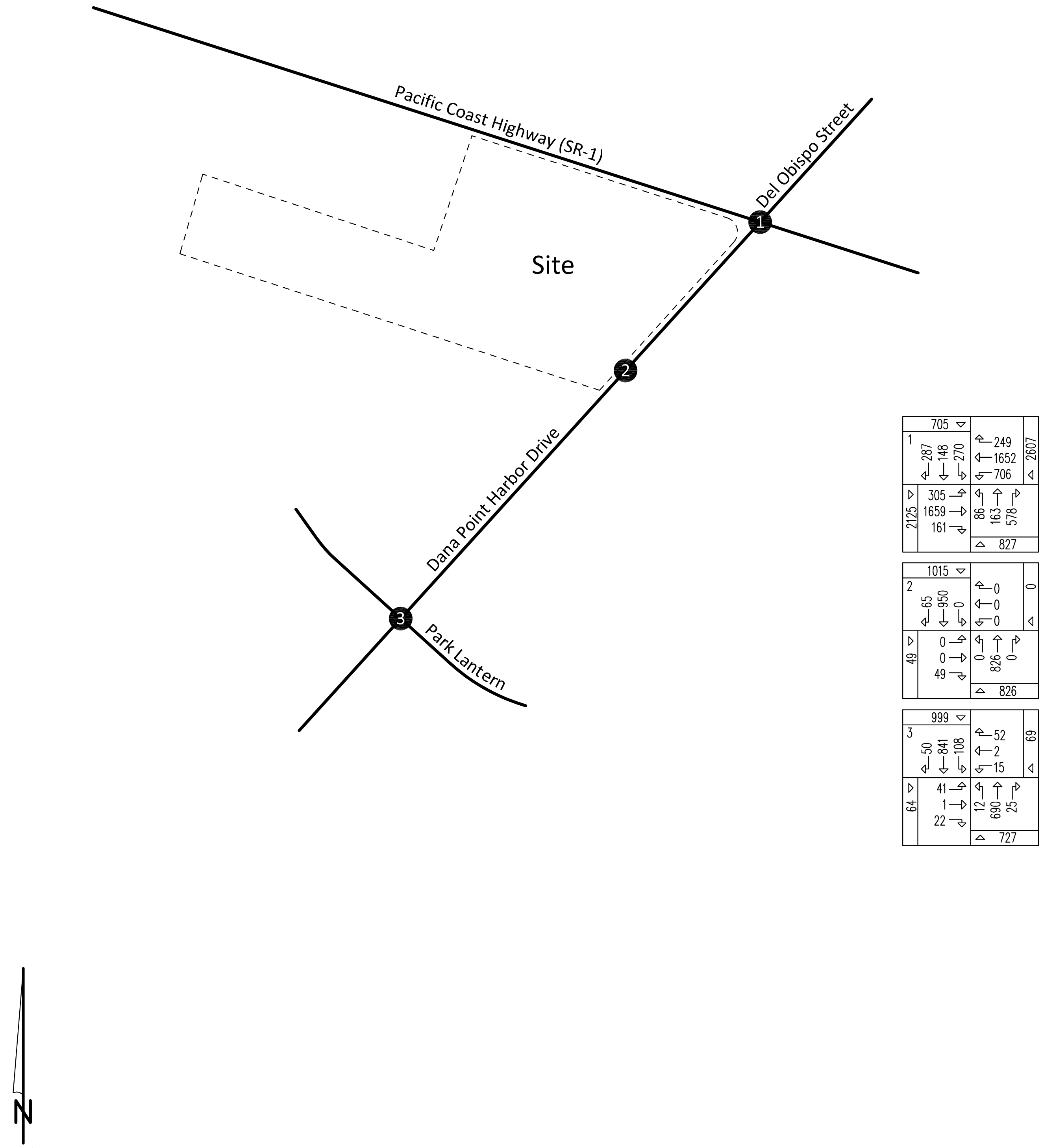
KUNZMAN ASSOCIATES, INC. Intersection reference numbers are in upper left corner of turning movement boxes.

Figure 82
Year 2025 With Project
Saturday Peak Season Mid-day Peak Hour Turning Movement Volumes



4845c/82

Kunzman Associates, Inc. Intersection reference numbers are in upper left corner of turning movement boxes.

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X. Recommendations

A. Site Access

The project site will continue to have access to Del Obispo Street/Dana Point Harbor Drive.

B. Roadway Improvements

Site-specific circulation and access recommendations are depicted on Figure 83.

Construct Del Obispo Street/Dana Point Harbor Drive from Pacific Coast Highway (SR-1) to the project south boundary at its ultimate half-section width as a Primary Arterial (100 foot right-of-way) including landscaping and parkway improvements in conjunction with development, as necessary.

Construct Pacific Coast Highway from the west project boundary to Del Obispo Street/Dana Point Harbor Drive at its ultimate half-section width as a Major Arterial (120 foot right-of-way) including landscaping and parkway improvements in conjunction with development, as necessary.

Construct an eastbound right turn lane at the intersection of Pacific Coast Highway and Del Obispo Street/Dana Point Harbor Drive. The project applicant did submit street improvement plans (plan) that showed the construction of the southerly curb line along the proposed right turn lane. The dimensions shown on the plans shall be reviewed and approved by the City Engineer to assure that an additional eastbound left turn lane can be added at a later date as needed. This is necessary to try to reduce the Level of Service impacts in Year 2025 for the weekday PM Peak Period and the Weekend Mid-day Peak Period, both shown to become Level of Service "D". With the mitigation measures, the Level of Service would be reduced to Level of Service C or better for all periods.

Modify the intersection of Dana Point Harbor Drive at Park Lantern to allow for southbound u-turns which are currently prohibited. Implementation of this improvement will require the elimination of the existing westbound free right turn lane, physical modifications to the northeast corner of the intersection and the existing traffic signal. Implementation of these improvements will require review and approval from the City of Dana Point.

Sufficient on-site parking shall be provided to meet City of Dana Point parking code requirements.

Sight distance at the project access should be reviewed with respect to California Department of Transportation/City of Dana Point standards in conjunction with the preparation of final grading, landscaping, and street improvement plans.

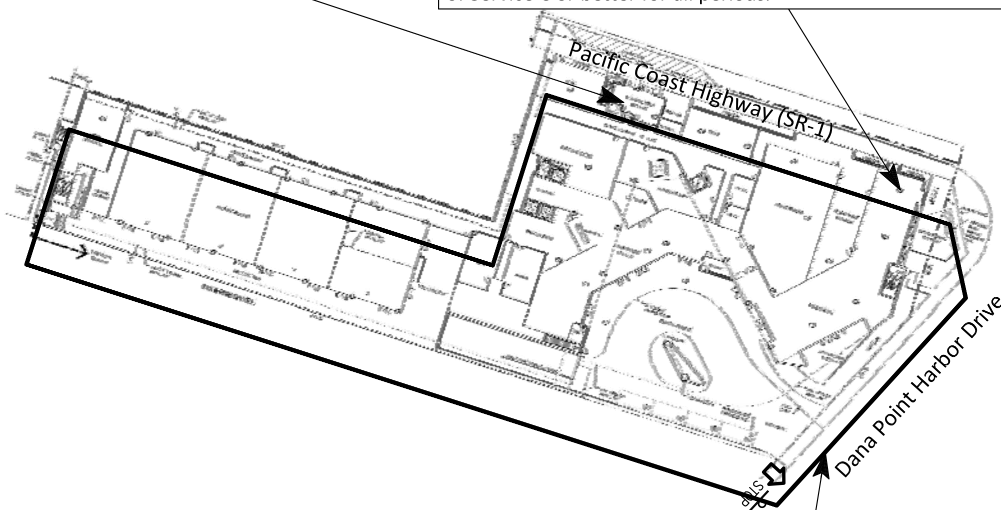
On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project.

As is the case for any roadway design, the City of Dana Point should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

Figure 83
Circulation Recommendations

Construct Pacific Coast Highway from the west project boundary to Dana Point Harbor Drive at its ultimate half-section width as a Major Arterial (120 foot right-of-way) including landscaping and parkway improvements in conjunction with development, as necessary.

Construct an eastbound right turn lane at the intersection of Pacific Coast Highway and Del Obispo Street/Dana Point Harbor Drive. The project applicant did submit street improvement plans (plan) that showed the construction of the southerly curb line along the proposed right turn lane. The dimensions shown on the plans shall be reviewed and approved by the City Engineer to assure that an additional eastbound left turn lane can be added at a later date as needed. This is necessary to try to reduce the Level of Service impacts in Year 2025 for the weekday PM Peak Period and the Weekend Mid-day Peak Period, both shown to become Level of Service “D”. With the mitigation measures, the Level of Service would be reduced to Level of Service C or better for all periods.



Construct Dana Point Harbor Drive from Pacific Coast Highway (SR-1) to the project south boundary at its ultimate half-section width as a Primary Arterial (100 foot right-of-way) including landscaping and parkway improvements in conjunction with development, as necessary.

Sufficient on-site parking shall be provided to meet City of Dana Point parking code requirements.

Sight distance at the project access should be reviewed with respect to California Department of Transportation/City of Dana Point standards in conjunction with the preparation of final grading, landscaping, and street improvement plans.

On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project.

As is the case for any roadway design, the City of Dana Point should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

Modify the intersection of Dana Point Harbor Drive at Park Lantern to allow for southbound u-turns which are currently prohibited. Implementation of this improvement will require the elimination of the existing westbound free right turn lane, physical modifications to the northeast corner of the intersection and the existing traffic signal. Implementation of these improvements will require review and approval from the City of Dana Point.

Legend

STOP = Stop Sign

= Right Turn In/Out Only Access Driveway

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Appendices

Appendix A – Glossary of Transportation Terms

Appendix B – Traffic Count Worksheets

Appendix C – Peak Season Factor Calculations

Appendix D – Explanation and Calculation of Intersection Capacity Utilization/Delay

APPENDIX A

Glossary of Transportation Terms

GLOSSARY OF TRANSPORTATION TERMS

COMMON ABBREVIATIONS

AC:	Acres
ADT:	Average Daily Traffic
Caltrans:	California Department of Transportation
DU:	Dwelling Unit
ICU:	Intersection Capacity Utilization
LOS:	Level of Service
TSF:	Thousand Square Feet
V/C:	Volume/Capacity
VMT:	Vehicle Miles Traveled

TERMS

AVERAGE DAILY TRAFFIC: The total volume during a year divided by the number of days in a year. Usually only weekdays are included.

BANDWIDTH: The number of seconds of green time available for through traffic in a signal progression.

BOTTLENECK: A constriction along a travelway that limits the amount of traffic that can proceed downstream from its location.

CAPACITY: The maximum number of vehicles that can be reasonably expected to pass over a given section of a lane or a roadway in a given time period.

CHANNELIZATION: The separation or regulation of conflicting traffic movements into definite paths of travel by the use of pavement markings, raised islands, or other suitable means to facilitate the safe and orderly movements of both vehicles and pedestrians.

CLEARANCE INTERVAL: Nearly same as yellow time. If there is an all red interval after the end of a yellow, then that is also added into the clearance interval.

CORDON: An imaginary line around an area across which vehicles, persons, or other items are counted (in and out).

CYCLE LENGTH: The time period in seconds required for one complete signal cycle.

CUL-DE-SAC STREET: A local street open at one end only, and with special provisions for turning around.

DAILY CAPACITY: The daily volume of traffic that will result in a volume during the peak hour equal to the capacity of the roadway.

DELAY: The time consumed while traffic is impeded in its movement by some element over which it has no control, usually expressed in seconds per vehicle.

DEMAND RESPONSIVE SIGNAL: Same as traffic-actuated signal.

DENSITY: The number of vehicles occupying in a unit length of the through traffic lanes of a roadway at any given instant. Usually expressed in vehicles per mile.

DETECTOR: A device that responds to a physical stimulus and transmits a resulting impulse to the signal controller.

DESIGN SPEED: A speed selected for purposes of design. Features of a highway, such as curvature, superelevation, and sight distance (upon which the safe operation of vehicles is dependent) are correlated to design speed.

DIRECTIONAL SPLIT: The percent of traffic in the peak direction at any point in time.

DIVERSION: The rerouting of peak hour traffic to avoid congestion.

FORCED FLOW: Opposite of free flow.

FREE FLOW: Volumes are well below capacity. Vehicles can maneuver freely and travel is unimpeded by other traffic.

GAP: Time or distance between successive vehicles in a traffic stream, rear bumper to front bumper.

HEADWAY: Time or distance spacing between successive vehicles in a traffic stream, front bumper to front bumper.

INTERCONNECTED SIGNAL SYSTEM: A number of intersections that are connected to achieve signal progression.

LEVEL OF SERVICE: A qualitative measure of a number of factors, which include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs.

LOOP DETECTOR: A vehicle detector consisting of a loop of wire embedded in the roadway, energized by alternating current and producing an output circuit closure when passed over by a vehicle.

MINIMUM ACCEPTABLE GAP: Smallest time headway between successive vehicles in a traffic stream into which another vehicle is willing and able to cross or merge.

MULTI-MODAL: More than one mode; such as automobile, bus transit, rail rapid transit, and bicycle transportation modes.

OFFSET: The time interval in seconds between the beginning of green at one intersection and the beginning of green at an adjacent intersection.

PLATOON: A closely grouped component of traffic that is composed of several vehicles moving, or standing ready to move, with clear spaces ahead and behind.

ORIGIN-DESTINATION SURVEY: A survey to determine the point of origin and the point of destination for a given vehicle trip.

PASSENGER CAR EQUIVALENTS (PCE): One car is one Passenger Car Equivalent. A truck is equal to 2 or 3 Passenger Car Equivalents in that a truck requires longer to start, goes slower, and accelerates slower. Loaded trucks have a higher Passenger Car Equivalent than empty trucks.

PEAK HOUR: The 60 consecutive minutes with the highest number of vehicles.

PRETIMED SIGNAL: A type of traffic signal that directs traffic to stop and go on a predetermined time schedule without regard to traffic conditions. Also, fixed time signal.

PROGRESSION: A term used to describe the progressive movement of traffic through several signalized intersections.

SCREEN-LINE: An imaginary line or physical feature across which all trips are counted, normally to verify the validity of mathematical traffic models.

SIGNAL CYCLE: The time period in seconds required for one complete sequence of signal indications.

SIGNAL PHASE: The part of the signal cycle allocated to one or more traffic movements.

STARTING DELAY: The delay experienced in initiating the movement of queued traffic from a stop to an average running speed through a signalized intersection.

TRAFFIC-ACTUATED SIGNAL: A type of traffic signal that directs traffic to stop and go in accordance with the demands of traffic, as registered by the actuation of detectors.

TRIP: The movement of a person or vehicle from one location (origin) to another (destination). For example, from home to store to home is two trips, not one.

TRIP-END: One end of a trip at either the origin or destination; i.e. each trip has two trip-ends. A trip-end occurs when a person, object, or message is transferred to or from a vehicle.

TRIP GENERATION RATE: The quality of trips produced and/or attracted by a specific land use stated in terms of units such as per dwelling, per acre, and per 1,000 square feet of floor space.

TRUCK: A vehicle having dual tires on one or more axles, or having more than two axles.

UNBALANCED FLOW: Heavier traffic flow in one direction than the other. On a daily basis, most facilities have balanced flow. During the peak hours, flow is seldom balanced in an urban area.

VEHICLE MILES OF TRAVEL: A measure of the amount of usage of a section of highway, obtained by multiplying the average daily traffic by length of facility in miles.

APPENDIX B

Traffic Count Worksheets

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Del Obispo St/Dana Harbor Dr DATE: 03/22/2011 LOCATION: City of Dana Point

E-W STREET: Pacific Coast Hwy (SR-1) DAY: TUESDAY PROJECT# 11-1028-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	2	2	1	1	1	2.5	0.5	2	3.5	0.5	
7:00 AM	2	3	24	42	9	22	11	153	7	46	198	34	551
7:15 AM	2	7	18	64	13	14	8	196	4	61	278	41	706
7:30 AM	4	9	27	75	15	22	19	263	15	59	322	51	881
7:45 AM	1	10	34	84	25	22	22	289	7	116	462	43	1115
8:00 AM	8	24	67	67	24	35	20	276	10	76	303	39	949
8:15 AM	7	15	45	62	23	29	18	230	16	78	323	40	886
8:30 AM	8	13	51	52	25	22	17	252	16	91	305	41	893
8:45 AM	3	11	54	43	27	34	23	239	17	109	313	42	915

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	35	92	320	489	161	200	138	1898	92	636	2504	331	6896

AM Peak Hr Begins at: 745 AM

PEAK VOLUMES =	24	62	197	265	97	108	77	1047	49	361	1393	163	3843
PEAK HR. FACTOR:		0.715			0.897			0.922			0.772		0.862

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Del Obispo St/Dana Harbor Dr DATE: 03/22/2011 LOCATION: City of Dana Point

E-W STREET: Pacific Coast Hwy (SR-1) DAY: TUESDAY PROJECT# 11-1028-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	2	2	1	1	1	2.5	0.5	2	3.5	0.5	
4:00 PM	15	20	123	56	27	49	38	358	15	79	327	50	1157
4:15 PM	10	31	137	51	24	27	25	316	19	85	399	62	1186
4:30 PM	12	26	107	64	29	34	35	337	18	81	362	63	1168
4:45 PM	9	32	101	73	26	39	39	313	16	74	362	56	1140
5:00 PM	19	44	153	44	27	33	33	309	17	80	370	55	1184
5:15 PM	9	36	98	48	22	32	37	349	19	98	457	63	1268
5:30 PM	13	25	82	59	36	42	43	338	13	68	392	56	1167
5:45 PM	6	17	84	55	24	36	36	274	10	100	373	67	1082

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	93	231	885	450	215	292	286	2594	127	665	3042	472	9352

PM Peak Hr Begins at: 430 PM

PEAK VOLUMES =	49	138	459	229	104	138	144	1308	70	333	1551	237	4760
PEAK HR. FACTOR:		0.748			0.853			0.940			0.858		0.938

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Del Obispo St/Dana Harbor Dr   DATE: 03/19/2011   LOCATION: City of Dana Point

E-W STREET: Pacific Coast Hwy (SR-1)   DAY: SATURDAY   PROJECT# 11-1028-001

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	2	2	1	1	1	2.5	0.5	2	3.5	0.5	
10:00 AM	7	17	63	41	27	38	28	227	17	85	207	31	788
10:15 AM	13	25	64	54	30	32	30	234	19	117	271	45	934
10:30 AM	9	33	94	40	15	46	36	252	20	91	294	42	972
10:45 AM	13	23	87	47	29	39	30	254	19	97	298	36	972
11:00 AM	9	25	85	61	16	31	43	292	23	107	306	38	1036
11:15 AM	17	27	97	62	29	31	26	264	21	113	298	40	1025
11:30 AM	20	20	82	44	21	46	31	322	23	115	293	48	1065
11:45 AM	18	24	76	69	28	40	23	282	27	116	281	47	1031
12:00 PM	15	25	94	52	18	32	34	289	19	100	310	51	1039
12:15 PM	17	21	97	72	28	42	36	265	30	125	318	48	1099
12:30 PM	17	27	99	39	28	38	37	305	30	110	312	47	1089
12:45 PM	13	29	96	69	30	26	37	295	32	135	331	40	1133
1:00 PM	18	19	97	42	22	35	41	359	27	109	325	49	1143
1:15 PM	15	30	104	59	22	33	31	325	29	114	294	51	1107
1:30 PM	16	21	92	44	21	27	32	276	22	99	302	30	982
1:45 PM	24	18	94	62	25	32	41	260	21	101	324	49	1051

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	241	384	1421	857	389	568	536	4501	379	1734	4764	692	16466

NOON Peak Hr Begins at: 1230 PM

PEAK VOLUMES =	63	105	396	209	102	132	146	1284	118	468	1262	187	4472
PEAK HR. FACTOR:		0.946			0.886			0.906			0.947		0.978

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Del Obispo St/Dana Harbor Dr | DATE: 03/22/2011 | LOCATION: City of Dana Point

E-W STREET: Park Lantern | DAY: TUESDAY | PROJECT# 11-1028-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	1	1	2	0	0	1	0	1	1	0	
7:00 AM	0	18	0	0	65	6	2	0	0	0	0	1	92
7:15 AM	1	27	2	5	56	9	5	0	1	1	1	2	110
7:30 AM	0	33	0	6	68	15	5	0	0	0	0	2	129
7:45 AM	4	38	0	8	125	21	3	0	0	1	0	4	204
8:00 AM	0	82	1	7	98	24	9	0	3	1	0	7	232
8:15 AM	2	51	3	3	82	21	10	0	4	0	0	4	180
8:30 AM	2	62	2	11	108	18	3	0	2	0	0	4	212
8:45 AM	5	59	4	7	109	20	8	1	4	3	0	3	223

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	14	370	12	47	711	134	45	1	14	6	1	27	1382

AM Peak Hr Begins at: 800 AM

PEAK VOLUMES =	9	254	10	28	397	83	30	1	13	4	0	18	847
PEAK HR. FACTOR:		0.822			0.927			0.786			0.688		0.913

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Del Obispo St/Dana Harbor Dr   DATE: 03/22/2011   LOCATION: City of Dana Point

E-W STREET: Park Lantern   DAY: TUESDAY   PROJECT# 11-1028-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	1	1	2	0	0	1	0	1	1	0	
4:00 PM	2	140	5	12	118	13	21		5	3		18	337
4:15 PM	5	120	2	5	103	10	24		3	2		10	284
4:30 PM	2	117	2	10	105	14	25		5	3		4	287
4:45 PM	5	121	4	9	95	8	34		6	2		6	290
5:00 PM	3	161	1	15	99	12	21		5	1		5	323
5:15 PM	0	114	4	9	101	17	21		8	4		7	285
5:30 PM	2	92	2	10	107	15	10		4	3		17	262
5:45 PM	2	93	2	13	105	7	19		8	4		4	257

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
VOLUMES =	21	958	22	83	833	96	175	0	44	22	0	71	2325

PM Peak Hr Begins at: 400 PM

PEAK VOLUMES =	14	498	13	36	421	45	104	0	19	10	0	38	1198
PEAK HR. FACTOR:		0.893			0.878			0.769			0.571		0.889

CONTROL: Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

N-S STREET: Del Obispo St/Dana Harbor Dr   DATE: 03/19/2011   LOCATION: City of Dana Point

E-W STREET: Park Lantern   DAY: SATURDAY   PROJECT# 11-1028-002

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	1	1	2	0	0	1	0	1	1	0	
10:00 AM	4	77	2	10	132	5	8	0	11	3	0	3	255
10:15 AM	2	81	3	14	131	15	6	0	6	4	0	8	270
10:30 AM	2	125	3	12	128	7	7	0	2	3	0	7	296
10:45 AM	2	101	8	9	118	10	16	2	2	5	1	7	281
11:00 AM	0	106	6	13	124	12	8	2	12	8	0	12	303
11:15 AM	3	114	7	14	124	6	14	0	2	6	0	8	298
11:30 AM	3	104	10	19	150	8	6	0	4	7	0	13	324
11:45 AM	6	100	4	21	140	9	12	1	4	3	0	5	305
12:00 PM	2	118	9	12	115	3	9	0	4	5	2	11	290
12:15 PM	0	120	10	17	156	16	4	0	4	5	0	12	344
12:30 PM	3	123	5	15	152	7	13	0	3	4	1	13	339
12:45 PM	3	106	4	14	143	17	10	1	9	2	0	11	320
1:00 PM	5	126	3	13	149	7	7	0	3	2	1	7	323
1:15 PM	5	134	3	16	128	12	8	1	4	1	0	5	317
1:30 PM	6	107	8	19	120	4	12	3	5	1	1	7	293
1:45 PM	7	122	3	12	127	5	8	0	7	4	0	7	302

TOTAL VOLUMES =	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	53	1764	88	230	2137	143	148	10	82	63	6	136	4860

NOON Peak Hr Begins at: 1215 PM

PEAK VOLUMES =	11	475	22	59	600	47	34	1	19	13	2	43	1326
PEAK HR. FACTOR:		0.948			0.934			0.675			0.806		0.964

CONTROL: Signalized

APPENDIX C

Peak Season Factor Calculations

Pacific Coast Highway (SR-1) Peak Season Calculator[1]

Year	Segment	Average Daily Traffic		Factor
		Average	Peak Month	
2009	Pacific Coast Highway (SR-1) North of Del Obispo	39,000	42,500	109%
2008	Pacific Coast Highway (SR-1) North of Del Obispo	39,000	42,500	109%
	Pacific Coast Highway (SR-1) South of Del Obispo	39,500	43,000	109%
2007	Pacific Coast Highway (SR-1) North of Del Obispo	29,500	32,000	108%
	Pacific Coast Highway (SR-1) South of Del Obispo	40,000	43,500	109%
2006	Pacific Coast Highway (SR-1) North of Del Obispo	30,000	32,500	108%
	Pacific Coast Highway (SR-1) South of Del Obispo	48,500	53,000	109%
2005	Pacific Coast Highway (SR-1) North of Del Obispo	32,000	35,000	109%
	Pacific Coast Highway (SR-1) South of Del Obispo	48,000	52,000	108%
2004	Pacific Coast Highway (SR-1) North of Del Obispo	31,000	33,500	108%
	Pacific Coast Highway (SR-1) South of Del Obispo	47,000	51,000	109%
2003	Pacific Coast Highway (SR-1) North of Del Obispo	30,000	32,500	108%
	Pacific Coast Highway (SR-1) South of Del Obispo	46,000	50,000	109%
2002	Pacific Coast Highway (SR-1) North of Del Obispo	40,000	43,500	109%
	Pacific Coast Highway (SR-1) South of Del Obispo	46,000	50,000	109%
2001	Pacific Coast Highway (SR-1) North of Del Obispo	40,000	43,500	109%
	Pacific Coast Highway (SR-1) South of Del Obispo	46,000	50,000	109%
2000	Pacific Coast Highway (SR-1) North of Del Obispo	40,000	43,500	109%
	Pacific Coast Highway (SR-1) South of Del Obispo	44,000	48,000	109%
1999	Pacific Coast Highway (SR-1) North of Del Obispo	33,000	36,000	109%
Total		788,500	857,500	109%

[1]Traffic volume data obtained from the California Department of Transportation,Traffic Volumes on California State Highways, 1999 to 2009.

APPENDIX D

Explanation and Calculation of Intersection Capacity Utilization/Delay

EXPLANATION AND CALCULATION OF INTERSECTION CAPACITY UTILIZATION

Overview

The ability of a roadway to carry traffic is referred to as capacity. The capacity is usually greater between intersections and less at intersections because traffic flows continuously between them and only during the green phase at them. Capacity at intersections is best defined in terms of vehicles per lane per hour of green. If capacity is 1,600 vehicles per lane per hour of green, and if the green phase is 50 percent of the cycle and there are three lanes, then the capacity is 1,600 times 50 percent times 3 lanes, or 2,400 vehicles per hour for that approach.

The technique used to compare the volume and capacity at a signalized intersection is known as Intersection Capacity Utilization. Intersection Capacity Utilization, usually expressed as a percent, is the proportion of an hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. If an intersection is operating at 80 percent of capacity (i.e., an Intersection Capacity Utilization of 80 percent), then 20 percent of the signal cycle is not used. The signal could show red on all indications 20 percent of the time and the signal would just accommodate approaching traffic.

Intersection Capacity Utilization analysis consists of (a) determining the proportion of signal time needed to serve each conflicting movement of traffic, (b) summing the times for the movements, and (c) comparing the total time required to the total time available. For example, if for north-south traffic the northbound traffic is 1,600 vehicles per hour, the southbound traffic is 1,200 vehicles per hour, and the capacity of either direction is 3,200 vehicles per hour, then the northbound traffic is critical and requires 1,600/3,200 or 50 percent of the signal time. If for east-west traffic, 30 percent of the signal time is required, then it can be seen that the Intersection Capacity Utilization is 50 plus 30, or 80 percent. When left turn arrows (left turn phasing) exist, they are incorporated into the analysis. The critical movements are usually the heavy left turn movements and the opposing through movements.

The Intersection Capacity Utilization technique is an ideal tool to quantify existing as well as future intersection operation. The impact of adding a lane can be quickly determined by examining the effect the lane has on the Intersection Capacity Utilization.

Intersection Capacity Utilization Worksheets That Follow This Discussion

The Intersection Capacity Utilization worksheet table contains the following information:

1. Peak hour turning movement volumes.

2. Number of lanes that serve each movement.

3. For right turn lanes, whether the lane is a free right turn lane, whether it has a right turn arrow, and the percent of right turns on red that are assumed.

4. Capacity assumed per lane.

5. Capacity available to serve each movement (number of lanes times capacity per lane).

6. Volume to capacity ratio for each movement.

7. Whether the movement's volume to capacity ratio is critical and adds to the Intersection Capacity Utilization value.

8. The yellow time or clearance interval assumed.

9. Adjustments for right turn movements.

10. The Intersection Capacity Utilization and Level of Service.

The Intersection Capacity Utilization Worksheet also has two graphics on the same page. These two graphics show the following:

1. Peak hour turning movement volumes.

2. Number of lanes that serve each movement.

3. The approach and exit leg volumes.

4. The two-way leg volumes.

5. An estimate of daily traffic volumes that is fairly close to actual counts and is based strictly on the peak hour leg volumes multiplied by a factor.

6. Percent of daily traffic in peak hours.

7. Percent of peak hour leg volume that is inbound versus outbound.

A more detailed discussion of Intersection Capacity Utilization and Level of Service follows.

Level of Service

Level of Service is used to describe the quality of traffic flow. Levels of Service A to C operate quite well. Level of Service C is typically the standard to which rural roadways are designed.

Level of Service D is characterized by fairly restricted traffic flow. Level of Service D is the standard to which urban roadways are typically designed. Level of Service E is the maximum volume a facility can accommodate and will result in possible stoppages of momentary duration. Level of Service F occurs when a facility is overloaded and is characterized by stop-and-go traffic with stoppages of long duration.

A description of the various Levels of Service appears at the end of the Intersection Capacity Utilization description, along with the relationship between Intersection Capacity Utilization and Level of Service.

Signalized Intersections

Although calculating an Intersection Capacity Utilization value for an unsignalized intersection is invalid, the presumption is that a signal can be installed and the calculation shows whether the geometrics are capable of accommodating the expected volumes with a signal. A traffic signal becomes warranted before Level of Service D is reached for a signalized intersection.

Signal Timing

The Intersection Capacity Utilization calculation assumes that a signal is properly timed. It is possible to have an Intersection Capacity Utilization well below 100 percent, yet have severe traffic congestion. This would occur if one or more movements is not getting sufficient green time to satisfy its demand, and excess green time exists on other movements. This is an operational problem that should be remedied.

Lane Capacity

Capacity is often defined in terms of roadway width; however, standard lanes have approximately the same capacity whether they are 11 or 14 feet wide. Our data indicates a typical lane, whether a through lane or a left turn lane, has a capacity of approximately 1,750 vehicles per hour of green time, with nearly all locations showing a capacity greater than 1,600 vehicles per hour of green per lane. Right turn lanes have a slightly lower capacity; however 1,600 vehicles per hour is a valid capacity assumption for right turn lanes.

This finding is published in the August 1978 issue of Institute of Transportation Engineers Journal in the article entitled, "Another Look at Signalized Intersection Capacity" by William Kunzman. A capacity of 1,600 vehicles per hour per lane with no yellow time penalty, or 1,700 vehicles per hour with a 3 or 5 percent yellow time penalty is reasonable.

Yellow Time

The yellow time can either be assumed to be completely used and no penalty applied, or it can be assumed to be only partially usable. Total yellow time accounts for approximately 10 percent of a signal cycle, and a penalty of 3 to 5 percent is reasonable.

During peak hour traffic operation the yellow times are nearly completely used. If there is no left turn phasing, the left turn vehicles completely use the yellow time. Even if there is left turn phasing, the through traffic continues to enter the intersection on the yellow until just a split second before the red.

Shared Lanes

Shared lanes occur in many locations. A shared lane is often found at the end of an off ramp where the ramp forms an intersection with the cross street. Often at a diamond interchange off ramp, there are three lanes. In the case of a diamond interchange, the middle lane is sometimes shared, and the driver can turn left, go through, or turn right from that lane.

If one assumes a three lane off ramp as described above, and if one assumes that each lane has 1,600 capacity, and if one assumes that there are 1,000 left turns per hour, 500 right turns per hour, and 100 through vehicles per hour, then how should one assume that the three lanes operate. There are three ways that it is done.

One way is to just assume that all 1,600 vehicles (1,000 plus 500 plus 100) are served simultaneously by three lanes. When this is done, the capacity is 3 times 1,600 or 4,800, and the amount of green time needed to serve the ramp is 1,600 vehicles divided by 4,800 capacity or 33.3 percent. This assumption effectively assumes perfect lane distribution between the three lanes that is not realistic. It also means a left turn can be made from the right lane.

Another way is to equally split the capacity of a shared lane and in this case to assume there are 1.33 left turn lanes, 1.33 right turn lanes, and 0.33 through lanes. With this assumption, the critical movement is the left turns and the 1,000 left turns are served by a capacity of 1.33 times 1,600, or 2,133. The volume to capacity ratio of the critical move is 1,000 divided by 2,133 or 46.9 percent.

The first method results in a critical move of 33.3 percent and the second method results in a critical move of 46.9 percent. Neither is very accurate, and the difference in the calculated Level of Service will be approximately 1.5 Levels of Service (one Level of Service is 10 percent).

The way Kunzman Associates, Inc. does it is to assign fractional lanes in a reasonable way. In this example, it would be assumed that there is 1.1 right turn lanes, 0.2 through lanes, and 1.7 left turn lanes. The volume to capacity ratios for each movement would be 31.3 percent for the through traffic, 28.4 percent for the right turn movement, and 36.8 percent for the left turn movement. The critical movement would be the 36.8 percent for the left turns.

Right Turn on Red

Kunzman Associates, Inc.'s software treats right turn lanes in one of five different ways. Each right turn lane is classified into one of five cases. The five cases are (1) free right turn lane, (2) right turn lane with separate right turn arrow, (3) standard right turn lane with no right turns on red allowed, (4) standard right turn lane with a certain percentage of right turns on red allowed, and (5) separate right turn arrow and a certain percentage of right turns on red allowed.

Free Right Turn Lane

If it is a free right turn lane, then it is given a capacity of one full lane with continuous or 100 percent green time. A Free right turn lane occurs when there is a separate approach lane for right turning vehicles, there is a separate departure lane for the right turning vehicles after they turn and are exiting the intersection, and the through cross street traffic does not interfere with the vehicles after they turn right.

Separate Right Turn Arrow

If there is a separate right turn arrow, then it is assumed that vehicles are given a green indication and can proceed on what is known as the left turn overlap.

The left turn overlap for a northbound right turn is the westbound left turn. When the left turn overlap has a green indication, the right turn lane is also given a green arrow indication. Thus, if there is a northbound right turn arrow, then it can be turned green for the period of time that the westbound left turns are proceeding.

If there are more right turns than can be accommodated during the northbound through green and the time that the northbound right turn arrow is on, then an adjustment is made to the Intersection Capacity Utilization to account for the green time that needs to be added to the northbound through green to accommodate the northbound right turns.

Standard Right Turn Lane, No Right Turns on Red

A standard right turn lane, with no right turn on red assumed, proceeds only when there is a green indication displayed for the adjacent through movement. If additional green time is needed above that amount of time, then in the Intersection Capacity Utilization calculation a right turn adjustment green time is added above the green time that is needed to serve the adjacent through movement.

Standard Right Turn Lane, With Right Turns on Red

A standard right turn lane with say 20 percent of the right turns allowed to turn right on a red indication is calculated the same as the standard right turn case where there is no right turn on red allowed, except that the right turn adjustment is reduced to account for the 20 percent of the right turning vehicles that can logically turn right on a red light. The right turns on red are never allowed to exceed the time the overlap left turns take plus the unused part of the green cycle that the cross street traffic moving from left to right has.

As an example of how 20 percent of the cars are allowed to turn right on a red indication, assume that the northbound right turn volume needs 40 percent of the signal cycle to be satisfied. To allow 20 percent of the northbound right turns to turn right on red, then during 8 percent of the signal cycle (40 percent of signal cycle times 20 percent that can turn right on red) right turns on red will be allowed if it is feasible.

For this example, assume that 15 percent of the signal cycle is green for the northbound through traffic, and that means that 15 percent of the signal cycle is available to satisfy northbound right turns. After the northbound through traffic has received its green, 25 percent of the signal cycle is still needed to satisfy the northbound right turns (40 percent of the signal cycle minus the 15 percent of the signal cycle that the northbound through used).

Assume that the westbound left turns require a green time of 6 percent of the signal cycle. This 6 percent of the signal cycle is used by northbound right turns on red. After accounting for the northbound right turns that occur on the westbound overlap left turn, 19 percent of the signal cycle is still needed for the northbound right turns (25 percent of the cycle was needed after the northbound through green time was accounted for [see above paragraph], and 6 percent was served during the westbound left turn overlap). Also, at this point 6 percent of the signal cycle has been used for northbound right turns on red, and still 2 percent more of the right turns will be allowed to occur on the red if there is unused eastbound through green time.

For purpose of this example, assume that the westbound through green is critical, and that 15 percent of the signal cycle is unused by eastbound through traffic. Thus, 2 percent more of the signal cycle can be used by the northbound right turns on red since there is 15 seconds of unused green time being given to the eastbound through traffic.

At this point, 8 percent of the signal cycle was available to serve northbound right turning vehicles on red, and 15 percent of the signal cycle was available to serve right turning vehicles on the northbound through green. So 23 percent of the signal cycle has been available for northbound right turns.

Because 40 percent of the signal cycle is needed to serve northbound right turns, there is still a need for 17 percent more of the signal cycle to be available for northbound right turns. What this means is the northbound through traffic green time is increased by 17 percent of the cycle length to serve the unserved right turn volume, and a 17 percent adjustment is added to the Intersection Capacity Utilization to account for the northbound right turns that were not served on the northbound through green time or when right turns on red were assumed.

Separate Right Turn Arrow, With Right Turns on Red

A right turn lane with a separate right turn arrow, plus a certain percentage of right turns allowed on red is calculated the same way as a standard right turn lane with a certain percentage of right turns allowed on red, except the turns which occur on the right turn arrow are not counted as part of the percentage of right turns that occur on red.

Critical Lane Method

Intersection Capacity Utilization parallels another calculation procedure known as the Critical Lane Method with one exception. Critical Lane Method dimensions capacity in terms of standardized vehicles per hour per lane. A Critical Lane Method result of 800 vehicles per hour means that the intersection operates as though 800 vehicles were using a single lane continuously. If one assumes a lane capacity of 1,600 vehicles per hour, then a Critical Lane Method calculation resulting in 800 vehicles per hour is the same as an Intersection Capacity Utilization calculation of 50 percent since 800/1,600 is 50 percent. It is our opinion that the Critical Lane Method is inferior to the Intersection Capacity Utilization method simply because a statement such as "The Critical Lane Method value is 800 vehicles per hour" means little to most persons, whereas a statement such as "The Intersection Capacity Utilization is 50 percent" communicates clearly. Critical Lane Method results directly correspond to Intersection Capacity Utilization results. The correspondence is as follows, assuming a lane capacity of 1,600 vehicles per hour and no clearance interval.

Critical Lane Method Result	Intersection Capacity Utilization Result
800 vehicles per hour	50 percent
960 vehicles per hour	60 percent
1,120 vehicles per hour	70 percent
1,280 vehicles per hour	80 percent
1,440 vehicles per hour	90 percent
1,600 vehicles per hour	100 percent
1,760 vehicles per hour	110 percent

INTERSECTION CAPACITY UTILIZATION
LEVEL OF SERVICE DESCRIPTION[1]

Level of Service	Description	Volume to Capacity Ratio
A	Level of Service A occurs when progression is extremely favorable and vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	0.600 and below
B	Level of Service B generally occurs with good progression and/or short cycle lengths. More vehicles stop than for Level of Service A, causing higher levels of average delay.	0.601 to 0.700
C	Level of Service C generally results when there is fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.	0.701 to 0.800
D	Level of Service D generally results in noticeable congestion. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume to capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	0.801 to 0.900
E	Level of Service E is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume to capacity ratios. Individual cycle failures are frequent.	0.901 to 1.000
F	Level of Service F is considered to be unacceptable to most drivers. This condition often occurs when oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high volume to capacity ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.	1.001 and up

[1]Source: Highway Capacity Manual Special Report 209, Transportation Research Board, National Research Council Washington D.C., 2000.

EXPLANATION AND CALCULATION OF INTERSECTION LEVEL OF SERVICE USING DELAY METHODOLOGY

The levels of service at the unsignalized intersections are calculated using the delay methodology in the 2000 Highway Capacity Manual. This methodology views an intersection as consisting of several lane groups. A lane group is a set of lanes serving a movement. If there are two northbound left turn lanes, then the lane group serving the northbound left turn movement has two lanes. Similarly, there may be three lanes in the lane group serving the northbound through movement, one lane in the lane group serving the northbound right turn movement, and so forth. It is also possible for one lane to serve two lane groups. A shared lane might result in there being 1.5 lanes in the northbound left turn lane group and 2.5 lanes in the northbound through lane group.

For each lane group, there is a capacity. That capacity is calculated by multiplying the number of lanes in the lane group times a theoretical maximum lane capacity per lane times 12 adjustment factors.

Each of the 12 adjustment factors has a value of approximately 1.00. A value less than 1.00 is generally assigned when a less than desirable condition occurs.

The 12 adjustment factors are as follows:

1. Peak hour factor (to account for peaking within the peak hour)
2. Lane utilization factor (to account for not all lanes loading equally)
3. Lane width
4. Percent of heavy trucks
5. Approach grade
6. Parking
7. Bus stops at intersections
8. Area type (CBD or other)
9. Right turns
10. Left turns

11. Pedestrian activity

12. Signal progression

The maximum theoretical lane capacity and the 12 adjustment factors for it are all unknowns for which approximate estimates have been recommended in the 2000 Highway Capacity Manual. For the most part, the recommended values are not based on statistical analysis but rather on educated estimates. However, it is possible to use the delay method and get reasonable results as will be discussed below.

Once the lane group volume is known and the lane group capacity is known, a volume to capacity ratio can be calculated for the lane group.

With a volume to capacity ratio calculated, average delay per vehicle in a lane group can be estimated. The average delay per vehicle in a lane group is calculated using a complex formula provided by the 2000 Highway Capacity Manual, which can be simplified and described as follows:

Delay per vehicle in a lane group is a function of the following:

1. Cycle length

2. Amount of red time faced by a lane group

3. Amount of yellow time for that lane group

4. The volume to capacity ratio of the lane group

The average delay per vehicle for each lane group is calculated, and eventually an overall average delay for all vehicles entering the intersection is calculated. This average delay per vehicle is then used to judge Level of Service. The Level of Services are defined in the table that follows this discussion.

Experience has shown that when a maximum lane capacity of 1,900 vehicles per hour is used (as recommended in the 2000 Highway Capacity Manual), little or no yellow time penalty is used, and none of the 12 penalty factors are applied, calculated delay is realistic. The delay calculation for instance assumes that yellow time is totally unused. Yet experience shows that most of the yellow time is used.

An idiosyncrasy of the delay methodology is that it is possible to add traffic to an intersection and reduce the average total delay per vehicle. If the average total delay is 30 seconds per vehicle for all vehicles traveling through an intersection, and traffic is added to a movement that has an average total delay of 15 seconds per vehicle, then the overall average total delay is reduced.

The delay calculation for a lane group is based on a concept that the delay is a function of the amount of unused capacity available. As the volume approaches capacity and there is no more unused capacity available, then the delay rapidly increases. Delay is not proportional to volume, but rather increases rapidly as the unused capacity approaches zero.

Because delay is not linearly related to volumes, the delay does not reflect how close an intersection is to overloading. If an intersection is operating at Level of Service C and has an average total delay of 18 seconds per vehicle, you know very little as to what percent the traffic can increase before Level of Service E is reached.

DELAY LEVEL OF SERVICE DESCRIPTION[1]

Level Of Service	Description	Average Total Delay Per Vehicle (Seconds)	
		Signalized	Unsignalized
A	Level of Service A occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	0 to 10.00	0 to 10.00
B	Level of Service B generally occurs with good progression and/or short cycle lengths. More vehicles stop than for Level of Service A, causing higher levels of average total delay.	10.01 to 20.00	10.01 to 15.00
C	Level of Service C generally results when there is fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.	20.01 to 35.00	15.01 to 25.00
D	Level of Service D generally results in noticeable congestion. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume to capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	35.01 to 55.00	25.01 to 35.00
E	Level of Service E is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume to capacity ratios. Individual cycle failures are frequent occurrences.	55.01 to 80.00	35.01 to 50.00
F	Level of Service F is considered to be unacceptable to most drivers. This condition often occurs with oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high volume to capacity ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.	80.01 and up	50.01 and up

[1] Source: Highway Capacity Manual Special Report 209, Transportation Research Board, National Research Council, Washington, D.C., 2000.

Existing

The Doheny Hotel
Existing
Weekday Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.515
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Street Name:	Del Obispo Street/Dana Point Harb						Pacific Coast Highway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Ovl			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	24	62	197	265	97	108	77	1047	49	361	1393	163
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	24	62	197	265	97	108	77	1047	49	361	1393	163
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	62	197	265	97	108	77	1047	49	361	1393	163
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	62	197	265	97	108	77	1047	49	361	1393	163
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	24	62	197	265	97	108	77	1047	49	361	1393	163
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	2.87	0.13	2.00	2.69	0.31
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	4872	228	3400	4566	534
Capacity Analysis Module:												
Vol/Sat:	0.01	0.04	0.06	0.08	0.06	0.06	0.05	0.21	0.21	0.11	0.31	0.31
OvlAdjV/S:			0.00									
Crit Moves:		****		****			****				****	

The Doheny Hotel
Existing
Weekday Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.634
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name: Del Obispo Street/Dana Point Harb — Pacific Coast Highway

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Ovl			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:		1 0 1 0 2			2 0 1 0 1			1 0 2 1 0			2 0 2 1 0	
Volume Module:												
Base Vol:	49	138	459	229	104	138	144	1308	70	333	1551	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	49	138	459	229	104	138	144	1308	70	333	1551	237
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	49	138	459	229	104	138	144	1308	70	333	1551	237
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	49	138	459	229	104	138	144	1308	70	333	1551	237
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	49	138	459	229	104	138	144	1308	70	333	1551	237
OvlAdjVol:			126									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	2.85	0.15	2.00	2.60	0.40
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	4841	259	3400	4424	676
Capacity Analysis Module:												
Vol/Sat:	0.03	0.08	0.14	0.07	0.06	0.08	0.08	0.27	0.27	0.10	0.35	0.35
OvlAdjV/S:			0.04									
Crit Moves:		****		****			****				****	

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--------------------------------------------------------------------------------
                           The Doheny Hotel
                               Existing
                      Saturday Mid-day Peak Hour
--------------------------------------------------------------------------------

                  Level Of Service Computation Report
      ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):         0.579
Loss Time (sec):       5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              Level Of Service:                  A
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb      Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:           Ovl             Include          Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:       1  0  1  0  2    2  0  1  0  1    1  0  2  1  0    2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      63  105   396   209  102   132   146 1248   118   468 1262   187
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   63  105   396   209  102   132   146 1248   118   468 1262   187
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    63  105   396   209  102   132   146 1248   118   468 1262   187
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   63  105   396   209  102   132   146 1248   118   468 1262   187
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   63  105   396   209  102   132   146 1248   118   468 1262   187
OvlAdjVol:                 0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 2.74  0.26  2.00 2.61  0.39
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 4659   441  3400 4442   658
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.06  0.12  0.06 0.06  0.08  0.09 0.27  0.27  0.14 0.28  0.28
OvlAdjV/S:              0.00
Crit Moves:       ****    ****                      ****        ****
********************************************************************************
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--------------------------------------------------------------------------------
                               The Doheny Hotel
                                   Existing
                           Weekday Morning Peak Hour
--------------------------------------------------------------------------------

                       Level Of Service Computation Report
         ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100             Critical Vol./Cap.(X):         0.191
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100             Level Of Service:                  A
********************************************************************************
Street Name:      Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Permitted        Permitted
Rights:           Include          Include           Include           Ignore
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:       1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      9  240    10    28  397    82    27    1    13     4    1    16
Growth Adj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   9  240    10    28  397    82    27    1    13     4    1    16
User Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    9  240    10    28  397    82    27    1    13     4    1     0
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   9  240    10    28  397    82    27    1    13     4    1     0
PCE Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   9  240    10    28  397    82    27    1    13     4    1     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:      1.00 2.00  1.00  1.00 2.00  1.00  0.96 0.04  1.00  1.00 1.00  1.00
Final Sat.: 1700 3400  1700  1700 3400  1700  1639   61  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.01 0.07  0.01  0.02 0.12  0.05  0.02 0.02  0.01  0.00 0.00  0.00
Crit Moves: ****                  ****             ****        ****
********************************************************************************
```

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-------------------------------------------------------------------------------
                                The Doheny Hotel
                                    Existing
                            Weekday Evening Peak Hour
-------------------------------------------------------------------------------

                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):          0.288
Loss Time (sec):       5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:       100              Level Of Service:                    A
********************************************************************************
Street Name:     Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Permitted         Permitted
Rights:           Include          Include           Include           Ignore
Min. Green:     0    0    0    0    0    0    0    0    0    0    0    0
Lanes:        1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      14  502   13    37  424   42   106    1   19    10    1   38
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:   14  502   13    37  424   42   106    1   19    10    1   38
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.00
PHF Volume:    14  502   13    37  424   42   106    1   19    10    1    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   14  502   13    37  424   42   106    1   19    10    1    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.00
FinalVolume:   14  502   13    37  424   42   106    1   19    10    1    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700 1700  1700 1700 1700  1700 1700 1700  1700 1700 1700
Adjustment:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Lanes:       1.00 2.00 1.00  1.00 2.00 1.00  0.99 0.01 1.00  1.00 1.00 1.00
Final Sat.:  1700 3400 1700  1700 3400 1700  1684   16 1700  1700 1700 1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.15 0.01  0.02 0.12 0.02  0.06 0.06 0.01  0.01 0.00 0.00
Crit Moves:       ****       ****                   ****      ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                                The Doheny Hotel
                                    Existing
                          Saturday Mid-day Peak Hour
--------------------------------------------------------------------------------

                       Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100                Critical Vol./Cap.(X):          0.259
Loss Time (sec):        5 (Y+R=0.0 sec)  Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        100                Level Of Service:                   A
********************************************************************************
Street Name:         Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:          North Bound      South Bound       East Bound       West Bound
Movement:        L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:          Protected        Protected         Permitted         Permitted
Rights:              Include          Include           Include           Ignore
Min. Green:      0     0     0   0     0     0   0     0     0   0     0     0
Lanes:           1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       11   483    22    56   588    44    36     1    19    13     2    45
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    11   483    22    56   588    44    36     1    19    13     2    45
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:     11   483    22    56   588    44    36     1    19    13     2     0
Reduct Vol:      0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:    11   483    22    56   588    44    36     1    19    13     2     0
PCE Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:    11   483    22    56   588    44    36     1    19    13     2     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:        1.00 2.00  1.00  1.00 2.00  1.00  0.97 0.03  1.00  1.00 1.00  1.00
Final Sat.:   1700 3400  1700  1700 3400  1700  1654   46  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.01 0.14  0.01  0.03 0.17  0.03  0.02 0.02  0.01  0.01 0.00  0.00
Crit Moves:   ****             ****             ****             ****
********************************************************************************
```

Existing – Peak Season

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-------------------------------------------------------------------------------
                            The Doheny Hotel
                                Existing
                 Weekday Morning Peak Hour - Peak Season
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*******************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
*******************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):        0.561
Loss Time (sec):       5 (Y+R=0.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100              Level Of Service:                 A
*******************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:            Ovl            Include          Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        1  0  1  0  2   2  0  1  0  1   1  0  2  1  0   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      26   68   217   292  107   119    85 1152    54   397 1532   179
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   26   68   217   292  107   119    85 1152    54   397 1532   179
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    26   68   217   292  107   119    85 1152    54   397 1532   179
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   26   68   217   292  107   119    85 1152    54   397 1532   179
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   26   68   217   292  107   119    85 1152    54   397 1532   179
OvlAdjVol:                 0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 2.87  0.13  2.00 2.69  0.31
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 4872   228  3400 4566   534
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.04  0.06  0.09 0.06  0.07  0.05 0.24  0.24  0.12 0.34  0.34
OvlAdjV/S:              0.00
Crit Moves:       ****        ****             ****                  ****
*******************************************************************************
```

```
--------------------------------------------------------------------------------
                                 The Doheny Hotel
                                     Existing
                    Weekday Evening Peak Hour - Peak Season
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):         0.692
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100               Level Of Service:                  B
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb      Pacific Coast Highway
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:            Ovl            Include          Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        1  0  1  0  2   2  0  1  0  1   1  0  2  1  0   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      54  152   505   252  114   152   158 1439    77   366 1706   261
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   54  152   505   252  114   152   158 1439    77   366 1706   261
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    54  152   505   252  114   152   158 1439    77   366 1706   261
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   54  152   505   252  114   152   158 1439    77   366 1706   261
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   54  152   505   252  114   152   158 1439    77   366 1706   261
OvlAdjVol:               139
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 2.85  0.15  2.00 2.60  0.40
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 4841   259  3400 4423   677
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.09  0.15  0.07 0.07  0.09  0.09 0.30  0.30  0.11 0.39  0.39
OvlAdjV/S:              0.04
Crit Moves:       ****        ****              ****                  ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                              The Doheny Hotel
                                  Existing
                   Saturday Mid-day Peak Hour - Peak Season
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
          ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100             Critical Vol./Cap.(X):          0.640
Loss Time (sec):        5 (Y+R=0.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:        100             Level Of Service:                   B
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:           Ovl             Include          Include          Include
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Lanes:       1  0  1  0  2   2  0  1  0  1   1  0  2  1  0   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      69  116   436   230  112   145   161 1412   130   515 1388   206
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   69  116   436   230  112   145   161 1412   130   515 1388   206
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    69  116   436   230  112   145   161 1412   130   515 1388   206
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   69  116   436   230  112   145   161 1412   130   515 1388   206
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   69  116   436   230  112   145   161 1412   130   515 1388   206
OvlAdjVol:                 0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 2.75  0.25  2.00 2.61  0.39
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 4670   430  3400 4441   659
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.07  0.13  0.07 0.07  0.09  0.09 0.30  0.30  0.15 0.31  0.31
OvlAdjV/S:                0.00
Crit Moves:       ****  ****                        ****        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                              The Doheny Hotel
                                  Existing
                   Weekday Morning Peak Hour - Peak Season
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):          0.205
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        100              Level Of Service:                  A
********************************************************************************
Street Name:      Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Permitted        Permitted
Rights:          Include          Include          Include           Ignore
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      10   264    11    31   437    90    30     1    14     4     1    18
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:   10   264    11    31   437    90    30     1    14     4     1    18
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
PHF Volume:    10   264    11    31   437    90    30     1    14     4     1     0
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   10   264    11    31   437    90    30     1    14     4     1     0
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
FinalVolume:   10   264    11    31   437    90    30     1    14     4     1     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  2.00  1.00  1.00  2.00  1.00  0.97  0.03  1.00  1.00  1.00  1.00
Final Sat.:  1700  3400  1700  1700  3400  1700  1645    55  1700  1700  1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01  0.08  0.01  0.02  0.13  0.05  0.02  0.02  0.01  0.00  0.00  0.00
Crit Moves:  ****                    ****              ****        ****
********************************************************************************
```

```
-------------------------------------------------------------------------------
                              The Doheny Hotel
                                  Existing
                    Weekday Evening Peak Hour - Peak Season
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
*******************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
*******************************************************************************
Cycle (sec):          100                Critical Vol./Cap.(X):         0.312
Loss Time (sec):        5 (Y+R=0.0 sec)  Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        100                Level Of Service:                  A
*******************************************************************************
Street Name:      Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Permitted        Permitted
Rights:           Include          Include          Include           Ignore
Min. Green:    0     0     0   0     0     0   0     0     0   0     0     0
Lanes:         1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      15   552    14   41   466    51  117     1    21   11     1    42
Growth Adj:  1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Initial Bse:   15   552    14   41   466    51  117     1    21   11     1    42
User Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  0.00
PHF Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  0.00
PHF Volume:    15   552    14   41   466    51  117     1    21   11     1     0
Reduct Vol:     0     0     0    0     0     0    0     0     0    0     0     0
Reduced Vol:   15   552    14   41   466    51  117     1    21   11     1     0
PCE Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  0.00
MLF Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  0.00
FinalVolume:   15   552    14   41   466    51  117     1    21   11     1     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700  1700
Adjustment:  1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Lanes:       1.00  2.00  1.00 1.00  2.00  1.00 0.99  0.01  1.00 1.00  1.00  1.00
Final Sat.:  1700  3400  1700 1700  3400  1700 1686    14  1700 1700  1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01  0.16  0.01 0.02  0.14  0.03 0.07  0.07  0.01 0.01  0.00  0.00
Crit Moves:        ****       ****                       ****       ****
*******************************************************************************
```

```
------------------------------------------------------------------------------
                              The Doheny Hotel
                                  Existing
                   Saturday Mid-day Peak Hour - Peak Season
------------------------------------------------------------------------------

                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
******************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
******************************************************************************
Cycle (sec):          100                Critical Vol./Cap.(X):        0.280
Loss Time (sec):        5 (Y+R=0.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:        100                Level Of Service:                 A
******************************************************************************
Street Name:      Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Permitted        Permitted
Rights:          Include          Include          Include          Ignore
Min. Green:   0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      12  531    24    62  647    48    40    1    21    14    2    50
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   12  531    24    62  647    48    40    1    21    14    2    50
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    12  531    24    62  647    48    40    1    21    14    2     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   12  531    24    62  647    48    40    1    21    14    2     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   12  531    24    62  647    48    40    1    21    14    2     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 2.00  1.00  1.00 2.00  1.00  0.98 0.02  1.00  1.00 1.00  1.00
Final Sat.:  1700 3400  1700  1700 3400  1700  1659   41  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.16  0.01  0.04 0.19  0.03  0.02 0.02  0.01  0.01 0.00  0.00
Crit Moves:  ****                  ****              ****        ****
******************************************************************************
```

Existing Plus Project

```
--------------------------------------------------------------------------------
                              The Doheny Hotel
                            Existing Plus Project
                          Weekday Morning Peak Hour
--------------------------------------------------------------------------------
                    Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):         0.518
Loss Time (sec):       5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100               Level Of Service:                  A
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:            Ovl            Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        1  0  1  0  2   2  0  1  0  1   1  0  3  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      24    62   197   265    97   108    77  1047    49   361  1393   163
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:   24    62   197   265    97   108    77  1047    49   361  1393   163
Added Vol:      9     6    12     0    11     0     0     0    22    22     0     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:   33    68   209   265   108   108    77  1047    71   383  1393   163
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    33    68   209   265   108   108    77  1047    71   383  1393   163
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   33    68   209   265   108   108    77  1047    71   383  1393   163
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
FinalVolume:   33    68   209   265   108   108    77  1047    71   383  1393   163
OvlAdjVol:                  0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  1.00  2.00  2.00  1.00  1.00  1.00  3.00  1.00  2.00  2.69  0.31
Final Sat.:  1700  1700  3400  3400  1700  1700  1700  5100  1700  3400  4566   534
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02  0.04  0.06  0.08  0.06  0.06  0.05  0.21  0.04  0.11  0.31  0.31
OvlAdjV/S:                 0.00
Crit Moves:        ****        ****              ****                   ****
********************************************************************************
```

The Doheny Hotel
Existing Plus Project
Weekday Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec): 100 Critical Vol./Cap.(X): 0.640
Loss Time (sec): 5 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: B

Street Name:	Del Obispo Street/Dana Point Harb						Pacific Coast Highway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	49	138	459	229	104	138	144	1308	70	333	1551	237
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	49	138	459	229	104	138	144	1308	70	333	1551	237
Added Vol:	15	10	20	0	11	0	0	0	22	22	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	64	148	479	229	115	138	144	1308	92	355	1551	237
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	64	148	479	229	115	138	144	1308	92	355	1551	237
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	148	479	229	115	138	144	1308	92	355	1551	237
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	64	148	479	229	115	138	144	1308	92	355	1551	237
OvlAdjVol:			124									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	3.00	1.00	2.00	2.60	0.40
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	5100	1700	3400	4424	676
Capacity Analysis Module:												
Vol/Sat:	0.04	0.09	0.14	0.07	0.07	0.08	0.08	0.26	0.05	0.10	0.35	0.35
OvlAdjV/S:			0.04									
Crit Moves:		****		****			****				****	

```
--------------------------------------------------------------------------------
                                The Doheny Hotel
                              Existing Plus Project
                           Saturday Mid-day Peak Hour
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
      ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):         0.569
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100               Level Of Service:                  A
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:           Ovl            Include          Include          Include
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Lanes:       1  0  1  0  2   2  0  1  0  1   1  0  3  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      63  105  396   209  102  132   146 1248  118   468 1262  187
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:   63  105  396   209  102  132   146 1248  118   468 1262  187
Added Vol:     15   10   20     0   13    0     0    0   26    26    0    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:   78  115  416   209  115  132   146 1248  144   494 1262  187
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    78  115  416   209  115  132   146 1248  144   494 1262  187
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   78  115  416   209  115  132   146 1248  144   494 1262  187
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
FinalVolume:   78  115  416   209  115  132   146 1248  144   494 1262  187
OvlAdjVol:                0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700 1700  1700 1700 1700  1700 1700 1700  1700 1700 1700
Adjustment:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Lanes:       1.00 1.00 2.00  2.00 1.00 1.00  1.00 3.00 1.00  2.00 2.61 0.39
Final Sat.:  1700 1700 3400  3400 1700 1700  1700 5100 1700  3400 4442  658
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.07 0.12  0.06 0.07 0.08  0.09 0.24 0.08  0.15 0.28 0.28
OvlAdjV/S:                0.00
Crit Moves:       ****       ****                   ****      ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                              The Doheny Hotel
                            Existing Plus Project
                          Weekday Morning Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):       0.3       Worst Case Level Of Service: A[ 10.0]
********************************************************************************
Street Name:      Dana Point Harbor Drive                Project Access
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:            Include          Include          Include          Include
Lanes:         0  0  2  0  0    0  0  2  0  1    0  0  0  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0  283     0     0  507     0     0     0     0     0     0     0
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:     0  283     0     0  507     0     0     0     0     0     0     0
Added Vol:       0   28     0     0    0    56     0     0    31     0     0     0
PasserByVol:     0    0     0     0    0     0     0     0     0     0     0     0
Initial Fut:     0  311     0     0  507    56     0     0    31     0     0     0
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:      0  311     0     0  507    56     0     0    31     0     0     0
Reduct Vol:      0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:     0  311     0     0  507    56     0     0    31     0     0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   254  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   752  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   752  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.04  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.1  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.0 xxxxx xxxx xxxxx
LOS by Move:     *    *     *     *    *     *     *    *     A     *    *     *
Movement:      LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      xxxxxx           xxxxxx             10.0           xxxxxx
ApproachLOS:        *                *                  A               *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
```

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--------------------------------------------------------------------------------
                            The Doheny Hotel
                          Existing Plus Project
                        Weekday Evening Peak Hour
--------------------------------------------------------------------------------
                   Level Of Service Computation Report
         2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):       0.4       Worst Case Level Of Service: B[ 10.1]
********************************************************************************
Street Name:      Dana Point Harbor Drive                Project Access
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:            Include          Include         Include          Include
Lanes:         0  0  2  0  0   0  0  2  0  1   0  0  0  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0  646     0     0  507     0     0     0     0     0     0     0
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:     0  646     0     0  507     0     0     0     0     0     0     0
Added Vol:       0   44     0     0    0    55     0     0    49     0     0     0
PasserByVol:     0    0     0     0    0     0     0     0     0     0     0     0
Initial Fut:     0  690     0     0  507    55     0     0    49     0     0     0
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:      0  690     0     0  507    55     0     0    49     0     0     0
Reduct Vol:      0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:     0  690     0     0  507    55     0     0    49     0     0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   254  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   752  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   752  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.07  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.1 xxxxx xxxx xxxxx
LOS by Move:     *    *     *     *    *     *     *    *     B     *    *     *
Movement:      LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      xxxxxx           xxxxxx            10.1            xxxxxx
ApproachLOS:         *                *                B                *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
```

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--------------------------------------------------------------------------------
                               The Doheny Hotel
                            Existing Plus Project
                         Saturday Mid-day Peak Hour
--------------------------------------------------------------------------------

                      Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):       0.4      Worst Case Level Of Service: B[ 10.9]
********************************************************************************
Street Name:      Dana Point Harbor Drive                    Project Access
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign         Stop Sign
Rights:           Include          Include          Include          Include
Lanes:         0  0  2  0  0   0  0  2  0  1   0  0  0  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0  564     0     0  688     0     0     0     0     0     0     0
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:     0  564     0     0  688     0     0     0     0     0     0     0
Added Vol:       0   44     0     0    0    65     0     0    49     0     0     0
PasserByVol:     0    0     0     0    0     0     0     0     0     0     0     0
Initial Fut:     0  608     0     0  688    65     0     0    49     0     0     0
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:      0  608     0     0  688    65     0     0    49     0     0     0
Reduct Vol:      0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:     0  608     0     0  688    65     0     0    49     0     0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   344  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   658  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   658  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.07  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.9 xxxxx xxxx xxxxx
LOS by Move:     *    *     *     *    *     *     *    *     B     *    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      xxxxxx           xxxxxx             10.9           xxxxxx
ApproachLOS:           *                *                B                *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
```

```
--------------------------------------------------------------------------------
                              The Doheny Hotel
                            Existing Plus Project
                          Weekday Morning Peak Hour
--------------------------------------------------------------------------------

                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100                Critical Vol./Cap.(X):        0.198
Loss Time (sec):        5 (Y+R=0.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100                Level Of Service:                  A
********************************************************************************
Street Name:      Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Permitted        Permitted
Rights:           Include          Include           Include          Include
Min. Green:     0    0    0    0    0    0    0    0    0    0    0    0
Lanes:        1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       9  240    10    28  397    82    27    1    13     4    1    16
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    9  240    10    28  397    82    27    1    13     4    1    16
Added Vol:      0    0     0    28    3     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    9  240    10    56  400    82    27    1    13     4    1    16
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     9  240    10    56  400    82    27    1    13     4    1    16
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    9  240    10    56  400    82    27    1    13     4    1    16
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:    9  240    10    56  400    82    27    1    13     4    1    16
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 2.00  1.00  1.00 2.00  1.00  0.96 0.04  1.00  1.00 1.00  1.00
Final Sat.:  1700 3400  1700  1700 3400  1700  1639   61  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.07  0.01  0.03 0.12  0.05  0.02 0.02  0.01  0.00 0.00  0.01
Crit Moves:  ****                  ****        ****                        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                              The Doheny Hotel
                            Existing Plus Project
                          Weekday Evening Peak Hour
--------------------------------------------------------------------------------

                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100                 Critical Vol./Cap.(X):         0.330
Loss Time (sec):        5 (Y+R=0.0 sec)   Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100                 Level Of Service:                  A
********************************************************************************
Street Name:      Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Permitted        Permitted
Rights:          Include          Include          Include          Include
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Lanes:        1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      14  502   13   37  424   42  106    1   19   10    1   38
Growth Adj:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:   14  502   13   37  424   42  106    1   19   10    1   38
Added Vol:      0    0    0   44    5    0    0    0    0    0    0    0
PasserByVol:    0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:   14  502   13   81  429   42  106    1   19   10    1   38
User Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:    14  502   13   81  429   42  106    1   19   10    1   38
Reduct Vol:     0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:   14  502   13   81  429   42  106    1   19   10    1   38
PCE Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume:   14  502   13   81  429   42  106    1   19   10    1   38
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment:  1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:       1.00 2.00 1.00 1.00 2.00 1.00 0.99 0.01 1.00 1.00 1.00 1.00
Final Sat.:  1700 3400 1700 1700 3400 1700 1684   16 1700 1700 1700 1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.15 0.01 0.05 0.13 0.02 0.06 0.06 0.01 0.01 0.00 0.02
Crit Moves:       ****      ****           ****                          ****
********************************************************************************
```

The Doheny Hotel
Existing Plus Project
Saturday Mid-day Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach

Cycle (sec):	100	Critical Vol./Cap.(X):	0.299
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Street Name:	Dana Point Harbor Drive						Park Lantern/Doheny State Beach					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	11	483	22	56	588	44	36	1	19	13	2	45
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	483	22	56	588	44	36	1	19	13	2	45
Added Vol:	0	0	0	44	5	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	483	22	100	593	44	36	1	19	13	2	45
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	483	22	100	593	44	36	1	19	13	2	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	483	22	100	593	44	36	1	19	13	2	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	483	22	100	593	44	36	1	19	13	2	45
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.97	0.03	1.00	1.00	1.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1654	46	1700	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.14	0.01	0.06	0.17	0.03	0.02	0.02	0.01	0.01	0.00	0.03
Crit Moves:		****		****			****					****

Existing Plus Project – Peak Season

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--------------------------------------------------------------------------------
                              The Doheny Hotel
                           Existing Plus Project
                 Weekday Morning Peak Hour - Peak Season
--------------------------------------------------------------------------------

                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):          0.565
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        100               Level Of Service:                   A
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:            Ovl             Include          Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        1  0  1  0  2   2  0  1  0  1   1  0  3  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      26   68   217   292  107   119    85 1152    54   397 1532   179
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   26   68   217   292  107   119    85 1152    54   397 1532   179
Added Vol:      9    6    12     0   11     0     0    0    22    22    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   35   74   229   292  118   119    85 1152    76   419 1532   179
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    35   74   229   292  118   119    85 1152    76   419 1532   179
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   35   74   229   292  118   119    85 1152    76   419 1532   179
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   35   74   229   292  118   119    85 1152    76   419 1532   179
OvlAdjVol:                 0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 3.00  1.00  2.00 2.69  0.31
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 5100  1700  3400 4566   534
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.04  0.07  0.09 0.07  0.07  0.05 0.23  0.04  0.12 0.34  0.34
OvlAdjV/S:              0.00
Crit Moves:       ****        ****             ****                  ****
********************************************************************************
```

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---------------------------------------------------------------------------------
                              The Doheny Hotel
                           Existing Plus Project
                 Weekday Evening Peak Hour - Peak Season
---------------------------------------------------------------------------------
                    Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
*********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):          0.698
Loss Time (sec):        5 (Y+R=0.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100              Level Of Service:                   B
*********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb        Pacific Coast Highway
Approach:       North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Protected         Protected         Protected         Protected
Rights:            Ovl             Include           Include           Include
Min. Green:    0     0     0     0     0     0     0     0     0     0     0     0
Lanes:        1  0  1  0  2    2  0  1  0  1    1  0  3  0  1    2  0  2  1  0
------------|----------------||----------------||----------------||----------------|
Volume Module:
Base Vol:      54   152   505   252   114   152   158  1439    77   366  1706   261
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:   54   152   505   252   114   152   158  1439    77   366  1706   261
Added Vol:     15    10    20     0    11     0     0     0    22    22     0     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:   69   162   525   252   125   152   158  1439    99   388  1706   261
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    69   162   525   252   125   152   158  1439    99   388  1706   261
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   69   162   525   252   125   152   158  1439    99   388  1706   261
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
FinalVolume:   69   162   525   252   125   152   158  1439    99   388  1706   261
OvlAdjVol:                137
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:    1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  1.00  2.00  2.00  1.00  1.00  1.00  3.00  1.00  2.00  2.60  0.40
Final Sat.:  1700  1700  3400  3400  1700  1700  1700  5100  1700  3400  4423   677
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:     0.04  0.10  0.15  0.07  0.07  0.09  0.09  0.28  0.06  0.11  0.39  0.39
OvlAdjV/S:                0.04
Crit Moves:        ****        ****              ****                    ****
*********************************************************************************
```

```
--------------------------------------------------------------------------------
                            The Doheny Hotel
                         Existing Plus Project
                 Saturday Mid-day Peak Hour - Peak Season
--------------------------------------------------------------------------------
                   Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):         0.628
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100              Level Of Service:                  B
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:            Ovl            Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        1  0  1  0  2   2  0  1  0  1   1  0  3  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      69  116   436   230  112   145   161 1412   130   515 1388   206
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   69  116   436   230  112   145   161 1412   130   515 1388   206
Added Vol:     15   10    20     0   13     0     0    0    26    26    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   84  126   456   230  125   145   161 1412   156   541 1388   206
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    84  126   456   230  125   145   161 1412   156   541 1388   206
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   84  126   456   230  125   145   161 1412   156   541 1388   206
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   84  126   456   230  125   145   161 1412   156   541 1388   206
OvlAdjVol:                 0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 3.00  1.00  2.00 2.61  0.39
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 5100  1700  3400 4441   659
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.07  0.13  0.07 0.07  0.09  0.09 0.28  0.09  0.16 0.31  0.31
OvlAdjV/S:                0.00
Crit Moves:       ****    ****                      ****    ****
********************************************************************************
```

```
---------------------------------------------------------------------------------
                              The Doheny Hotel
                           Existing Plus Project
                  Weekday Morning Peak Hour - Peak Season
---------------------------------------------------------------------------------
                     Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
*********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
*********************************************************************************
Average Delay (sec/veh):       0.3       Worst Case Level Of Service: B[ 10.2]
*********************************************************************************
Street Name:      Dana Point Harbor Drive                Project Access
Approach:       North Bound      South Bound       East Bound        West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Uncontrolled     Uncontrolled       Stop Sign         Stop Sign
Rights:            Include          Include           Include           Include
Lanes:         0  0  2  0  0   0  0  2  0  1   0  0  0  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0  311     0     0  558     0     0     0     0     0     0     0
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:     0  311     0     0  558     0     0     0     0     0     0     0
Added Vol:       0   28     0     0    0    56     0     0    31     0     0     0
PasserByVol:     0    0     0     0    0     0     0     0     0     0     0     0
Initial Fut:     0  339     0     0  558    56     0     0    31     0     0     0
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:      0  339     0     0  558    56     0     0    31     0     0     0
Reduct Vol:      0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:     0  339     0     0  558    56     0     0    31     0     0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   279  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   724  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   724  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.04  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.1  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.2 xxxxx xxxx xxxxx
LOS by Move:     *    *     *     *    *     *     *    *     B     *    *     *
Movement:      LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      xxxxxx            xxxxxx              10.2            xxxxxx
ApproachLOS:         *                 *                  B                 *
*********************************************************************************
Note: Queue reported is the number of cars per lane.
*********************************************************************************
```

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--------------------------------------------------------------------------------
                              The Doheny Hotel
                           Existing Plus Project
                  Weekday Evening Peak Hour - Peak Season
--------------------------------------------------------------------------------

                    Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):       0.4       Worst Case Level Of Service: B[ 10.3]
********************************************************************************
Street Name:     Dana Point Harbor Drive                  Project Access
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:            Include          Include          Include          Include
Lanes:        0  0  2  0  0    0  0  2  0  1    0  0  0  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  711     0     0  558     0     0    0     0     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  711     0     0  558     0     0    0     0     0    0     0
Added Vol:      0   44     0     0    0    55     0    0    49     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0  755     0     0  558    55     0    0    49     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  755     0     0  558    55     0    0    49     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0  755     0     0  558    55     0    0    49     0    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   279  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   724  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   724  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.07  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.3 xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     B     *    *     *
Movement:    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:     xxxxxx           xxxxxx             10.3           xxxxxx
ApproachLOS:        *                *                 B               *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
```

```
--------------------------------------------------------------------------------
                              The Doheny Hotel
                           Existing Plus Project
                   Saturday Mid-day Peak Hour - Peak Season
--------------------------------------------------------------------------------

                     Level Of Service Computation Report
          2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):       0.4       Worst Case Level Of Service: B[ 11.2]
********************************************************************************
Street Name:      Dana Point Harbor Drive                 Project Access
Approach:       North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Uncontrolled     Uncontrolled       Stop Sign         Stop Sign
Rights:            Include          Include           Include           Include
Lanes:        0  0  2  0  0   0  0  2  0  1   0  0  0  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  620     0     0  757     0     0     0     0     0     0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  620     0     0  757     0     0     0     0     0     0     0
Added Vol:      0   44     0     0    0    65     0     0    49     0     0     0
PasserByVol:    0    0     0     0    0     0     0     0     0     0     0     0
Initial Fut:    0  664     0     0  757    65     0     0    49     0     0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  664     0     0  757    65     0     0    49     0     0     0
Reduct Vol:     0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:    0  664     0     0  757    65     0     0    49     0     0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   379  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   625  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   625  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.08  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.3  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  11.2 xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     B     *    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:     xxxxxx            xxxxxx             11.2            xxxxxx
ApproachLOS:        *                 *                 B                 *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
```

```
--------------------------------------------------------------------------------
                              The Doheny Hotel
                           Existing Plus Project
                   Weekday Morning Peak Hour - Peak Season
--------------------------------------------------------------------------------

                     Level Of Service Computation Report
      ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100                 Critical Vol./Cap.(X):         0.214
Loss Time (sec):        5 (Y+R=0.0 sec)   Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100                 Level Of Service:                  A
********************************************************************************
Street Name:       Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:        North Bound      South Bound       East Bound        West Bound
Movement:       L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Protected        Protected        Permitted         Permitted
Rights:            Include          Include          Include           Include
Min. Green:       0    0     0    0    0     0    0    0     0    0    0     0
Lanes:          1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        10  264    11    31  437    90    30    1    14     4    1    18
Growth Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:     10  264    11    31  437    90    30    1    14     4    1    18
Added Vol:        0    0     0    28    3     0     0    0     0     0    0     0
PasserByVol:      0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:     10  264    11    59  440    90    30    1    14     4    1    18
User Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:       1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:      10  264    11    59  440    90    30    1    14     4    1    18
Reduct Vol:       0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:     10  264    11    59  440    90    30    1    14     4    1    18
PCE Adj:       1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:       1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:     10  264    11    59  440    90    30    1    14     4    1    18
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:      1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:         1.00 2.00  1.00  1.00 2.00  1.00  0.97 0.03  1.00  1.00 1.00  1.00
Final Sat.:    1700 3400  1700  1700 3400  1700  1645   55  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:       0.01 0.08  0.01  0.03 0.13  0.05  0.02 0.02  0.01  0.00 0.00  0.01
Crit Moves:    ****              ****          ****                          ****
********************************************************************************
```

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------------------------------------------------------------------------------
                            The Doheny Hotel
                          Existing Plus Project
                  Weekday Evening Peak Hour - Peak Season
------------------------------------------------------------------------------
                    Level Of Service Computation Report
      ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
******************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
******************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):          0.356
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100              Level Of Service:                   A
******************************************************************************
Street Name:     Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Permitted        Permitted
Rights:          Include          Include          Include          Include
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Lanes:        1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      15  552    14    41  466    51   117    1    21    11    1    42
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   15  552    14    41  466    51   117    1    21    11    1    42
Added Vol:      0    0     0    44    5     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   15  552    14    85  471    51   117    1    21    11    1    42
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    15  552    14    85  471    51   117    1    21    11    1    42
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   15  552    14    85  471    51   117    1    21    11    1    42
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   15  552    14    85  471    51   117    1    21    11    1    42
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 2.00  1.00  1.00 2.00  1.00  0.99 0.01  1.00  1.00 1.00  1.00
Final Sat.:  1700 3400  1700  1700 3400  1700  1686   14  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.16  0.01  0.05 0.14  0.03  0.07 0.07  0.01  0.01 0.00  0.02
Crit Moves:       ****        ****             ****                        ****
******************************************************************************
```

The Doheny Hotel
Existing Plus Project
Saturday Mid-day Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach

Cycle (sec):	100	Critical Vol./Cap.(X):	0.321
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Street Name:	Dana Point Harbor Drive						Park Lantern/Doheny State Beach					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	12	531	24	62	647	48	40	1	21	14	2	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	531	24	62	647	48	40	1	21	14	2	50
Added Vol:	0	0	0	44	5	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	531	24	106	652	48	40	1	21	14	2	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	531	24	106	652	48	40	1	21	14	2	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	531	24	106	652	48	40	1	21	14	2	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	12	531	24	106	652	48	40	1	21	14	2	50
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.98	0.02	1.00	1.00	1.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1659	41	1700	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.16	0.01	0.06	0.19	0.03	0.02	0.02	0.01	0.01	0.00	0.03
Crit Moves:		****		****			****					****

Opening Year (2013) Without Project

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---------------------------------------------------------------------------------
                          The Doheny Hotel
                 Opening Year (2013) Without Project
                      Weekday Morning Peak Hour
---------------------------------------------------------------------------------
                 Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
*********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):          0.517
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):        xxxxxx
Optimal Cycle:        100              Level Of Service:                   A
*********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected         Protected         Protected         Protected
Rights:            Ovl             Include           Include           Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        1  0  1  0  2    2  0  1  0  1    1  0  2  1  0    2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      24   62   197   265   97   108    77 1047    49   361 1393   163
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   24   62   198   266   97   109    77 1052    49   363 1400   164
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   24   62   198   266   97   109    77 1052    49   363 1400   164
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    24   62   198   266   97   109    77 1052    49   363 1400   164
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   24   62   198   266   97   109    77 1052    49   363 1400   164
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   24   62   198   266   97   109    77 1052    49   363 1400   164
OvlAdjVol:                 0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 2.87  0.13  2.00 2.69  0.31
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 4872   228  3400 4566   534
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.04  0.06  0.08 0.06  0.06  0.05 0.22  0.22  0.11 0.31  0.31
OvlAdjV/S:              0.00
Crit Moves:       ****        ****              ****                   ****
*********************************************************************************
```

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--------------------------------------------------------------------------------
                            The Doheny Hotel
                      Opening Year (2013) Without Project
                           Weekday Evening Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100                Critical Vol./Cap.(X):          0.637
Loss Time (sec):        5 (Y+R=0.0 sec)  Average Delay (sec/veh):        xxxxxx
Optimal Cycle:        100                Level Of Service:                   B
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:       North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Protected         Protected
Rights:            Ovl             Include          Include           Include
Min. Green:     0    0    0    0    0    0    0    0    0    0    0    0
Lanes:        1  0  1  0  2   2  0  1  0  1   1  0  2  1  0   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      49  138   459   229  104   138   144 1308    70   333 1551   237
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   49  139   461   230  105   139   145 1315    70   335 1559   238
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   49  139   461   230  105   139   145 1315    70   335 1559   238
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    49  139   461   230  105   139   145 1315    70   335 1559   238
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   49  139   461   230  105   139   145 1315    70   335 1559   238
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   49  139   461   230  105   139   145 1315    70   335 1559   238
OvlAdjVol:               127
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 2.85  0.15  2.00 2.60  0.40
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 4841   259  3400 4424   676
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.08  0.14  0.07 0.06  0.08  0.09 0.27  0.27  0.10 0.35  0.35
OvlAdjV/S:              0.04
Crit Moves:       ****        ****              ****                   ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                           The Doheny Hotel
                  Opening Year (2013) Without Project
                      Saturday Mid-day Peak Hour
--------------------------------------------------------------------------------
                  Level Of Service Computation Report
     ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):         0.581
Loss Time (sec):       5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              Level Of Service:                  A
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:           Ovl            Include          Include          Include
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Lanes:       1  0  1  0  2   2  0  1  0  1   1  0  2  1  0   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     63  105   396   209  102   132   146 1248   118   468 1262   187
Growth Adj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  63  106   398   210  103   133   147 1254   119   470 1268   188
Added Vol:     0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:   0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  63  106   398   210  103   133   147 1254   119   470 1268   188
User Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   63  106   398   210  103   133   147 1254   119   470 1268   188
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  63  106   398   210  103   133   147 1254   119   470 1268   188
PCE Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  63  106   398   210  103   133   147 1254   119   470 1268   188
OvlAdjVol:                0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:      1.00 1.00  2.00  2.00 1.00  1.00  1.00 2.74  0.26  2.00 2.61  0.39
Final Sat.: 1700 1700  3400  3400 1700  1700  1700 4659   441  3400 4442   658
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.04 0.06  0.12  0.06 0.06  0.08  0.09 0.27  0.27  0.14 0.29  0.29
OvlAdjV/S:             0.00
Crit Moves:      ****  ****                        ****        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                              The Doheny Hotel
                     Opening Year (2013) Without Project
                          Weekday Morning Peak Hour
--------------------------------------------------------------------------------

                      Level Of Service Computation Report
     ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):        100              Critical Vol./Cap.(X):         0.192
Loss Time (sec):      5 (Y+R=0.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:      100              Level Of Service:                  A
********************************************************************************
Street Name:     Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:       L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Permitted        Permitted
Rights:           Include          Include          Include          Ignore
Min. Green:     0     0     0   0     0     0   0     0     0   0     0     0
Lanes:          1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       9   240    10   28   397    82   27     1    13    4     1    16
Growth Adj:  1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Initial Bse:    9   241    10   28   399    82   27     1    13    4     1    16
Added Vol:      0     0     0    0     0     0    0     0     0    0     0     0
PasserByVol:    0     0     0    0     0     0    0     0     0    0     0     0
Initial Fut:    9   241    10   28   399    82   27     1    13    4     1    16
User Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  0.00
PHF Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  0.00
PHF Volume:     9   241    10   28   399    82   27     1    13    4     1     0
Reduct Vol:     0     0     0    0     0     0    0     0     0    0     0     0
Reduced Vol:    9   241    10   28   399    82   27     1    13    4     1     0
PCE Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  0.00
MLF Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  0.00
FinalVolume:    9   241    10   28   399    82   27     1    13    4     1     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700  1700
Adjustment:  1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Lanes:       1.00  2.00  1.00 1.00  2.00  1.00 0.96  0.04  1.00 1.00  1.00  1.00
Final Sat.:  1700  3400  1700 1700  3400  1700 1639    61  1700 1700  1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01  0.07  0.01 0.02  0.12  0.05 0.02  0.02  0.01 0.00  0.00  0.00
Crit Moves:  ****                   ****             ****       ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                             The Doheny Hotel
                    Opening Year (2013) Without Project
                         Weekday Evening Peak Hour
--------------------------------------------------------------------------------

                     Level Of Service Computation Report
      ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):           100                Critical Vol./Cap.(X):         0.289
Loss Time (sec):         5 (Y+R=0.0 sec)  Average Delay (sec/veh):       xxxxxx
Optimal Cycle:         100                Level Of Service:                  A
********************************************************************************
Street Name:      Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Protected        Protected         Permitted        Permitted
Rights:          Include          Include           Include          Ignore
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        1  0  2  0  1    1  0  2  0  1    0  1  0  0  1    1  0  1  0  1
------------|----------------||----------------||----------------||----------------|
Volume Module:
Base Vol:     14  502    13    37  424    42   106    1    19    10    1    38
Growth Adj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  14  505    13    37  426    42   107    1    19    10    1    38
Added Vol:     0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:   0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  14  505    13    37  426    42   107    1    19    10    1    38
User Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:   14  505    13    37  426    42   107    1    19    10    1     0
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  14  505    13    37  426    42   107    1    19    10    1     0
PCE Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:  14  505    13    37  426    42   107    1    19    10    1     0
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:   1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:      1.00 2.00  1.00  1.00 2.00  1.00  0.99 0.01  1.00  1.00 1.00  1.00
Final Sat.: 1700 3400  1700  1700 3400  1700  1684   16  1700  1700 1700  1700
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:    0.01 0.15  0.01  0.02 0.13  0.02  0.06 0.06  0.01  0.01 0.00  0.00
Crit Moves:      ****        ****                    ****        ****
********************************************************************************
```

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-------------------------------------------------------------------------------
                          The Doheny Hotel
                 Opening Year (2013) Without Project
                     Saturday Mid-day Peak Hour
-------------------------------------------------------------------------------
                  Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*******************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
*******************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):          0.260
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        100               Level Of Service:                   A
*******************************************************************************
Street Name:      Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Permitted        Permitted
Rights:           Include          Include          Include           Ignore
Min. Green:   0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        1  0  2  0  1    1  0  2  0  1    0  1  0  0  1    1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      11   483    22    56   588    44    36     1    19    13     2    45
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:   11   485    22    56   591    44    36     1    19    13     2    45
Added Vol:      0     0     0     0     0     0     0     0     0     0     0     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:   11   485    22    56   591    44    36     1    19    13     2    45
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
PHF Volume:    11   485    22    56   591    44    36     1    19    13     2     0
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   11   485    22    56   591    44    36     1    19    13     2     0
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
FinalVolume:   11   485    22    56   591    44    36     1    19    13     2     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  2.00  1.00  1.00  2.00  1.00  0.97  0.03  1.00  1.00  1.00  1.00
Final Sat.:  1700  3400  1700  1700  3400  1700  1654    46  1700  1700  1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01  0.14  0.01  0.03  0.17  0.03  0.02  0.02  0.01  0.01  0.00  0.00
Crit Moves:  ****                    ****              ****        ****
*******************************************************************************
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Opening Year (2013) Without Project – Peak Season

The Doheny Hotel
Opening Year (2013) Without Project
Weekday Morning Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.564
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Street Name:	Del Obispo Street/Dana Point Harb		Pacific Coast Highway	
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected	Protected
Rights:	Ovl	Include	Include	Include
Lanes:	1 0 1 0 2	2 0 1 0 1	1 0 2 1 0	2 0 2 1 0

Movement:	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	26	68	217	292	107	119	85	1152	54	397	1532	179
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	26	68	218	293	108	120	85	1158	54	399	1540	180
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	26	68	218	293	108	120	85	1158	54	399	1540	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	26	68	218	293	108	120	85	1158	54	399	1540	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	68	218	293	108	120	85	1158	54	399	1540	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	68	218	293	108	120	85	1158	54	399	1540	180
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	2.87	0.13	2.00	2.69	0.31
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	4872	228	3400	4566	534
Capacity Analysis Module:												
Vol/Sat:	0.02	0.04	0.06	0.09	0.06	0.07	0.05	0.24	0.24	0.12	0.34	0.34
OvlAdjV/S:			0.00									
Crit Moves:		****		****			****				****	

```
-------------------------------------------------------------------------------
                               The Doheny Hotel
                     Opening Year (2013) Without Project
                   Weekday Evening Peak Hour - Peak Season
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):          0.695
Loss Time (sec):       5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:       100              Level Of Service:                   B
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:            Ovl             Include          Include          Include
Min. Green:   0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        1  0  1  0  2   2  0  1  0  1   1  0  2  1  0   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      54  152   505   252  114   152   158 1439    77   366 1706   261
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   54  153   508   253  115   153   159 1446    77   368 1715   262
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   54  153   508   253  115   153   159 1446    77   368 1715   262
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    54  153   508   253  115   153   159 1446    77   368 1715   262
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   54  153   508   253  115   153   159 1446    77   368 1715   262
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   54  153   508   253  115   153   159 1446    77   368 1715   262
OvlAdjVol:               140
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 2.85  0.15  2.00 2.60  0.40
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 4841   259  3400 4423   677
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.09  0.15  0.07 0.07  0.09  0.09 0.30  0.30  0.11 0.39  0.39
OvlAdjV/S:              0.04
Crit Moves:       ****  ****              ****                    ****
********************************************************************************
```

The Doheny Hotel
Opening Year (2013) Without Project
Saturday Mid-day Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.643
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	Del Obispo Street/Dana Point Harb		Pacific Coast Highway	
Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Protected	Protected	Protected	Protected
Rights:	Ovl	Include	Include	Include
Min. Green:	0 0 0	0 0 0	0 0 0	0 0 0
Lanes:	1 0 1 0 2	2 0 1 0 1	1 0 2 1 0	2 0 2 1 0

	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Volume Module:												
Base Vol:	69	116	436	230	112	145	161	1412	130	515	1388	206
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	69	117	438	231	113	146	162	1419	131	518	1395	207
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	69	117	438	231	113	146	162	1419	131	518	1395	207
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	69	117	438	231	113	146	162	1419	131	518	1395	207
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	69	117	438	231	113	146	162	1419	131	518	1395	207
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	69	117	438	231	113	146	162	1419	131	518	1395	207
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	2.75	0.25	2.00	2.61	0.39
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	4670	430	3400	4441	659
Capacity Analysis Module:												
Vol/Sat:	0.04	0.07	0.13	0.07	0.07	0.09	0.10	0.30	0.30	0.15	0.31	0.31
OvlAdjV/S:			0.00									
Crit Moves:		****		****				****		****		

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------------------------------------------------------------------------------
                              The Doheny Hotel
                     Opening Year (2013) Without Project
                   Weekday Morning Peak Hour - Peak Season
------------------------------------------------------------------------------

                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
******************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
******************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):        0.206
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:        100              Level Of Service:                 A
******************************************************************************
Street Name:      Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Permitted        Permitted
Rights:           Include          Include           Include          Ignore
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     10  264    11    31  437    90    30    1    14     4    1    18
Growth Adj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  10  265    11    31  439    90    30    1    14     4    1    18
Added Vol:     0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:   0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  10  265    11    31  439    90    30    1    14     4    1    18
User Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:   10  265    11    31  439    90    30    1    14     4    1     0
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  10  265    11    31  439    90    30    1    14     4    1     0
PCE Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:  10  265    11    31  439    90    30    1    14     4    1     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:      1.00 2.00  1.00  1.00 2.00  1.00  0.97 0.03  1.00  1.00 1.00  1.00
Final Sat.: 1700 3400  1700  1700 3400  1700  1645   55  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.01 0.08  0.01  0.02 0.13  0.05  0.02 0.02  0.01  0.00 0.00  0.00
Crit Moves: ****                  ****              ****        ****
******************************************************************************
```

```
--------------------------------------------------------------------------------
                              The Doheny Hotel
                     Opening Year (2013) Without Project
                   Weekday Evening Peak Hour - Peak Season
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100                Critical Vol./Cap.(X):         0.314
Loss Time (sec):        5 (Y+R=0.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100                Level Of Service:                  A
********************************************************************************
Street Name:     Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Permitted        Permitted
Rights:          Include          Include          Include          Ignore
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Lanes:        1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      15  552   14    41  466   51   117    1   21    11    1   42
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:   15  555   14    41  468   51   118    1   21    11    1   42
Added Vol:      0    0    0     0    0    0     0    0    0     0    0    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:   15  555   14    41  468   51   118    1   21    11    1   42
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.00
PHF Volume:    15  555   14    41  468   51   118    1   21    11    1    0
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   15  555   14    41  468   51   118    1   21    11    1    0
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 0.00
FinalVolume:   15  555   14    41  468   51   118    1   21    11    1    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700 1700  1700 1700 1700  1700 1700 1700  1700 1700 1700
Adjustment:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Lanes:       1.00 2.00 1.00  1.00 2.00 1.00  0.99 0.01 1.00  1.00 1.00 1.00
Final Sat.:  1700 3400 1700  1700 3400 1700  1686   14 1700  1700 1700 1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.16 0.01  0.02 0.14 0.03  0.07 0.07 0.01  0.01 0.00 0.00
Crit Moves:       ****       ****                  ****        ****
********************************************************************************
```

The Doheny Hotel
Opening Year (2013) Without Project
Saturday Mid-day Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach

Cycle (sec):	100	Critical Vol./Cap.(X):	0.281
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Street Name:	Dana Point Harbor Drive		Park Lantern/Doheny State Beach	
Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Protected	Protected	Permitted	Permitted
Rights:	Include	Include	Include	Ignore
Lanes:	1 0 2 0 1	1 0 2 0 1	0 1 0 0 1	1 0 1 0 1

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	12	531	24	62	647	48	40	1	21	14	2	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	534	24	62	650	48	40	1	21	14	2	50
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	534	24	62	650	48	40	1	21	14	2	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	12	534	24	62	650	48	40	1	21	14	2	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	534	24	62	650	48	40	1	21	14	2	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	12	534	24	62	650	48	40	1	21	14	2	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.98	0.02	1.00	1.00	1.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1659	41	1700	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.16	0.01	0.04	0.19	0.03	0.02	0.02	0.01	0.01	0.00	0.00
Crit Moves:	****				****			****		****		

Opening Year (2013) With Project

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--------------------------------------------------------------------------------
                            The Doheny Hotel
                      Opening Year (2013) With Project
                         Weekday Morning Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):         100                 Critical Vol./Cap.(X):          0.521
Loss Time (sec):       5 (Y+R=0.0 sec)  Average Delay (sec/veh):        xxxxxx
Optimal Cycle:       100                 Level Of Service:                   A
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Protected        Protected        Protected         Protected
Rights:            Ovl            Include          Include           Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:       1  0  1  0  2    2  0  1  0  1    1  0  3  0  1    2  0  2  1  0
------------|----------------||----------------||----------------||----------------|
Volume Module:
Base Vol:      24   62   197   265   97   108    77 1047    49   361 1393   163
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   24   62   198   266   97   109    77 1052    49   363 1400   164
Added Vol:      9    6    12     0   11     0     0    0    22    22    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   33   68   210   266  108   109    77 1052    71   385 1400   164
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    33   68   210   266  108   109    77 1052    71   385 1400   164
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   33   68   210   266  108   109    77 1052    71   385 1400   164
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   33   68   210   266  108   109    77 1052    71   385 1400   164
OvlAdjVol:                 0
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 3.00  1.00  2.00 2.69  0.31
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 5100  1700  3400 4566   534
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.04  0.06  0.08 0.06  0.06  0.05 0.21  0.04  0.11 0.31  0.31
OvlAdjV/S:              0.00
Crit Moves:       ****        ****             ****                  ****
********************************************************************************
```

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-------------------------------------------------------------------------------
                             The Doheny Hotel
                       Opening Year (2013) With Project
                          Weekday Evening Peak Hour
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*******************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
*******************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):         0.643
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        100               Level Of Service:                   B
*******************************************************************************
Street Name:Del Obispo Street/Dana Point Harb      Pacific Coast Highway
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:            Ovl            Include          Include          Include
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Lanes:       1  0  1  0  2   2  0  1  0  1   1  0  3  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      49  138   459   229  104   138   144 1308    70   333 1551   237
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   49  139   461   230  105   139   145 1315    70   335 1559   238
Added Vol:     15   10    20     0   11     0     0    0    22    22    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   64  149   481   230  116   139   145 1315    92   357 1559   238
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    64  149   481   230  116   139   145 1315    92   357 1559   238
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   64  149   481   230  116   139   145 1315    92   357 1559   238
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   64  149   481   230  116   139   145 1315    92   357 1559   238
OvlAdjVol:               125
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 3.00  1.00  2.00 2.60  0.40
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 5100  1700  3400 4424   676
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.09  0.14  0.07 0.07  0.08  0.09 0.26  0.05  0.10 0.35  0.35
OvlAdjV/S:              0.04
Crit Moves:       ****        ****             ****                   ****
*******************************************************************************
```

```
--------------------------------------------------------------------------------
                              The Doheny Hotel
                       Opening Year (2013) With Project
                          Saturday Mid-day Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.572
Loss Time (sec):       5 (Y+R=0.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                Level Of Service:                  A
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb      Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Protected        Protected        Protected        Protected
Rights:            Ovl             Include          Include          Include
Min. Green:    0    0    0     0    0    0     0    0    0     0    0    0
Lanes:       1  0  1  0  2   2  0  1  0  1   1  0  3  0  1   2  0  2  1  0
------------|----------------||----------------||----------------||----------------|
Volume Module:
Base Vol:      63  105   396   209  102   132   146 1248   118   468 1262   187
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   63  106   398   210  103   133   147 1254   119   470 1268   188
Added Vol:     15   10    20     0   13     0     0    0    26    26    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   78  116   418   210  116   133   147 1254   145   496 1268   188
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    78  116   418   210  116   133   147 1254   145   496 1268   188
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   78  116   418   210  116   133   147 1254   145   496 1268   188
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   78  116   418   210  116   133   147 1254   145   496 1268   188
OvlAdjVol:                 0
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 3.00  1.00  2.00 2.61  0.39
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 5100  1700  3400 4442   658
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.07  0.12  0.06 0.07  0.08  0.09 0.25  0.09  0.15 0.29  0.29
OvlAdjV/S:                0.00
Crit Moves:       ****    ****                      ****    ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                              The Doheny Hotel
                        Opening Year (2013) With Project
                           Weekday Morning Peak Hour
--------------------------------------------------------------------------------

                       Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):       0.3       Worst Case Level Of Service: B[ 10.0]
********************************************************************************
Street Name:     Dana Point Harbor Drive                  Project Access
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Lanes:        0  0  2  0  0    0  0  2  0  1    0  0  0  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  283    0      0  507    0      0    0    0      0    0    0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  284    0      0  510    0      0    0    0      0    0    0
Added Vol:      0   28    0      0    0   56      0    0   31      0    0    0
PasserByVol:    0    0    0      0    0    0      0    0    0      0    0    0
Initial Fut:    0  312    0      0  510   56      0    0   31      0    0    0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  312    0      0  510   56      0    0   31      0    0    0
Reduct Vol:     0    0    0      0    0    0      0    0    0      0    0    0
FinalVolume:    0  312    0      0  510   56      0    0   31      0    0    0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   255  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   751  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   751  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.04  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.1  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.0 xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     B     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:     xxxxxx           xxxxxx             10.0            xxxxxx
ApproachLOS:        *                *                 B                *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
```

```
--------------------------------------------------------------------------------
                              The Doheny Hotel
                        Opening Year (2013) With Project
                           Weekday Evening Peak Hour
--------------------------------------------------------------------------------
                         Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):       0.4       Worst Case Level Of Service: B[ 10.1]
********************************************************************************
Street Name:     Dana Point Harbor Drive                 Project Access
Approach:       North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled       Stop Sign         Stop Sign
Rights:           Include          Include          Include           Include
Lanes:        0  0  2  0  0   0  0  2  0  1   0  0  0  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  646     0     0  507     0     0     0     0     0     0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  649     0     0  510     0     0     0     0     0     0     0
Added Vol:      0   44     0     0    0    55     0     0    49     0     0     0
PasserByVol:    0    0     0     0    0     0     0     0     0     0     0     0
Initial Fut:    0  693     0     0  510    55     0     0    49     0     0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  693     0     0  510    55     0     0    49     0     0     0
Reduct Vol:     0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:    0  693     0     0  510    55     0     0    49     0     0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   255  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   751  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   751  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.07  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.1 xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     B     *    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:     xxxxxx           xxxxxx             10.1            xxxxxx
ApproachLOS:        *                *                 B                *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
```

```
--------------------------------------------------------------------------------
                              The Doheny Hotel
                       Opening Year (2013) With Project
                          Saturday Mid-day Peak Hour
--------------------------------------------------------------------------------

                      Level Of Service Computation Report
          2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):       0.4       Worst Case Level Of Service: B[ 10.9]
********************************************************************************
Street Name:      Dana Point Harbor Drive                 Project Access
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Lanes:        0  0  2  0  0   0  0  2  0  1   0  0  0  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  564     0     0  688     0     0     0     0     0     0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  567     0     0  691     0     0     0     0     0     0     0
Added Vol:      0   44     0     0    0    65     0     0    49     0     0     0
PasserByVol:    0    0     0     0    0     0     0     0     0     0     0     0
Initial Fut:    0  611     0     0  691    65     0     0    49     0     0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  611     0     0  691    65     0     0    49     0     0     0
Reduct Vol:     0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:    0  611     0     0  691    65     0     0    49     0     0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   346  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   656  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   656  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.07  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.9 xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     B     *    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      xxxxxx           xxxxxx             10.9           xxxxxx
ApproachLOS:         *                *                  B                *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
```

The Doheny Hotel
Opening Year (2013) With Project
Weekday Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach

Cycle (sec):	100	Critical Vol./Cap.(X):	0.199
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Street Name:	Dana Point Harbor Drive						Park Lantern/Doheny State Beach					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	9	240	10	28	397	82	27	1	13	4	1	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	241	10	28	399	82	27	1	13	4	1	16
Added Vol:	0	0	0	28	3	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	241	10	56	402	82	27	1	13	4	1	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	241	10	56	402	82	27	1	13	4	1	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	241	10	56	402	82	27	1	13	4	1	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	9	241	10	56	402	82	27	1	13	4	1	16
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.96	0.04	1.00	1.00	1.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1639	61	1700	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.07	0.01	0.03	0.12	0.05	0.02	0.02	0.01	0.00	0.00	0.01
Crit Moves:	****				****		****					****

```
------------------------------------------------------------------------------
                              The Doheny Hotel
                      Opening Year (2013) With Project
                          Weekday Evening Peak Hour
------------------------------------------------------------------------------

                       Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
******************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
******************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.331
Loss Time (sec):       5 (Y+R=0.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                Level Of Service:                  A
******************************************************************************
Street Name:     Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:         1  0  2  0  1    1  0  2  0  1    0  1  0  0  1    1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      14  502    13    37  424    42   106    1    19    10    1    38
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   14  505    13    37  426    42   107    1    19    10    1    38
Added Vol:      0    0     0    44    5     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   14  505    13    81  431    42   107    1    19    10    1    38
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    14  505    13    81  431    42   107    1    19    10    1    38
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   14  505    13    81  431    42   107    1    19    10    1    38
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   14  505    13    81  431    42   107    1    19    10    1    38
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 2.00  1.00  1.00 2.00  1.00  0.99 0.01  1.00  1.00 1.00  1.00
Final Sat.:  1700 3400  1700  1700 3400  1700  1684   16  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.15  0.01  0.05 0.13  0.02  0.06 0.06  0.01  0.01 0.00  0.02
Crit Moves:       ****        ****              ****                        ****
******************************************************************************
```

The Doheny Hotel
Opening Year (2013) With Project
Saturday Mid-day Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach

Cycle (sec): 100 Critical Vol./Cap.(X): 0.300
Loss Time (sec): 5 (Y+R=0.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 100 Level Of Service: A

Street Name:	Dana Point Harbor Drive						Park Lantern/Doheny State Beach					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	11	483	22	56	588	44	36	1	19	13	2	45
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	485	22	56	591	44	36	1	19	13	2	45
Added Vol:	0	0	0	44	5	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	485	22	100	596	44	36	1	19	13	2	45
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	485	22	100	596	44	36	1	19	13	2	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	485	22	100	596	44	36	1	19	13	2	45
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	11	485	22	100	596	44	36	1	19	13	2	45
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.97	0.03	1.00	1.00	1.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1654	46	1700	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.14	0.01	0.06	0.18	0.03	0.02	0.02	0.01	0.01	0.00	0.03
Crit Moves:		****		****			****					****

Opening Year (2013) With Project – Peak Season

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--------------------------------------------------------------------------------
                              The Doheny Hotel
                        Opening Year (2013) With Project
                   Weekday Morning Peak Hour - Peak Season
--------------------------------------------------------------------------------

                     Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):         0.567
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100              Level Of Service:                  A
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb      Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:            Ovl            Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:       1  0  1  0  2   2  0  1  0  1   1  0  3  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      26    68   217   292   107   119    85  1152    54   397  1532   179
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:   26    68   218   293   108   120    85  1158    54   399  1540   180
Added Vol:      9     6    12     0    11     0     0     0    22    22     0     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:   35    74   230   293   119   120    85  1158    76   421  1540   180
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:    35    74   230   293   119   120    85  1158    76   421  1540   180
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   35    74   230   293   119   120    85  1158    76   421  1540   180
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
FinalVolume:   35    74   230   293   119   120    85  1158    76   421  1540   180
OvlAdjVol:                  0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  1.00  2.00  2.00  1.00  1.00  1.00  3.00  1.00  2.00  2.69  0.31
Final Sat.:  1700  1700  3400  3400  1700  1700  1700  5100  1700  3400  4566   534
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02  0.04  0.07  0.09  0.07  0.07  0.05  0.23  0.04  0.12  0.34  0.34
OvlAdjV/S:               0.00
Crit Moves:        ****  ****              ****                    ****
********************************************************************************
```

```
-------------------------------------------------------------------------------
                            The Doheny Hotel
                     Opening Year (2013) With Project
                 Weekday Evening Peak Hour - Peak Season
-------------------------------------------------------------------------------

                     Level Of Service Computation Report
      ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*******************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
*******************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):          0.701
Loss Time (sec):       5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:       100              Level Of Service:                   C
*******************************************************************************
Street Name:Del Obispo Street/Dana Point Harb      Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:           Ovl            Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:       1  0  1  0  2   2  0  1  0  1   1  0  3  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     54  152   505   252  114   152   158 1439    77   366 1706   261
Growth Adj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  54  153   508   253  115   153   159 1446    77   368 1715   262
Added Vol:    15   10    20     0   11     0     0    0    22    22    0     0
PasserByVol:   0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  69  163   528   253  126   153   159 1446    99   390 1715   262
User Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   69  163   528   253  126   153   159 1446    99   390 1715   262
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  69  163   528   253  126   153   159 1446    99   390 1715   262
PCE Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  69  163   528   253  126   153   159 1446    99   390 1715   262
OvlAdjVol:              138
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:      1.00 1.00  2.00  2.00 1.00  1.00  1.00 3.00  1.00  2.00 2.60  0.40
Final Sat.: 1700 1700  3400  3400 1700  1700  1700 5100  1700  3400 4423   677
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.04 0.10  0.16  0.07 0.07  0.09  0.09 0.28  0.06  0.11 0.39  0.39
OvlAdjV/S:             0.04
Crit Moves:      ****        ****              ****                   ****
*******************************************************************************
```

```
--------------------------------------------------------------------------------
                              The Doheny Hotel
                       Opening Year (2013) With Project
                   Saturday Mid-day Peak Hour - Peak Season
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):        100              Critical Vol./Cap.(X):         0.631
Loss Time (sec):      5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:      100              Level Of Service:                  B
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:           Ovl            Include          Include          Include
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Lanes:       1  0  1  0  2   2  0  1  0  1   1  0  3  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      69  116  436   230  112  145   161 1412  130   515 1388  206
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:   69  117  438   231  113  146   162 1419  131   518 1395  207
Added Vol:     15   10   20     0   13    0     0    0   26    26    0    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:   84  127  458   231  126  146   162 1419  157   544 1395  207
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    84  127  458   231  126  146   162 1419  157   544 1395  207
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   84  127  458   231  126  146   162 1419  157   544 1395  207
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
FinalVolume:   84  127  458   231  126  146   162 1419  157   544 1395  207
OvlAdjVol:                  0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700 1700  1700 1700 1700  1700 1700 1700  1700 1700 1700
Adjustment:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Lanes:       1.00 1.00 2.00  2.00 1.00 1.00  1.00 3.00 1.00  2.00 2.61 0.39
Final Sat.:  1700 1700 3400  3400 1700 1700  1700 5100 1700  3400 4441  659
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.07 0.13  0.07 0.07 0.09  0.10 0.28 0.09  0.16 0.31 0.31
OvlAdjV/S:                0.00
Crit Moves:       ****       ****                  ****       ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                               The Doheny Hotel
                        Opening Year (2013) With Project
                     Weekday Morning Peak Hour - Peak Season
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):       0.3       Worst Case Level Of Service: B[ 10.2]
********************************************************************************
Street Name:      Dana Point Harbor Drive                   Project Access
Approach:       North Bound       South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled      Uncontrolled       Stop Sign         Stop Sign
Rights:           Include           Include          Include           Include
Lanes:        0  0  2  0  0    0  0  2  0  1    0  0  0  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  311     0     0  558     0     0    0     0     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  313     0     0  561     0     0    0     0     0    0     0
Added Vol:      0   28     0     0    0    56     0    0    31     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0  341     0     0  561    56     0    0    31     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  341     0     0  561    56     0    0    31     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0  341     0     0  561    56     0    0    31     0    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   280  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   723  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   723  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.04  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2WayQ95thQ:  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.1  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.2 xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     B     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      xxxxxx            xxxxxx              10.2            xxxxxx
ApproachLOS:        *                 *                   B                 *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
```

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------------------------------------------------------------------------------
                          The Doheny Hotel
                   Opening Year (2013) With Project
                Weekday Evening Peak Hour - Peak Season
------------------------------------------------------------------------------
                  Level Of Service Computation Report
         2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):      0.4      Worst Case Level Of Service: B[ 10.3]
********************************************************************************
Street Name:     Dana Point Harbor Drive               Project Access
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:            Include          Include          Include          Include
Lanes:         0  0  2  0  0   0  0  2  0  1   0  0  0  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0  711    0     0  558    0     0    0    0     0    0    0
Growth Adj:   1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:     0  715    0     0  561    0     0    0    0     0    0    0
Added Vol:       0   44    0     0    0   55     0    0   49     0    0    0
PasserByVol:     0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:     0  759    0     0  561   55     0    0   49     0    0    0
User Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:      1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:      0  759    0     0  561   55     0    0   49     0    0    0
Reduct Vol:      0    0    0     0    0    0     0    0    0     0    0    0
FinalVolume:     0  759    0     0  561   55     0    0   49     0    0    0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   280  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   723  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   723  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.07  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.3 xxxxx xxxx xxxxx
LOS by Move:     *    *    *     *    *    *     *    *    B     *    *    *
Movement:      LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *    *     *    *    *     *    *    *     *    *    *
ApproachDel:      xxxxxx           xxxxxx             10.3            xxxxxx
ApproachLOS:         *                *                 B                *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
```

```
--------------------------------------------------------------------------------
                             The Doheny Hotel
                      Opening Year (2013) With Project
                  Saturday Mid-day Peak Hour - Peak Season
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
         2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):       0.4       Worst Case Level Of Service: B[ 11.3]
********************************************************************************
Street Name:      Dana Point Harbor Drive                   Project Access
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:            Include          Include          Include          Include
Lanes:         0  0  2  0  0   0  0  2  0  1   0  0  0  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0  620     0     0  757     0     0     0     0     0     0     0
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:     0  623     0     0  761     0     0     0     0     0     0     0
Added Vol:       0   44     0     0    0    65     0     0    49     0     0     0
PasserByVol:     0    0     0     0    0     0     0     0     0     0     0     0
Initial Fut:     0  667     0     0  761    65     0     0    49     0     0     0
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:      0  667     0     0  761    65     0     0    49     0     0     0
Reduct Vol:      0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:     0  667     0     0  761    65     0     0    49     0     0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   380  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   623  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   623  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.08  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.3  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  11.3 xxxxx xxxx xxxxx
LOS by Move:     *    *     *     *    *     *     *    *     B     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:     xxxxxx           xxxxxx             11.3           xxxxxx
ApproachLOS:        *                *                 B                *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
```

```
--------------------------------------------------------------------------------
                           The Doheny Hotel
                     Opening Year (2013) With Project
                 Weekday Morning Peak Hour - Peak Season
--------------------------------------------------------------------------------

                    Level Of Service Computation Report
      ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):         0.214
Loss Time (sec):       5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              Level Of Service:                  A
********************************************************************************
Street Name:     Dana Point Harbor Drive     Park Lantern/Doheny State Beach
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Permitted        Permitted
Rights:         Include          Include          Include          Include
Min. Green:    0     0     0    0    0     0    0    0     0    0    0     0
Lanes:        1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      10  264    11    31  437    90    30    1    14     4    1    18
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   10  265    11    31  439    90    30    1    14     4    1    18
Added Vol:      0    0     0    28    3     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   10  265    11    59  442    90    30    1    14     4    1    18
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    10  265    11    59  442    90    30    1    14     4    1    18
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   10  265    11    59  442    90    30    1    14     4    1    18
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   10  265    11    59  442    90    30    1    14     4    1    18
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 2.00  1.00  1.00 2.00  1.00  0.97 0.03  1.00  1.00 1.00  1.00
Final Sat.:  1700 3400  1700  1700 3400  1700  1645   55  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.08  0.01  0.03 0.13  0.05  0.02 0.02  0.01  0.00 0.00  0.01
Crit Moves:  ****                  ****        ****                          ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                              The Doheny Hotel
                        Opening Year (2013) With Project
                    Weekday Evening Peak Hour - Peak Season
--------------------------------------------------------------------------------

                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):         0.357
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100               Level Of Service:                  A
********************************************************************************
Street Name:      Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Permitted        Permitted
Rights:           Include          Include           Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:       1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      15  552    14    41  466    51   117    1    21    11    1    42
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   15  555    14    41  468    51   118    1    21    11    1    42
Added Vol:      0    0     0    44    5     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   15  555    14    85  473    51   118    1    21    11    1    42
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    15  555    14    85  473    51   118    1    21    11    1    42
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   15  555    14    85  473    51   118    1    21    11    1    42
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   15  555    14    85  473    51   118    1    21    11    1    42
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 2.00  1.00  1.00 2.00  1.00  0.99 0.01  1.00  1.00 1.00  1.00
Final Sat.:  1700 3400  1700  1700 3400  1700  1686   14  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.16  0.01  0.05 0.14  0.03  0.07 0.07  0.01  0.01 0.00  0.02
Crit Moves:       ****        ****             ****                         ****
********************************************************************************
```

```
------------------------------------------------------------------------------
                              The Doheny Hotel
                       Opening Year (2013) With Project
                  Saturday Mid-day Peak Hour - Peak Season
------------------------------------------------------------------------------

                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
******************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
******************************************************************************
Cycle (sec):          100                Critical Vol./Cap.(X):         0.323
Loss Time (sec):        5 (Y+R=0.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100                Level Of Service:                  A
******************************************************************************
Street Name:       Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0    0     0    0    0     0    0    0     0    0    0
Lanes:        1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      12  531   24    62  647   48    40    1   21    14    2   50
Growth Adj:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Initial Bse:   12  534   24    62  650   48    40    1   21    14    2   50
Added Vol:      0    0    0    44    5    0     0    0    0     0    0    0
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:   12  534   24   106  655   48    40    1   21    14    2   50
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    12  534   24   106  655   48    40    1   21    14    2   50
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   12  534   24   106  655   48    40    1   21    14    2   50
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
FinalVolume:   12  534   24   106  655   48    40    1   21    14    2   50
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700 1700  1700 1700 1700  1700 1700 1700  1700 1700 1700
Adjustment:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Lanes:       1.00 2.00 1.00  1.00 2.00 1.00  0.98 0.02 1.00  1.00 1.00 1.00
Final Sat.:  1700 3400 1700  1700 3400 1700  1659   41 1700  1700 1700 1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.16 0.01  0.06 0.19 0.03  0.02 0.02 0.01  0.01 0.00 0.03
Crit Moves:       ****       ****            ****                        ****
******************************************************************************
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Year 2025 Without Project

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--------------------------------------------------------------------------------
                          The Doheny Hotel
                       Year 2025 Without Project
                       Weekday Morning Peak Hour
--------------------------------------------------------------------------------

                    Level Of Service Computation Report
     ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):          0.597
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        100              Level Of Service:                   A
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Protected        Protected        Protected        Protected
Rights:            Ovl            Include          Include          Include
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Lanes:       1  0  1  0  2   2  0  1  0  1    1  0  2  1  0    2  0  2  1  0
------------|----------------||----------------||----------------||----------------|
Volume Module:
Base Vol:     24   62  197  265   97  108   77 1047   49  361 1393  163
Growth Adj: 1.04 1.04 1.04 1.04 1.04 1.04 1.04 1.04 1.04 1.04 1.04 1.04
Initial Bse:  25   64  204  275  100  112   80 1085   51  374 1443  169
Added Vol:     0   21   89   14   13   67   41   68    0  131  116    9
PasserByVol:   0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:  25   85  293  289  113  179  121 1153   51  505 1559  178
User Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Volume:   25   85  293  289  113  179  121 1153   51  505 1559  178
Reduct Vol:    0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:  25   85  293  289  113  179  121 1153   51  505 1559  178
PCE Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
MLF Adj:    1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
FinalVolume:  25   85  293  289  113  179  121 1153   51  505 1559  178
OvlAdjVol:                 0
------------|----------------||----------------||----------------||----------------|
Saturation Flow Module:
Sat/Lane:   1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:      1.00 1.00 2.00 2.00 1.00 1.00 1.00 2.87 0.13 2.00 2.69 0.31
Final Sat.: 1700 1700 3400 3400 1700 1700 1700 4885  215 3400 4578  522
------------|----------------||----------------||----------------||----------------|
Capacity Analysis Module:
Vol/Sat:    0.01 0.05 0.09 0.08 0.07 0.11 0.07 0.24 0.24 0.15 0.34 0.34
OvlAdjV/S:                0.00
Crit Moves:      ****      ****            ****                     ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          The Doheny Hotel
                      Year 2025 Without Project
                      Weekday Evening Peak Hour
--------------------------------------------------------------------------------

                   Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):         0.785
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100               Level Of Service:                  C
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:           Ovl            Include          Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:       1  0  1  0  2   2  0  1  0  1   1  0  2  1  0   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      49  138   459   229  104   138   144 1308    70   333 1551   237
Growth Adj:  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:   51  143   476   237  108   143   149 1355    73   345 1607   246
Added Vol:      0   37   143    23   18    95   116  189     0   169  142    26
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   51  180   619   260  126   238   265 1544    73   514 1749   272
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    51  180   619   260  126   238   265 1544    73   514 1749   272
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   51  180   619   260  126   238   265 1544    73   514 1749   272
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   51  180   619   260  126   238   265 1544    73   514 1749   272
OvlAdjVol:               105
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 2.87  0.13  2.00 2.60  0.40
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 4871   229  3400 4415   685
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.11  0.18  0.08 0.07  0.14  0.16 0.32  0.32  0.15 0.40  0.40
OvlAdjV/S:              0.03
Crit Moves:       ****        ****             ****                  ****
********************************************************************************
```

The Doheny Hotel
Year 2025 Without Project
Saturday Mid-day Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.763
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Street Name:	Del Obispo Street/Dana Point Harb						Pacific Coast Highway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 0 2			2 0 1 0 1			1 0 2 1 0			2 0 2 1 0		
Volume Module:												
Base Vol:	63	105	396	209	102	132	146	1248	118	468	1262	187
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	65	109	410	217	106	137	151	1293	122	485	1307	194
Added Vol:	0	19	121	32	19	137	138	196	0	146	214	36
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	65	128	531	249	125	274	289	1489	122	631	1521	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	65	128	531	249	125	274	289	1489	122	631	1521	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	128	531	249	125	274	289	1489	122	631	1521	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	65	128	531	249	125	274	289	1489	122	631	1521	230
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	2.77	0.23	2.00	2.61	0.39
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	4713	387	3400	4431	669
Capacity Analysis Module:												
Vol/Sat:	0.04	0.08	0.16	0.07	0.07	0.16	0.17	0.32	0.32	0.19	0.34	0.34
OvlAdjV/S:			0.00									
Crit Moves:	****					****	****				****	

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--------------------------------------------------------------------------------
                         The Doheny Hotel
                     Year 2025 Without Project
                     Weekday Morning Peak Hour
--------------------------------------------------------------------------------

                 Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):         0.238
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100               Level Of Service:                  A
********************************************************************************
Street Name:      Dana Point Harbor Drive     Park Lantern/Doheny State Beach
Approach:       North Bound     South Bound      East Bound      West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected       Protected        Permitted       Permitted
Rights:         Include         Include          Include         Ignore
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Lanes:         1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        9  240   10   28  397   82   27    1   13    4    1   16
Growth Adj:   1.04 1.04 1.04 1.04 1.04 1.04 1.04 1.04 1.04 1.04 1.04 1.04
Initial Bse:     9  249   10   29  411   85   28    1   13    4    1   17
Added Vol:       0  109    0    0  143    0    0    0    0    0    0    0
PasserByVol:     0    0    0    0    0    0    0    0    0    0    0    0
Initial Fut:     9  358   10   29  554   85   28    1   13    4    1   17
User Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
PHF Volume:      9  358   10   29  554   85   28    1   13    4    1    0
Reduct Vol:      0    0    0    0    0    0    0    0    0    0    0    0
Reduced Vol:     9  358   10   29  554   85   28    1   13    4    1    0
PCE Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
MLF Adj:      1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00
FinalVolume:     9  358   10   29  554   85   28    1   13    4    1    0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700 1700
Adjustment:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Lanes:        1.00 2.00 1.00 1.00 2.00 1.00 0.96 0.04 1.00 1.00 1.00 1.00
Final Sat.:   1700 3400 1700 1700 3400 1700 1639   61 1700 1700 1700 1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.01 0.11 0.01 0.02 0.16 0.05 0.02 0.02 0.01 0.00 0.00 0.00
Crit Moves:   ****                ****           ****           ****
********************************************************************************
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------------------------------------------------------------------------------
                           The Doheny Hotel
                      Year 2025 Without Project
                      Weekday Evening Peak Hour
------------------------------------------------------------------------------

                  Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
******************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
******************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):          0.350
Loss Time (sec):       5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:       100               Level Of Service:                   A
******************************************************************************
Street Name:     Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Permitted        Permitted
Rights:          Include          Include          Include          Ignore
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      14   502    13    37   424    42   106     1    19    10     1    38
Growth Adj:  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04
Initial Bse:   15   520    13    38   439    44   110     1    20    10     1    39
Added Vol:      0   180     0     0   187     0     0     0     0     0     0     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:   15   700    13    38   626    44   110     1    20    10     1    39
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
PHF Volume:    15   700    13    38   626    44   110     1    20    10     1     0
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   15   700    13    38   626    44   110     1    20    10     1     0
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  0.00
FinalVolume:   15   700    13    38   626    44   110     1    20    10     1     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700
Adjustment:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:       1.00  2.00  1.00  1.00  2.00  1.00  0.99  0.01  1.00  1.00  1.00  1.00
Final Sat.:  1700  3400  1700  1700  3400  1700  1684    16  1700  1700  1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01  0.21  0.01  0.02  0.18  0.03  0.06  0.07  0.01  0.01  0.00  0.00
Crit Moves:        ****        ****                    ****        ****
******************************************************************************
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The Doheny Hotel
Year 2025 Without Project
Saturday Mid-day Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach

Cycle (sec):	100	Critical Vol./Cap.(X):	0.315
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Street Name:	Dana Point Harbor Drive						Park Lantern/Doheny State Beach					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	11	483	22	56	588	44	36	1	19	13	2	45
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	11	500	23	58	609	46	37	1	20	13	2	47
Added Vol:	0	140	0	0	166	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	640	23	58	775	46	37	1	20	13	2	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	11	640	23	58	775	46	37	1	20	13	2	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	640	23	58	775	46	37	1	20	13	2	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	11	640	23	58	775	46	37	1	20	13	2	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.97	0.03	1.00	1.00	1.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1654	46	1700	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.19	0.01	0.03	0.23	0.03	0.02	0.02	0.01	0.01	0.00	0.00
Crit Moves:	****				****			****		****		

Year 2025 Without Project – Peak Season

The Doheny Hotel
Year 2025 Without Project
Weekday Morning Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.645
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name: Del Obispo Street/Dana Point Harb — Pacific Coast Highway

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	26	68	217	292	107	119	85	1152	54	397	1532	179
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	27	70	225	303	111	123	88	1193	56	411	1587	185
Added Vol:	0	21	89	14	13	67	41	68	0	131	116	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	91	314	317	124	190	129	1261	56	542	1703	194
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	91	314	317	124	190	129	1261	56	542	1703	194
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	91	314	317	124	190	129	1261	56	542	1703	194
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	91	314	317	124	190	129	1261	56	542	1703	194
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	2.87	0.13	2.00	2.69	0.31
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	4883	217	3400	4577	523
Capacity Analysis Module:												
Vol/Sat:	0.02	0.05	0.09	0.09	0.07	0.11	0.08	0.26	0.26	0.16	0.37	0.37
OvlAdjV/S:			0.00									
Crit Moves:		****		****			****				****	

The Doheny Hotel
Year 2025 Without Project
Weekday Evening Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.845
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Street Name:	Del Obispo Street/Dana Point Harb						Pacific Coast Highway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	54	152	505	252	114	152	158	1439	77	366	1706	261
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	56	157	523	261	118	157	164	1491	80	379	1767	270
Added Vol:	0	37	1	23	18	95	116	189	0	21	142	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	56	194	524	284	136	252	280	1680	80	400	1909	296
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	56	194	524	284	136	252	280	1680	80	400	1909	296
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	194	524	284	136	252	280	1680	80	400	1909	296
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	56	194	524	284	136	252	280	1680	80	400	1909	296
OvlAdjVol:			124									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	2.86	0.14	2.00	2.60	0.40
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	4869	231	3400	4415	685
Capacity Analysis Module:												
Vol/Sat:	0.03	0.11	0.15	0.08	0.08	0.15	0.16	0.35	0.35	0.12	0.43	0.43
OvlAdjV/S:			0.04									
Crit Moves:		****		****			****				****	

The Doheny Hotel
Year 2025 Without Project
Saturday Mid-day Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

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Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.813
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

****

Street Name: Del Obispo Street/Dana Point Harb — Pacific Coast Highway

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	2 1	0	2 0	2 1	0
Volume Module:												
Base Vol:	69	116	436	230	112	145	161	1412	130	515	1388	206
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	71	120	452	238	116	150	167	1463	135	534	1438	213
Added Vol:	0	33	107	32	19	137	138	196	0	146	214	36
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	71	153	559	270	135	287	305	1659	135	680	1652	249
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	71	153	559	270	135	287	305	1659	135	680	1652	249
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	153	559	270	135	287	305	1659	135	680	1652	249
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	71	153	559	270	135	287	305	1659	135	680	1652	249
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	2.77	0.23	2.00	2.61	0.39
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	4717	383	3400	4431	669
Capacity Analysis Module:												
Vol/Sat:	0.04	0.09	0.16	0.08	0.08	0.17	0.18	0.35	0.35	0.20	0.37	0.37
OvlAdjV/S:			0.00									
Crit Moves:	****					****	****				****	

****

The Doheny Hotel
Year 2025 Without Project
Weekday Morning Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach

Cycle (sec):	100	Critical Vol./Cap.(X):	0.253
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Street Name:	Dana Point Harbor Drive						Park Lantern/Doheny State Beach					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	10	264	11	31	437	90	30	1	14	4	1	18
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	10	274	11	32	453	93	31	1	15	4	1	19
Added Vol:	0	109	0	0	143	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	383	11	32	596	93	31	1	15	4	1	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	10	383	11	32	596	93	31	1	15	4	1	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	383	11	32	596	93	31	1	15	4	1	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	10	383	11	32	596	93	31	1	15	4	1	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.97	0.03	1.00	1.00	1.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1645	55	1700	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.11	0.01	0.02	0.18	0.05	0.02	0.02	0.01	0.00	0.00	0.00
Crit Moves:	****				****			****		****		

The Doheny Hotel
Year 2025 Without Project
Weekday Evening Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach

Cycle (sec):	100	Critical Vol./Cap.(X):	0.333
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Street Name:	Dana Point Harbor Drive						Park Lantern/Doheny State Beach					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2	0 1	1 0	2	0 1	0 1	0	0 1	1 0	1	0 1
Volume Module:												
Base Vol:	15	552	14	41	466	51	117	1	21	11	1	42
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	16	572	15	42	483	53	121	1	22	11	1	44
Added Vol:	0	39	0	0	39	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	16	611	15	42	522	53	121	1	22	11	1	44
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	16	611	15	42	522	53	121	1	22	11	1	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	611	15	42	522	53	121	1	22	11	1	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	16	611	15	42	522	53	121	1	22	11	1	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.99	0.01	1.00	1.00	1.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1686	14	1700	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.18	0.01	0.02	0.15	0.03	0.07	0.07	0.01	0.01	0.00	0.00
Crit Moves:		****		****				****		****		

The Doheny Hotel
Year 2025 Without Project
Saturday Mid-day Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach

Cycle (sec):	100	Critical Vol./Cap.(X):	0.337
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Street Name:	Dana Point Harbor Drive						Park Lantern/Doheny State Beach					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	12	531	24	62	647	48	40	1	21	14	2	50
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	12	550	25	64	670	50	41	1	22	15	2	52
Added Vol:	0	140	0	0	166	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	12	690	25	64	836	50	41	1	22	15	2	52
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	12	690	25	64	836	50	41	1	22	15	2	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	12	690	25	64	836	50	41	1	22	15	2	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	12	690	25	64	836	50	41	1	22	15	2	0
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.98	0.02	1.00	1.00	1.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1659	41	1700	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.20	0.01	0.04	0.25	0.03	0.02	0.02	0.01	0.01	0.00	0.00
Crit Moves:	****				****			****		****		

Year 2025 With Project

The Doheny Hotel
Year 2025 With Project
Weekday Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.600
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name: Del Obispo Street/Dana Point Harb — Pacific Coast Highway

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 0 2			2 0 1 0 1			1 0 3 0 1			2 0 2 1 0		
Volume Module:												
Base Vol:	24	62	197	265	97	108	77	1047	49	361	1393	163
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	25	64	204	275	100	112	80	1085	51	374	1443	169
Added Vol:	9	27	101	14	24	67	41	68	22	153	116	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	34	91	305	289	124	179	121	1153	73	527	1559	178
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	91	305	289	124	179	121	1153	73	527	1559	178
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	91	305	289	124	179	121	1153	73	527	1559	178
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	91	305	289	124	179	121	1153	73	527	1559	178
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	3.00	1.00	2.00	2.69	0.31
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	5100	1700	3400	4578	522
Capacity Analysis Module:												
Vol/Sat:	0.02	0.05	0.09	0.08	0.07	0.11	0.07	0.23	0.04	0.15	0.34	0.34
OvlAdjV/S:			0.00									
Crit Moves:		****		****			****				****	

The Doheny Hotel
Year 2025 With Project
Weekday Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.790
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Street Name:	Del Obispo Street/Dana Point Harb		Pacific Coast Highway	
Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Protected	Protected	Protected	Protected
Rights:	Ovl	Include	Include	Include
Lanes:	1 0 1 0 2	2 0 1 0 1	1 0 3 0 1	2 0 2 1 0

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	49	138	459	229	104	138	144	1308	70	333	1551	237
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	51	143	476	237	108	143	149	1355	73	345	1607	246
Added Vol:	15	47	162	23	29	95	116	189	22	191	142	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	66	190	638	260	137	238	265	1544	95	536	1749	272
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	66	190	638	260	137	238	265	1544	95	536	1749	272
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	190	638	260	137	238	265	1544	95	536	1749	272
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	66	190	638	260	137	238	265	1544	95	536	1749	272
OvlAdjVol:			102									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	3.00	1.00	2.00	2.60	0.40
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	5100	1700	3400	4415	685
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.19	0.08	0.08	0.14	0.16	0.30	0.06	0.16	0.40	0.40
OvlAdjV/S:			0.03									
Crit Moves:		****		****			****				****	

```
--------------------------------------------------------------------------------
                              The Doheny Hotel
                           Year 2025 With Project
                         Saturday Mid-day Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):         0.772
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100              Level Of Service:                  C
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:           Ovl            Include          Include          Include
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Lanes:        1  0  1  0  2   2  0  1  0  1   1  0  3  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      63  105   396   209  102   132   146 1248   118   468 1262   187
Growth Adj:  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:   65  109   410   217  106   137   151 1293   122   485 1307   194
Added Vol:     15   29   140    32   32   137   138  196    26   172  214    36
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   80  138   550   249  138   274   289 1489   148   657 1521   230
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    80  138   550   249  138   274   289 1489   148   657 1521   230
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   80  138   550   249  138   274   289 1489   148   657 1521   230
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   80  138   550   249  138   274   289 1489   148   657 1521   230
OvlAdjVol:                 0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  1.00  1.00 3.00  1.00  2.00 2.61  0.39
Final Sat.:  1700 1700  3400  3400 1700  1700  1700 5100  1700  3400 4431   669
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.08  0.16  0.07 0.08  0.16  0.17 0.29  0.09  0.19 0.34  0.34
OvlAdjV/S:              0.00
Crit Moves:  ****                        ****  ****                   ****
********************************************************************************
```

The Doheny Hotel
Year 2025 With Project
Weekday Morning Peak Hour - With Improvements

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.570
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Street Name: Del Obispo Street/Dana Point Harb — Pacific Coast Highway

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected	
Rights:		Ovl			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	2	2 0	1 0	2	2 0	3 0	1	2 0	2 1	0

Volume Module:												
Base Vol:	24	62	197	265	97	108	77	1047	49	361	1393	163
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	25	64	204	275	100	112	80	1085	51	374	1443	169
Added Vol:	9	27	101	14	24	67	41	68	22	153	116	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	34	91	305	289	124	179	121	1153	73	527	1559	178
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	91	305	289	124	179	121	1153	73	527	1559	178
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	91	305	289	124	179	121	1153	73	527	1559	178
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	91	305	289	124	179	121	1153	73	527	1559	178
OvlAdjVol:			0									

Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	2.00	2.00	3.00	1.00	2.00	2.69	0.31
Final Sat.:	1700	1700	3400	3400	1700	3400	3400	5100	1700	3400	4578	522

Capacity Analysis Module:												
Vol/Sat:	0.02	0.05	0.09	0.08	0.07	0.05	0.04	0.23	0.04	0.15	0.34	0.34
OvlAdjV/S:			0.00									
Crit Moves:		****		****				****		****		

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--------------------------------------------------------------------------------
                              The Doheny Hotel
                           Year 2025 With Project
                 Weekday Evening Peak Hour - With Improvements
--------------------------------------------------------------------------------

                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):         0.712
Loss Time (sec):       5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100               Level Of Service:                  C
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb        Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:            Ovl            Include          Include          Include
Min. Green:    0    0    0    0    0    0    0    0    0    0    0    0
Lanes:        1  0  1  0  2   2  0  1  0  2   2  0  3  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      49  138  459   229  104  138   144 1308   70   333 1551  237
Growth Adj:  1.04 1.04 1.04  1.04 1.04 1.04  1.04 1.04 1.04  1.04 1.04 1.04
Initial Bse:   51  143  476   237  108  143   149 1355   73   345 1607  246
Added Vol:     15   47  162    23   29   95   116  189   22   191  142   26
PasserByVol:    0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:   66  190  638   260  137  238   265 1544   95   536 1749  272
User Adj:    1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:    66  190  638   260  137  238   265 1544   95   536 1749  272
Reduct Vol:     0    0    0     0    0    0     0    0    0     0    0    0
Reduced Vol:   66  190  638   260  137  238   265 1544   95   536 1749  272
PCE Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
MLF Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
FinalVolume:   66  190  638   260  137  238   265 1544   95   536 1749  272
OvlAdjVol:                102
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700 1700  1700 1700 1700  1700 1700 1700  1700 1700 1700
Adjustment:  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
Lanes:       1.00 1.00 2.00  2.00 1.00 2.00  2.00 3.00 1.00  2.00 2.60 0.40
Final Sat.:  1700 1700 3400  3400 1700 3400  3400 5100 1700  3400 4415  685
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.11 0.19  0.08 0.08 0.07  0.08 0.30 0.06  0.16 0.40 0.40
OvlAdjV/S:                0.03
Crit Moves:       ****       ****             ****                  ****
********************************************************************************
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--------------------------------------------------------------------------------
                              The Doheny Hotel
                           Year 2025 With Project
                 Saturday Mid-day Peak Hour - With Improvements
--------------------------------------------------------------------------------

                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):         0.689
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100              Level Of Service:                  B
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb      Pacific Coast Highway
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Protected        Protected
Rights:            Ovl            Include          Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        1  0  1  0  2   2  0  1  0  2   2  0  3  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     63   105   396   209   102   132   146  1248   118   468  1262   187
Growth Adj: 1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04
Initial Bse:  65   109   410   217   106   137   151  1293   122   485  1307   194
Added Vol:    15    29   140    32    32   137   138   196    26   172   214    36
PasserByVol:   0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:  80   138   550   249   138   274   289  1489   148   657  1521   230
User Adj:   1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:   80   138   550   249   138   274   289  1489   148   657  1521   230
Reduct Vol:    0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:  80   138   550   249   138   274   289  1489   148   657  1521   230
PCE Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
FinalVolume:  80   138   550   249   138   274   289  1489   148   657  1521   230
OvlAdjVol:                 0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700  1700
Adjustment: 1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Lanes:      1.00  1.00  2.00  2.00  1.00  2.00  2.00  3.00  1.00  2.00  2.61  0.39
Final Sat.: 1700  1700  3400  3400  1700  3400  3400  5100  1700  3400  4431   669
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.05  0.08  0.16  0.07  0.08  0.08  0.09  0.29  0.09  0.19  0.34  0.34
OvlAdjV/S:              0.00
Crit Moves:       ****        ****                    ****        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                              The Doheny Hotel
                          Year 2025 With Project
                          Weekday Morning Peak Hour
--------------------------------------------------------------------------------

                       Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):      0.3      Worst Case Level Of Service: B[ 10.7]
********************************************************************************
Street Name:     Dana Point Harbor Drive              Project Access
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Lanes:        0  0  2  0  0   0  0  2  0  1   0  0  0  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  283     0     0  507     0     0    0     0     0    0     0
Growth Adj:  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:    0  293     0     0  525     0     0    0     0     0    0     0
Added Vol:      0  137     0     0  143    56     0    0    31     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0  430     0     0  668    56     0    0    31     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  430     0     0  668    56     0    0    31     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0  430     0     0  668    56     0    0    31     0    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   334  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   668  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   668  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.05  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.1  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.7 xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     B     *    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:     xxxxxx           xxxxxx             10.7           xxxxxx
ApproachLOS:        *                *                 B                *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
```

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--------------------------------------------------------------------------------
                              The Doheny Hotel
                           Year 2025 With Project
                          Weekday Evening Peak Hour
--------------------------------------------------------------------------------

                     Level Of Service Computation Report
          2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):       0.3      Worst Case Level Of Service: B[ 11.0]
********************************************************************************
Street Name:      Dana Point Harbor Drive               Project Access
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Lanes:         0  0  2  0  0   0  0  2  0  1   0  0  0  0  1   0  0  0  0  0
------------|----------------||----------------||----------------||----------------|
Volume Module:
Base Vol:        0  646    0     0  507    0     0    0    0     0    0    0
Growth Adj:   1.04 1.04 1.04  1.04 1.04 1.04  1.04 1.04 1.04  1.04 1.04 1.04
Initial Bse:     0  669    0     0  525    0     0    0    0     0    0    0
Added Vol:       0  224    0     0  187   55     0    0   49     0    0    0
PasserByVol:     0    0    0     0    0    0     0    0    0     0    0    0
Initial Fut:     0  893    0     0  712   55     0    0   49     0    0    0
User Adj:     1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Adj:      1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00
PHF Volume:      0  893    0     0  712   55     0    0   49     0    0    0
Reduct Vol:      0    0    0     0    0    0     0    0    0     0    0    0
FinalVolume:     0  893    0     0  712   55     0    0   49     0    0    0
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   356  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   646  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   646  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.08  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  11.0 xxxxx xxxx xxxxx
LOS by Move:     *    *    *     *    *    *     *    *    B     *    *    *
Movement:      LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *    *     *    *    *     *    *    *     *    *    *
ApproachDel:        xxxxxx           xxxxxx            11.0           xxxxxx
ApproachLOS:          *                *                B                *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
```

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--------------------------------------------------------------------------------
                              The Doheny Hotel
                            Year 2025 With Project
                         Saturday Mid-day Peak Hour
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
            2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):       0.3       Worst Case Level Of Service: B[ 11.9]
********************************************************************************
Street Name:      Dana Point Harbor Drive                 Project Access
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:            Include          Include          Include          Include
Lanes:        0  0  2  0  0    0  0  2  0  1    0  0  0  0  1    0  0  0  0  0
------------|----------------||----------------||----------------||----------------|
Volume Module:
Base Vol:        0  564     0     0  688     0     0     0     0     0     0     0
Growth Adj:   1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:     0  584     0     0  713     0     0     0     0     0     0     0
Added Vol:       0  184     0     0  166    65     0     0    49     0     0     0
PasserByVol:     0    0     0     0    0     0     0     0     0     0     0     0
Initial Fut:     0  768     0     0  879    65     0     0    49     0     0     0
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:      0  768     0     0  879    65     0     0    49     0     0     0
Reduct Vol:      0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:     0  768     0     0  879    65     0     0    49     0     0     0
------------|----------------||----------------||----------------||----------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|----------------||----------------||----------------||----------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   439  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   571  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   571  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.09  xxxx xxxx  xxxx
------------|----------------||----------------||----------------||----------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.3  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  11.9 xxxxx xxxx xxxxx
LOS by Move:     *    *     *     *    *     *     *    *     B     *    *     *
Movement:      LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      xxxxxx           xxxxxx             11.9            xxxxxx
ApproachLOS:         *                *                 B                *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
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The Doheny Hotel
Year 2025 With Project
Weekday Morning Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach

Cycle (sec):	100	Critical Vol./Cap.(X):	0.246
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Street Name:	Dana Point Harbor Drive						Park Lantern/Doheny State Beach					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	9	240	10	28	397	82	27	1	13	4	1	16
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	9	249	10	29	411	85	28	1	13	4	1	17
Added Vol:	0	109	0	28	147	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	358	10	57	558	85	28	1	13	4	1	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	358	10	57	558	85	28	1	13	4	1	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	9	358	10	57	558	85	28	1	13	4	1	17
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	9	358	10	57	558	85	28	1	13	4	1	17
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.96	0.04	1.00	1.00	1.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1639	61	1700	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.11	0.01	0.03	0.16	0.05	0.02	0.02	0.01	0.00	0.00	0.01
Crit Moves:	****				****		****					****

The Doheny Hotel
Year 2025 With Project
Weekday Evening Peak Hour

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach

Cycle (sec):	100	Critical Vol./Cap.(X):	0.392
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	A

Street Name:	Dana Point Harbor Drive						Park Lantern/Doheny State Beach					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	0 1	0 0	1	1 0	1 0	1
Volume Module:												
Base Vol:	14	502	13	37	424	42	106	1	19	10	1	38
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	15	520	13	38	439	44	110	1	20	10	1	39
Added Vol:	0	180	0	44	192	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	15	700	13	82	631	44	110	1	20	10	1	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	700	13	82	631	44	110	1	20	10	1	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	700	13	82	631	44	110	1	20	10	1	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	15	700	13	82	631	44	110	1	20	10	1	39
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	0.99	0.01	1.00	1.00	1.00	1.00
Final Sat.:	1700	3400	1700	1700	3400	1700	1684	16	1700	1700	1700	1700
Capacity Analysis Module:												
Vol/Sat:	0.01	0.21	0.01	0.05	0.19	0.03	0.06	0.07	0.01	0.01	0.00	0.02
Crit Moves:		****		****			****					****

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-------------------------------------------------------------------------------
                              The Doheny Hotel
                          Year 2025 With Project
                        Saturday Mid-day Peak Hour
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*******************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
*******************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):          0.348
Loss Time (sec):       5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:       100              Level Of Service:                   A
*******************************************************************************
Street Name:      Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected         Permitted        Permitted
Rights:           Include          Include           Include          Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:       1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     11   483    22   56   588    44   36     1    19   13     2    45
Growth Adj: 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04
Initial Bse:  11   500    23   58   609    46   37     1    20   13     2    47
Added Vol:     0   140     0   44   171     0    0     0     0    0     0     0
PasserByVol:   0     0     0    0     0     0    0     0     0    0     0     0
Initial Fut:  11   640    23  102   780    46   37     1    20   13     2    47
User Adj:   1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
PHF Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
PHF Volume:   11   640    23  102   780    46   37     1    20   13     2    47
Reduct Vol:    0     0     0    0     0     0    0     0     0    0     0     0
Reduced Vol:  11   640    23  102   780    46   37     1    20   13     2    47
PCE Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
MLF Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
FinalVolume:  11   640    23  102   780    46   37     1    20   13     2    47
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700  1700
Adjustment: 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Lanes:      1.00  2.00  1.00 1.00  2.00  1.00 0.97  0.03  1.00 1.00  1.00  1.00
Final Sat.: 1700  3400  1700 1700  3400  1700 1654    46  1700 1700  1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.01  0.19  0.01 0.06  0.23  0.03 0.02  0.02  0.01 0.01  0.00  0.03
Crit Moves:       ****       ****             ****                         ****
*******************************************************************************
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<u>Year 2025 With Project – Peak Season</u>

The Doheny Hotel
Year 2025 With Project
Weekday Morning Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.648
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	B

Street Name:	Del Obispo Street/Dana Point Harb		Pacific Coast Highway	
Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Protected	Protected	Protected	Protected
Rights:	Ovl	Include	Include	Include
Lanes:	1 0 1 0 2	2 0 1 0 1	1 0 3 0 1	2 0 2 1 0

Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	26	68	217	292	107	119	85	1152	54	397	1532	179
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	27	70	225	303	111	123	88	1193	56	411	1587	185
Added Vol:	9	27	101	14	24	67	41	68	22	153	116	9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	97	326	317	135	190	129	1261	78	564	1703	194
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	36	97	326	317	135	190	129	1261	78	564	1703	194
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	97	326	317	135	190	129	1261	78	564	1703	194
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	97	326	317	135	190	129	1261	78	564	1703	194
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	3.00	1.00	2.00	2.69	0.31
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	5100	1700	3400	4577	523
Capacity Analysis Module:												
Vol/Sat:	0.02	0.06	0.10	0.09	0.08	0.11	0.08	0.25	0.05	0.17	0.37	0.37
OvlAdjV/S:			0.00									
Crit Moves:		****		****			****				****	

The Doheny Hotel
Year 2025 With Project
Weekday Evening Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.851
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Street Name: Del Obispo Street/Dana Point Harb | Pacific Coast Highway

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	2	2 0	1 0	1	1 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	54	152	505	252	114	152	158	1439	77	366	1706	261
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	56	157	523	261	118	157	164	1491	80	379	1767	270
Added Vol:	15	47	21	23	29	95	116	189	22	43	142	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	71	204	544	284	147	252	280	1680	102	422	1909	296
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	71	204	544	284	147	252	280	1680	102	422	1909	296
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	204	544	284	147	252	280	1680	102	422	1909	296
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	71	204	544	284	147	252	280	1680	102	422	1909	296
OvlAdjVol:			122									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	3.00	1.00	2.00	2.60	0.40
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	5100	1700	3400	4415	685
Capacity Analysis Module:												
Vol/Sat:	0.04	0.12	0.16	0.08	0.09	0.15	0.16	0.33	0.06	0.12	0.43	0.43
OvlAdjV/S:			0.04									
Crit Moves:		****		****			****				****	

The Doheny Hotel
Year 2025 With Project
Saturday Mid-day Peak Hour - Peak Season

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.822
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	D

Street Name:	Del Obispo Street/Dana Point Harb						Pacific Coast Highway					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 0 2			2 0 1 0 1			1 0 3 0 1			2 0 2 1 0		
Volume Module:												
Base Vol:	69	116	436	230	112	145	161	1412	130	515	1388	206
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	71	120	452	238	116	150	167	1463	135	534	1438	213
Added Vol:	15	43	126	32	32	137	138	196	26	172	214	36
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	86	163	578	270	148	287	305	1659	161	706	1652	249
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	86	163	578	270	148	287	305	1659	161	706	1652	249
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	86	163	578	270	148	287	305	1659	161	706	1652	249
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	86	163	578	270	148	287	305	1659	161	706	1652	249
OvlAdjVol:			0									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	1.00	1.00	3.00	1.00	2.00	2.61	0.39
Final Sat.:	1700	1700	3400	3400	1700	1700	1700	5100	1700	3400	4431	669
Capacity Analysis Module:												
Vol/Sat:	0.05	0.10	0.17	0.08	0.09	0.17	0.18	0.33	0.09	0.21	0.37	0.37
OvlAdjV/S:			0.00									
Crit Moves:	****					****	****				****	

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--------------------------------------------------------------------------------
                              The Doheny Hotel
                           Year 2025 With Project
                  Weekday Morning Peak Hour - Peak Season
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):         0.648
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100               Level Of Service:                  B
********************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:     North Bound       South Bound       East Bound        West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected         Protected         Protected         Protected
Rights:           Ovl             Include           Include           Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:       1  0  1  0  2   2  0  1  0  2   1  0  3  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     26   68   217   292  107   119    85 1152    54   397 1532   179
Growth Adj:  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:  27   70   225   303  111   123    88 1193    56   411 1587   185
Added Vol:     9   27   101    14   24    67    41   68    22   153  116     9
PasserByVol:   0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  36   97   326   317  135   190   129 1261    78   564 1703   194
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   36   97   326   317  135   190   129 1261    78   564 1703   194
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  36   97   326   317  135   190   129 1261    78   564 1703   194
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  36   97   326   317  135   190   129 1261    78   564 1703   194
OvlAdjVol:                  0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  2.00  1.00 3.00  1.00  2.00 2.69  0.31
Final Sat.:  1700 1700  3400  3400 1700  3400  1700 5100  1700  3400 4577   523
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.06  0.10  0.09 0.08  0.06  0.08 0.25  0.05  0.17 0.37  0.37
OvlAdjV/S:              0.00
Crit Moves:       ****        ****              ****                   ****
********************************************************************************
```

The Doheny Hotel
Year 2025 With Project
Weekday Evening Peak Hour - Peak Season - With Improvements

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)

Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast

Cycle (sec):	100	Critical Vol./Cap.(X):	0.769
Loss Time (sec):	5 (Y+R=0.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Street Name: Del Obispo Street/Dana Point Harb — Pacific Coast Highway

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ovl			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	2	2 0	1 0	2	2 0	3 0	1	2 0	2 1	0
Volume Module:												
Base Vol:	54	152	505	252	114	152	158	1439	77	366	1706	261
Growth Adj:	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Initial Bse:	56	157	523	261	118	157	164	1491	80	379	1767	270
Added Vol:	15	47	21	23	29	95	116	189	22	43	142	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	71	204	544	284	147	252	280	1680	102	422	1909	296
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	71	204	544	284	147	252	280	1680	102	422	1909	296
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	204	544	284	147	252	280	1680	102	422	1909	296
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	71	204	544	284	147	252	280	1680	102	422	1909	296
OvlAdjVol:			122									
Saturation Flow Module:												
Sat/Lane:	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	2.00	2.00	1.00	2.00	2.00	3.00	1.00	2.00	2.60	0.40
Final Sat.:	1700	1700	3400	3400	1700	3400	3400	5100	1700	3400	4415	685
Capacity Analysis Module:												
Vol/Sat:	0.04	0.12	0.16	0.08	0.09	0.07	0.08	0.33	0.06	0.12	0.43	0.43
OvlAdjV/S:			0.04									
Crit Moves:		****		****			****				****	

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------------------------------------------------------------------------------
                              The Doheny Hotel
                           Year 2025 With Project
         Saturday Mid-day Peak Hour - Peak Season - With Improvements
------------------------------------------------------------------------------

                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
******************************************************************************
Intersection #1 Del Obispo Street/Dana Point Harbor Drive (NS) at Pacific Coast
******************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):         0.758
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100              Level Of Service:                  C
******************************************************************************
Street Name:Del Obispo Street/Dana Point Harb       Pacific Coast Highway
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected        Protected        Protected
Rights:           Ovl            Include          Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:       1  0  1  0  2   2  0  1  0  2   2  0  3  0  1   2  0  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      69  116   436   230  112   145   161 1412   130   515 1388   206
Growth Adj:  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:   71  120   452   238  116   150   167 1463   135   534 1438   213
Added Vol:     15   43   126    32   32   137   138  196    26   172  214    36
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   86  163   578   270  148   287   305 1659   161   706 1652   249
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    86  163   578   270  148   287   305 1659   161   706 1652   249
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   86  163   578   270  148   287   305 1659   161   706 1652   249
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   86  163   578   270  148   287   305 1659   161   706 1652   249
OvlAdjVol:                 0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       1.00 1.00  2.00  2.00 1.00  2.00  2.00 3.00  1.00  2.00 2.61  0.39
Final Sat.:  1700 1700  3400  3400 1700  3400  3400 5100  1700  3400 4431   669
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.10  0.17  0.08 0.09  0.08  0.09 0.33  0.09  0.21 0.37  0.37
OvlAdjV/S:                0.00
Crit Moves:       ****        ****                   ****        ****
******************************************************************************
```

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--------------------------------------------------------------------------------
                               The Doheny Hotel
                            Year 2025 With Project
                    Weekday Morning Peak Hour - Peak Season
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):       0.3      Worst Case Level Of Service: B[ 10.9]
********************************************************************************
Street Name:      Dana Point Harbor Drive                 Project Access
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:            Include          Include          Include          Include
Lanes:         0  0  2  0  0   0  0  2  0  1   0  0  0  0  1   0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0  311     0     0  558     0     0     0     0     0     0     0
Growth Adj:   1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:     0  322     0     0  578     0     0     0     0     0     0     0
Added Vol:       0  137     0     0  143    56     0     0    31     0     0     0
PasserByVol:     0    0     0     0    0     0     0     0     0     0     0     0
Initial Fut:     0  459     0     0  721    56     0     0    31     0     0     0
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:      0  459     0     0  721    56     0     0    31     0     0     0
Reduct Vol:      0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:     0  459     0     0  721    56     0     0    31     0     0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   361  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   642  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   642  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.05  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.9 xxxxx xxxx xxxxx
LOS by Move:     *    *     *     *    *     *     *    *     B     *    *     *
Movement:      LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:        xxxxxx           xxxxxx             10.9           xxxxxx
ApproachLOS:           *                *                 B                *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
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--------------------------------------------------------------------------------
                             The Doheny Hotel
                          Year 2025 With Project
                   Weekday Evening Peak Hour - Peak Season
--------------------------------------------------------------------------------

                     Level Of Service Computation Report
          2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
********************************************************************************
Average Delay (sec/veh):      0.3       Worst Case Level Of Service: B[ 10.6]
********************************************************************************
Street Name:     Dana Point Harbor Drive                  Project Access
Approach:      North Bound       South Bound        East Bound        West Bound
Movement:     L  -  T  -  R   L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:      Uncontrolled      Uncontrolled       Stop Sign         Stop Sign
Rights:          Include           Include           Include           Include
Lanes:        0  0  2  0  0   0  0  2  0  1    0  0  0  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  711     0     0  558     0     0     0     0     0     0     0
Growth Adj:  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:    0  737     0     0  578     0     0     0     0     0     0     0
Added Vol:      0   83     0     0   39    55     0     0    49     0     0     0
PasserByVol:    0    0     0     0    0     0     0     0     0     0     0     0
Initial Fut:    0  820     0     0  617    55     0     0    49     0     0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  820     0     0  617    55     0     0    49     0     0     0
Reduct Vol:     0    0     0     0    0     0     0     0     0     0     0     0
FinalVolume:    0  820     0     0  617    55     0     0    49     0     0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   309  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   693  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   693  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.07  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.2  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.6 xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     B     *    *     *
Movement:     LT - LTR - RT   LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:     xxxxxx            xxxxxx             10.6             xxxxxx
ApproachLOS:        *                 *                 B                 *
********************************************************************************
Note: Queue reported is the number of cars per lane.
********************************************************************************
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------------------------------------------------------------------------------
                              The Doheny Hotel
                           Year 2025 With Project
                 Saturday Mid-day Peak Hour - Peak Season
------------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Unsignalized Method (Future Volume Alternative)
******************************************************************************
Intersection #2 Dana Point Harbor Drive (NS) at Project Access (EW) - #2
******************************************************************************
Average Delay (sec/veh):       0.3       Worst Case Level Of Service: B[ 12.3]
******************************************************************************
Street Name:      Dana Point Harbor Drive               Project Access
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Rights:            Include          Include          Include          Include
Lanes:         0  0  2  0  0    0  0  2  0  1    0  0  0  0  1    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0   620     0     0   757     0     0     0     0     0     0     0
Growth Adj:  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04  1.04
Initial Bse:    0   642     0     0   784     0     0     0     0     0     0     0
Added Vol:      0   184     0     0   166    65     0     0    49     0     0     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:    0   826     0     0   950    65     0     0    49     0     0     0
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Volume:     0   826     0     0   950    65     0     0    49     0     0     0
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
FinalVolume:    0   826     0     0   950    65     0     0    49     0     0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.9 xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3 xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   475  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   541  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   541  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.09  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.3  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  12.3 xxxxx xxxx xxxxx
LOS by Move:    *     *     *     *     *     *     *     *     B     *     *     *
Movement:      LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *     *     *     *     *     *     *     *     *     *     *     *
ApproachDel:      xxxxxx           xxxxxx             12.3            xxxxxx
ApproachLOS:        *                *                  B                *
******************************************************************************
Note: Queue reported is the number of cars per lane.
******************************************************************************
```

```
--------------------------------------------------------------------------------
                            The Doheny Hotel
                         Year 2025 With Project
                 Weekday Morning Peak Hour - Peak Season
--------------------------------------------------------------------------------

                   Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):          0.262
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        100              Level Of Service:                   A
********************************************************************************
Street Name:      Dana Point Harbor Drive       Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Protected        Protected         Permitted         Permitted
Rights:          Include          Include           Include           Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:       1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     10  264    11    31  437    90    30    1    14     4    1    18
Growth Adj: 1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:  10  274    11    32  453    93    31    1    15     4    1    19
Added Vol:     0  109     0    28  147     0     0    0     0     0    0     0
PasserByVol:   0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  10  383    11    60  600    93    31    1    15     4    1    19
User Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   10  383    11    60  600    93    31    1    15     4    1    19
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  10  383    11    60  600    93    31    1    15     4    1    19
PCE Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  10  383    11    60  600    93    31    1    15     4    1    19
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:      1.00 2.00  1.00  1.00 2.00  1.00  0.97 0.03  1.00  1.00 1.00  1.00
Final Sat.: 1700 3400  1700  1700 3400  1700  1645   55  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.01 0.11  0.01  0.04 0.18  0.05  0.02 0.02  0.01  0.00 0.00  0.01
Crit Moves: ****                  ****        ****                        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                               The Doheny Hotel
                            Year 2025 With Project
                   Weekday Evening Peak Hour - Peak Season
--------------------------------------------------------------------------------

                      Level Of Service Computation Report
      ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
********************************************************************************
Cycle (sec):           100             Critical Vol./Cap.(X):         0.377
Loss Time (sec):         5 (Y+R=0.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:         100             Level Of Service:                  A
********************************************************************************
Street Name:      Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Protected        Protected        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:    0     0     0   0     0     0   0     0     0   0     0     0
Lanes:         1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      15   552    14   41   466    51  117     1    21   11     1    42
Growth Adj:  1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04
Initial Bse:   16   572    15   42   483    53  121     1    22   11     1    44
Added Vol:      0    39     0   44    44     0    0     0     0    0     0     0
PasserByVol:    0     0     0    0     0     0    0     0     0    0     0     0
Initial Fut:   16   611    15   86   527    53  121     1    22   11     1    44
User Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
PHF Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
PHF Volume:    16   611    15   86   527    53  121     1    22   11     1    44
Reduct Vol:     0     0     0    0     0     0    0     0     0    0     0     0
Reduced Vol:   16   611    15   86   527    53  121     1    22   11     1    44
PCE Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
FinalVolume:   16   611    15   86   527    53  121     1    22   11     1    44
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700  1700
Adjustment:  1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Lanes:       1.00  2.00  1.00 1.00  2.00  1.00 0.99  0.01  1.00 1.00  1.00  1.00
Final Sat.:  1700  3400  1700 1700  3400  1700 1686    14  1700 1700  1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01  0.18  0.01 0.05  0.15  0.03 0.07  0.07  0.01 0.01  0.00  0.03
Crit Moves:        ****       ****             ****                         ****
********************************************************************************
```

```
-------------------------------------------------------------------------------
                              The Doheny Hotel
                           Year 2025 With Project
                   Saturday Mid-day Peak Hour - Peak Season
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
*******************************************************************************
Intersection #3 Dana Point Harbor Drive (NS) at Park Lantern/Doheny State Beach
*******************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):          0.371
Loss Time (sec):        5 (Y+R=0.0 sec) Average Delay (sec/veh):       xxxxxx
Optimal Cycle:        100              Level Of Service:                   A
*******************************************************************************
Street Name:       Dana Point Harbor Drive      Park Lantern/Doheny State Beach
Approach:        North Bound      South Bound      East Bound       West Bound
Movement:       L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Protected        Protected         Permitted        Permitted
Rights:            Include          Include          Include          Include
Min. Green:     0    0     0    0    0     0    0    0     0    0    0     0
Lanes:          1  0  2  0  1   1  0  2  0  1   0  1  0  0  1   1  0  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       12  531    24    62  647    48    40    1    21    14    2    50
Growth Adj:   1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04  1.04 1.04  1.04
Initial Bse:    12  550    25    64  670    50    41    1    22    15    2    52
Added Vol:       0  140     0    44  171     0     0    0     0     0    0     0
PasserByVol:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    12  690    25   108  841    50    41    1    22    15    2    52
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     12  690    25   108  841    50    41    1    22    15    2    52
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    12  690    25   108  841    50    41    1    22    15    2    52
PCE Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:    12  690    25   108  841    50    41    1    22    15    2    52
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1700 1700  1700  1700 1700  1700  1700 1700  1700  1700 1700  1700
Adjustment:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:        1.00 2.00  1.00  1.00 2.00  1.00  0.98 0.02  1.00  1.00 1.00  1.00
Final Sat.:   1700 3400  1700  1700 3400  1700  1659   41  1700  1700 1700  1700
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.01 0.20  0.01  0.06 0.25  0.03  0.02 0.02  0.01  0.01 0.00  0.03
Crit Moves:        ****        ****             ****                        ****
*******************************************************************************
```

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Appendix K

Preliminary Geotechnical Evaluation

PRELIMINARY GEOTECHNICAL EVALUATION

FOR

DANA POINT HOTEL PROJECT
CITY OF DANA POINT, ORANGE COUNTY, CALIFORNIA

PREPARED FOR

BEVERLY HILLS HOSPITALITY GROUP, LLC
25325 DANA POINT HARBOR DRIVE
DANA POINT, CALIFORNIA 92629

PREPARED BY

GEOTEK, INC.
4130 FLAT ROCK DRIVE, SUITE 140
RIVERSIDE, CALIFORNIA 92505

PROJECT NO. 0480-CR3 DECEMBER 18, 2009

GEOTEK

GeoTek, Inc.
4130 Flat Rock Drive, Suite 140, Riverside, CA 92505-5864
951-710-1160 Office 951-710-1167 Fax www.geotekusa.com

December 18, 2009
Project No. 0480-CR3

Beverly Hills Hospitality Group, LLC
25325 Dana Point Harbor Drive
Dana Point, California 92629

Attention: Mr. Michael Draz

Subject: Preliminary Geotechnical Evaluation
Dana Point Hotel Project
City of Dana Point, Orange County, California

Dear Mr. Draz:

We are pleased to provide herewith the results of our preliminary geotechnical evaluation for the proposed Dana Point Hotel project, located southwest of the intersection of Pacific Coast Highway and Harbor Drive, in the City of Dana Point, Orange County, California. This report presents the results of our evaluation, discussion of our findings, and provides preliminary geotechnical parameters and recommendations for the proposed structure(s). In our opinion, site development appears feasible from a geotechnical viewpoint provided that the geotechnical parameters and recommendations included herein are incorporated into the design and construction phases of site development.

The opportunity to be of service is sincerely appreciated. If you should have any questions, please do not hesitate to call our office.

Respectfully submitted,
GeoTek, Inc.

REGISTERED GEOLOGIST
EDWARD H. LaMONT
No. 1892
Exp. 7-31-10
Certified Engineering Geologist
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
EDMOND VARDEH
No. 56992
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Edward H. LaMont
CEG 1892, Exp. 07/31/10
Principal Geologist

Edmond Vardeh
RCE 56992, Exp. 06/30/11
Project Engineer

Distribution: (6) Addressee

G:\GeoTek\Projects\0451 to 0500\0480CR3 Beverly Hills Hospitality Group\0480CR3 Preliminary Geo Report.doc

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1. INTENT

It is the intent of this report to aid in the design and construction of the proposed hotel building at the subject site. Implementation of the advice presented in Section 6 of this report is intended to reduce risk associated with construction projects. The professional opinions and geotechnical advice contained in this report are not intended to imply total performance of the project or guarantee that unusual or variable conditions will not be discovered during or after construction.

The scope of our field evaluation is limited to the areas explored. Further, no evaluation of any existing site improvements is included. The scope is based on our understanding of the project and the client's needs, and geotechnical engineering standards normally used on similar projects in this region.

2. PURPOSE AND SCOPE OF SERVICES

The purpose of this study was to evaluate the general geotechnical conditions on the site with respect to currently anticipated improvements. Services provided for this study included the following:

- Research and review of available geologic, geotechnical data, online aerial photographs, and general information pertinent to the site.
- Scheduling of and boring location mark out for Underground Service Alert, including onsite meeting with some utility representatives.
- Site exploration consisting of the excavation, logging, and sampling of four (4) exploratory hollow-stem borings; two (2) bucket-auger borings; and, five (5) cone penetrometer test borings.
- Laboratory testing of representative soil samples collected during the field investigation.

- Review and evaluation of site seismicity.
- Data compilation, geologic and engineering review and analyses, and
- Compilation of this geotechnical report which presents our findings, conclusions, and recommendations for anticipated site improvements.

3. SITE DESCRIPTION AND PROPOSED DEVELOPMENT

3.1 SITE DESCRIPTION

The project site is located within the City of Dana Point, Orange County, California (see Figure 1). The site is bounded by Dana Point Harbor Drive to the southeast, Pacific Coast Highway to the northeast, Park Lantern to the southwest, and existing commercial properties to the west. Two existing commercial buildings are located on the property adjacent Pacific Coast Highway, and two hotel buildings with related improvements and parking areas are situated just south and southwest of the commercial buildings described above, toward the central portion of the site. The southern site area is occupied by a City of Dana Point parking lot, located atop a small hill.

The central to northeastern portions of the subject property are relatively flat-lying. The City parking lot area is bounded by descending slopes to the north, south and east, which are up to roughly 20 feet in height. Existing slope gradients are roughly 2:1 (horizontal to vertical). An outdoor basketball court (not part of the subject property) is located to the west of the parking lot.

Based on our local experience and review of published geologic maps, the site is underlain by middle-to upper-Miocence age marine sediments which form the hill in the southern portion of the site, and are blanketed by a variable depth of Quaternary age alluvium in flat-lying central to northeastern portions of the site. A site area geologic map is shown on Figure 2 at the back of the text of this report. Quaternary age terrace deposits may also be present, as might fill soils associated with existing site improvements. The relatively flat-lying site areas are identified by the State of California (Seismic Hazard Zone Maps) as being underlain by land which requires an evaluation for earthquake induced liquefaction potential, and the hillside portion of the site as requiring an evaluation of earthquake induced landslide potential. No Earthquake Fault Zone (Alquist-Priolo) is shown to be on or near the site.

3.2 PROPOSED DEVELOPMENT

Based on review of the conceptual drawings provided, the site will be developed into a multi-story hotel building, with portions below existing grades. The improvements are anticipated to include retail, business centers, commercial facilities, hotel rooms and parking areas. The building is anticipated to be up to 6-stories in height, and be comprised of a combination of concrete and wood frame structural areas. Existing site improvements are to be razed. Proposed building loads are not presently known.

In addition, a relatively large retaining wall is anticipated to be constructed within the existing slope between the building site and the parking area to the west. The retaining wall may be utilized as a common wall for the building/below ground parking area of the hotel, and a retaining wall for the slope. Total height of this wall may be up to approximately 20 feet. A schematic site development plan is included herein as Figure 3.

4. FIELD EXPLORATION AND LABORATORY TESTING

4.1 FIELD EXPLORATION

Field exploration was conducted in August and November of 2008 and consisted of excavating four exploratory borings with a hollow stem auger drill rig to a maximum depth of 100.2 feet; two bucket auger borings to a maximum depth of 51 feet; and, five cone penetrometer test borings to a maximum depth of roughly 60 feet. An engineering geologist from our firm logged the excavations and collected soil samples for use in subsequent laboratory testing. Logs of exploratory borings are included in Appendix A. Boring locations are shown on the Boring Location Map (Figure 4).

4.2 LABORATORY TESTING

Laboratory testing was performed on selected disturbed and relatively undisturbed samples collected during the field investigation. The purpose of the laboratory testing was to confirm the field classification of the soil materials encountered and to evaluate their physical properties for use in the engineering design and analyses. The results of the laboratory testing program along with a brief description and relevant information regarding testing procedures are included in Appendix B.

5. GEOLOGIC AND SOILS CONDITIONS

5.1 REGIONAL SETTING

The subject property is situated in the Peninsular Ranges province. The Peninsular Ranges province is one of the largest geomorphic units in western North America. Basically, it extends from the Transverse Ranges geomorphic province and the Los Angeles Basin, 975 miles south to the tip of Baja California. This province varies in width from about 30 to 100 miles. It is bounded on the west by the Pacific Ocean, on the south by the Gulf of California and on the east by the Colorado Desert Province.

The Peninsular Ranges are essentially a series of northwest-southeast oriented fault blocks. Three major fault zones are found in this province. The Elsinore Fault zone and the San Jacinto Fault zones trend northwest-southeast and are found in the near the middle of the province. The San Andreas Fault zone borders the northeasterly margin of the province.

The subject property is located approximately 5.4 km east of the Newport-Inglewood fault zone. In general, the site area is underlain by marine terrace alluvial sediments. A geologic map for the area is included on Figure 2 at the back of the text of this report.

5.2 GENERAL SOIL CONDITIONS

A brief description of the earth materials encountered in our borings is presented in the following sections, along with a description of some of the laboratory test results. More detailed descriptions of these materials are provided in the logs of the exploratory borings included in Appendix A. Based on our site observations, subsurface excavations and review of published geologic maps, the site is underlain to the depths explored by surficial undocumented fill soils, Quaternary-age alluvium and marine terrace deposits (not encountered in our explorations).

5.2.1 Undocumented Fill Soils

Fill soils were encountered in the upper portions of our borings excavated across the areas explored (see logs in Appendix A). These materials generally consist of silty fine sand to fine sandy silty clay. The fill materials encountered were roughly five to ten feet deep at our boring locations toward the eastern (low-lying) portions of the site, and 15-20 feet deep in the parking lot area toward the western site area. Fill material thicknesses are likely variable across the site. Existing undocumented fill materials are not suitable for support of anticipated improvements, due primarily to their lack of documentation and unknown overall condition.

5.2.2 Alluvium

Quaternary-age alluvium was encountered in all of the borings excavated in the study area, to the depths explored. In general, interbedded silty fine sand and fine sandy silty clay are the dominant soil types encountered. Based on our experience in the area and with similar soils, the onsite materials possess a very low to medium expansion potential (0<EI<90), when tested in accordance with Table 18A-I-B of the 2007 California Building Code (CBC). Overall, site materials are likely in the very low to medium expansion potential level as well, with local variations likely in more clayey lenses.

The consolidation potential of selected alluvial materials was evaluated in the laboratory on representative soil samples in general accordance with the consolidation test procedure per ASTM D 2435. Inundation with water was performed at an equivalent overburden pressure of 2 kips/sf. The test results indicate that the potential for 'hydro-consolidation' in the alluvium is considered low (less than 1.0 percent). The test results are included in Appendix B.

5.3 SURFACE AND GROUNDWATER

5.3.1 Surface Water

If encountered during earthwork construction at the site, surface and/or near surface water on this property is the result of precipitation or surface run-off from surrounding sites. Overall site drainage is in a southwesterly direction, and is via sheet flow. Provisions for surface drainage will need to be addressed by the project civil engineer.

5.3.2 Groundwater

Groundwater was encountered at a depth as shallow as 13 feet below ground surface (bgs) in Boring HSA-1. Groundwater is anticipated to impact currently planned site development, as a below ground level garage is planned. Dewatering will likely be required prior to some below-ground construction activities. This should be further addressed when more specific site development plans become available.

5.4 FAULTING AND SEISMICITY

The geologic structure of the entire southern California area is dominated mainly by northwest-trending faults associated with the San Andreas system. The site is in a seismically active region. No active or potentially active fault is known to exist at this site nor is the site situated within an *"Alquist-Priolo"* Earthquake Fault Zone. No active faulting was noted or suspected on the site. The site is located within a State of California designated Seismic Hazard Zone for earthquake induced liquefaction potential. This is addressed in later sections of this report.

The project site is located within approximately 5.4 kilometers of the Newport-Inglewood fault zone (see attached EQFAULT (Blake) computer program printouts in Appendix C).

5.4.1 Design Response Spectra

The site is located at approximately 33.4649 Latitude and -117.6886 Longitude. Site spectral accelerations (S_s and S_1), for 0.2 and 1.0 second periods for a Class "E" site, was determined from the USGS Website, Earthquake Hazards Program, Interpolated Probabilistic Ground

Motion for the Conterminous 48 States by Latitude/Longitude, 2002 Data. The results are presented in the following table:

SITE SEISMIC PARAMETERS	
Mapped 0.2 sec Period Spectral Acceleration, Ss	1.575g
Mapped 1.0 sec Period Spectral Acceleration, S1	0.579g
Site Coefficient for Site Class "E", Fa	0.9
Site Coefficient for Site Class "E", Fv	2.4
Maximum Considered Earthquake Spectral Response Acceleration Parameter at 0.2 Second, SMS	1.418g
Maximum Considered Earthquake Spectral Response Acceleration Parameter at 1 second, SM1	1.377g
Design Spectral Response Acceleration for Parameter for 0.2 Second, SDS	0.945g
Design Spectral Response Acceleration for Parameter 1.0 Second, SD1	0.918g

5.5 LIQUEFACTION AND SETTLEMENT

As previously indicated, the subject site is located within a State of California designated Seismic Hazard Zone for earthquake induced liquefaction potential. As a result, we have completed a liquefaction analyses for the site (see Appendix D). Based on the results of our analyses, we have concluded that there is a liquefaction potential on this site. Our analyses included dry settlement and liquefaction analyses for the current groundwater condition of 13 ft bgs and a rise to 5 feet bgs. Our analysis is included in Appendix D.

Total settlement as a result of earthquake induced strain is estimated to be on the order of 5.6 inches for current groundwater conditions, and 6.6 inches for high groundwater conditions (see analysis). It is important to note that, while it is typical to assume that differential settlements are on the order of 1/2 of the total predicted, due to the homogeneity of subsurface conditions on this site and the recommended remedial grading, the seismic induced settlement is likely to be global and over a large area mitigating much of the potential for differential.

5.6 OTHER SEISMIC HAZARDS

Evidence of ancient landslides or slope instabilities at this site was not observed during our investigation. Slope instabilities would not be expected at this site due to the flat nature of the proposed development areas, and the large retaining wall proposed within the existing slope that descends from the city parking lot area down to the eastern portions of the site. The potential for landslides and/or slope instabilities is considered low.

The potential for secondary seismic hazards such as seiche and tsunami are considered to be low due to site elevation and distance from an open body of water. Surface fault rupture potential is considered negligible due to absence of any nearby active faults.

Lateral spreading potential is considered negligible due to the absence of any significant slope(s) on or in the immediate vicinity of the site that would support the eastern portion of the site, which is the site area most susceptible to liquefaction.

The potential for settlement is addressed above.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 GENERAL

Anticipated site development as described in Section 3.2, appears feasible from a geotechnical viewpoint, provided that the following recommendations are incorporated into the design and construction phases of development. The potential for seismically induced settlements is considered the most significant concern for the site. Currently proposed site development should meet with the minimum geotechnical design parameters provided herein. Site development plans should be submitted to GeoTek for review and comment as they become available. Additional or modified recommendations will be warranted.

As no specific design plans are currently available, it is not yet plausible to offer specific recommendations for actual site development. However, geotechnical parameters are provided to assist the structural engineer in developing the criteria for anticipated site construction, based on our understanding of the project.

6.2 EARTHWORK CONSIDERATIONS

Grading/earthwork planned for the site should be performed in general accordance with the local City of Dana Point and/or County of Orange grading ordinances and applicable provisions of the 2010 California Building Code (CBC). GeoTek should be consulted to review proposed grading plans when they become available and provide specific recommendations as may be appropriate. The following recommendations should be considered for site work, and are in-part intended to reduce differential settlement.

- Any site preparation should start with the removal of deleterious materials and vegetation, and be disposed of properly off site.

- Temporary excavations within the onsite materials should be stable at 1H:1V inclinations for short durations during construction, and where cuts do not exceed 5 feet in height.

- Building pad areas should be excavated a minimum of seven (7) feet below finish pad grade, or two (2) feet below proposed footings, whichever is deeper. Over-excavations should extend a minimum of seven (7) feet beyond the limits of proposed structure foundations. After the excavation bottom is scarified and compacted a layer of geogrid (BX4100 or BX4200, or equivalent) should be placed followed by placement of two (2) feet of compacted fill an additional geogrid layer and the remaining portion of the fill. The intent of the removal and geogrid is to help mitigate the surface effects of the anticipated differential settlements.

- Pavement and free standing wall areas should be overexcavated a minimum of three (3) feet below finish pad grade, or one foot below deepest foundation.

- Any proposed design cut areas should be observed by a representative of GeoTek upon excavation. Cuts into existing undocumented fill will likely require additional remedial grading and replacement with compacted fill in order to meet with acceptable industry standards.

- Prior to replacing the overexcavated area with compacted fill materials, the exposed bottom subgrade should be scarified to a minimum of eight inches, brought to at least optimum moisture content and then recompacted to minimum project standards.

- The on-site materials are considered suitable for reuse as compacted fill provided they are free from vegetation, roots, and rock or hard lumps greater than six inches in diameter. The earthwork contractor should ensure that all proposed excavated materials to be used for backfilling at this project are approved by the soils engineer.

- Any undercut areas should be brought to final grade elevations with fill compacted in layers no thicker than eight inches compacted to at least 92 percent of maximum dry density at near optimum moisture content, as determined in accordance with ASTM D 1557. Prior to receiving fill, the bottom of any excavation should be scarified to a depth of six inches; moisture conditioned, and recompacted to at least 90 percent of the maximum dry density.

- Several factors will impact earthwork balancing on the site, including shrinkage and subsidence. For planning purposes, a shrinkage factor of 10-15% may be considered for the materials requiring removal and recompaction. Subsidence may occur in site alluvial areas as a result of compaction below the removal bottom or surcharging. Subsidence could range from 0 to 0.10 feet.

- Excavations in the onsite materials should be generally accomplished with conventional earthmoving or excavating equipment in good operating condition.

- Utility trenches should be properly backfilled. After bedding has been placed in accordance with project specifications, backfill should be compacted in layers no thicker than 12 inches and to at least 90 percent of the maximum dry density (or to the otherwise recommended compaction level), at or above optimum moisture content, as determined in accordance with ASTM Test Method D 1557.

6.3 DESIGN RECOMMENDATIONS

Foundation design criteria for a conventional foundation system in conformance with the 2007 CBC are presented herein based on the presence of very low to medium expansive materials. These are typical design criteria for the proposed foundations and are not intended to supersede the design by the structural engineer. The foundation system should also be designed to tolerate up to 3.3 inches (½ of the total) of differential settlement in any 40 foot span and 1.65 inches overall assuming the geogrid mats are constructed as recommended above. Other types of foundations may require additional evaluation and a review of the recommendations presented herein. The basement for the proposed hotel will likely be supported on a mat slab supported by caissons.

6.3.1 Foundation Design Criteria

It should be noted that the following recommendations are based on soil support characteristics only. The structural engineer should analyze and design the slab and beam reinforcement based on actual loading conditions. Conditions (static and dynamic loads), soils structure interaction and consideration of stiffness and deflections in various slab and foundation scenarios should be considered in order to develop appropriate design and specific details. We provide the following criteria for design of conventional and mat-type foundations:

6.3.1.1 Shallow Foundations: An allowable bearing capacity of 2000 pounds per square foot (psf) may be used to design shallow continuous footings with a minimum of 12 inch soil penetration and overall depth of 18 inches and a minimum width of 12 inches, and also for isolated pad footings at least 24 inches square and 24 inches deep. This value may be increased by 200 pounds per square foot for each additional 12 inches in depth or 200 pounds per square foot for each additional 12 inches in width to a maximum value of 3000 psf. Additionally, an increase of one-third may be applied when considering short-term live loads (e.g. seismic and wind loads). The passive earth pressure may be computed as an equivalent fluid having a density of 250 psf per foot of depth, to a maximum earth pressure of 2,000 psf for footings founded on compacted fill. A coefficient of friction between soil and concrete of 0.35 may be used with dead load forces. When combining passive pressure and frictional resistance, the passive pressure component should be reduced by one-third.

6.3.1.2 Continuous footings should be provided with reinforcement consisting of at least four No. 5 reinforcing bars, two near the top and two near the bottom.

6.3.2 Floor Slab Design

6.3.2.1 Concrete slab-on-grade floor construction should have a minimum thickness of five (5) inches and be reinforced with No. 3 bars at 18 inches on center in each direction, placed at the mid-depth of the slab. The design parameters do not account for concentrated loads (e.g. heavy machinery, fork lifts, etc.). Subgrade materials should be compacted to a minimum of 95% of the maximum laboratory density to a depth of 12 inches.

These recommendations are meant as minimums. The project structural engineer should review and verify that the minimum recommendations presented herein are considered adequate with respect to anticipated uses.

We recommend that control joints be placed in two directions spaced the numeric equivalent of two times the thickness of the slab in inches changed to feet (e.g. a five inch slab would have control joints at ten feet centers). These joints are a widely accepted means to control cracks and should be reviewed by the project structural engineer.

If flexible design is utilized, then the modulus of subgrade reaction (k-value) may be used in the design of the floor slabs *supporting heavy live loads (e.g. fork lifts, machine foundations and heavy storage areas.) A k-value (modulus of subgrade reaction) of 75 pounds per square inch per inch (pci) should be used for preliminary slab design.* If grading recommendations are complied with, concrete floor slabs may be supported on a 4-inch layer of aggregate base material. If vapor /moisture intrusion is undesireable it is recommended that a plastic water vapor retarder is utilized below the slab. The retarder should conform to the specifications presented in ASTM E1745-97 and should be placed as described in ASTM E1643-98 and the Guide for Concrete Floor and Slab Construction, published by the American Concrete Institute (ACE 302.IR-96).

6.3.3 Foundation Settlement

Based on the prevailing subsurface conditions, the total settlement is expected to be on the order of 1 to 2 inch under static loading and up to 6.6 inches under seismic loading (3.3 inches if recommendations provided herein are implemented). The majority of the static settlement will occur during construction. The recommended geogrid system and removal is intended to lessen the surface effects of seismically induced settlements (to 3.3 inches). Post-grading differential settlement under static conditions is expected to be limited to less than 1 inch in a 40-foot span.

6.4 RETAINING WALL DESIGN AND CONSTRUCTION

6.4.1 General Design Recommendations (as applicable for walls retaining up to 10 feet of material)

An allowable bearing capacity of 1,500 pounds per square foot, including both dead and live loads, may be used if footings are founded at a minimum of 18 inches into compacted fill and/or dense formational materials. The allowable bearing value may be increased by one-third when considering short-term live loads (e.g. seismic and wind loads). The passive resistance may be computed as an equivalent fluid pressure having a density of 250 psf per foot of depth, to a maximum earth pressure of 2,500 psf. A coefficient of friction between soil and concrete of 0.35 may be used with dead load forces. When combining passive pressure and frictional resistance, the passive pressure component should be reduced by one-third.

An equivalent fluid pressure approach may be used to compute the horizontal active pressure against the proposed walls. The appropriate fluid unit weights are given in Table 6.4.1 below for specific slope gradients of retained materials.

TABLE 6.4.1 – ACTIVE EARTH PRESSURES

Surface Slope of Retained Materials (H:V)	Equivalent Fluid Pressure (PCF)
Level	35
2:1	55

The above equivalent fluid weights do not include other superimposed loading conditions such as expansive soil, vehicular traffic, structures, seismic conditions or adverse geologic conditions.

6.4.2 Wall Backfill and Drainage

Selected onsite or import soil (SM/SW materials with EI<21 & PI<4) should be used for backfill provided they are screened of greater than 3-inch size gravels. Presence of other materials might necessitate revision to the parameters provided and modification of wall designs. The backfill materials should be placed in lifts no greater than 8-inches in thickness, moisture conditioned to at least optimum moisture content, and compacted at 90 percent relative compaction in accordance with ASTM Test Method D1557. The select backfill should extend up and away from the back of the retaining wall footing, at a gradient of 1:1 (h:v), to the proposed finish grade. Proper surface drainage needs to be provided and maintained.

Retaining walls should be provided with an adequate pipe and gravel back drain system to prevent build up of hydrostatic pressures. Backdrains should consist of a 4-inch diameter perforated PVC pipe (schedule 40 or approved equivalent) embedded in a minimum of one cubic foot per lineal foot of 3/8 to one inch clean crushed rock or equivalent, wrapped in filter fabric (Mirafi 140N or approved equivalent). The drain system should be connected to a suitable outlet. A minimum of two outlets should be provided for each drain section. Walls from 2 to 4 feet in height may be drained using localized gravel packs behind weep holes at 10 feet maximum spacing (e.g. approximately 1.5 cubic feet of gravel in a woven plastic bag). Wall drainage should comply with the minimum requirements by the wall designer or manufacturer.

6.5 PRELIMINARY SHORING DESIGN

A temporary shoring system consisting of cantilever steel beams and wood lagging would likely be installed to allow for the required excavation for the large site retaining wall(s). The ultimate embedment depth should be provided by the project structural engineer and/ or shoring contractor based on the geotechnical parameters provided herein.

It should be noted that some difficulty may be experienced in the drilling of piles due to groundwater. Caving could occur during drilling of the piles and the anchors through sand deposits. Casing and/or drilling mud may be necessary to utilize during the drilling and installation of the piles. Alternatively, piles may be driven into place. Final selection of an appropriate system must include due consideration of the potential effects of vibrations, deflections, and footing area disturbance on the neighboring structures. If shoring is removed following construction, it will create void spaces which must be filled as shoring removal progresses. To reduce the risk of possible settlement induced distress on adjacent properties, shoring elements along property boundaries should be abandoned in place.

6.5.1 Lateral Pressure

For design of cantilevered shoring, a triangular distribution of lateral earth pressure may be used. It may be assumed that the retained soils with a level surface behind the shoring will exert a lateral pressure equal to that developed by a fluid with a density of 35 pounds per cubic foot (pcf). Retained soils with a 2:1 backslope ratio will exert a lateral pressure equal to a fluid with a density of 50 pcf.

If street traffic is located within 10 feet of the shoring, the upper 10 feet of shoring adjacent to the traffic should be designed to resist a uniform lateral pressure of 100 pounds per square foot (psf), which is a result of an assumed 300 psf surcharge behind the shoring due to normal street traffic.

6.5.2 Design of Piles

For the design of standard soldier piles adjacent to a level excavation bottom, and spaced at least two diameters on centers, the allowable lateral bearing value (passive value) of the soils below the level of excavation may be assumed to be 300 psf per foot of depth, up to a maximum of 3000 psf. To develop the full lateral value, provisions should be taken to assure firm contact between the soldier piles and the undisturbed soils.

The soldier piles below the excavated level may be used to resist downward loads, if any. The downward skin frictional resistance between the soldier piles and the soils below the excavated level may be taken as equal to 300 psf.

6.5.3 Lagging

Continuous wood lagging will be required between the soldier piles. The soldier piles should be designed for the full anticipated lateral pressure. However, the pressure on the lagging will be less due to arching in the soils. We recommend that the lagging be designed for the recommended earth pressure, but limited to a maximum value of 1,000 psf. If the shoring designer determines that the pressures are in excess of the carrying capacity of wood lagging, steel sheet piles could be used.

6.5.4 Deflection

It is difficult to accurately predict the amount of deflection of a shored profile. It should be realized, however, that some deflection will occur. We anticipate that this deflection would be on the order of 1 inch at the top of the planned 10- to 12-foot shoring. If greater deflection occurs during construction, additional bracing may be necessary to minimize deflection. If desired to reduce the deflection of the shoring, a greater active pressure leading to a more stiffer section could be used.

6.5.5 Dewatering

A dewatering system would be required to lower the groundwater level at the site during basement removal/excavation. It is GeoTek's opinion that surrounding areas should not experience any adverse affects due to temporary dewatering. However, if dewatering should lower the existing ground water elevation by more than three feet below the basement level during construction, the effects to the surrounding areas should be re-evaluated by the project geotechnical engineer.

6.5.6 Monitoring

Some means of monitoring the performance of the shoring system are recommended. The monitoring should consist of periodic surveying of the lateral and vertical locations of the tops of all the soldier piles and the lateral movement along the entire lengths of selected soldier piles. We suggest that photographs and survey data of the adjacent improvements be made prior to excavation.

6.5.7 Foundation Set Backs

Where applicable (not anticipated for this site), the following setbacks should apply to all foundations. Any improvements not conforming to these setbacks may be subject to lateral movements and/or differential settlements:

- The outside bottom edge of all footings should be set back a minimum of H/3 (where H is the slope height) from the face of any descending slope. The setback should be at least seven feet and need not exceed 40 feet.
- The bottom of all footings for structures near retaining walls should be deepened so as to extend below a 1:1 projection upward from the bottom inside edge of the wall stem.
- The bottom of any existing foundations for structures should be deepened so as to extend below a 2:1 projection upward from the bottom of the nearest excavation or trench.
- Setbacks from ascending slope(s) should meet with minimum CBC requirements guidelines.

6.5.8 Soil Corrosivity

The soil resistivity at this site was tested in the laboratory on representative samples collected during the field investigation. The results of the testing indicate that the onsite soils are considered severely corrosive to buried metal in accordance with current standards used by corrosion engineers. The corrosion test results include a pH of 7.75, a chloride content of 96 ppm, and a resistivity of 660 ohm-cm. These characteristics can be considered typical of soils commonly found in southern California. We recommend that a corrosion engineer be consulted to provide recommendations for proper protection of buried metal at this site.

6.5.9 Soil Sulfate Content

The sulfate content was determined in the laboratory for a representative onsite soil sample. The results indicate that the water soluble sulfate range is less than 0.1 percent by weight, which is considered negligible as per Table 19-A-4 of the 2007 CBC. Based upon the test results, type II cement or an equivalent may be used. Based on the proximity of the site to the ocean, shallow groundwater conditions and proposed site development (below ground parking garage), Type V concrete, with a water to cement ratio of 0.45, is recommended due to likely severe sulfate exposures.

6.6 POST CONSTRUCTION CONSIDERATIONS

6.6.1 Landscape Maintenance and Planting

Water has been shown to weaken the inherent strength of soil, and slope stability is significantly reduced by overly wet conditions. Positive surface drainage away from graded slopes if any should be maintained and only the amount of irrigation necessary to sustain plant life should be provided for planted slopes. Controlling surface drainage and runoff, and maintaining a suitable vegetation cover can minimize erosion. Plants selected for landscaping should be lightweight, deep-rooted types that require little water and are capable of surviving the prevailing climate.

Overwatering should be avoided. The soils should be maintained in a solid to semi-solid state as defined by the materials Atterberg Limits. Care should be taken when adding soil amendments to avoid excessive watering. Leaching as a method of soil preparation prior to planting is not recommended. An abatement program to control ground-burrowing rodents should be implemented and maintained. This is critical as burrowing rodents can decreased the long-term performance of slopes and/or compacted fills.

It is common for planting to be placed adjacent to structures in planter or lawn areas. This will result in the introduction of water into the ground adjacent to the foundation. This type of landscaping should be avoided. If used, then extreme care should be exercised with regard to the irrigation and drainage in these areas. Waterproofing of the foundation and/or subdrains may be warranted and advisable. We could discuss these issues, if desired, when plans are made available.

6.6.2 Drainage

The need to maintain proper surface drainage and subsurface systems cannot be overly emphasized. Positive site drainage should be maintained at all times. Drainage should not flow uncontrolled down any descending slope. Water should be directed away from foundations and not allowed to pond or seep into the ground. Pad drainage should be directed toward approved area(s) and not be blocked by other improvements.

It is the owner's responsibility to maintain and clean drainage devices on or contiguous to their lot. In order to be effective, maintenance should be conducted on a regular and routine schedule and necessary corrections made prior to each rainy season.

6.7 PLAN REVIEW AND CONSTRUCTION OBSERVATIONS

We recommend that site grading, specifications, and foundation plans be reviewed by this office prior to construction to check for conformance with the recommendations of this report. We also recommend that GeoTek representatives be present during site grading and foundation construction to check for proper implementation of the geotechnical recommendations. These representatives should perform at least the following duties:

- Observe site clearing and grubbing operations for proper removal of all unsuitable materials.
- Observe and test bottom of removals prior to fill placement.
- Evaluate the suitability of on-site and import materials for fill placement, and collect soil samples for laboratory testing where necessary.
- Observe the fill for uniformity during placement including utility trenches. Also, test the fill for field density and relative compaction.
- Observe and probe foundation materials to confirm suitability of bearing materials.
- Provide inspection and testing of steel and concrete components.

7. LIMITATIONS

The materials observed on the project site appear to be representative of the area; however, soil and bedrock materials vary in character between excavations and natural outcrops or conditions exposed during site construction. Site conditions may vary due to seasonal changes or other factors. GeoTek, Inc. assumes no responsibility or liability for work, testing or recommendations performed or provided by others.

Since our recommendations are based on the site conditions observed and encountered, and laboratory testing, our conclusion and recommendations are professional opinions that are limited to the extent of the available data. Observations during construction are important to allow for any change in recommendations found to be warranted. These opinions have been derived in accordance with current standards of practice and no warranty is expressed or implied. Standards of practice are subject to change with time.

8. SELECTED REFERENCES

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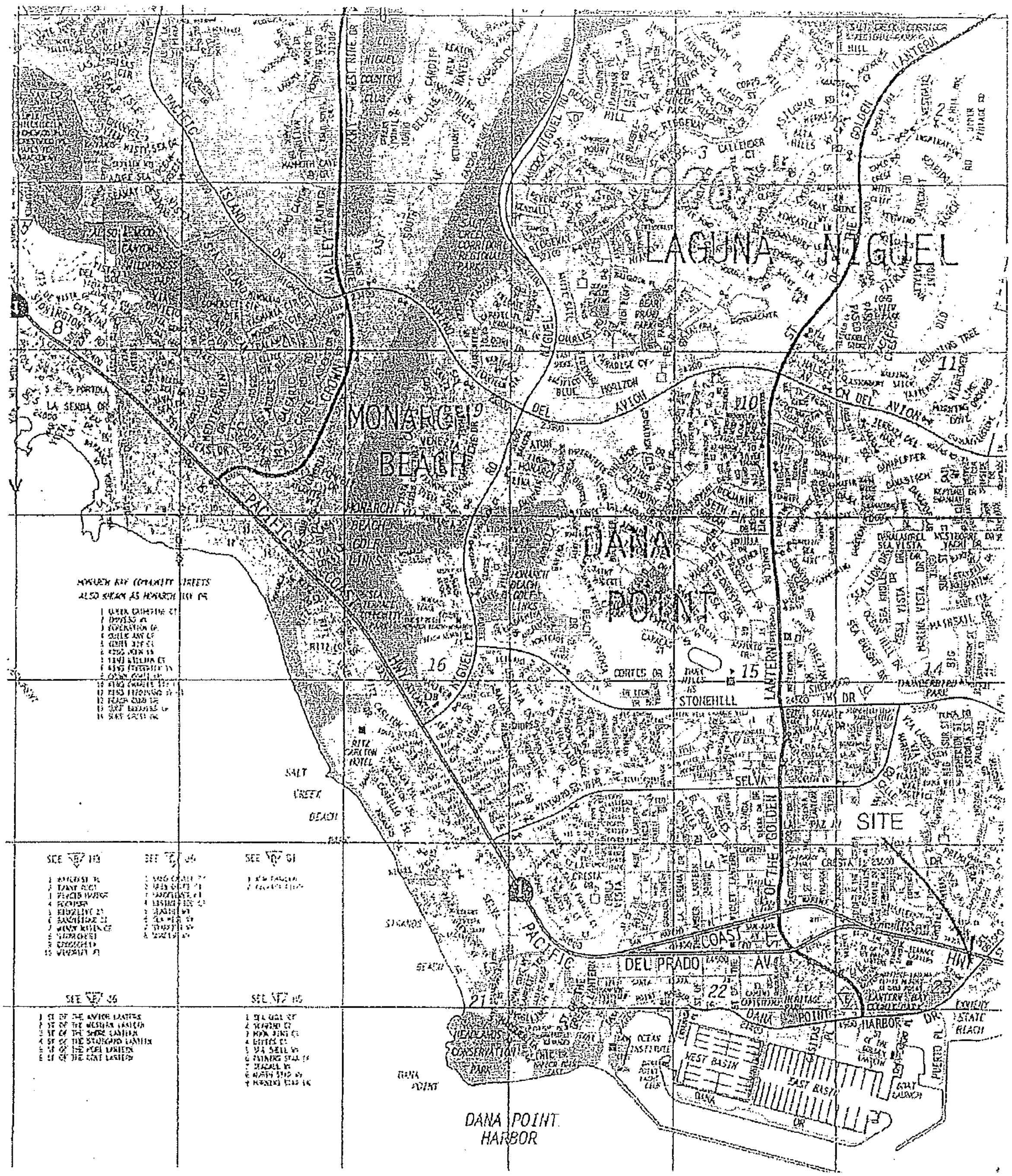
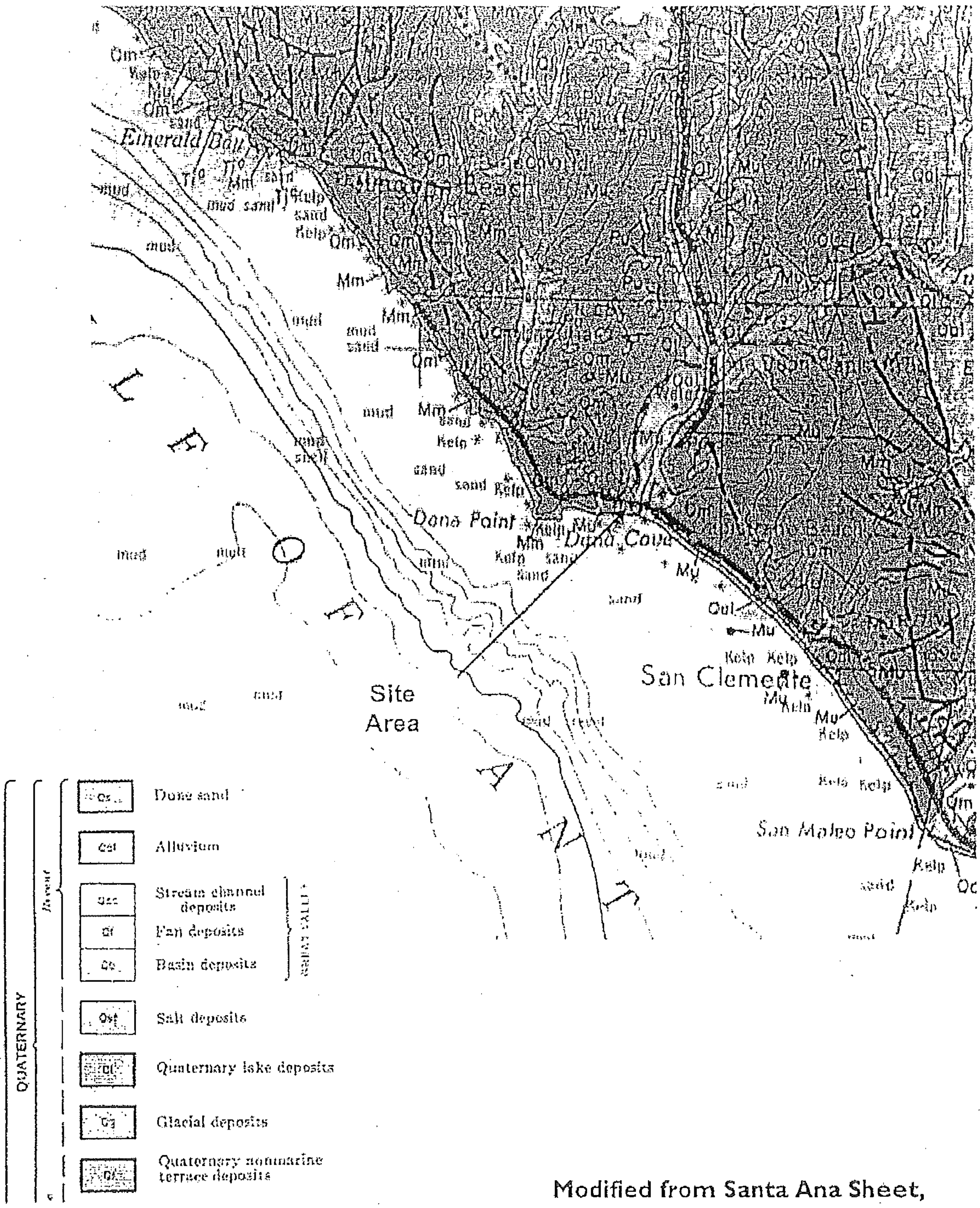
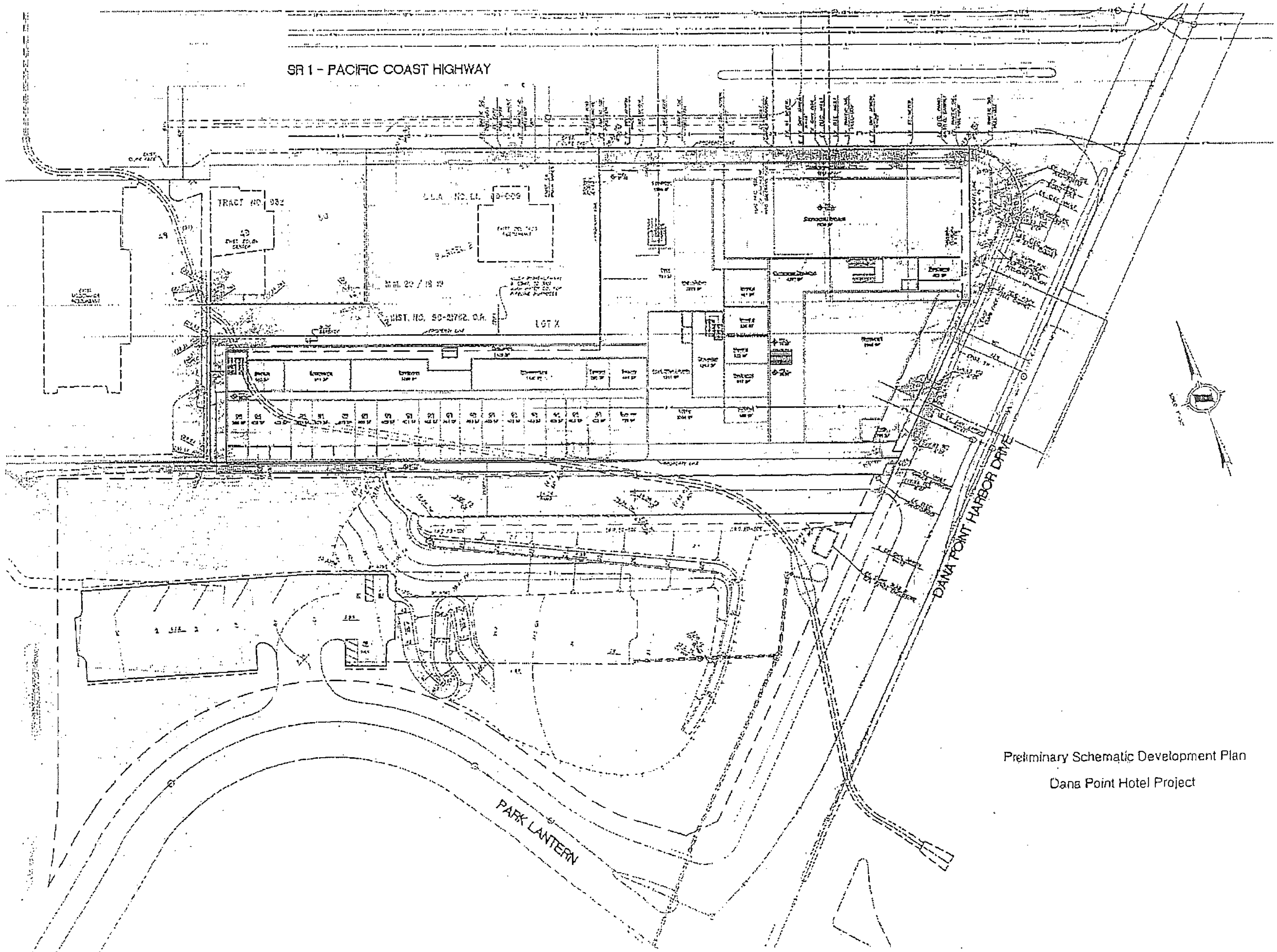


Beverly Hills Hospitality Group, LLC Dana Point Hotel Project City of Dana Point, California *GeoTek Project No.: 0480-CR3*	N Modified from The Thomas Guide, Orange County, Scale: 1" = 2400'	Figure 1 Site Location Map	GEOTEK



Modified from Santa Ana Sheet, Geologic Map of California

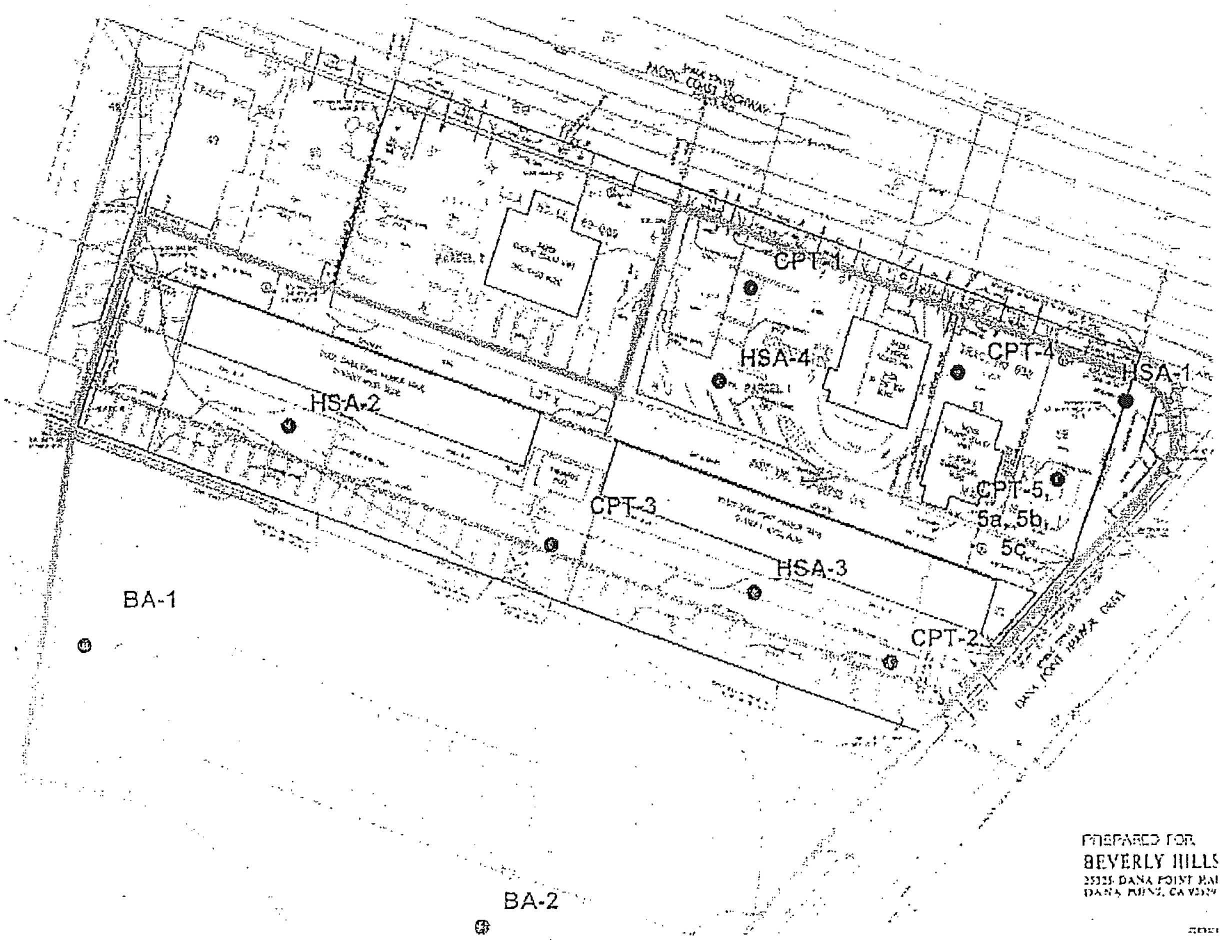
Beverly Hills Hospitality Group, LLC Dana Point Hotel Project Dana Point, California *GeoTek Project No.: 0480-CR3*	N	<u>Figure 2</u> Site Area Geology Map	GEOTEK



Preliminary Schematic Development Plan

Dana Point Hotel Project

Figure 3



Legend		
BA-1	●	Bucket Auger Boring
CPT-5c	●	Cone Penetrometer Test,
HSA-4	●	Hollow Stem Auger Boring

Doheny Hotel Project
Dana Point, California

Project No. 0480-CR3

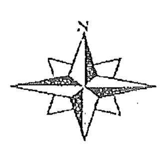


Figure 4

Boring Location Map

GEOTEK

APPENDIX A

LOG OF EXPLORATORY BORINGS &
CONE PENETROMETER TEST RESULTS

Dana Point Hotel Project
City of Dana Point, Orange County, California
Project No. 0480-CR3

GEOTEK

A - FIELD TESTING AND SAMPLING PROCEDURES

The Standard Penetration Test (SPT)

The SPT is performed in accordance with ASTM Test Method D 1586-99. The SPT sampler is typically driven into the ground 12 or 18 inches with a 140-pound hammer free falling from a height of 30 inches. Blow counts are recorded for every 6 inches of penetration as indicated on the log of boring. The split-barrel sampler has an external diameter of 2 inches and an unlined internal diameter of 1-3/8 inches. The samples of earth materials collected in the sampler are typically classified in the field, bagged, sealed and transported to the laboratory for further testing.

The Modified Split-Barrel Sampler (Ring)

The Ring sampler is driven into the ground in accordance with ASTM Test Method D 3550-84. The sampler, with an external diameter of 3.0 inches, is lined with 1-inch long, thin brass rings with inside diameters of approximately 2.4 inches. The sampler is typically driven into the ground 12 or 18 inches with a 140-pound hammer free falling from a height of 30 inches. Blow counts are recorded for every 6 inches of penetration as indicated on the log of boring. The samples are removed from the sample barrel in the brass rings, sealed, and transported to the laboratory for testing.

Bulk Samples (Large)

These samples are normally large bags of representative earth materials over 20 pounds in weight collected from the field by means of hand digging or exploratory cuttings.

Bulk Samples (Small)

These are plastic bag samples which are normally airtight and contain less than 5 pounds in weight of representative earth materials collected from the field by means of hand digging or exploratory cuttings. These samples are primarily used for determining natural moisture content and classification indices.

B - BORING LOG LEGEND

The following abbreviations and symbols often appear in the classification and description of soil and rock on the logs of borings:

SOILS

USCS	Unified Soil Classification System
f-c	Fine to coarse
f-m	Fine to medium

GEOLOGIC

B: Attitudes	Bedding: strike/dip
J: Attitudes	Joint: strike/dip
C:	Contact line
....	Dashed line denotes USCS material change
———	Solid Line denotes unit / formational change
━━━	Thick solid line denotes end of boring

(Additional denotations and symbols are provided on the logs of borings)

GeoTek, Inc.

LOG OF EXPLORATORY BORING

CLIENT:	Beverly Hills Hospitality Group	DRILLER:	2R Drilling	LOGGED BY:	EHL
PROJECT NAME	Dana Point Hotel	DRILL METHOD:	8" Hollow Stem	OPERATOR:	Nick
PROJECT NO.:	0480-CR3	HAMMER:	Auto 140#/30"	RIG TYPE:	CME 75
LOCATION:	See Boring Location Plan			DATE:	8/11/2008

BORING NO.: *HSA-1*

Depth (ft)	SAMPLES: Sample Type	SAMPLES: Blows/ 6 in	SAMPLES: Sample Number	USCS Symbol	MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing: Water Content (%)	Laboratory Testing: Dry Density (pcf)	Laboratory Testing: Others
				SM	**Asphaltic Concrete 0 - 3"** **Artificial Fill:** Clayey gravelly silty SAND (SM), medium gray brown, slightly moist to moist, loose to medium dense			
5	Ring	6 6 8	B1-1		SAME			
10	Ring	6 8 7	B1-2	CL	**Alluvium:** Silty CLAY (CL), dark gray, moist to very moist, soft to medium/stiff	24.4	93.5	
13 (Water Table)					Groundwater @ 13'			
15	Ring	3 4 6	B1-3		SAME	38.6	79.2	HC
20	SPT	2 4 9	B1-4		Silty SAND (SM), gray, saturated, stiff			SA
25	Ring	4 2 3	B1-5	CL/SM	Silty CLAY (CL) and silty medium SAND (SM), interbedded, dark gray, saturated, loose/soft	32.2	93.5	
30								

LEGEND

Sample type: ---Ring ---SPT ---Small Bulk ---Large Bulk ---No Recovery ---Water Table

Lab testing: AL = Atterberg Limits; EI = Expansion Index; SA = Sieve Analysis; RV = R-Value Test; SR = Sulfate/Resisitivity Test; SH = Shear Test; HC = Consolidation; MD = Maximum Density

GeoTek, Inc.

LOG OF EXPLORATORY BORING

CLIENT:	Beverly Hills Hospitality Group	DRILLER:	2R Drilling	LOGGED BY:	EHL
PROJECT NAME	Dana Point Hotel	DRILL METHOD:	8" Hollow Stem	OPERATOR:	Nick
PROJECT NO.:	0480-CR3	HAMMER:	Auto 140#/30"	RIG TYPE:	CME 75
LOCATION:	See Boring Location Plan			DATE:	8/11/2008

BORING NO.: *HSA-1 continued*

Depth (ft)	SAMPLES: Sample Type	Blows/6 in	Sample Number	USCS Symbol	MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing: Water Content (%)	Dry Density (pcf)	Others
30	SPT	3 4 10	B1-6	CL	continued Silty CLAY (CL), dark gray, saturated, stiff			
35	Ring	3 5 8	B1-7		SAME	22.3	93.3	HC
40	SPT	5 11 19	B1-8	ML	Fine sandy clayey SILT (ML), dark gray, saturated, very stiff			SA
45	Ring	8 18 35	B1-9	ML/SM	Fine sandy SILT (ML) to silty fine SAND (SM), gray, saturated, very stiff/dense	22.8	100.8	
50	SPT	6 11 19	B1-10	SM	Silty fine SAND (SM), medium gray, saturated, medium dense to dense			SA
55								
60								

LEGEND

Sample type: --Ring --SPT --Small Bulk --Large Bulk --No Recovery --Water Table

Lab testing: AL = Atterberg Limits; EI = Expansion Index; SA = Sieve Analysis; RV = R-Value Test; SR = Sulfate/Resisitivity Test; SH = Shear Test; HC= Hydrocollapse; MD = Maximum Density

GeoTek, Inc.

LOG OF EXPLORATORY BORING

CLIENT:	Beverly Hills Hospitality Group	DRILLER:	2R Drilling	LOGGED BY:	EHL
PROJECT NAME	Dana Point Hotel	DRILL METHOD:	8" Hollow Stem	OPERATOR:	Nick
PROJECT NO.:	0460-CR3	HAMMER:	Auto 140#/30"	RIG TYPE:	CME 75
LOCATION:	See Boring Location Plan			DATE:	8/11/2008

BORING NO.: *HSA-1 continued*

Depth (ft)	SAMPLES: Sample Type	Blows/ 6 in	Sample Number	USCS Symbol	MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing: Water Content (%)	Dry Density (pcf)	Others
60	Ring	7 23 50	B1-11	SM	continued Silty fine to medium SAND (SM), light to medium gray, saturated, dense			
65								
70	Ring	4 7 8	B1-12	ML	Sandy clayey SILT (ML), medium gray, saturated, stiff			SA
75								
80	Ring	9 17 23	B1-13	CL	Silty CLAY (CL), dark gray, saturated, very stiff			
85								
90								

LEGEND

Sample type: —Ring —SPT —Small Bulk —Large Bulk —No Recovery —Water Table

Lab testing: AL = Atterberg Limits; EI = Expansion Index; SA = Sieve Analysis; RV = R-Value Test; SR = Sulfate/Resistivity Test; SH = Shear Test; HC= Hydrocollapse; MD = Maximum Density

GeoTek, Inc.

LOG OF EXPLORATORY BORING

CLIENT:	Beverly Hills Hospitality Group	DRILLER:	2R Drilling	LOGGED BY:	EHL
PROJECT NAME:	Dana Point Hotel	DRILL METHOD:	8" Hollow Stem	OPERATOR:	Nick
PROJECT NO.:	0480-CR3	HAMMER:	Auto 140#/30"	RIG TYPE:	CME 75
LOCATION:	See Boring Location Plan			DATE:	8/11/2008

BORING NO.: *HSA-1 continued*

Depth (ft)	SAMPLES: Sample Type	Blows/ 6 in	Sample Number	USCS Symbol	MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing: Water Content (%)	Dry Density (pcf)	Others
90	SPT	17 35 45	B1-14		continued Older Alluvium: Silty clayey Siltstone & silty Sandstone, thinly bedded, moist, dipping ~30°, ~ 80% to 90% Claystone			
95								
100	Ring	50-2"	B1-15		SAME			
					BORING TERMINATED AT 100.2 FEET Groundwater encountered at 13' Boring backfilled with soil cuttings			
105								
110								
115								
120								

LEGEND

Sample type: --Ring --SPT --Small Bulk --Large Bulk --No Recovery --Water Table

Lab testing: AL = Atterberg Limits; EI = Expansion Index; SA = Sieve Analysis; RV = R-Value Test; SR = Sulfate/Resisitivity Test; SH = Shear Test; HC= Hydrocollapse; MD = Maximum Density

GeoTek, Inc.

LOG OF EXPLORATORY BORING

CLIENT:	Beverly Hills Hospitality Group	DRILLER:	2R Drilling	LOGGED BY:	EHL
PROJECT NAME	Dana Point Hotel	DRILL METHOD:	8" Hollow Stem	OPERATOR:	Nick
PROJECT NO.:	0480-CR3	HAMMER:	Auto 140#/30"	RIG TYPE:	CME 75
LOCATION:	See Boring Location Plan			DATE:	8/11/2008

Depth (ft)	SAMPLES: Sample Type	Blows/ 6 in	Sample Number	USCS Symbol	BORING NO.: *HSA-2* MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing: Water Content (%)	Dry Density (pcf)	Others
				SM	Asphaltic Concrete 0 - 3" Artificial Fill: Silty SAND (SM), medium gray, moist, loose to medium dense			
5	Ring	3 3 3	B2-1		SAME	11.6	109.0	
10	Ring	3 5 6	B2-2	SC	Alluvium: Clayey silty SAND (SC), brown, very moist, loose to medium dense	25.2	96.0	
15	Ring	3 5 6	B2-3		Groundwater @ 15' Clayey silty SAND (SC), dark gray brown, saturated, loose to medium dense	28.4	94.7	
20	SPT	2 2 2	B2-4		SAME			SA
25	Ring	4 5 6	B2-5		SAME	21.8	101.8	HC
30								

LEGEND

Sample type: --Ring --SPT --Small Bulk --Large Bulk --No Recovery --Water Table

Lab testing: AL = Atterberg Limits; EI = Expansion Index; SA = Sieve Analysis; RV = R-Value Test; SR = Sulfate/Resistivity Test; SH = Shear Test; HC= Consolidation; MD = Maximum Density

GeoTek, Inc.

LOG OF EXPLORATORY BORING

CLIENT:	Beverly Hills Hospitality Group	DRILLER:	2R Drilling	LOGGED BY:	EHL
PROJECT NAME	Dana Point Hotel	DRILL METHOD:	8" Hollow Stem	OPERATOR:	Nick
PROJECT NO.:	0480-CR3	HAMMER:	Auto 140#/30"	RIG TYPE:	CME 75
LOCATION:	See Boring Location Plan			DATE:	8/11/2008

BORING NO.: *HSA-2 continued*

Depth (ft)	SAMPLES: Sample Type	Blows/ 6 in	Sample Number	USCS Symbol	MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing: Water Content (%)	Dry Density (pcf)	Others
30	Ring	1 1 2	B2-6	SC	continued Sandy silty CLAY (CL), dark gray, saturated, soft			
35	Ring	4 4 7	B2-7	CL	Sandy silty CLAY (CL), dark gray, saturated, soft to medium	26.4	97.3	
40	SPT	3 5 7	B2-8		Fine to medium sandy CLAY (CL) and silty CLAY (CL), interbedded, dark gray, saturated, stiff			AL
45								
50	Ring	10 21 28	B2-9		Silty CLAY (CL), dark gray, very moist, very stiff	34.5	83.9	AL
55								
60								

LEGEND

Sample type: Ring, SPT, Small Bulk, Large Bulk, No Recovery, Water Table

Lab testing: AL = Atterberg Limits, EI = Expansion Index, SA = Sieve Analysis, RV = R-Value Test, SR = Sulfate/Resisitivity Test, SH = Shear Test, HC= Hydrocollapse, MD = Maximum Density

GeoTek, Inc.

LOG OF EXPLORATORY BORING

CLIENT:	Beverly Hills Hospitality Group	DRILLER:	2R Drilling	LOGGED BY:	EHL
PROJECT NAME	Dana Point Hotel	DRILL METHOD:	8" Hollow Stem	OPERATOR:	Nick
PROJECT NO.:	0480-CR3	HAMMER:	Auto 140#/30"	RIG TYPE:	CME 75
LOCATION:	See Boring Location Plan			DATE:	8/11/2008

BORING NO.: *HSA-2 continued*

Depth (ft)	SAMPLES: Sample Type	Blows/ 6 in	Sample Number	USCS Symbol	MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing: Water Content (%)	Dry Density (pcf)	Others
60	SPT	4 7 10	B2-10	CL	continued Silty CLAY (CL), dark gray, very moist, stiff to very stiff			
					BORING TERMINATED AT 61.5 FEET Groundwater encountered at 15' Boring backfilled with soil cuttings			
65								
70								
75								
80								
85								
90								

LEGEND

Sample type: --Ring --SPT --Small Bulk --Large Bulk --No Recovery --Water Table

Lab testing: AL = Atterberg Limits; EI = Expansion Index; SA = Sieve Analysis; RV = R-Value Test; SR = Sulfate/Resisitivity Test; SH = Shear Test; HC= Hydrocollapse; MD = Maximum Density

GeoTek, Inc.

LOG OF EXPLORATORY BORING

CLIENT:	Beverly Hills Hospitality Group	DRILLER:	2R Drilling	LOGGED BY:	EHL
PROJECT NAME	Dana Point Hotel	DRILL METHOD:	8" Hollow Stem	OPERATOR:	Nick
PROJECT NO.:	0480-CR3	HAMMER:	Auto 140#/30"	RIG TYPE:	CME 75
LOCATION:	See Boring Location Plan			DATE:	8/12/2008

BORING NO.: *HSA-3*

Depth (ft)	SAMPLES: Sample Type	Blows/ 6 In	Sample Number	USCS Symbol	MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing: Water Content (%)	Dry Density (pcf)	Others
0	Large Bulk			CL	Alluvium: Sandy silty CLAY (CL), dark gray, very moist, medium to stiff			
5	Ring	2 3 3	B3-1		SAME	18.9	104.6	
10	Ring	3 2 3	B3-2		SAME			
15	Ring	2 3 4	B3-3		Groundwater @ 15' SAME	20.9	97.7	
20	SPT	3 4 5	B3-4	ML	Clayey SILT (ML), dark gray, saturated, stiff			AL
25	SPT	2 4 5	B3-5		SAME			
30								

LEGEND

Sample type: Ring —Ring; SPT —SPT; —Small Bulk; —Large Bulk; —No Recovery; —Water Table

Lab testing: AL = Atterberg Limits; EI = Expansion Index; SA = Sieve Analysis; RV = R-Value Test; SR = Sulfate/Resistivity Test; SH = Shear Test; HC= Consolidation; MD = Maximum Density

GeoTek, Inc.

LOG OF EXPLORATORY BORING

CLIENT:	Beverly Hills Hospitality Group	DRILLER:	2R Drilling	LOGGED BY:	EHL
PROJECT NAME	Dana Point Hotel	DRILL METHOD:	8" Hollow Stem	OPERATOR:	Nick
PROJECT NO.:	0480-CR3	HAMMER:	Auto 140#/30"	RIG TYPE:	CME 75
LOCATION:	See Boring Location Plan			DATE:	8/12/2008

BORING NO.: *HSA-3 continued*

Depth (ft)	SAMPLES: Sample Type	Blows/ 6 in	Sample Number	USCS Symbol	MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing: Water Content (%)	Dry Density (pcf)	Others
30		Push 4 3	B3-6	SM	continued Silty fine SAND (SM), medium gray, saturated, loose			
35		Push 4 5	B3-7		SAME			
40		1 2 4	B3-8	SM/ML	Clayey silty fine SAND (SM) and clayey SILT (ML), dark gray, saturated, loose			SA
45								
50		5 7 23	B3-9	SM	Silty fine SAND (SM), medium gray, saturated, loose to medium			
					BORING TERMINATED AT 51.5 FEET Groundwater encountered at 15' Boring backfilled with soil cuttings			
55								
60								

LEGEND

Sample type: ---Ring ---SPT ---Small Bulk ---Large Bulk ---No Recovery ---Water Table

Lab testing: AL = Atterberg Limits; EI = Expansion Index; SA = Sieve Analysis; RV = R-Value Test; SR = Sulfate/Resistivity Test; SH = Shear Test; HC= Hydrocollapse; MD = Maximum Density

GeoTek, Inc.

LOG OF EXPLORATORY BORING

CLIENT:	Beverly Hills Hospitality Group	DRILLER:	2R Drilling	LOGGED BY:	EHL
PROJECT NAME:	Dana Point Hotel	DRILL METHOD:	8" Hollow Stem	OPERATOR:	Nick
PROJECT NO.:	0486-CR3	HAMMER:	Auto 140#/30"	RIG TYPE:	CME 75
LOCATION:	See Boring Location Plan			DATE:	8/12/2008

BORING NO.: *HSA-4*

Depth (ft)	SAMPLES: Sample Type	Blows/6 in	Sample Number	USCS Symbol	MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing: Water Content (%)	Dry Density (pcf)	Others
0	Large Bulk				Asphaltic Concrete 0'- 3"			MD, SR
					Artificial Fill:			
				CL	Sandy silty CLAY (CL), mottled yellow brown, moist, firm			
5	Ring	4	B4-1		SAME			
	Ring	2 6		CL	Alluvium: Silty clay (CL), dark gray, very moist, soft, porous			
10	Ring	4 5 6	B4-2		SAME			
15	Ring	2 4 5	B4-3	CL/ML	Groundwater @ 15' Silty CLAY (CL) to clayey SILT (ML), medium brown, very moist, soft			
20	SPT	Push 1 2	B4-4		SAME			
25	Ring	1 3 4	B4-5	CL	Silty CLAY (CL), dark gray, very moist, soft			HC
30								

LEGEND

Sample type: Ring --Ring; SPT --SPT; --Small Bulk; --Large Bulk; --No Recovery; --Water Table

Lab testing: AL = Atterberg Limits; EI = Expansion Index; SA = Sieve Analysis; RV = R-Value Test; SR = Sulfate/Resistivity Test; SH = Shear Test; HC= Consolidation; MD = Maximum Density

GeoTek, Inc.

LOG OF EXPLORATORY BORING

CLIENT:	Beverly Hills Hospitality Group	DRILLER:	2R Drilling	LOGGED BY:	EHL
PROJECT NAME	Dana Point Hotel	DRILL METHOD:	8" Hollow Stem	OPERATOR:	Nick
PROJECT NO.:	0480-CR3	HAMMER:	Auto 140#/30"	RIG TYPE:	CME 75
LOCATION:	See Boring Location Plan			DATE:	8/12/2008

BORING NO.: *HSA-4 continued*

Depth (ft)	SAMPLES: Sample Type	Blows/ 6 in	Sample Number	USCS Symbol	MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing: Water Content (%)	Dry Density (pcf)	Others
30	SPT	Push 1 2	B4-6	CL	continued Silty CLAY (CL), dark gray, very moist, soft			
35	Ring	7 6 7	B4-7		SAME	14.4	104.2	
40	SPT	Push 1 2	B4-8		SAME			AL
45								
50	Ring	3 6 8	B4-9		SAME	16.9	105.3	
55								
60								

LEGEND

Sample type: —Ring —SPT —Small Bulk —Large Bulk —No Recovery —Water Table

Lab testing: AL = Atterberg Limits; EI = Expansion Index; SA = Sieve Analysis; RV = R-Value Test; SR = Sulfate/Resistivity Test; SH = Shear Test; HC= Hydrocollapse; MD = Maximum Density

GeoTek, Inc.

LOG OF EXPLORATORY BORING

CLIENT:	Beverly Hills Hospitality Group	DRILLER:	2R Drilling	LOGGED BY:	EHL
PROJECT NAME	Dana Point Hotel	DRILL METHOD:	8" Hollow Stem	OPERATOR:	Nick
PROJECT NO.:	0480-CR3	HAMMER:	Auto 140#/30"	RIG TYPE:	CME 75
LOCATION:	See Boring Location Plan			DATE:	8/11/2006

BORING NO.: *HSA-4 continued*

Depth (ft)	SAMPLES: Sample Type	Blows/ 6 in	Sample Number	USCS Symbol	MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing: Water Content (%)	Dry Density (pcf)	Others
60	Ring	2 2 4	B4-10	CL	continued Silty CLAY (CL) with some sand, dark gray, very moist, soft			
					BORING TERMINATED AT 61.5 FEET Groundwater encountered at 15' Boring backfilled with soil cuttings			
65								
70								
75								
80								
85								
90								

LEGEND

Sample type: ---Ring ---SPT ---Small Bulk ---Large Bulk ---No Recovery ---Water Table

Lab testing: AL = Atterberg Limits; EI = Expansion Index; SA = Sieve Analysis; RV = R-Value Test; SR = Sulfate/Resistivity Test; SH = Shear Test; HC= Hydrocollapse; MD = Maximum Density

GeoTek, Inc.

LOG OF EXPLORATORY BORING

CLIENT:	Beverly Hills Hospitality Group	DRILLER:	Al Roy Drilling	LOGGED BY:	EHL
PROJECT NAME	Dana Point Hotel	DRILL METHOD:	24" Bucket Auger	OPERATOR:	Erik
PROJECT NO.:	0480-CR3	HAMMER:	See Log Below	RIG TYPE:	EZ Bore
LOCATION:	See Boring Location Plan			DATE:	11/24/2006

BORING NO.: BA-1

Depth (ft)	Samples: Sample Type	Samples: Blows/6 In	Samples: Sample Number	USCS Symbol	MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing: Water Content (%)	Laboratory Testing: Dry Density (pcf)	Laboratory Testing: Others
0				SM	Grass 0 - 4" Undocumented Fill: Silty SAND (SM) with clay, occasional gravel and cobbles, light to medium yellow brown, slightly moist to moist			
5	Ring / Large Bulk	2	BA1-1	ML/CL	Clayey sandy SILT (ML) to fine sandy silty CLAY (CL), medium to dark brown, moist			
10				CL	Cobbly sandy CLAY (CL), dark gray mottled, moist, up to 12" diameter rounded cobble clasts, ~20% clasts			
15	Ring	Push 1	BA1-2		Gravelly cobbly silty CLAY (CL), dark brown gray mottled, moist, piece of concrete	15.7	108.3	
20	Ring / Large Bulk	Push 2	BA1-3	CL	Alluvium: Sandy silty CLAY (CL), dark gray, slightly moist to moist, stiff			SH
25					@25', becomes very gravelly - silty GRAVEL, 1/4 to 1/2" gravel, saturated, angular, very uniform.			
					@28', Silty CLAY (CL), dark gray, very moist to saturated			
30								

LEGEND

Sample type: Ring --- SPT --- Small Bulk --- Large Bulk --- No Recovery --- Water Table

Lab testing:
AL = Atterberg Limits
EI = Expansion Index
SA = Sieve Analysis
RV = R-Value Test
SR = Sulfate/Resisitivity Test
SH = Shear Test
HC= Consolidation
MD = Maximum Density

GeoTek, Inc.

LOG OF EXPLORATORY BORING

CLIENT:	Beverly Hills Hospitality Group	DRILLER:	Al Roy Drilling	LOGGED BY:	EHL
PROJECT NAME:	Dana Point Hotel	DRILL METHOD:	24" Bucket Auger	OPERATOR:	Erik
PROJECT NO.:	0480-CR3	HAMMER:	See Log Below	RIG TYPE:	EZ Bore
LOCATION:	See Boring Location Plan			DATE:	11/24/2008

BORING NO.: *BA-1 continued*

Depth (ft)	SAMPLES: Sample Type	Blows/ 6 in	Sample Number	USCS Symbol	MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing: Water Content (%)	Dry Density (pcf)	Others
30	Ring	3	BA1-4	CL	continued SAME @33', Caving and Refusal; ~7' of water in hole with some gravel	13.3	111.7	
					BORING TERMINATED AT 33 FEET Groundwater encountered at 26' Boring backfilled with soil cuttings			
35								
40								
45								
50								
55								
60								

LEGEND

Sample type: Ring — SPT — Small Bulk — Large Bulk — No Recovery — Water Table

Lab testing:
AL = Atterberg Limits, EI = Expansion Index, SA = Sieve Analysis, RV = R-Value Test
SR = Sulfate/Resisitivity Test, SH = Shear Test, HC= Hydrocollapse, MD = Maximum Density

GeoTek, Inc.

LOG OF EXPLORATORY BORING

CLIENT:	Beverly Hills Hospitality Group	DRILLER:	Al Roy Drilling	LOGGED BY:	EHL
PROJECT NAME:	Dana Point Hotel	DRILL METHOD:	24" Bucket Auger	OPERATOR:	Erik
PROJECT NO.:	0480-CR3	HAMMER:	See Log Below	RIG TYPE:	EZ Bore
LOCATION:	See Boring Location Plan			DATE:	11/24/2008

BORING NO.: BA-2

Depth (ft)	SAMPLES: Sample Type	Blows/6 in	Sample Number	USCS Symbol	MATERIAL DESCRIPTION AND COMMENTS	Laboratory Testing: Water Content (%)	Dry Density (pcf)	Others
				SM	**Undocumented Fill:** Cobbly gravelly silty SAND (SM), gray brown mottled, damp, loose, ~20-40% cobble, rounded clasts up to 10" diameter			
5					Too rocky to sample.			
10	Ring	3	BA2-1		Clayey cobbly silty SAND (SM), light to medium yellow brown mottled, moist, medium dense			
	Large Bulk							
15	Ring	3	BA2-2		SAME	7.6	126.5	
				SC	**Alluvium:** Clayey SAND (SC) with some gravel, dark brown, moist			
20	Ring	Push 1	BA2-3		@20', Becomes mottled with more clay, yellow brown and dark gray, moist, stiff	10.6	115.7	
25				CL	Silty CLAY (CL), dark gray, moist to very moist			
30								

LEGEND

Sample type: Ring — SPT — Small Bulk — Large Bulk — No Recovery — Water Table

Lab testing: AL = Atterberg Limits; EI = Expansion Index; SA = Sieve Analysis; RV = R-Value Test; SR = Sulfate/Resisitivity Test; SH = Shear Test; HC= Consolidation; MD = Maximum Density

GeoTek, Inc.

LOG OF EXPLORATORY BORING

CLIENT: Beverly Hills Hospitality Group
PROJECT NAME: Dana Point Hotel
PROJECT NO.: 0460-CR3
LOCATION: See Boring Location Plan

DRILLER: Al Roy Drilling
DRILL METHOD: 24" Bucket Auger
HAMMER: See Log Below

LOGGED BY: EHL
OPERATOR: Erik
RIG TYPE: EZ Bore
DATE: 11/24/2008

BORING NO.: *BA-2 continued*

Depth (ft)	Sample Type	Blows/ 6 in	Sample Number	USCS Symbol	MATERIAL DESCRIPTION AND COMMENTS	Water Content (%)	Dry Density (pcf)	Others
30	Ring	Push	BA2-4		continued	14.7	111.3	
				CL	SAME			
					Becomes more mottled with some calcium carbonate staining/veins			
35								
40	Ring	Push	BA2-5		Sandy silty CLAY (CL), dark gray, very moist, firm, very plastic, some hair-size roots, occasional small well-rounded gravel	14.4	115.0	
45								
				SC	Clayey fine to medium SAND (SC), light to medium gray, very moist			
50	Ring	6	BA2-6		Clayey silty fine to medium SAND (SC), light olive gray, moist, medium dense to dense	12.1	119.7	
					BORING TERMINATED AT 51 FEET			
					No groundwater encountered Boring backfilled with soil cuttings			
55								
60								

LEGEND

Sample type: —Ring —SPT —Small Bulk —Large Bulk —No Recovery —Water Table

Lab testing: AL = Atterberg Limits; EI = Expansion Index; SA = Sieve Analysis; RV = R-Value Test; SR = Sulfate/Resistivity Test; SH = Shear Test; HC= Hydrocollapse; MD = Maximum Density

APPENDIX B

RESULTS OF LABORATORY TESTING

Dana Point Hotel Project

City of Dana Point, Orange County, California

Project No. 0480-CR3

GEOTEK

SUMMARY OF LABORATORY TESTING

Classification
Soils were classified visually according to the Unified Soil Classification System (ASTM Test Method D 2487). The soil classifications are shown on the logs of exploratory borings included in Appendix A.

Moisture-Density Relations
Laboratory testing was performed on a representative sample collected during the subsurface exploration. The laboratory maximum dry density and optimum moisture content for a representative soil type was determined in general accordance with test method ASTM Test Procedure D1557. The result is included herein on Plate MD-1.

Particle Size Analysis
Washed sieve and hydrometer analyses were performed on selected site soil samples per ASTM D1140 and D-422. Atterberg limits tests were also completed on selected soil samples, per ASTM D4318 (see attached results).

Consolidation Tests
Consolidation testing was performed on representative samples of the site soils according to ASTM Test Method D-2435. The results of this testing is presented on Plates HC-1 through HC-4.

Sulfate Content
Analysis to determine the water-soluble sulfate content was performed in accordance with California Test No. 417. Results of the testing indicated a 0.0720% by weight sulfate content, which is considered negligible as per Table 19-A-4 of the 2007 CBC.

Resistivity
A representative soil sample was tested for resistivity in accordance with California Test 643. The results of the testing are included herein.

GEOTEK
4130 Flat Rock Drive, Suite 140, Riverside, CA, 92505-5864
951-710-1160 Office 951-710-1167 Fax

MOISTURE/DENSITY RELATIONSHIP

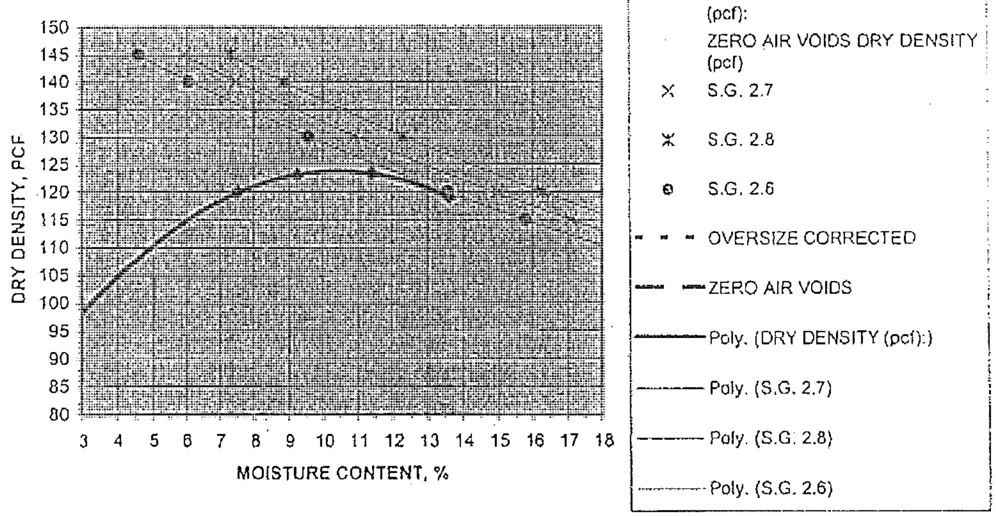
Client: Beverly Hills Hospitality Group
Project: Dana Point Hotel
Location: Dana Point
Material Type: Clayey Sand w/ Gravel
Material Supplier: N/A
Material Source: 0
Sample Location: Hollow Stem Auger Boring 4
@ 0 - 5'
Sampled By: EHL
Received By: N/A
Tested By: BD
Reviewed By: N/A

Job No.: 0480-CR3
Lab No.: Riv

Date Sampled: 12-Aug-08
Date Received: 12-Aug-08
Date Tested: 19-Sep-08
Date Reviewed: 17-Dec-09

Test Procedure: ASTM 1557 Method: 0
Oversized Material (%): 0.0 Correction Required: yes no

MOISTURE/DENSITY RELATIONSHIP CURVE



MOISTURE DENSITY RELATIONSHIP VALUES

Maximum Dry Density, pcf	125.0	@ Optimum Moisture, %	10.5
Corrected Maximum Dry Density, pcf		@ Optimum Moisture, %	

MATERIAL DESCRIPTION

Grain Size Distribution:

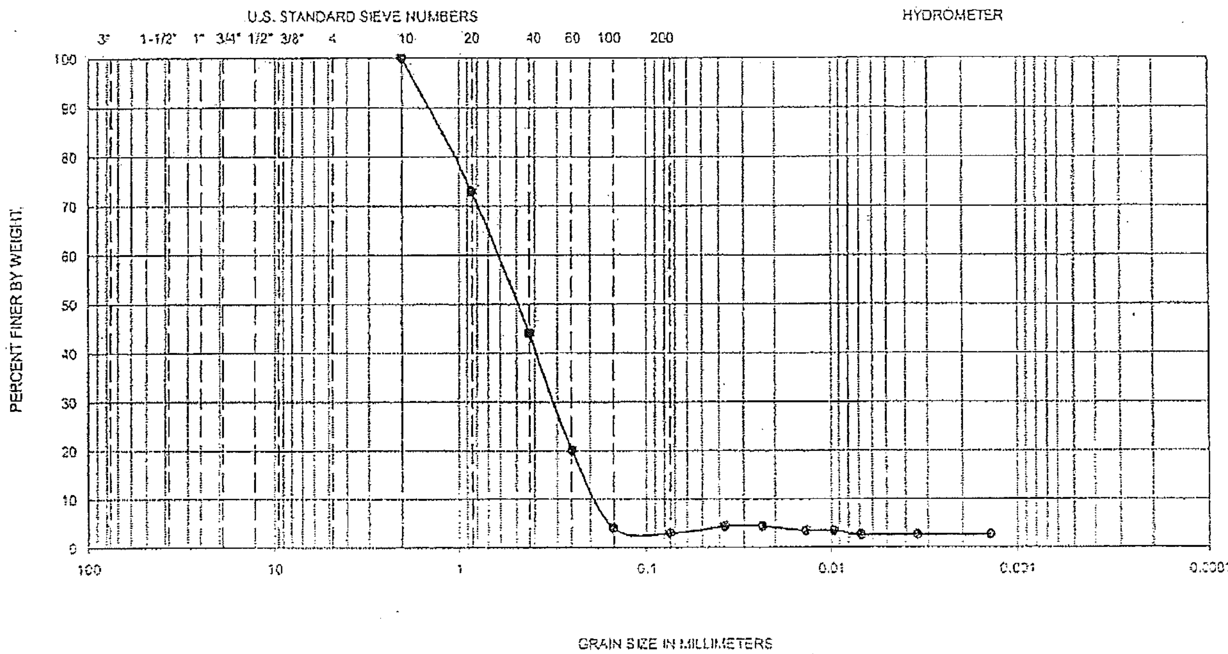
	% Gravel (retained on No. 4)
	% Sand (Passing No. 4, Retained on No. 200)
	% Silt and Clay (Passing No. 200)

Atterberg Limits:

	Liquid Limit, %
	Plastic Limit, %
	Plasticity Index, %

Classification:
Unified Soils Classification: ______
AASHTO Soils Classification: ______

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	Silt	Clay



Symbol	Hole No.	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D_{10}	D_{30}	D_{60}	C_u	C_c	Passing No. 200 (%)	U.S.C.S
	H.S.A-1	@ 20'	--	--	--	--	--	--	--	--	3.0	SP-SM

GEOTEK

Checked By: EHL | Lab: Riverside

Project No. 0480-CR3

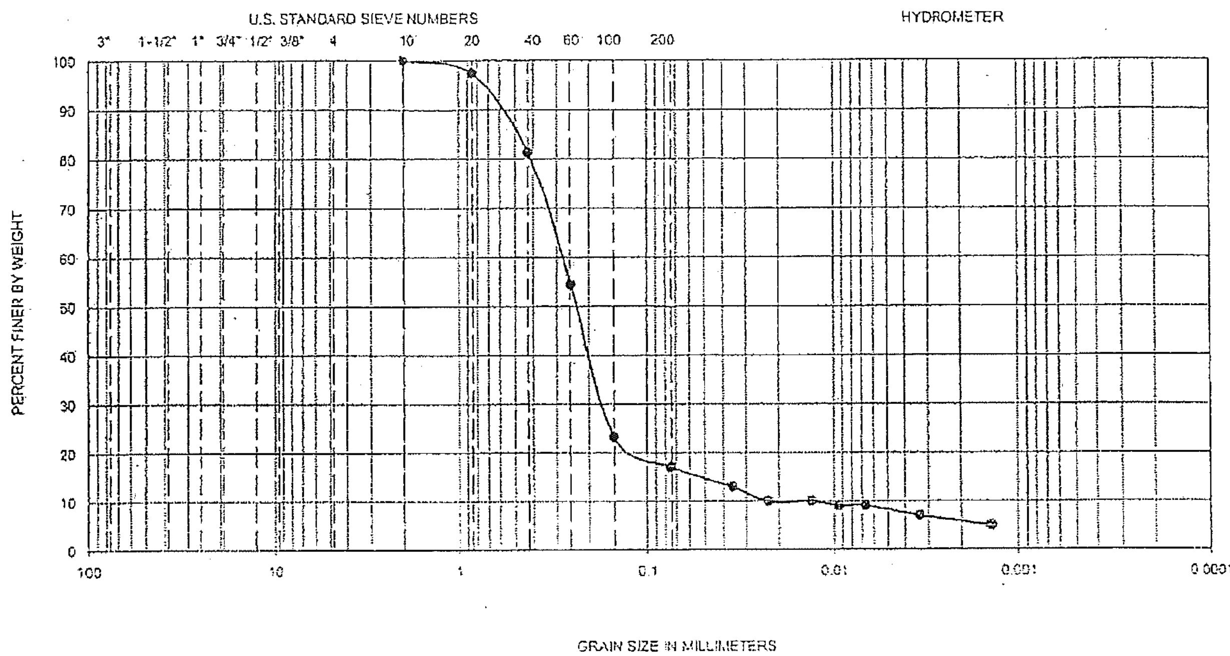
SIEVE ANALYSIS

Sample: HSA-1 @ 20'

Beverly Hills Hospitality Group

Dana Point Hotel

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	Silt	Clay



Symbol	Hole No.	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D_{10}	D_{30}	D_{60}	C_u	C_c	Passing No. 200 (%)	U.S.C.S
	H.S.A-1	@ 40'	--	--	--	--	--	--	--	--	17.0	SM

GEOTEK

Checked By: EHL	Lab: Riverside
Project No. 0480-CR3	

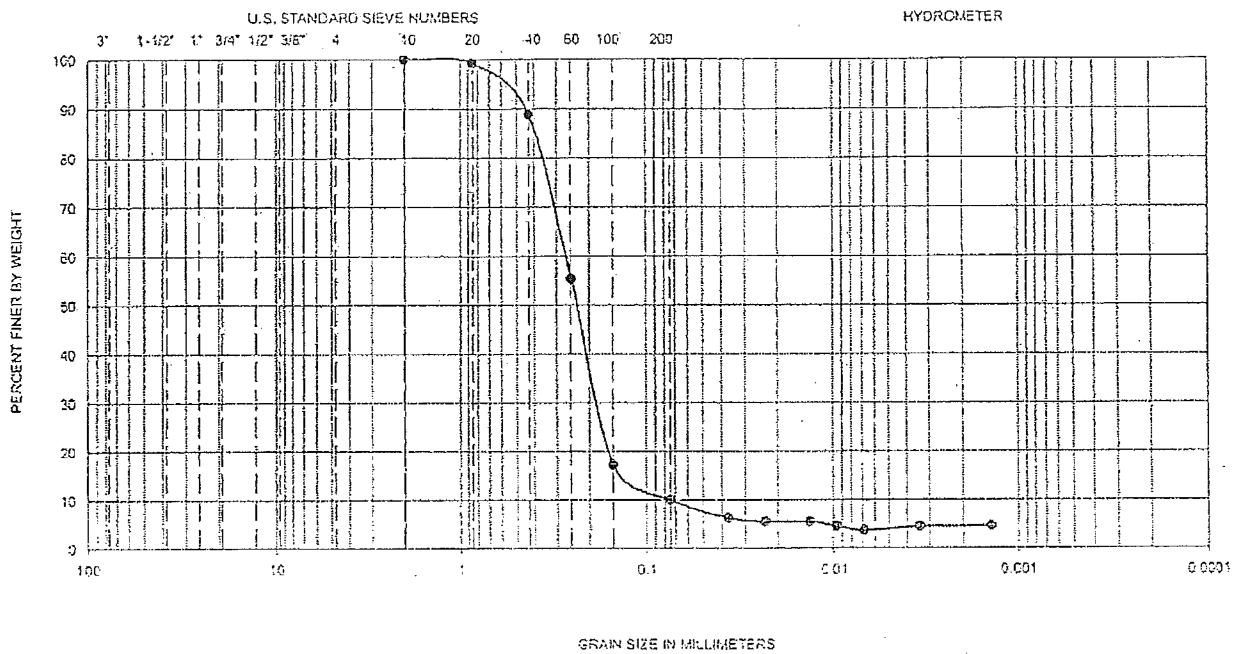
SIEVE ANALYSIS

Sample: HSA-1 @ 40'

Beverly Hills Hospitality Group

Dana Point Hotel

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	Silt	Clay



Symbol	Hole No.	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D_{10}	D_{30}	D_{60}	C_u	C_c	Passing No. 200 (%)	U.S.C.S
	H.S.A-1	@ 50'	--	--	--	--	--	--	--	--	10.0	SP-SM

GEOTEK

Checked By: EHL | Lab: Riverside

Project No. 0480-CR3

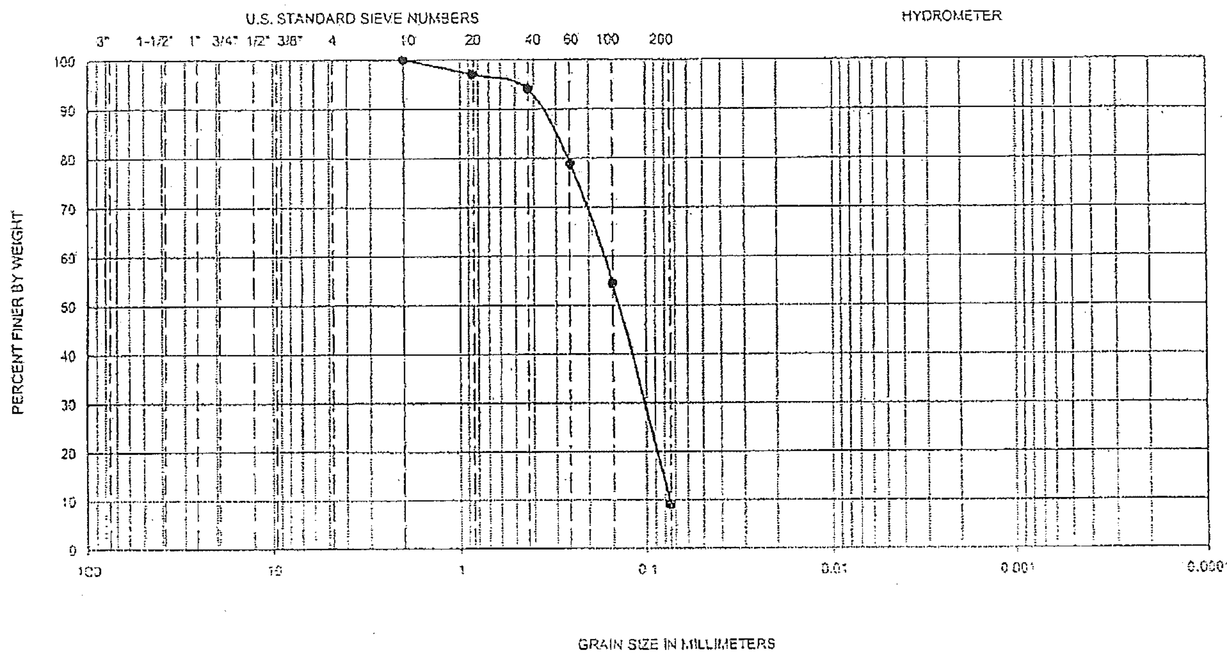
SIEVE ANALYSIS

Sample: HSA-1 @ 50'

Beverly Hills Hospitality Group

Dana Point Hotel

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	Silt	Clay



Symbol	Hole No.	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D_{10}	D_{30}	D_{60}	C_u	C_c	Passing No. 200 (%)	U.S.C.S
	H.S.A-1	@ 70'	--	--	--	--	--	--	--	--	9.0	SP-SM

GEOTEK

Checked By: EHL | Lab: Riverside

Project No. 0480-CR3

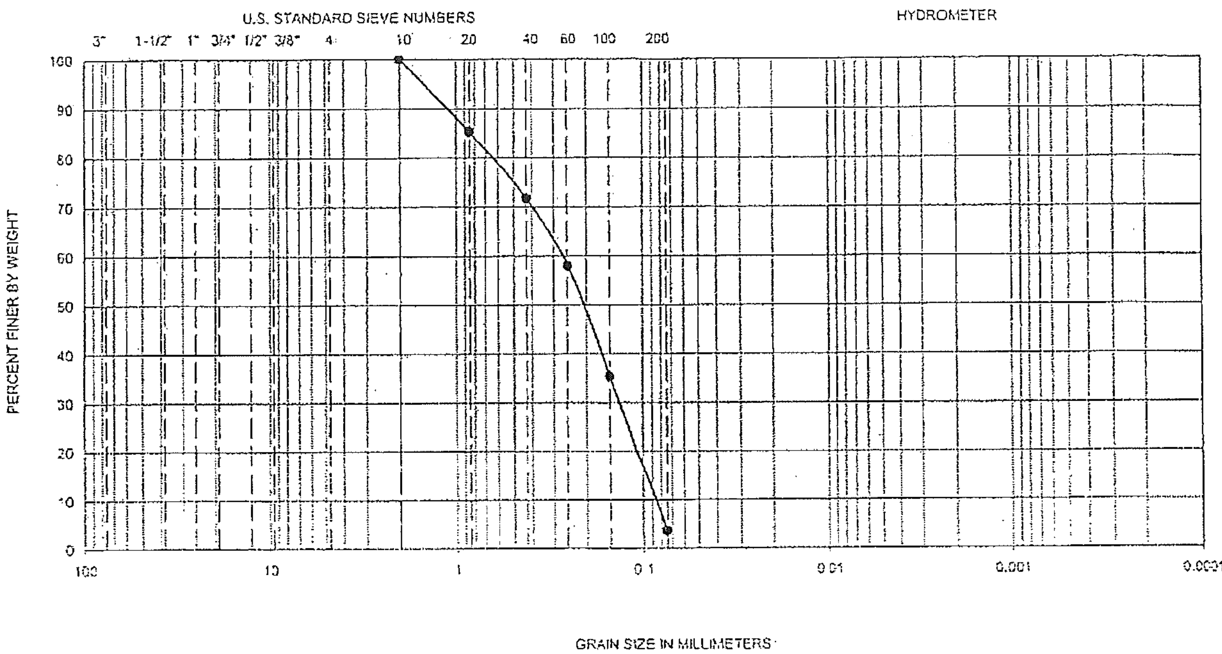
SIEVE ANALYSIS

Sample: HSA-1 @ 70'

Beverly Hills Hospitality Group

Dana Point Hotel

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	Silt	Clay



Symbol	Hole No.	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D_{10}	D_{30}	D_{60}	C_u	C_c	Passing No. 200 (%)	U.S.C.S
	H.S.A-2	@ 20'	--	--	--	--	--	--	--	--	3.6	SP-SM

GEOTEK

Checked By: EHL | Lab: Riverside

Project No. 0480-CR3

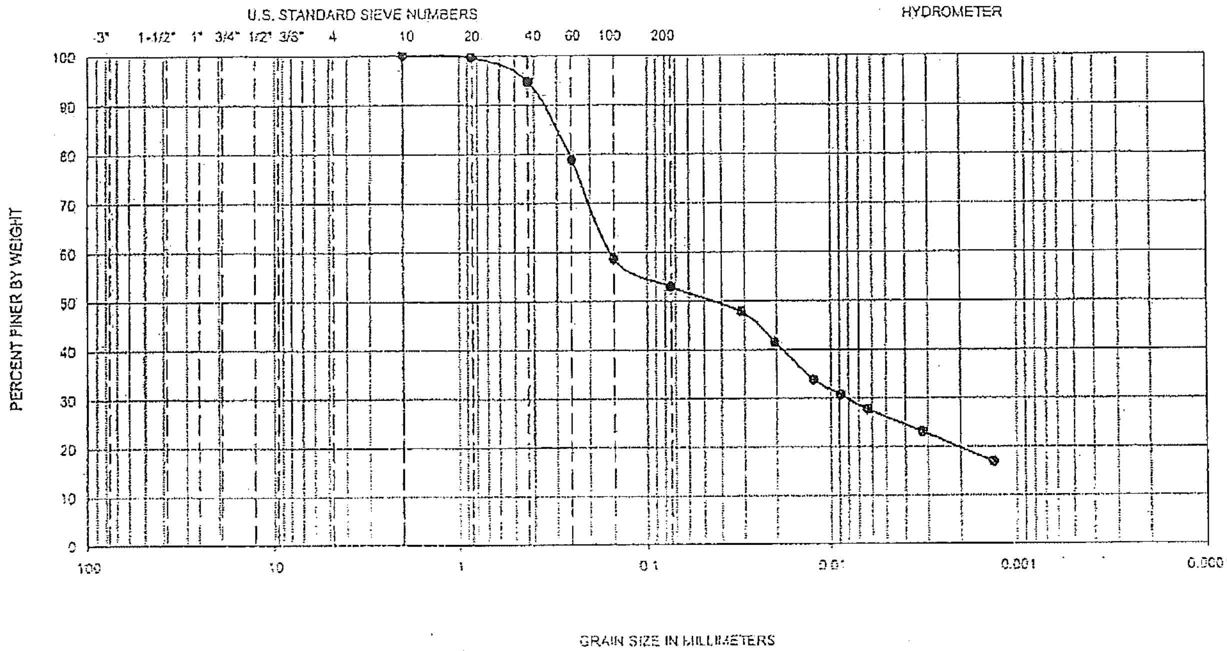
SIEVE ANALYSIS

Sample: HSA-2 @ 20'

Beverly Hills Hospitality Group

Dana Point Hotel

GRAVEL		SAND			FINES	
Coarse	Fine	Coarse	Medium	Fine	Silt	Clay



Symbol	Hole No.	Depth (ft)	Liquid Limit	Plastic Limit	Plasticity Index	D_{10}	D_{30}	D_{60}	C_u	C_c	Passing No. 200 (%)	U.S.C.S
	H.S.A-3	@ 40'	--	--	--	--	--	--	--	--	53.0	SM

GEOTEK

Checked By: EHL | Lab: Riverside

Project No. 0480-CR3

SIEVE ANALYSIS

Sample: HSA-3 @ 40'

Beverly Hills Hospitality Group

Dana Point Hotel

GEOTEK

Job # => 0480-CR3
Project => Dana Point Hotel
Client => Beverly Hills Hospitality Group
Date Sampled => 8/11/2008
Date Received => 8/11/2008

Sample Location => Hollow Stem Auger Boring No. 2 @ 40'
Sampled By => EHL
Tested By => EV

	Plastic Limit			Liquid Limit			
Trial # =>	One	Two	Three	One	Two	Three	Four
Tare Label =>	DD	M		35			
# of Blows =>				25			
Wt. of Tare + Wet Soil =>	11.40	12.80		49.70			
Wt. of Tare + Dry Soil =>	10.50	11.60		45.00			
Wt. of Moisture =>	0.90	1.20		4.70			
Wt. of Can =>	6.00	6.00		30.60			
Wt. of Dry Soil =>	4.50	5.60		14.40			
% Moisture =>	20.0	21.4		32.6			

LL Spec =>
Liquid Limit => 33 (L)

Plastic Limit => 21 (P)

PI Spec =>
Plasticity Index => 12 (L-P)

Base Aggregates	Table 1	PI		PI		PI
CCPW Plastic Limits	.1 to 3.0	15	4.1 to 5.0	9	8.1 to 11.0	4
Minus 200 =>	3.1 to 4.0	12	5.1 to 8.0	6	11.1 to 15	3

GEOTEK

Job # =>	0480-CR3	Sample Location =>	Hollow Stem Auger Boring No. 2 @ 50'
Project =>	Dana Point Hotel	Sampled By =>	EHL
Client =>	Beverly Hills Hospitality Group	Tested By =>	EV
Date Sampled =>	8/11/2008		
Date Received =>	8/11/2008		

	Plastic Limit			Liquid Limit			
Trial # =>	One	Two	Three	One	Two	Three	Four
Tare Label =>	X	Q		AA			
# of Blows =>				25			
Wt. of Tare + Wet Soil =>	13.00	13.90		25.40			
Wt. of Tare + Dry Soil =>	11.10	11.80		18.80			
Wt. of Moisture =>	1.90	2.10		6.60			
Wt. of Can =>	6.00	6.00		6.00			
Wt. of Dry Soil =>	5.10	5.80		12.80			
% Moisture =>	37.3	36.2		51.6			

LL Spec =>				PI Spec =>	
Liquid Limit =>	52 (L)	Plastic Limit =>	37 (P)	Plasticity Index =>	15 (L-P)

Base Aggregates	Table 1	PI		PI		PI
CCPW Plastic Limits	.1 to 3.0	15	4.1 to 5.0	9	8.1 to 11.0	4
Minus 200 =>	3.1 to 4.0	12	5.1 to 8.0	6	11.1 to 15	3

GEOTEK

Job # => 0480-CR3
Project => Dana Point Hotel
Client => Beverly Hills Hospitality Group
Date Sampled => 8/12/2008
Date Received => 8/12/2008

Sample Location => Hollow Stem Auger Boring No. 3 @ 20'
Sampled By => EHL
Tested By => EV

	Plastic Limit			Liquid Limit			
Trial # =>	One	Two	Three	One	Two	Three	Four
Tare Label =>	X	M		P			
# of Blows =>				25			
Wt. of Tare + Wet Soil =>	17.20	11.40		24.50			
Wt. of Tare + Dry Soil =>	14.80	10.30		20.20			
Wt. of Moisture =>	2.40	1.10		4.30			
Wt. of Can =>	6.00	6.00		6.00			
Wt. of Dry Soil =>	8.80	4.30		14.20			
% Moisture =>	27.3	25.6		30.3			

LL Spec =>
Liquid Limit => 30 (L)

Plastic Limit => 26 (P)

PI Spec =>
Plasticity Index => 4 (L-P)

Base Aggregates	Table 1	PI		PI		PI
CCPW Plastic Limits	.1 to 3.0	15	4.1 to 5.0	9	8.1 to 11.0	4
Minus 200 =>	3.1 to 4.0	12	5.1 to 8.0	6	11.1 to 15	3

GEOTEK

Job # => 0480-CR3
Project => Dana Point Hotel
Client => Beverly Hills Hospitality Group
Date Sampled => 8/12/2008
Date Received => 8/12/2008

Sample Location => Hollow Stem Auger Boring No. 4 @ 40'
Sampled By => EHL
Tested By => EV

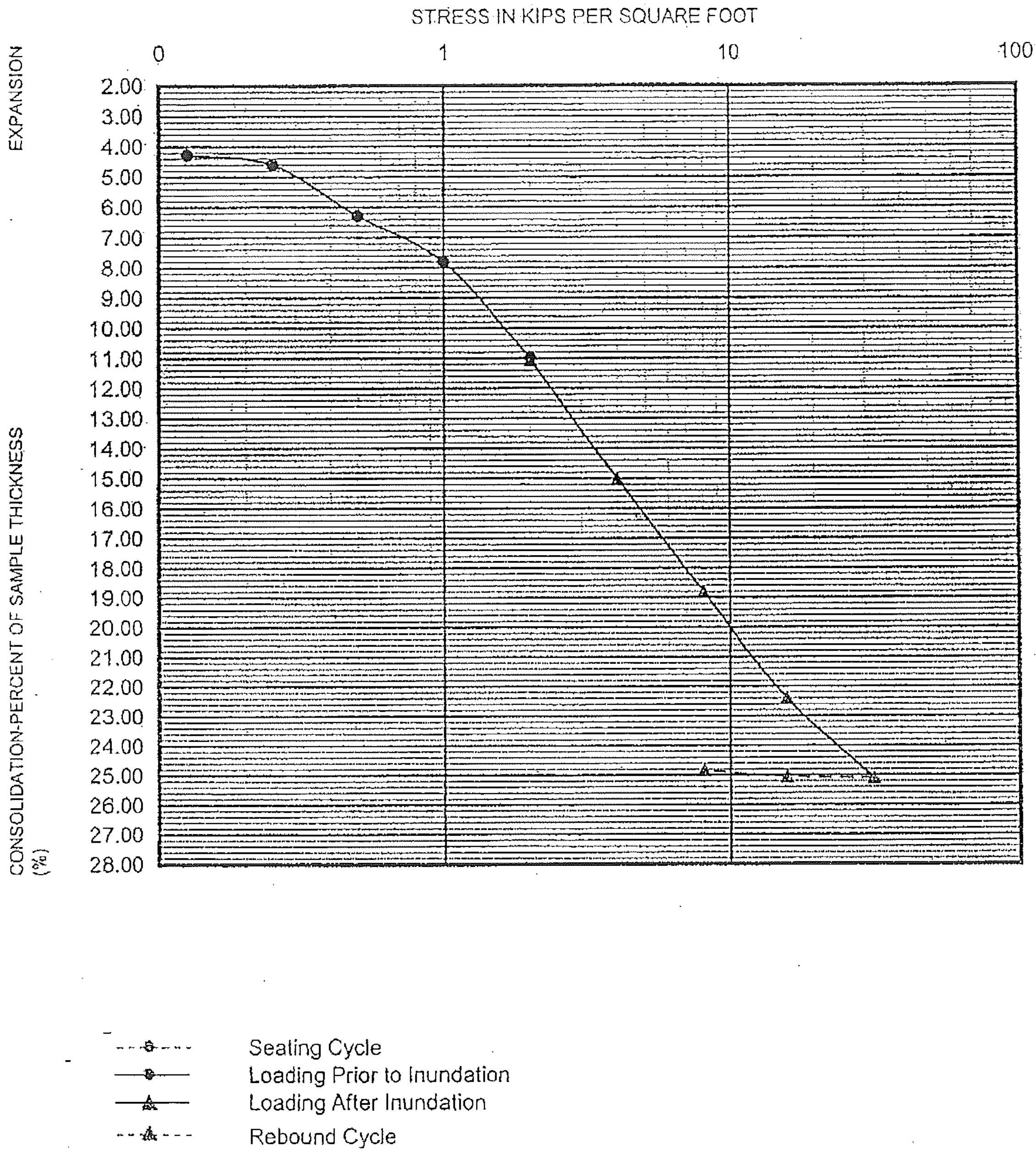
	Plastic Limit			Liquid Limit			
Trial # =>	One	Two	Three	One	Two	Three	Four
Tare Label =>	AA	DD		Q			
# of Blows =>				25			
Wt. of Tare + Wet Soil =>	12.60	13.10		26.60			
Wt. of Tare + Dry Soil =>	11.30	11.80		20.30			
Wt. of Moisture =>	1.30	1.30		6.30			
Wt. of Can =>	6.00	6.00		6.00			
Wt. of Dry Soil =>	5.30	5.80		14.30			
% Moisture =>	24.5	22.4		44.1			

LL Spec =>
Liquid Limit => 44 (L)

Plastic Limit => 24 (P)

PI Spec =>
Plasticity Index => 21 (L-P)

Base Aggregates	Table 1	PI		PI		PI
CCPW Plastic Limits	.1 to 3.0	15	4.1 to 5.0	9	8.1 to 11.0	4
Minus 200 =>	3.1 to 4.0	12	5.1 to 8.0	6	11.1 to 15	3



Per ASTM Method D2435

GEOTEK

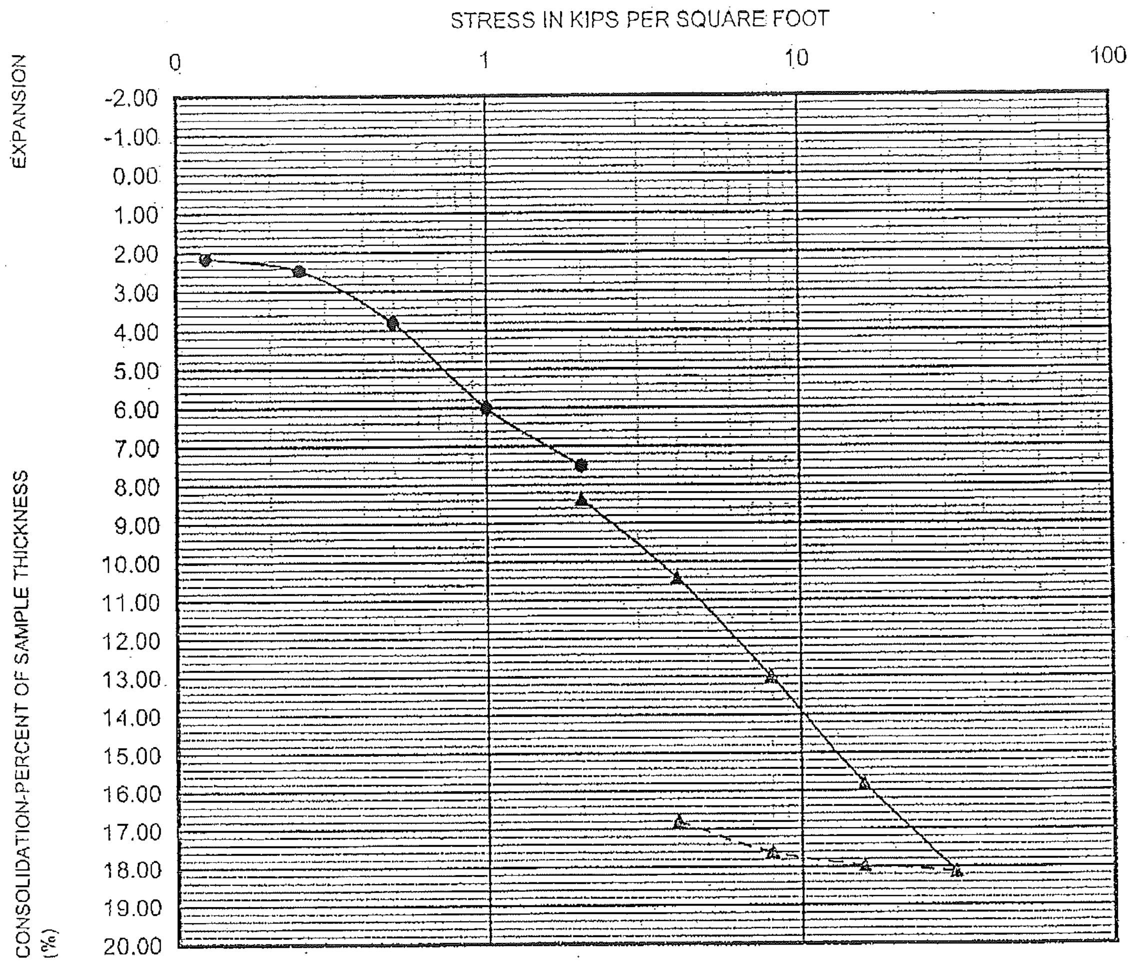
CONSOLIDATION REPORT

Sample: HSA-1 @ 15'

Beverly Hills Hospitality Group
Dana Point

Plate HC-1

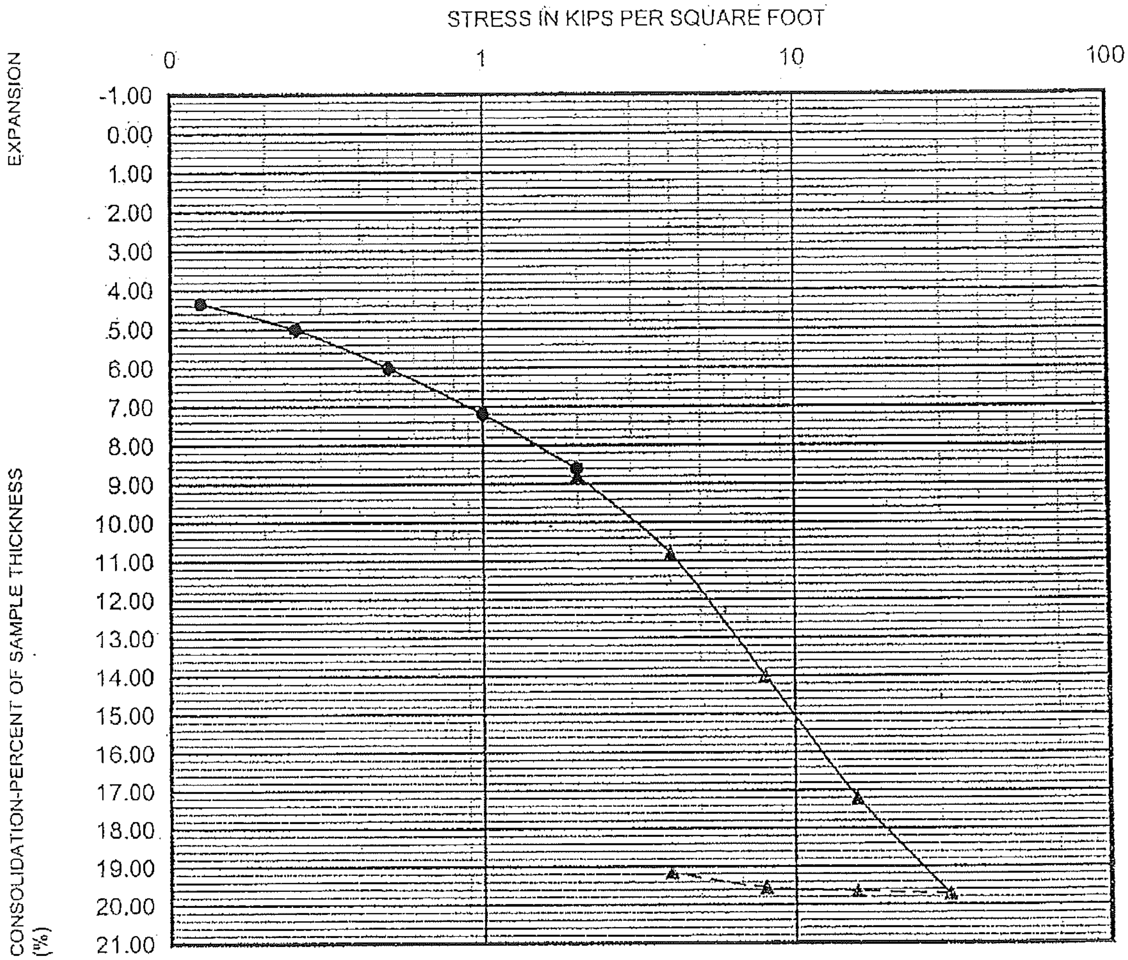
CHECKED BY: EHL	Lab: RIV
PROJECT NO.: 0480-CR3	Date: 12/29/08



Seating Cycle
Loading Prior to Inundation
Loading After Inundation
Rebound Cycle

Per ASTM Method D2435

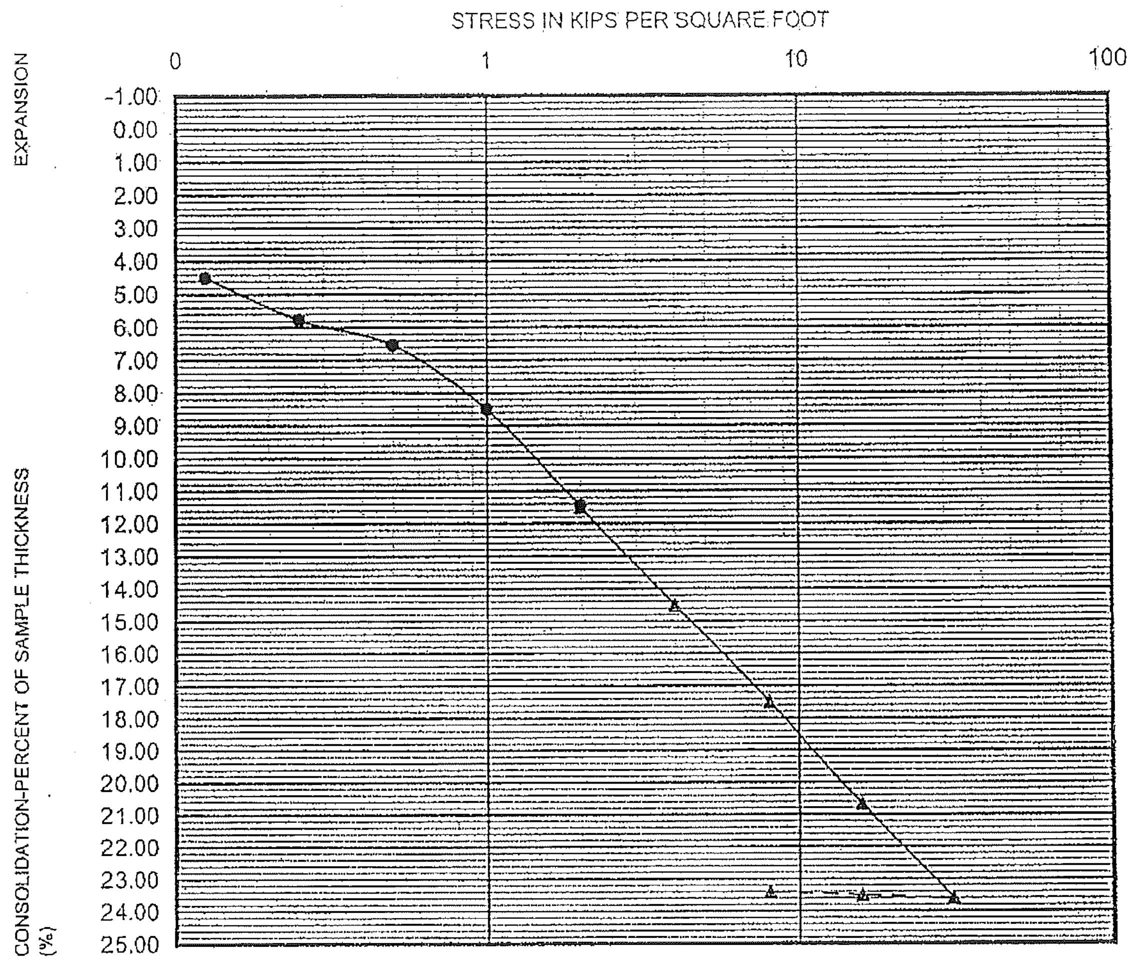
GEOTEK		**CONSOLIDATION REPORT** Sample: HSA-1 @ 35' Beverly Hills Hospitality Group Dana Point	Plate HC-2
CHECKED BY: EHL	Lab: RIV		
PROJECT NO.: 0480-CR3	Date:12/19/08		



- - -o- - - Seating Cycle
—o— Loading Prior to Inundation
—▲— Loading After Inundation
- - -▲- - - Rebound Cycle

Per ASTM Method D2435

GEOTEK		**CONSOLIDATION REPORT** Sample: HSA-2 @ 25' Beverly Hills Hospitality Group Dana Point	Plate HC-3
CHECKED BY: EHL	Lab: RIV		
PROJECT NO.: 0480-CR3	Date:12/19/08		



Seating Cycle
Loading Prior to Inundation
Loading After Inundation
Rebound Cycle

Per ASTM Method D2435

GEOTEK

CONSOLIDATION REPORT

Sample: HSA-4 @ 25'

Beverly Hills Hospitality Group
Dana Point

Plate HC-4

CHECKED BY: EHL	Lab: RIV
PROJECT NO.: 0480-CR3	Date:12/29/08

Cal Land Engineering, Inc.
dba Quartech Consultants
Geotechnical, Environmental & Civil Engineering

September 23, 2008

Geo Tek Inc.
4130 Flatrock, Suite 140
Riverside, California 92505

Attn: Mr. Edward Lamont

RE: LABORATORY TEST RESULTS/REPORT

Client: Beverly Hill Investment
W.O. 0480-CR3
Project: N/A
QCI Job No.: 08-167-09a

Gentlemen:

We have completed the testing program conducted on sample from the above project. The tests were performed in accordance with testing procedures as follows:

TEST	METHOD
Corrosion Potential	CT- 417, CT- 422, CT-532 (643)

Enclosed is Summary of Laboratory Test Results.

We appreciate the opportunity to provide testing services to Geo Tek, Inc. Should you have any questions, please call the undersigned.

Sincerely yours,
Quartech Consultants (QCI)

Jack C. Lee, PE, GE
President

Enclosure

For: GeoTek, Inc.
W.O.: 0480-CR3
Client: Beverly Hill Investment
Project: N/A

QCI Project No.:08-167-09a
Date: September 23, 2008
Summarized by: ABK

Sample ID #	Sample Depth (Feet)	pH CT-532 (643)	Chloride CT-422 (ppm)	Sulfate CT-417 (% By Weight)	Resistivity CT-532 (643) (ohm-cm)
HSA-4	0-5'	7.75	96	0.0720	660

APPENDIX C

COMPUTER PRINTOUTS OF SEISMIC ANALYSES

Dana Point Hotel Project
City of Dana Point, Orange County, California
Project No. 0480-CR3

GEOTEK

Conterminous 48 States
2006 International Building Code
Latitude = 33.464912
Longitude = -117.688634
Spectral Response Accelerations Ss and S1
Ss and S1 = Mapped Spectral Acceleration Values
Site Class B - Fa = 1.0 ,Fv = 1.0
Data are based on a 0.009999999776482582 deg grid spacing

Period (sec)	Sa (g)
0.2	1.575 (Ss, Site Class B)
1.0	0.574 (S1, Site Class B)

Conterminous 48 States
2006 International Building Code
Latitude = 33.464912
Longitude = -117.688634
Spectral Response Accelerations SMs and SM1
SMs = Fa x Ss and SM1 = Fv x S1
Site Class E - Fa = 0.9 ,Fv = 2.4

Period (sec)	Sa (g)
0.2	1.418 (SMs, Site Class E)
1.0	1.377 (SM1, Site Class E)

Conterminous 48 States
2006 International Building Code
Latitude = 33.464912
Longitude = -117.688634
Design Spectral Response Accelerations SDs and SD1
SDs = 2/3 x SMs and SD1 = 2/3 x SM1
Site Class E - Fa = 0.9 ,Fv = 2.4

Period (sec)	Sa (g)
0.2	0.945 (SDs, Site Class E)
1.0	0.918 (SD1, Site Class E)

2006 International Building Code
Latitude = 33.464912
Longitude = -117.688634
MCE Response Spectrum for Site Class B
Ss and S1 = Mapped Spectral Acceleration Values
Site Class B - Fa = 1.0 ,Fv = 1.0

Period (sec)	Sa (g)	Sd (inches)
0.000	0.630	0.000
0.073	1.575	0.082
0.200	1.575	0.616
0.364	1.575	2.043
0.400	1.435	2.243
0.500	1.148	2.804
0.600	0.957	3.364
0.700	0.820	3.925
0.800	0.717	4.486
0.900	0.638	5.047
1.000	0.574	5.607
1.100	0.522	6.168
1.200	0.478	6.729
1.300	0.441	7.289
1.400	0.410	7.850
1.500	0.383	8.411
1.600	0.359	8.972
1.700	0.338	9.532
1.800	0.319	10.093
1.900	0.302	10.654
2.000	0.287	11.215

Conterminous 48 States
2006 International Building Code
Latitude = 33.464912
Longitude = -117.688634
Site Modified Response Spectrum for Site Class E
SMs = FaSs and SM1 = FvS1
Site Class E - Fa = 0.9 ,Fv = 2.4

Period (sec)	Sa (g)	Sd (inches)
0.000	0.567	0.000
0.194	1.418	0.523

[illegible]	[illegible]	[illegible]
0.972	1.418	13.074
1.000	1.377	13.457
1.100	1.252	14.803
1.200	1.148	16.149
1.300	1.060	17.495
1.400	0.984	18.840
1.500	0.918	20.186
1.600	0.861	21.532
1.700	0.810	22.878
1.800	0.765	24.223
1.900	0.725	25.569
2.000	0.689	26.915

Conterminous 48 States
2006 International Building Code
Latitude = 33.464912
Longitude = -117.688634
Design Response Spectrum for Site Class E
SDs = 2/3 x SMs and SD1 = 2/3 x SM1
Site Class E - Fa = 0.9 ,Fv = 2.4

Period (sec)	Sa (g)	Sd (inches)
0.000	0.378	0.000
0.194	0.945	0.349
0.200	0.945	0.369
0.972	0.945	8.716
1.000	0.918	8.972
1.100	0.835	9.869
1.200	0.765	10.766
1.300	0.706	11.663
1.400	0.656	12.560
1.500	0.612	13.457
1.600	0.574	14.355
1.700	0.540	15.252
1.800	0.510	16.149
1.900	0.483	17.046
2.000	0.459	17.943

APPENDIX D

LIQUEFACTION AND SETTLEMENT ANALYSES

Dana Point Hotel Project
City of Dana Point, Orange County, California
Project No. 0480-CR3

GEOTEK

LIQUEFACTION ANALYSIS

Project: Dana Point Hotel | Project No. 0480-CR3
Client: Beverly Hills Hospitality | Date: 12/19/2009

BORING: HAS-1

Fault Distance: 5.4 km | A_{max}: 0.45 g
Groundwater Depth: 13 feet | M_s: 6.90

Sampler: S = SPT without Liner: 1.375" Dia. | C_S = 1.20 | Boring: Drilled Diameter = 8 inches
R = Split Spoon/California w/ Rings: 3.5" Dia. | C_S = 0.63 | Sampled Diameter = 4 inches
SL = SPT with Liner: 1.375" Dia. | C_S = 1.00 | Hammer: 140 lb w/ 30 inch Drop

Depth h (ft)	Dry Density (pcf) γ_d	Wet Density (pcf) γ_w	Total Stress (psf) σ	Effective Stress (psf) σ'	Sampler Type	Fines (%)	Field N (B/Ft)	Corrections to Field N-Value (From Table 5.2) C_N	C_E	C_B	C_R	C_S	Additive Correction Factor * C_{Fines}	Corrected N_1 (B/ft)	Magnitude Scaling Factor (From Fig 7.2)	CRR Cyclic Resistance Ratio (From Fig 7.1) M = 7.5	M = 6.9	r_d ** (From Fig 7.3)	Induced Cyclic Stress Ratio	Safety Factor
2.0	109	121.6	243	243	R	3	12	2.00	1.00	1.15	0.75	0.63	0	13	1.300	0.142	0.165	0.995	0.291	NL-G
4.0	96	120.2	484	484	R	3	11	2.00	1.00	1.15	0.75	0.63	0	12	1.300	0.131	0.170	0.991	0.290	NL-G
6.0	96	120.2	724	724	R	3	11	1.68	1.00	1.15	0.75	0.63	0	10	1.300	0.108	0.140	0.986	0.288	NL-G
8.0	96	120.2	964	964	R	3	11	1.44	1.00	1.15	0.75	0.63	0	9	1.300	0.098	0.127	0.981	0.287	NL-G
10.0	96	120.2	1205	1205	R	3	15	1.29	1.00	1.15	0.75	0.63	0	11	1.300	0.119	0.155	0.977	0.286	NL-G
12.0	93.5	116.3	1437	1437	R	53	15	1.18	1.00	1.15	0.75	0.63	0	10	1.300	0.182	0.250	0.972	0.284	NL-G
14.0	93.5	116.3	1670	1608	R	53	15	1.12	1.00	1.15	0.85	0.63	7	17	1.300	0.325	0.423	0.967	0.294	1.44
16.0	79.2	109.7	1889	1702	R	53	10	1.08	1.00	1.15	0.85	0.63	6	13	1.300	0.240	0.312	0.963	0.313	1.00
18.0	79.2	109.7	2109	1797	S	53	13	1.06	1.00	1.15	0.85	1.20	8	24	1.300	1.000	1.300	0.958	0.329	3.95
20.0	93.5	123.6	2356	1919	S	5	13	1.02	1.00	1.15	0.85	1.20	0	16	1.300	0.176	0.229	0.953	0.342	0.67
22.0	93.5	123.6	2603	2042	S	5	13	0.99	1.00	1.15	0.95	1.20	0	17	1.300	0.188	0.244	0.949	0.354	0.69
24.0	93.5	123.6	2850	2164	S	5	13	0.96	1.00	1.15	0.95	1.20	0	16	1.300	0.176	0.229	0.944	0.364	0.63
26.0	93.5	123.6	3098	2286	R	53	5	0.94	1.00	1.15	0.95	0.63	6	9	1.300	0.178	0.231	0.939	0.372	0.62
28.0	93.5	123.6	3345	2409	R	53	5	0.91	1.00	1.15	0.95	0.63	6	9	1.300	0.178	0.231	0.935	0.380	0.61
30.0	93.5	123.6	3592	2531	S	53	14	0.89	1.00	1.15	0.95	1.20	8	24	1.300	1.000	1.300	0.930	0.388	3.37
32.0	93.5	123.6	3839	2654	S	53	14	0.87	1.00	1.15	0.95	1.20	8	24	1.300	1.000	1.300	0.913	0.387	3.36
34.0	93.3	114.1	4067	2757	R	53	13	0.85	1.00	1.15	1.00	0.63	7	15	1.300	0.275	0.358	0.897	0.387	0.92
36.0	93.3	114.1	4296	2860	R	53	13	0.84	1.00	1.15	1.00	0.63	7	15	1.300	0.275	0.358	0.881	0.387	0.92
38.0	93.3	114.1	4524	2964	R	53	13	0.82	1.00	1.15	1.00	0.63	7	15	1.300	0.275	0.358	0.865	0.386	0.93
40.0	93.3	114.1	4752	3067	S	17	30	0.81	1.00	1.15	1.00	1.20	5	38	1.300	1.000	1.300	0.848	0.384	3.38
42.0	93.3	114.1	4980	3171	S	17	30	0.79	1.00	1.15	1.00	1.20	5	38	1.300	1.000	1.300	0.832	0.382	3.40
44.0	93.3	114.1	5208	3274	S	17	30	0.78	1.00	1.15	1.00	1.20	5	37	1.300	1.000	1.300	0.816	0.380	3.43
46.0	100.6	123.7	5456	3397	R	17	53	0.77	1.00	1.15	1.00	0.63	5	34	1.300	1.000	1.300	0.799	0.376	3.46
48.0	100.6	123.7	5703	3519	R	10	53	0.75	1.00	1.15	1.00	0.63	1	30	1.300	1.000	1.300	0.783	0.371	3.50
50.0	100.6	123.7	5951	3642	S	10	30	0.74	1.00	1.15	1.00	1.20	2	33	1.300	1.000	1.300	0.767	0.366	3.55

Liquefaction Analysis Per

1. *Recommended Procedures for Implementation of DMG Special Publication 117: Guidelines for Analyzing and Mitigating Liquefaction in California*, March 1999, Organized Through the Southern California Earthquake Center, University of Southern California.
2. Proceedings of the NCEER Workshop on Evaluation of Liquefaction Resistance of Soils, December 31, 1997, National Center for Earthquake Engineering Research.

* Additive Fines Content Correction for SPT

$C_{Fines} = [\alpha + \beta (N_1)_{60}] - (N_1)_{60}$ (From NCEER)

FC	α	β
For FC ≤ 5% :	0.0	1.0
For 5% < FC < 35% :	$\exp(1.76 - (190 / FC^2))$	$0.99 + (FC^{1.5} / 1000)$
For FC ≥ 35% :	5.0	1.2

** r_d

Depth (ft)	r_d (From NCEER)
For h ≤ 30' :	$r_d = 1.0 - 0.00765(0.305)h$
For 30' < h ≤ 75' :	$r_d = 1.174 - 0.0267(0.305)h$
For 75' < h ≤ 100' :	$r_d = 0.744 - 0.008(0.305)h$
For h < 100' :	$r_d = 0.50$

LEGEND:

C_N : Depth Correction Factor $[0.4 \le (2000/\sigma')^{0.5} \le 2.0]$
C_E : Energy Ratio Correction Factor
C_B : Borehole Diameter Correction Factor
C_R : Rod Length Correction Factor
C_S : Sampling Method Correction Factor
C_{SPT} : Large Diameter Sampler to SPT Correction Factor
C_{Fines} : Fines Correction Factor

Induced Cyclic Stress Ratio = $0.65 (A_{max}/g) (\sigma / \sigma') r_d$

NL-F: No Liquefaction due to Clay and Fines Content
NL-G: No Liquefaction due to Soil Layer Being Above Ground Water

LIQUEFACTION SETTLEMENT - SUBMERGED SOILS

Project: Dana Point Hotel
Client: Beverly Hills Hospitality

Project No. 0480-CR3
Date: 12/19/2009
1/0/1900

BORING: HAS-1

Depth h (feet)	Fines (%)	Additive Corr. Factor to N_1 From Table 7.2	Corrected N_1 (B/ft)	Cyclic Resistance Ratio M = 6.9	Induced Cyclic Stress Ratio	Safety Factor	Volumetric Strain (From Fig 7.11) (%)	Settlement (feet)
2.0	3	0	13	0.185	0.291	NL-G	N/A-G	N/A-G
4.0	3	0	12	0.170	0.290	NL-G	N/A-G	N/A-G
6.0	3	0	10	0.140	0.288	NL-G	N/A-G	N/A-G
8.0	3	0	9	0.127	0.287	NL-G	N/A-G	N/A-G
10.0	3	0	11	0.155	0.286	NL-G	N/A-G	N/A-G
12.0	53	0	10	0.250	0.284	NL-G	N/A-G	N/A-G
14.0	53	4	14	0.423	0.294	1.44	N/A- SF > 1.1	N/A-SF
16.0	53	4	11	0.312	0.313	1.00	2.40%	0.048
18.0	53	4	20	1.300	0.329	3.95	N/A- SF > 1.1	N/A-SF
20.0	5	0	16	0.229	0.342	0.67	1.80%	0.036
22.0	5	0	17	0.244	0.354	0.69	1.70%	0.034
24.0	5	0	16	0.229	0.354	0.63	1.80%	0.036
26.0	53	4	7	0.231	0.372	0.62	3.10%	0.062
28.0	53	4	7	0.231	0.380	0.61	3.10%	0.062
30.0	53	4	20	1.300	0.386	3.37	N/A- SF > 1.1	N/A-SF
32.0	53	4	20	1.300	0.397	3.36	N/A- SF > 1.1	N/A-SF
34.0	53	4	12	0.358	0.387	0.92	2.30%	0.046
36.0	53	4	12	0.358	0.387	0.92	2.30%	0.046
38.0	53	4	12	0.358	0.386	0.93	2.30%	0.046
40.0	17	1	34	1.300	0.384	3.38	N/A- SF > 1.1	N/A-SF
42.0	17	1	34	1.300	0.382	3.40	N/A- SF > 1.1	N/A-SF
44.0	17	1	33	1.300	0.380	3.43	N/A- SF > 1.1	N/A-SF
46.0	17	1	30	1.300	0.376	3.46	N/A- SF > 1.1	N/A-SF
48.0	10	1	30	1.300	0.371	3.50	N/A- SF > 1.1	N/A-SF
50.0	10	1	32	1.300	0.366	3.55	N/A- SF > 1.1	N/A-SF
							Total Liquefaction Settlement	0.416 feet 4.992 inches
							Estimated Differential Settlement	0.208 feet 2.496 inches

Liquefaction Settlement Analysis Per Tokimatsu, K. and Seed,H.B., 1987,
Evaluation of Settlements in Sands Due to Earthquake Shaking,
Journal of the Geotechnical Engineering Division, ASCE, Volume 113, No. 8, August.

N/A-G : Not Applicable due to soil layer being above ground water
N/A-SF : Not applicable due to Safety Factor ≥ 1.1

EARTHQUAKE INDUCED SETTLEMENT IN DRY SANDY SOIL

Project: Dana Point Hotel
Client: Beverly Hills Hospitality

Project No. 0480-CR3
Date: 12/19/2009
1/0/1900

BORING: HAS-1

Depth h (feet)	Total Stress σ_o (psf)	Avg Stress p (psf)	Addition to N1 for Percent Fines	Corrected N_1 (B/ft)	Void Ratio e	a	b	Max Shear Modulus G_{max} (psf)	R_d	Av Cyclic Shear Stress τ_{av} (psf)	Cyclic Shear Strain γ	Volumetric Strain M = 7.5 ε_{15} 15 Cycles	No. of Cycles M = 6.9 N_C	Volumetric Strain M = 6.9 ε_{Nc} 11 Cycles	Settlement ΔS (feet)
2.0	243.2	162.9	0	13	0.546	0.127	28812	600007	0.995	70.8	1.294E-04	2.170E-04	11.00	1.887E-04	0.0008
4.0	483.6	324.0	0	12	0.755	0.130	19075	823816	0.991	140.1	1.985E-04	3.665E-04	11.00	3.187E-04	0.0025
6.0	724.0	485.1	0	10	0.755	0.133	14973	948555	0.986	208.8	2.587E-04	5.943E-04	11.00	5.169E-04	0.0062
8.0	964.4	646.1	0	9	0.755	0.137	12607	1056986	0.981	276.8	3.089E-04	8.052E-04	11.00	7.003E-04	0.0112
10.0	1204.8	807.2	0	11	0.755	0.140	11031	1263131	0.977	344.2	3.149E-04	6.452E-04	11.00	5.612E-04	0.0112
12.0	1437.4	963.1	0	10	0.802	0.143	9922	1336540	0.972	408.7	3.605E-04	8.282E-04	11.00	7.203E-04	0.0173
14.0	1670.0	1118.9	7	17	0.802	0.146	9068	1611613	0.967	472.5	3.354E-04	5.146E-04	11.00	N/A	N/A
16.0	1889.4	1265.9	6	13	1.127	0.149	8421	1581804	0.963	532.0	4.318E-04	8.847E-04	11.00	N/A	N/A
18.0	2108.8	1412.9	8	24	1.127	0.151	7884	2039644	0.958	590.9	3.497E-04	3.497E-04	11.00	N/A	N/A
20.0	2356.0	1578.5	0	16	0.802	0.155	7376	2001340	0.953	657.0	3.697E-04	4.832E-04	11.00	N/A	N/A
22.0	2603.2	1744.1	0	17	0.802	0.158	6948	2146660	0.949	722.4	3.766E-04	4.578E-04	11.00	N/A	N/A
24.0	2850.4	1909.8	0	16	0.802	0.161	6580	2201335	0.944	787.1	4.015E-04	5.248E-04	11.00	N/A	N/A
26.0	3097.6	2075.4	6	9	0.802	0.164	6259	1742095	0.939	851.1	5.887E-04	2.075E-03	11.00	N/A	N/A
28.0	3344.8	2241.0	6	9	0.802	0.168	5978	1810274	0.935	914.4	6.082E-04	2.144E-03	11.00	N/A	N/A
30.0	3592.0	2406.6	8	24	0.802	0.171	5727	2661980	0.930	977.1	4.038E-04	4.038E-04	11.00	N/A	N/A
32.0	3839.2	2572.3	8	24	0.802	0.174	5503	2752054	0.913	1025.7	4.083E-04	4.083E-04	11.00	N/A	N/A
34.0	4067.4	2725.2	7	15	0.806	0.177	5316	2389161	0.897	1067.3	5.081E-04	9.379E-04	11.00	N/A	N/A
36.0	4295.6	2878.1	7	15	0.806	0.180	5144	2455268	0.881	1106.7	5.105E-04	9.423E-04	11.00	N/A	N/A
38.0	4523.8	3030.9	7	15	0.806	0.183	4987	2519641	0.865	1144.0	5.119E-04	9.450E-04	11.00	N/A	N/A
40.0	4752.0	3183.8	5	38	0.806	0.186	4842	3654190	0.848	1179.0	3.358E-04	1.776E-04	11.00	N/A	N/A
42.0	4980.2	3336.7	5	38	0.806	0.189	4708	3740902	0.832	1211.9	3.358E-04	1.776E-04	11.00	N/A	N/A
44.0	5208.4	3489.6	5	37	0.806	0.192	4583	3787768	0.816	1242.7	3.392E-04	1.860E-04	11.00	N/A	N/A
46.0	5455.8	3655.4	5	34	0.671	0.195	4457	3755458	0.799	1275.7	3.406E-04	2.094E-04	11.00	N/A	N/A
48.0	5703.2	3821.1	1	30	0.671	0.198	4340	3839662	0.783	1306.4	3.397E-04	2.089E-04	11.00	N/A	N/A
50.0	5950.6	3986.9	2	33	0.671	0.202	4231	4007347	0.767	1334.7	3.301E-04	1.878E-04	11.00	N/A	N/A

Total Settlement In Dry Sandy Soil	0.049	feet
	0.591	inches
Estimated Differential Settlement	0.025	feet
	0.295	inches

Settlement Analysis Per *Procedure to Evaluate Earthquake Induced Settlements in Dry Sandy Soils*, by Daniel Pradel, Journal of Geotechnical and Geoenvironmental Engineering, April 1998.

TOTAL MAXIMUM SEISMIC SETTLEMENT INCLUDING SATURATED AND DRY SOILS	0.465	feet
	5.583	inches
TOTAL DIFFERENTIAL SEISMIC SETTLEMENT INCLUDING SATURATED AND DRY SOILS	0.233	feet
	2.791	inches

$G_{max} = 447 p_o (N_1)^{1/3} (p/p_o)^{1/2}$

$\tau_{av} = 0.65\,(a_{max}/g)\,\sigma_o\,R_d$

$\gamma = \dfrac{(1 + a e^{(b\,\tau_{av}/G_{max})})}{(1+a)}\,(\tau_{av}/G_{max})$

$a = 0.0389\,(p/p_o) + 0.124$ where p_o = 2000 psf

$b = 6400\,(p/p_o)^{-0.6}$

$\varepsilon_{15} = \gamma\,(N_1/20)^{-1.2}$

$N_C = (M-4)^{2.17}$

$\varepsilon_{Nc} = \varepsilon_{15}\,(N_c/15)^{0.45}$

$\Delta S = 2\,\Delta h\,\varepsilon_{Nc}$

SURFACE MANIFESTATIONS (Per Ishihara, 1985)

Thickness of Surface Layer: 15 feet
Thickness of Liquefiable Layer: 10 feet
Maximum Acceleration: 0.45 g

From Chart: Potential Surface Manifestations at Min. Acceleration of 0.30 g

Therefore, There Is a Potential for Surface Manifestations Occurring

LIQUEFACTION ANALYSIS

Project: Dana Point Hotel
Client: Beverly Hills Hospitality

Project No. 0480-CR3
Date: 12/19/2009

BORING: HAS-1

Fault Distance: 5.4 km
Groundwater Depth: 5 feet

A_{max}: 0.45 g
M_s: 6.90

Sampler:
S = SPT without Liner; 1.375" Dia. — C_S = 1.20
R = Split Spoon/California w/ Rings: 3.5" Dia. — C_S = 0.63
SL = SPT with Liner; 1.375" Dia. — C_S = 1.00

Boring: Drilled Diameter = 8 inches
Sampled Diameter = 4 inches
Hammer: 140 lb w/ 30 inch Drop

Depth h (ft)	Dry Density (pcf) γ_d	Wet Density (pcf) γ_w	Total Stress (psf) σ	Effective Stress (psf) σ'	Sampler Type	Fines (%)	Field N (B/Ft)	Corrections to Field N-Value (From Table 5.2) C_N	C_E	C_B	C_R	C_S	Additive Correction Factor * C_{Fines}	Corrected N_1 (B/ft)	Magnitude Scaling Factor (From Fig 7.2)	CRR Cyclic Resistance Ratio (From Fig 7.1) M = 7.5	M = 6.9	r_d ** (From Fig 7.3)	Induced Cyclic Stress Ratio	Safety Factor
2.0	109	121.6	243	243	R	3	12	2.00	1.00	1.15	0.75	0.63	0	13	1.300	0.142	0.185	0.995	0.291	NL-G
4.0	96	120.2	484	484	R	3	11	2.00	1.00	1.15	0.75	0.63	0	12	1.300	0.131	0.170	0.991	0.290	NL-G
6.0	96	120.2	724	662	R	3	11	1.74	1.00	1.15	0.75	0.63	0	10	1.300	0.108	0.140	0.986	0.316	0.44
8.0	96	120.2	964	777	R	3	11	1.60	1.00	1.15	0.75	0.63	0	10	1.300	0.108	0.140	0.981	0.356	0.39
10.0	96	120.2	1205	893	R	3	15	1.50	1.00	1.15	0.75	0.63	0	12	1.300	0.131	0.170	0.977	0.386	0.44
12.0	93.5	116.3	1437	1001	R	53	15	1.41	1.00	1.15	0.75	0.63	7	19	1.300	1.000	1.300	0.972	0.408	3.18
14.0	93.5	116.3	1670	1108	R	53	15	1.34	1.00	1.15	0.85	0.63	7	19	1.300	1.000	1.300	0.967	0.426	3.05
16.0	79.2	109.7	1889	1203	R	53	10	1.29	1.00	1.15	0.85	0.63	7	15	1.300	0.275	0.358	0.963	0.442	0.81
18.0	79.2	109.7	2109	1298	S	53	13	1.24	1.00	1.15	0.85	1.20	9	28	1.300	1.000	1.300	0.958	0.455	2.85
20.0	93.5	123.6	2356	1420	S	5	13	1.19	1.00	1.15	0.85	1.20	0	18	1.300	0.199	0.259	0.953	0.463	0.56
22.0	93.5	123.6	2603	1542	S	5	13	1.14	1.00	1.15	0.95	1.20	0	19	1.300	0.211	0.274	0.949	0.468	0.59
24.0	93.5	123.6	2850	1665	S	5	13	1.10	1.00	1.15	0.95	1.20	0	19	1.300	0.211	0.274	0.944	0.473	0.58
26.0	93.5	123.6	3098	1787	R	53	5	1.06	1.00	1.15	0.95	0.63	6	10	1.300	0.192	0.250	0.939	0.476	0.52
28.0	93.5	123.6	3345	1910	R	53	5	1.02	1.00	1.15	0.95	0.63	6	10	1.300	0.192	0.250	0.935	0.479	0.52
30.0	93.5	123.6	3592	2032	S	53	14	0.99	1.00	1.15	0.95	1.20	9	27	1.300	1.000	1.300	0.930	0.481	2.70
32.0	93.5	123.6	3839	2154	S	53	14	0.96	1.00	1.15	0.95	1.20	9	27	1.300	1.000	1.300	0.913	0.476	2.73
34.0	93.3	114.1	4067	2258	R	53	13	0.94	1.00	1.15	1.00	0.63	7	16	1.300	0.295	0.384	0.897	0.473	0.81
36.0	93.3	114.1	4286	2361	R	53	13	0.92	1.00	1.15	1.00	0.63	7	16	1.300	0.295	0.384	0.881	0.469	0.82
38.0	93.3	114.1	4524	2465	R	53	13	0.90	1.00	1.15	1.00	0.63	7	15	1.300	0.275	0.358	0.865	0.464	0.77
40.0	93.3	114.1	4752	2568	S	17	30	0.88	1.00	1.15	1.00	1.20	5	42	1.300	1.000	1.300	0.848	0.459	2.83
42.0	93.3	114.1	4980	2671	S	17	30	0.87	1.00	1.15	1.00	1.20	5	41	1.300	1.000	1.300	0.832	0.454	2.87
44.0	93.3	114.1	5208	2775	S	17	30	0.85	1.00	1.15	1.00	1.20	5	40	1.300	1.000	1.300	0.816	0.448	2.90
46.0	100.8	123.7	5456	2897	R	17	53	0.83	1.00	1.15	1.00	0.63	5	37	1.300	1.000	1.300	0.799	0.440	2.95
48.0	100.8	123.7	5703	3020	R	10	53	0.81	1.00	1.15	1.00	0.63	2	33	1.300	1.000	1.300	0.783	0.433	3.01
50.0	100.8	123.7	5951	3143	S	10	30	0.80	1.00	1.15	1.00	1.20	2	35	1.300	1.000	1.300	0.767	0.425	3.06

Liquefaction Analysis Per

1. *Recommended Procedures for Implementation of DMG Special Publication 117:*
   Guidelines for Analyzing and Mitigating Liquefaction in California, March 1999,
   Organized Through the Southern California Earthquake Center, University of Southern California.
2. Proceedings of the NCEER Workshop on Evaluation of Liquefaction Resistance of Soils,
   December 31, 1997, National Center for Earthquake Engineering Research.

* Additive Fines Content Correction for SPT

$C_{Fines} = [\alpha + \beta (N_1)_{60}] - (N_1)_{60}$		(From NCEER)
FC	α	β
For FC ≤ 5% :	0.0	1.0
For 5% < FC < 35% :	exp (1.76 - (190 / FC^2))	0.99 + (FC$^{1.5}$ / 1000)
For FC ≥ 35% :	5.0	1.2

** r_d

Depth (ft)	r_d (From NCEER)
For h ≤ 30' :	r_d = 1.0 - 0.00765(0.305)h
For 30' < h ≤ 75' :	r_d = 1.174 - 0.0267(0.305)h
For 75' < h ≤ 100' :	r_d = 0.744 - 0.008(0.305)h
For h < 100' :	r_d = 0.50

LEGEND:

C_N : Depth Correction Factor [0.4 ≤ (2000 / σ')$^{0.5}$ ≤ 2.0]
C_E : Energy Ratio Correction Factor
C_B : Borehole Diameter Correction Factor
C_R : Rod Length Correction Factor
C_S : Sampling Method Correction Factor
C_{SPT} : Large Diameter Sampler to SPT Correction Factor
C_{Fines} : Fines Correction Factor

Induced Cyclic Stress Ratio = $0.65 (A_{max}/g) (\sigma / \sigma') r_d$

NL-F: No Liquefaction due to Clay and Fines Content
NL-G: No Liquefaction due to Soil Layer Being Above Ground Water

LIQUEFACTION SETTLEMENT - SUBMERGED SOILS

Project: Dana Point Hotel
Client: Beverly Hills Hospitality

Project No. 0480-CR3
Date: 12/19/2009
1/0/1900

BORING: HAS-1

Depth h	Fines	Additive Corr. Factor to N_1	Corrected N_1	Cyclic Resistance Ratio	Induced Cyclic Stress Ratio	Safety Factor	Volumetric Strain (From Fig 7.11)	Settlement
(feet)	(%)	From Table 7.2	(B/ft)	M = 6.9			(%)	(feet)
2.0	3	0	13	0.185	0.291	NL-G	N/A-G	N/A-G
4.0	3	0	12	0.170	0.290	NL-G	N/A-G	N/A-G
6.0	3	0	10	0.140	0.316	0.44	2.60%	0.052
8.0	3	0	10	0.140	0.356	0.39	2.60%	0.052
10.0	3	0	12	0.170	0.386	0.44	2.30%	0.046
12.0	53	4	16	1.300	0.408	3.18	N/A- SF > 1.1	N/A-SF
14.0	53	4	16	1.300	0.426	3.05	N/A- SF > 1.1	N/A-SF
16.0	53	4	12	0.358	0.442	0.81	2.30%	0.046
18.0	53	4	23	1.300	0.455	2.85	N/A- SF > 1.1	N/A-SF
20.0	5	0	18	0.259	0.463	0.56	1.70%	0.034
22.0	5	0	19	0.274	0.468	0.59	1.60%	0.032
24.0	5	0	19	0.274	0.473	0.58	1.60%	0.032
26.0	53	4	8	0.250	0.476	0.52	2.90%	0.058
28.0	53	4	8	0.250	0.479	0.52	2.90%	0.058
30.0	53	4	22	1.300	0.481	2.70	N/A- SF > 1.1	N/A-SF
32.0	53	4	22	1.300	0.476	2.73	N/A- SF > 1.1	N/A-SF
34.0	53	4	13	0.384	0.473	0.81	2.30%	0.046
36.0	53	4	13	0.384	0.469	0.82	2.30%	0.046
38.0	53	4	12	0.358	0.464	0.77	2.30%	0.046
40.0	17	1	38	1.300	0.459	2.83	N/A- SF > 1.1	N/A-SF
42.0	17	1	37	1.300	0.454	2.87	N/A- SF > 1.1	N/A-SF
44.0	17	1	36	1.300	0.448	2.90	N/A- SF > 1.1	N/A-SF
46.0	17	1	33	1.300	0.440	2.95	N/A- SF > 1.1	N/A-SF
48.0	10	1	32	1.300	0.433	3.01	N/A- SF > 1.1	N/A-SF
50.0	10	1	34	1.300	0.425	3.06	N/A- SF > 1.1	N/A-SF
							Total Liquefaction Settlement	0.548 feet
								6.576 inches
							Estimated Differential Settlement	0.274 feet
								3.288 inches

Liquefaction Settlement Analysis Per Takimatsu, K. and Seed,H.B., 1987.
Evaluation of Settlements in Sands Due to Earthquake Shaking,
Journal of the Geotechnical Engineering Division, ASCE, Volume 113, No. 8, August.

N/A-G : Not Applicable due to soil layer being above ground water
N/A-SF : Not applicable due to Safety Factor $\geq$ 1.1

EARTHQUAKE INDUCED SETTLEMENT IN DRY SANDY SOIL

Project: Dana Point Hotel
Client: Beverly Hills Hospitality

Project No. 0480-CR3
Date: 12/19/2009
1/0/1900

BORING: HAS-1

Depth h (feet)	Total Stress σ_o (psf)	Avg Stress p (psf)	Addition to N1 for Percent Fines	Corrected N_1 (B/ft)	Void Ratio e	a	b	Max Shear Modulus G_{max} (psf)	R_d	Av Cyclic Shear Stress Θ_{av} (psf)	Cyclic Shear Strain γ	Volumetric Strain M = 7.5 γ_{15} 15 Cycles	No. of Cycles M = 6.9 N_C	Volumetric Strain M = 6.9 γ_{Nc} 11 Cycles	Settlement ΔS (feet)
2.0	243.2	162.9	0	13	0.546	0.127	28812	600007	0.995	70.8	1.294E-04	2.170E-04	11.00	1.887E-04	0.0008
4.0	483.6	324.0	0	12	0.755	0.130	19075	823816	0.991	140.1	1.985E-04	3.665E-04	11.00	3.187E-04	0.0025
6.0	724.0	485.1	0	10	0.755	0.133	14973	948555	0.986	208.8	2.587E-04	5.943E-04	11.00	N/A	N/A
8.0	964.4	646.1	0	10	0.755	0.137	12607	1054767	0.981	276.8	2.956E-04	6.791E-04	11.00	N/A	N/A
10.0	1204.8	807.2	0	12	0.755	0.140	11031	1300303	0.977	344.2	3.038E-04	5.607E-04	11.00	N/A	N/A
12.0	1437.4	963.1	7	19	0.802	0.143	9922	1563227	0.972	408.7	2.967E-04	3.878E-04	11.00	N/A	N/A
14.0	1670.0	1118.9	7	19	0.802	0.146	9068	1684967	0.967	472.5	3.175E-04	4.150E-04	11.00	N/A	N/A
16.0	1889.4	1265.9	7	15	1.127	0.149	8421	1628355	0.963	532.0	4.156E-04	7.671E-04	11.00	N/A	N/A
18.0	2108.8	1412.9	9	28	1.127	0.151	7884	2136913	0.958	590.9	3.296E-04	2.787E-04	11.00	N/A	N/A
20.0	2356.0	1578.5	0	18	0.802	0.155	7376	2081478	0.953	657.0	3.523E-04	3.998E-04	11.00	N/A	N/A
22.0	2603.2	1744.1	0	19	0.802	0.158	6948	2227742	0.949	722.4	3.599E-04	3.828E-04	11.00	N/A	N/A
24.0	2850.4	1909.8	0	19	0.802	0.161	6580	2331117	0.944	787.1	3.742E-04	3.980E-04	11.00	N/A	N/A
26.0	3097.6	2075.4	6	10	0.802	0.164	6259	1821388	0.939	851.1	5.560E-04	1.870E-03	11.00	N/A	N/A
28.0	3344.8	2241.0	6	10	0.802	0.168	5978	1892670	0.935	914.4	5.744E-04	1.725E-03	11.00	N/A	N/A
30.0	3592.0	2406.6	9	27	0.802	0.171	5727	2747909	0.930	977.1	3.884E-04	3.465E-04	11.00	N/A	N/A
32.0	3839.2	2572.3	9	27	0.802	0.174	5503	2840891	0.913	1025.7	3.928E-04	3.504E-04	11.00	N/A	N/A
34.0	4067.4	2725.2	7	16	0.806	0.177	5316	2453764	0.897	1067.3	4.914E-04	8.241E-04	11.00	N/A	N/A
36.0	4295.6	2878.1	7	16	0.806	0.180	5144	2521659	0.881	1106.7	4.937E-04	8.279E-04	11.00	N/A	N/A
38.0	4523.8	3030.9	7	15	0.806	0.183	4987	2519641	0.865	1144.0	5.119E-04	9.450E-04	11.00	N/A	N/A
40.0	4752.0	3183.8	5	42	0.806	0.186	4842	3792213	0.848	1179.0	3.213E-04	1.487E-04	11.00	N/A	N/A
42.0	4980.2	3336.7	5	41	0.806	0.189	4708	3847842	0.832	1211.9	3.247E-04	1.552E-04	11.00	N/A	N/A
44.0	5208.4	3489.6	5	40	0.806	0.192	4583	3899237	0.816	1242.7	3.278E-04	1.619E-04	11.00	N/A	N/A
46.0	5455.8	3655.4	5	37	0.671	0.195	4457	3876684	0.799	1275.7	3.283E-04	1.800E-04	11.00	N/A	N/A
48.0	5703.2	3821.1	2	33	0.671	0.198	4340	3923159	0.783	1306.4	3.314E-04	1.885E-04	11.00	N/A	N/A
50.0	5950.6	3986.9	2	35	0.671	0.202	4231	4089152	0.767	1334.7	3.224E-04	1.706E-04	11.00	N/A	N/A

Total Settlement In Dry Sandy Soil	0.003	feet
	0.040	inches
Estimated Differential Settlement	0.002	feet
	0.020	inches

Settlement Analysis Per *Procedure to Evaluate Earthquake Induced Settlements in Dry Sandy Soils*, by Daniel Pradel, Journal of Geotechnical and Geoenvironmental Engineering, April 1998.

$G_{max} = 447 p_o (N_1)^{1/3} (p/p_o)^{1/2}$

$\Theta_{av} = 0.65 (a_{max}/g) \cdot \sigma_o R_d$

$\gamma = \frac{(1 + ae^{(b\,\Theta_{av}/G_{max})})}{(1 + a)} (\Theta_{av}/G_{max})$

$a = 0.0389 (p/p_o) + 0.124$ where $p_o = 2000$ psf

$b = 6400 (p/p_o)^{-0.6}$

$\gamma_{15} = \gamma (N_1/20)^{-1.2}$

$N_C = (M - 4)^{2.17}$

$\gamma_{Nc} = \gamma_{15} (N_c/15)^{0.45}$

$\Delta S = 2\,\Delta h\,\gamma_{Nc}$

TOTAL MAXIMUM SEISMIC SETTLEMENT INCLUDING SATURATED AND DRY SOILS	0.551	feet
	6.616	inches
TOTAL DIFFERENTIAL SEISMIC SETTLEMENT INCLUDING SATURATED AND DRY SOILS	0.276	feet
	3.308	inches

SURFACE MANIFESTATIONS (Per Ishihara, 1985)

Thickness of Surface Layer: 15 feet
Thickness of Liquefiable Layer: 10 feet
Maximum Acceleration: 0.45 g

From Chart: Potential Surface Manifestations at Min. Acceleration of 0.30 g

Therefore, There is a Potential for Surface Manifestations Occurring

APPENDIX E

GENERAL EARTHWORK AND GRADING GUIDELINES

Dana Point Hotel Project
City of Dana Point, Orange County, California
Project No. 0480-CR3

GEOTEK

GENERAL GRADING GUIDELINES

Guidelines presented herein are intended to address general construction procedures for earthwork construction. Specific situations and conditions often arise which cannot reasonably be discussed in general guidelines; when anticipated these are discussed in the text of the report. Often unanticipated conditions are encountered which may necessitate modification or changes to these guidelines. It is our hope that these will assist the contractor to more efficiently complete the project by providing a reasonable understanding of the procedures that would be expected during earthwork and the testing and observation used to evaluate those procedures.

General

Grading should be performed to at least the minimum requirements of governing agencies, Chapters 18 and 33 of the Uniform Building Code, CBC (2007) and the guidelines presented below.

Preconstruction Meeting

A preconstruction meeting should be held prior to site earthwork. Any questions the contractor has regarding our recommendations, general site conditions, apparent discrepancies between reported and actual conditions and/or differences in procedures the contractor intends to use should be brought up at that meeting. The contractor (including the main onsite representative) should review our report and these guidelines in advance of the meeting. Any comments the contractor may have regarding these guidelines should be brought up at that meeting.

Grading Observation and Testing

1. Observation of the fill placement should be provided by our representative during grading. Verbal communication during the course of each day will be used to inform the contractor of test results. The contractor should receive a copy of the "Daily Field Report" indicating results of field density tests that day. If our representative does not provide the contractor with these reports, our office should be notified.
2. Testing and observation procedures are, by their nature, specific to the work or area observed and location of the tests taken, variability may occur in other locations. The contractor is responsible for the uniformity of the grading operations; our observations and test results are intended to evaluate the contractor's overall level of efforts during grading. The contractor's personnel are the only individuals participating in all aspect of site work. Compaction testing and observation should not be considered as relieving the contractor's responsibility to properly compact the fill.
3. Cleanouts, processed ground to receive fill, key excavations, and subdrains should be observed by our representative prior to placing any fill. It will be the contractor's responsibility to notify our representative or office when such areas are ready for observation.
4. Density tests may be made on the surface material to receive fill, as considered warranted by this firm.

5. In general, density tests would be made at maximum intervals of two feet of fill height or every 1,000 cubic yards of fill placed. Criteria will vary depending on soil conditions and size of the fill. More frequent testing may be performed. In any case, an adequate number of field density tests should be made to evaluate the required compaction and moisture content is generally being obtained.

6. Laboratory testing to support field test procedures will be performed, as considered warranted, based on conditions encountered (e.g. change of material sources, types, etc.) Every effort will be made to process samples in the laboratory as quickly as possible and in progress construction projects are our first priority. However, laboratory workloads may cause in delays and some soils may require a minimum of 48 to 72 hours to complete test procedures. Whenever possible, our representative(s) should be informed in advance of operational changes that might result in different source areas for materials.

7. Procedures for testing of fill slopes are as follows:
   a) Density tests should be taken periodically during grading on the flat surface of the fill, three to five feet horizontally from the face of the slope.
   b) If a method other than over building and cutting back to the compacted core is to be employed, slope compaction testing during construction should include testing the outer six inches to three feet in the slope face to determine if the required compaction is being achieved.

8. Finish grade testing of slopes and pad surfaces should be performed after construction is complete.

Site Clearing

1. All vegetation, and other deleterious materials, should be removed from the site. If material is not immediately removed from the site it should be stockpiled in a designated area(s) well outside of all current work areas and delineated with flagging or other means. Site clearing should be performed in advance of any grading in a specific area.

2. Efforts should be made by the contractor to remove all organic or other deleterious material from the fill, as even the most diligent efforts may result in the incorporation of some materials. This is especially important when grading is occurring near the natural grade. All equipment operators should be aware of these efforts. Laborers may be required as root pickers.

3. Nonorganic debris or concrete may be placed in deeper fill areas provided the procedures used are observed and found acceptable by our representative. Typical procedures are similar to those indicated on Plate G-4.

Treatment of Existing Ground

1. Following site clearing, all surficial deposits of alluvium and colluvium as well as weathered or creep effected bedrock, should be removed (see Plates G-1, G-2 and G-3) unless otherwise specifically indicated in the text of this report.

2. In some cases, removal may be recommended to a specified depth (e.g. flat sites where partial alluvial removals may be sufficient). The contractor should not exceed these depths unless directed otherwise by our representative.

3. Groundwater existing in alluvial areas may make excavation difficult. Deeper removals than indicated in the text of the report may be necessary due to saturation during winter months.

4. Subsequent to removals, the natural ground should be processed to a depth of six inches, moistened to near optimum moisture conditions and compacted to fill standards.

5. Exploratory back hoe or dozer trenches still remaining after site removal should be excavated and filled with compacted fill if they can be located.

Subdrainage

1. Subdrainage systems should be provided in canyon bottoms prior to placing fill, and behind buttress and stabilization fills and in other areas indicated in the report. Subdrains should conform to schematic diagrams G-1 and G-5, and be acceptable to our representative.

2. For canyon subdrains, runs less than 500 feet may use six-inch pipe. Typically, runs in excess of 500 feet should have the lower end as eight-inch minimum.

3. Filter material should be clean, 1/2 to 1-inch gravel wrapped in a suitable filter fabric. Class 2 permeable filter material per California Department of Transportation Standards tested by this office to verify its suitability, may be used without filter fabric. A sample of the material should be provided to the Soils Engineer by the contractor at least two working days before it is delivered to the site. The filter should be clean with a wide range of sizes.

4. Approximate delineation of anticipated subdrain locations may be offered at 40-scale plan review stage. During grading, this office would evaluate the necessity of placing additional drains.

5. All subdrainage systems should be observed by our representative during construction and prior to covering with compacted fill.

6. Subdrains should outlet into storm drains where possible. Outlets should be located and protected. The need for backflow preventers should be assessed during construction.

7. Consideration should be given to having subdrains located by the project surveyors.

Fill Placement

1. Unless otherwise indicated, all site soil and bedrock may be reused for compacted fill; however, some special processing or handling may be required (see text of report).

2. Material used in the compacting process should be evenly spread, moisture conditioned, processed, and compacted in thin lifts six (6) to eight (8) inches in compacted thickness to obtain a uniformly dense layer. The fill should be placed and compacted on a nearly horizontal plane, unless otherwise found acceptable by our representative.

3. If the moisture content or relative density varies from that recommended by this firm, the contractor should rework the fill until it is in accordance with the following:

a) Moisture content of the fill should be at or above optimum moisture. Moisture should be evenly distributed without wet and dry pockets. Pre-watering of cut or removal areas should be considered in addition to watering during fill placement, particularly in clay or dry surficial soils. The ability of the contractor to obtain the proper moisture content will control production rates.

b) Each six-inch layer should be compacted to at least 90 percent of the maximum dry density in compliance with the testing method specified by the controlling governmental agency. In most cases, the testing method is ASTM Test Designation D-1557.

4. Rock fragments less than eight inches in diameter may be utilized in the fill, provided:

   a) They are not placed in concentrated pockets;

   b) There is a sufficient percentage of fine-grained material to surround the rocks;

   c) The distribution of the rocks is observed by, and acceptable to, our representative.

5. Rocks exceeding eight (8) inches in diameter should be taken off site, broken into smaller fragments, or placed in accordance with recommendations of this firm in areas designated suitable for rock disposal (see Plate G-4). On projects where significant large quantities of oversized materials are anticipated, alternate guidelines for placement may be included. If significant oversize materials are encountered during construction, these guidelines should be requested.

6. In clay soil, dry or large chunks or blocks are common. If in excess of eight (8) inches minimum dimension, then they are considered as oversized. Sheepsfoot compactors or other suitable methods should be used to break up blocks. When dry, they should be moisture conditioned to provide a uniform condition with the surrounding fill.

Slope Construction

1. The contractor should obtain a minimum relative compaction of 90 percent out to the finished slope face of fill slopes. This may be achieved by either overbuilding the slope and cutting back to the compacted core, or by direct compaction of the slope face with suitable equipment.

2. Slopes trimmed to the compacted core should be overbuilt by at least three (3) feet with compaction efforts out to the edge of the false slope. Failure to properly compact the outer edge results in trimming not exposing the compacted core and additional compaction after trimming may be necessary.

3. If fill slopes are built "at grade" using direct compaction methods, then the slope construction should be performed so that a constant gradient is maintained throughout construction. Soil should not be "spilled" over the slope face nor should slopes be "pushed out" to obtain grades. Compaction equipment should compact each lift along the immediate top of slope. Slopes should be back rolled or otherwise compacted at approximately every 4 feet vertically as the slope is built.

4. Corners and bends in slopes should have special attention during construction as these are the most difficult areas to obtain proper compaction.

5. Cut slopes should be cut to the finished surface. Excessive undercutting and smoothing of the face with fill may necessitate stabilization.

Keyways, Buttress and Stabilization Fills

Keyways are needed to provide support for fill slope and various corrective procedures.

1. Side-hill fills should have an equipment-width key at their toe excavated through all surficial soil and into competent material and tilted back into the hill (Plates G-2, G-3). As the fill is elevated, it should be benched through surficial soil and slopewash, and into competent bedrock or other material deemed suitable by our representatives (See Plates G-1, G-2, and G-3).
2. Fill over cut slopes should be constructed in the following manner:
   a) All surficial soils and weathered rock materials should be removed at the cut-fill interface.
   b) A key at least one and one-half (1.5) equipment width wide (or as needed for compaction), and tipped at least one (1) foot into slope, should be excavated into competent materials and observed by our representative.
   c) The cut portion of the slope should be excavated prior to fill placement to evaluate if stabilization is necessary. The contractor should be responsible for any additional earthwork created by placing fill prior to cut excavation. (see Plate G-3 for schematic details.)
3. Daylight cut lots above descending natural slopes may require removal and replacement of the outer portion of the lot. A schematic diagram for this condition is presented on Plate G-2.
4. A basal key is needed for fill slopes extending over natural slopes. A schematic diagram for this condition is presented on Plate G-2.
5. All fill slopes should be provided with a key unless within the body of a larger overall fill mass. Please refer to Plate G-3 for specific guidelines.

Anticipated buttress and stabilization fills are discussed in the text of the report. The need to stabilize other proposed cut slopes will be evaluated during construction. Plate G-5 shows a schematic of buttress construction.

1. All backcuts should be excavated at gradients of 1:1 or flatter. The backcut configuration should be determined based on the design, exposed conditions, and need to maintain a minimum fill width and provide working room for the equipment.
2. On longer slopes, backcuts and keyways should be excavated in maximum 250 feet long segments. The specific configurations will be determined during construction.
3. All keys should be a minimum of two (2) feet deep at the toe and slope toward the heel at least one foot or two (2%) percent, whichever is greater.
4. Subdrains are to be placed for all stabilization slopes exceeding 10 feet in height. Lower slopes are subject to review. Drains may be required. Guidelines for subdrains are presented on Plate G-5.

5. Benching of backcuts during fill placement is required.

Lot Capping

1. When practical, the upper three (3) feet of material placed below finish grade should be comprised of the least expansive material available. Preferably, highly and very highly expansive materials should not be used. We will attempt to offer advise based on visual evaluations of the materials during grading, but it must be realized that laboratory testing is needed to evaluate the expansive potential of soil. Minimally, this testing takes two (2) to four (4) days to complete.
2. Transition lots (cut and fill) both per plan and those created by remedial grading (e.g. lots above stabilization fills, along daylight lines, above natural slopes, etc.) should be capped with a minimum three foot thick compacted fill blanket.
3. Cut pads should be observed by our representative(s) to evaluate the need for overexcavation and replacement with fill. This may be necessary to reduce water infiltration into highly fractured bedrock or other permeable zones, and/or due to differing expansive potential of materials beneath a structure. The overexcavation should be at least three feet. Deeper overexcavation may be recommended in some cases.

ROCK PLACEMENT AND ROCK FILL GUIDELINES

It is anticipated that large quantities of oversize material would be generated during grading. It's likely that such materials may require special handling for burial. Although alternatives may be developed in the field, the following methods of rock disposal are recommended on a preliminary basis.

Limited Larger Rock

When materials encountered are principally soil with limited quantities of larger rock fragments or boulders, placement in windrows is recommended. The following procedures should be applied:

1. Oversize rock (greater than 8 inches) should be placed in windrows.
    a) Windrows are rows of single file rocks placed to avoid nesting or clusters of rock.
    b) Each adjacent rock should be approximately the same size (within ~one foot in diameter).
    c) The maximum rock size allowed in windrows is four feet
2. A minimum vertical distance of three feet between lifts should be maintained. Also, the windrows should be offset from lift to lift. Rock windrows should not be closer than 15 feet to the face of fill slopes and sufficient space must be maintained for proper slope construction (see Plate G-4).
3. Rocks greater than eight inches in diameter should not be placed within seven feet of the finished subgrade for a roadway or pads and should be held below the depth of the lowest utility. This will allow easier trenching for utility lines.

4. Rocks greater than four feet in diameter should be broken down, if possible, or they may be placed in a dozer trench. Each trench should be excavated into the compacted fill a minimum of one foot deeper than the largest diameter of rock.

   a) The rock should be placed in the trench and granular fill materials (SE>30) should be flooded into the trench to fill voids around the rock.

   b) The over size rock trenches should be no closer together than 15 feet from any slope face.

   c) Trenches at higher elevation should be staggered and there should be a minimum of four feet of compacted fill between the top of the one trench and the bottom of the next higher trench.

   d) It would be necessary to verify 90 percent relative compaction in these pits. A 24 to 72 hour delay to allow for water dissipation should be anticipated prior to additional fill placement.

Structural Rock Fills

If the materials generated for placement in structural fills contains a significant percentage of material more than six (6) inches in one dimension, then placement using conventional soil fill methods with isolated windrows would not be feasible. In such cases the following could be considered:

1. Mixes of large rock or boulders may be placed as rock fill. They should be below the depth of all utilities both on pads and in roadways and below any proposed swimming pools or other excavations. If these fills are placed within seven (7) feet of finished grade, they may effect foundation design.

2. Rock fills are required to be placed in horizontal layers that should not exceed two feet in thickness, or the maximum rock size present, which ever is less. All rocks exceeding two feet should be broken down to a smaller size, windrowed (see above), or disposed of in non-structural fill areas. Localized larger rock up to 3 feet in largest dimension may be placed in rock fill as follows:

   a) individual rocks are placed in a given lift so as to be roughly 50% exposed above the typical surface of the fill ,

   b) loaded rock trucks or alternate compactors are worked around the rock on all sides to the satisfaction of the soil engineer,

   c) the portion of the rock above grade is covered with a second lift.

3. Material placed in each lift should be well graded. No unfilled spaces (voids) should be permitted in the rock fill.

Compaction Procedures

Compaction of rock fills is largely procedural. The following procedures have been found to generally produce satisfactory compaction.

1. Provisions for routing of construction traffic over the fill should be implemented.

- a) Placement should be by rock trucks crossing the lift being placed and dumping at its edge.
- b) The trucks should be routed so that each pass across the fill is via a different path and that all areas are uniformly traversed.
- c) The dumped piles should be knocked down and spread by a large dozer (D-8 or larger suggested). (Water should be applied before and during spreading.)

2. Rock fill should be generously watered (sluiced)
   - a) Water should be applied by water trucks to the:
     - i) dump piles,
     - ii) front face of the lift being placed and,
     - iii) surface of the fill prior to compaction.
   - b) No material should be placed without adequate water.
   - c) The number of water trucks and water supply should be sufficient to provide constant water.
   - d) Rock fill placement should be suspended when water trucks are unavailable:
     - i) for more than 5 minutes straight, or,
     - ii) for more than 10 minutes/hour.

3. In addition to the truck pattern and at the discretion of the soil engineer, large, rubber tired compactors may be required.
   - a) The need for this equipment will depend largely on the ability of the operators to provide complete and uniform coverage by wheel rolling with the trucks.
   - b) Other large compactors will also be considered by the soil engineer provided that required compaction is achieved.

4. Placement and compaction of the rock fill is largely procedural. Observation by trenching should be made to check:
   - a) the general segregation of rock size,
   - b) for any unfilled spaces between the large blocks, and
   - c) the matrix compaction and moisture content.

5. Test fills may be required to evaluate relative compaction of finer grained zones or as deemed appropriate by the soil engineer.
   - a) A lift should be constructed by the methods proposed, as proposed

6. Frequency of the test trenching is to be at the discretion of the soil engineer. Control areas may be used to evaluate the contractors procedures.

7. A minimum horizontal distance of 15 feet should be maintained from the face of the rock fill and any finish slope face. At least the outer 15 feet should be built of conventional fill materials.

Piping Potential and Filter Blankets

Where conventional fill is placed over rock fill, the potential for piping (migration) of the fine grained material from the conventional fill into rock fills will need to be addressed.

The potential for particle migration is related to the grain size comparisons of the materials present and in contact with each other. Provided that 15 percent of the finer soil is larger than the effective pore size of the coarse soil, then particle migration is substantially mitigated. This can be accomplished with a well-graded matrix material for the rock fill and a zone of fill similar to the matrix above it. The specific gradation of the fill materials placed during grading must be known to evaluate the need for any type of filter that may be necessary to cap the rock fills. This, unfortunately, can only be accurately determined during construction.

In the event that poorly graded matrix is used in the rock fills, properly graded filter blankets 2 to 3 feet thick separating rock fills and conventional fill may be needed. As an alternative, use of two layers of filter fabric (Mirafi 700 x or equivalent) could be employed on top of the rock fill. In order to mitigate excess puncturing, the surface of the rock fill should be well broken down and smoothed prior to placing the filter fabric. The first layer of the fabric may then be placed and covered with relatively permeable fill material (with respect to overlying material) 1 to 2 feet thick. The relative permeable material should be compacted to fill standards. The second layer of fabric should be placed and conventional fill placement continued.

Subdrainage

Rock fill areas should be tied to a subdrainage system. If conventional fill is placed that separates the rock from the main canyon subdrain, then a secondary system should be installed. A system consisting of an adequately graded base (3 to 4 percent to the lower side) with a collector system and outlets may suffice.

Additionally, at approximately every 25 foot vertical interval, a collector system with outlets should be placed at the interface of the rock fill and the conventional fill blanketing a fill slope

Monitoring

Depending upon the depth of the rock fill and other factors, monitoring for settlement of the fill areas may be needed following completion of grading. Typically, if rock fill depths exceed 40 feet, monitoring would be recommend prior to construction of any settlement sensitive improvements. Delays of 3 to 6 months or longer can be expected prior to the start of construction.

UTILITY TRENCH CONSTRUCTION AND BACKFILL

Utility trench excavation and backfill is the contractors responsibility. The geotechnical consultant typically provides periodic observation and testing of these operations. While efforts are made to make sufficient observations and tests to verify that the contractors' methods and procedures are adequate to achieve proper compaction, it is typically impractical to observe all backfill procedures. As such, it is critical that the contractor use consistent backfill procedures.

Compaction methods vary for trench compaction and experience indicates many methods can be successful. However, procedures that "worked" on previous projects may or may not prove effective on a given site. The contractor(s) should outline the procedures proposed, so that we may discuss them prior to construction. We will offer comments based on our knowledge of site conditions and experience.

1. Utility trench backfill in slopes, structural areas, in streets and beneath flat work or hardscape should be brought to at least optimum moisture and compacted to at least 90 percent of the laboratory standard. Soil should be moisture conditioned prior to placing in the trench.
2. Flooding and jetting are not typically recommended or acceptable for native soils. Flooding or jetting may be used with select sand having a Sand Equivalent (SE) of 30 or higher. This is typically limited to the following uses:
   a) shallow (12 + inches) under slab interior trenches and,
   b) as bedding in pipe zone.

   The water should be allowed to dissipate prior to pouring slabs or completing trench compaction.
3. Care should be taken not to place soils at high moisture content within the upper three feet of the trench backfill in street areas, as overly wet soils may impact subgrade preparation. Moisture may be reduced to 2% below optimum moisture in areas to be paved within the upper three feet below sub grade.
4. Sand backfill should not be allowed in exterior trenches adjacent to and within an area extending below a 1:1 projection from the outside bottom edge of a footing, unless it is similar to the surrounding soil.
5. Trench compaction testing is generally at the discretion of the geotechnical consultant. Testing frequency will be based on trench depth and the contractors procedures. A probing rod would be used to assess the consistency of compaction between tested areas and untested areas. If zones are found that are considered less compact than other areas, this would be brought to the contractors attention.

JOB SAFETY

General

Personnel safety is a primary concern on all job sites. The following summaries are safety considerations for use by all our employees on multi-employer construction sites. On ground personnel are at highest risk of injury and possible fatality on grading construction projects. The company recognizes that construction activities will vary on each site and that job site safety is the contractor's responsibility. However, it is, imperative that all personnel be safety conscious to avoid accidents and potential injury.

In an effort to minimize risks associated with geotechnical testing and observation, the following precautions are to be implemented for the safety of our field personnel on grading and construction projects.

1. Safety Meetings: Our field personnel are directed to attend the contractor's regularly scheduled safety meetings.
2. Safety Vests: Safety vests are provided for and are to be worn by our personnel while on the job site.
3. Safety Flags: Safety flags are provided to our field technicians; one is to be affixed to the vehicle when on site, the other is to be placed atop the spoil pile on all test pits.

In the event that the contractor's representative observes any of our personnel not following the above, we request that it be brought to the attention of our office.

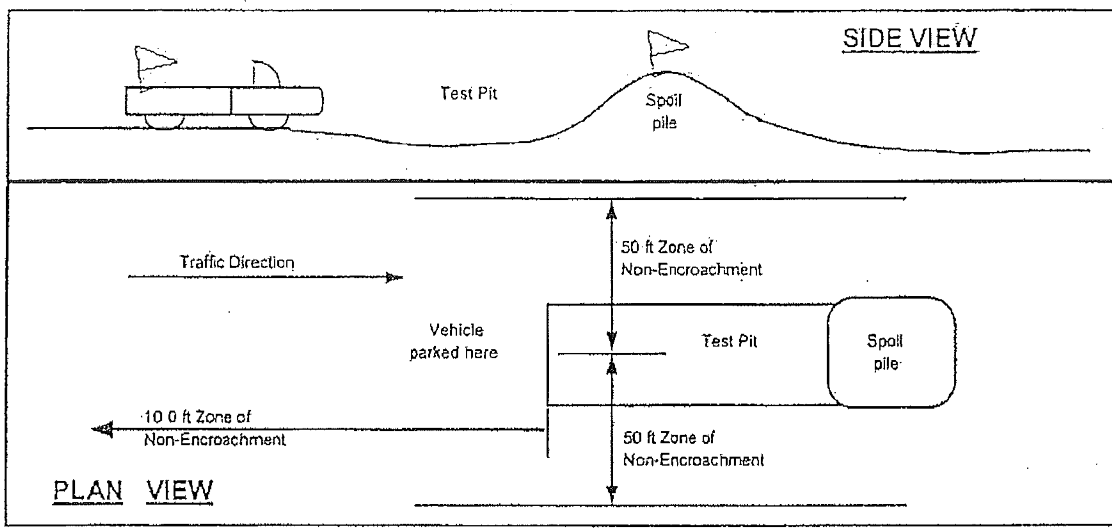
Test Pits Location, Orientation and Clearance

The technician is responsible for selecting test pit locations. The primary concern is the technician's safety. However, it is necessary to take sufficient tests at various locations to obtain a representative sampling of the fill. As such, efforts will be made to coordinate locations with the grading contractors authorized representatives (e.g. dump man, operator, supervisor, grade checker, etc.), and to select locations following or behind the established traffic pattern, preferably outside of current traffic. The contractors authorized representative should direct excavation of the pit and safety during the test period. Again, safety is the paramount concern.

Test pits should be excavated so that the spoil pile is placed away from oncoming traffic. The technician's vehicle is to be placed next to the test pit, opposite the spoil pile. This necessitates that the fill be maintained in a drivable condition. Alternatively, the contractor may opt to park a piece of equipment in front of test pits, particularly in small fill areas or those with limited access.

A zone of non-encroachment should be established for all test pits (see diagram below). No grading equipment should enter this zone during the test procedure. The zone should extend outward to the sides approximately 50 feet from the center of the test pit and 100 feet in the direction of traffic flow. This zone is established both for safety and to avoid excessive ground vibration, which typically decreases test results.

TEST PIT SAFETY PLAN



Slope Tests

When taking slope tests, the technician should park their vehicle directly above or below the test location on the slope. The contractor's representative should effectively keep all equipment at a safe operation distance (e.g. 50 feet) away from the slope during testing.

The technician is directed to withdraw from the active portion of the fill as soon as possible following testing. The technician's vehicle should be parked at the perimeter of the fill in a highly visible location.

Trench Safety

It is the contractor's responsibility to provide safe access into trenches where compaction testing is needed. Trenches for all utilities should be excavated in accordance with CAL-OSHA and any other applicable safety standards. Safe conditions will be required to enable compaction testing of the trench backfill.

All utility trench excavations in excess of 5 feet deep, which a person enters, are to be shored or laid back. Trench access should be provided in accordance with OSHA standards. Our personnel are directed not to enter any trench by being lowered or "riding down" on the equipment.

Our personnel are directed not to enter any excavation which;

1. is 5 feet or deeper unless shored or laid back,
2. exit points or ladders are not provided,
3. displays any evidence of instability, has any loose rock or other debris which could fall into the trench, or
4. displays any other evidence of any unsafe conditions regardless of depth.

If the contractor fails to provide safe access to trenches for compaction testing, our company policy requires that the soil technician withdraws and notifies their supervisor. The contractor's representative will then be contacted in an effort to effect a solution. All backfill not tested due to safety concerns or other reasons is subject to reprocessing and/or removal.

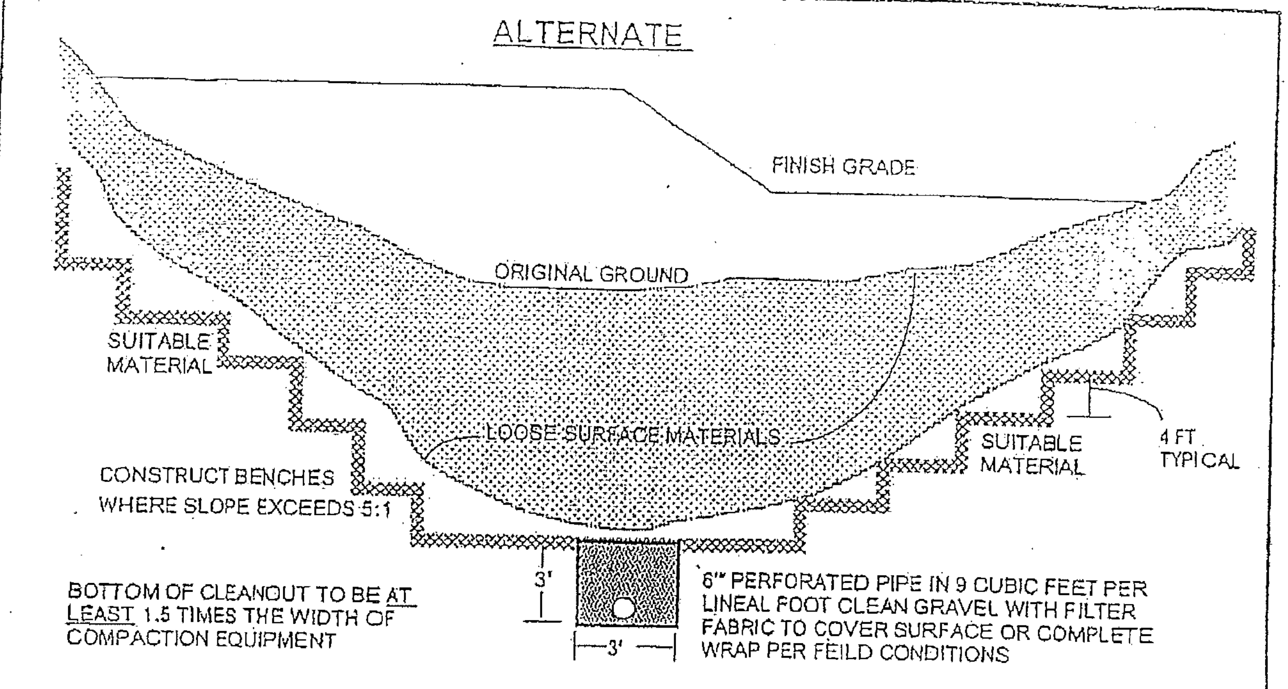
Procedures

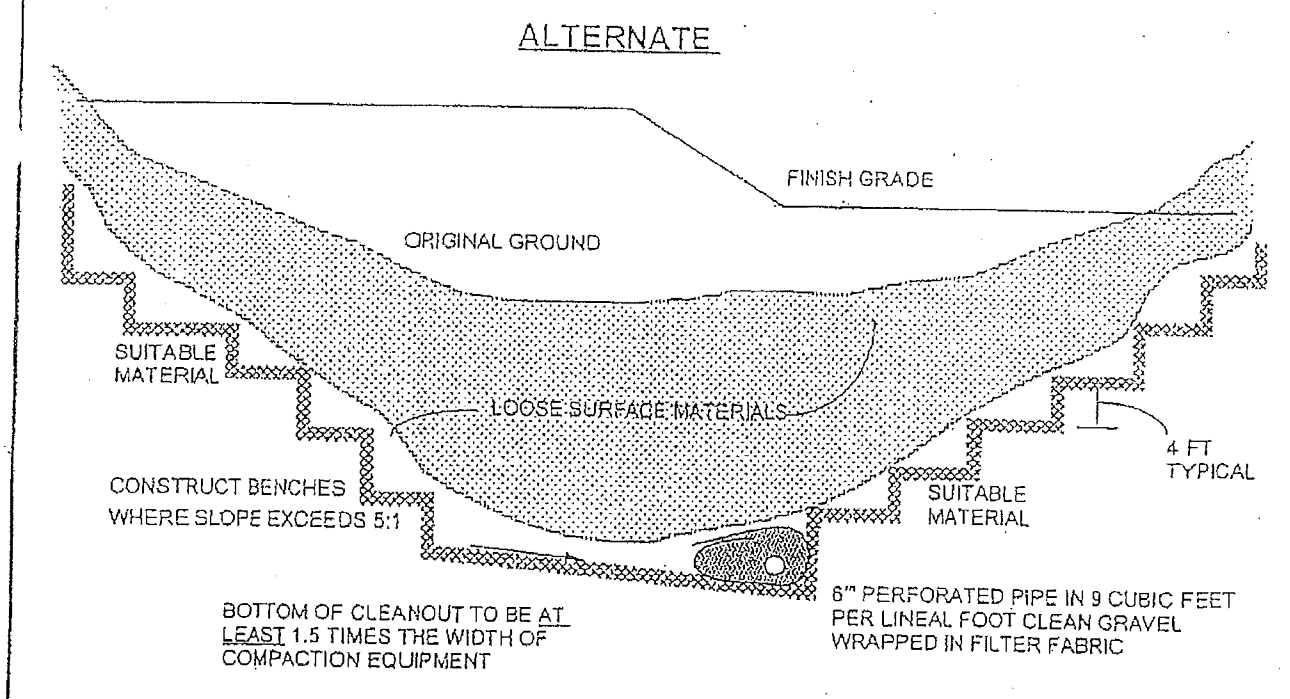
In the event that the technician's safety is jeopardized or compromised as a result of the contractor's failure to comply with any of the above, the technician is directed to inform both the developer's and contractor's representatives. If the condition is not rectified, the technician is required, by company policy, to immediately withdraw and notify their supervisor. The contractor's representative will then be contacted in an effort to effect a solution. No further testing will be performed until the situation is rectified. Any fill placed in the interim can be considered unacceptable and subject to reprocessing, recompaction or removal.

In the event that the soil technician does not comply with the above or other established safety guidelines, we request that the contractor bring this to technicians attention and notify our project manager or office. Effective communication and coordination between the contractors' representative and the field technician(s) is strongly encouraged in order to implement the above safety program and safety in general.

The safety procedures outlined above should be discussed at the contractor's safety meetings. This will serve to inform and remind equipment operators of these safety procedures particularly the zone of non-encroachment.

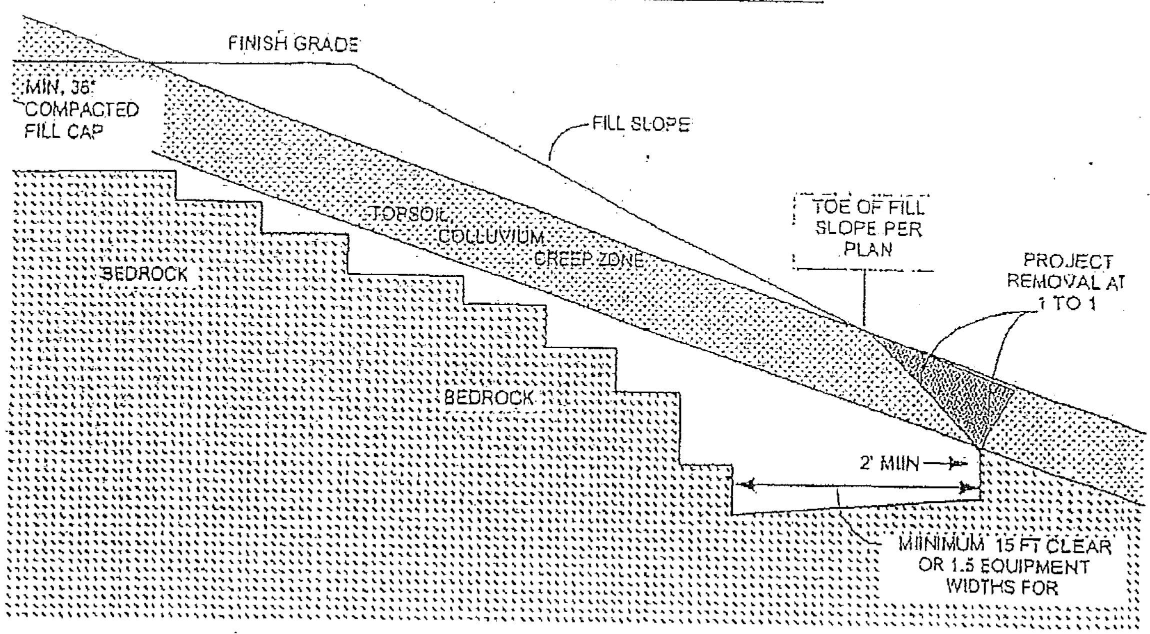
The safety procedures outlined above should be discussed at the contractor's safety meetings. This will serve to inform and remind equipment operators of these safety procedures particularly the zone of non-encroachment.



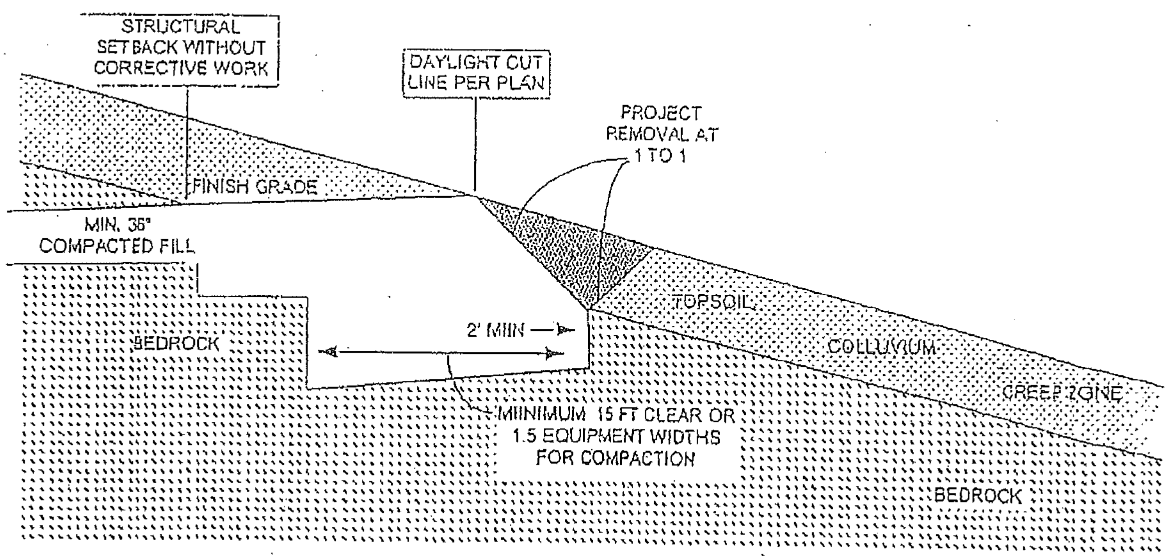


STANDARD GRADING GUIDELINES	TYPICAL CANYON CLEANOUT
GeoTek, Inc.	PLATE G - 1

TYPICAL FILL SLOPE OVER NATURAL DESCENDING SLOPE

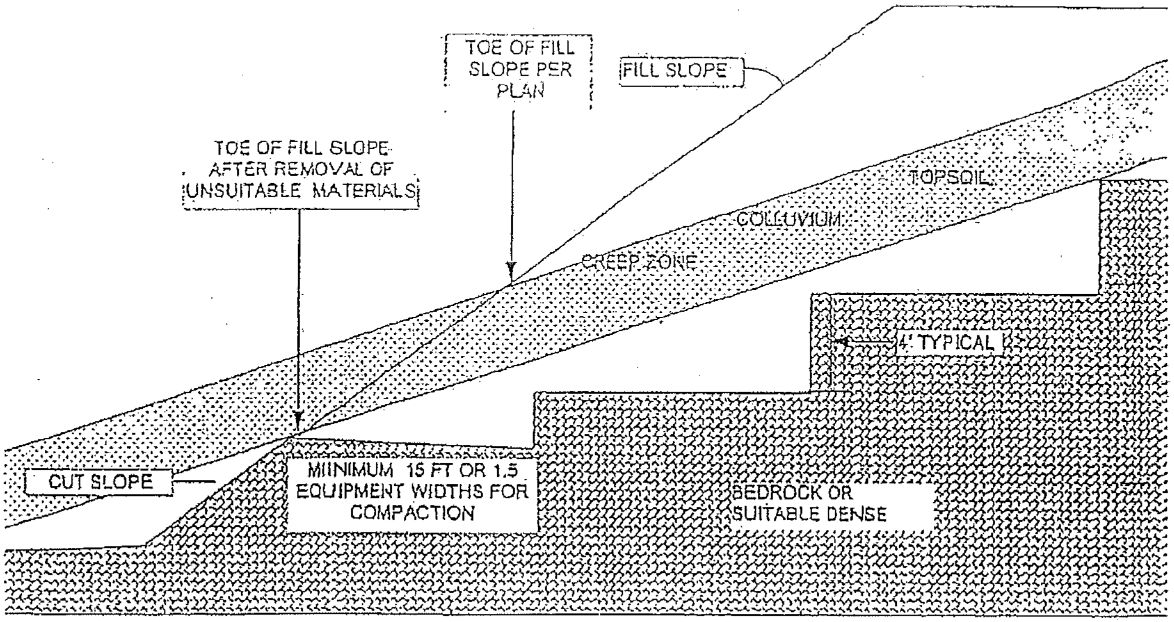


DAYLIGHT CUT AREA OVER NATURAL DESCENDING SLOPE

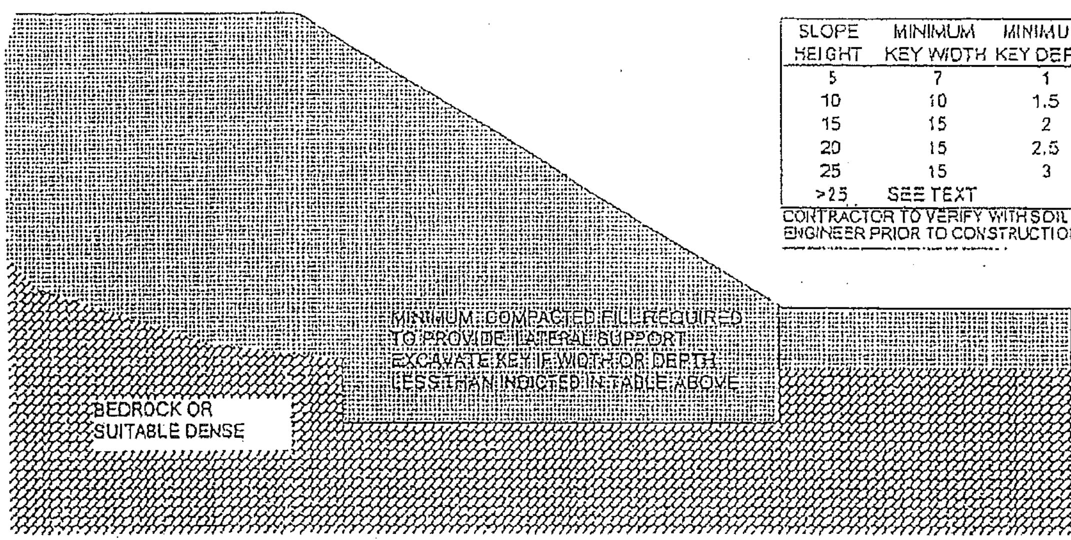


STANDARD GRADING GUIDELINES	TREATMENT ABOVE NATURAL SLOPES
GeoTek, Inc.	PLATE G - 2

TYPICAL FILL SLOPE OVER PROPOSED CUT SLOPE



TYPICAL FILL SLOPE

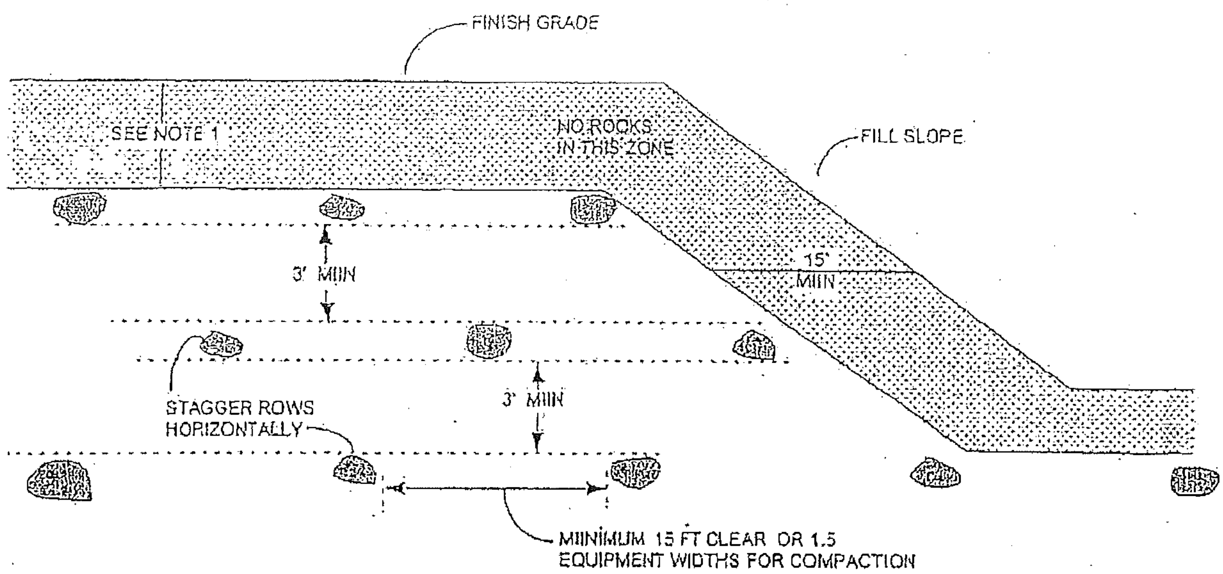


SLOPE HEIGHT	MINIMUM KEY WIDTH	MINIMUM KEY DEPTH
5	7	1
10	10	1.5
15	15	2
20	15	2.5
25	15	3
>25	SEE TEXT	

CONTRACTOR TO VERIFY WITH SOIL ENGINEER PRIOR TO CONSTRUCTION

STANDARD GRADING GUIDELINES	COMMON FILL SLOPE KEYS
GeoTek, Inc.	PLATE G-3

CROSS SECTIONAL VIEW



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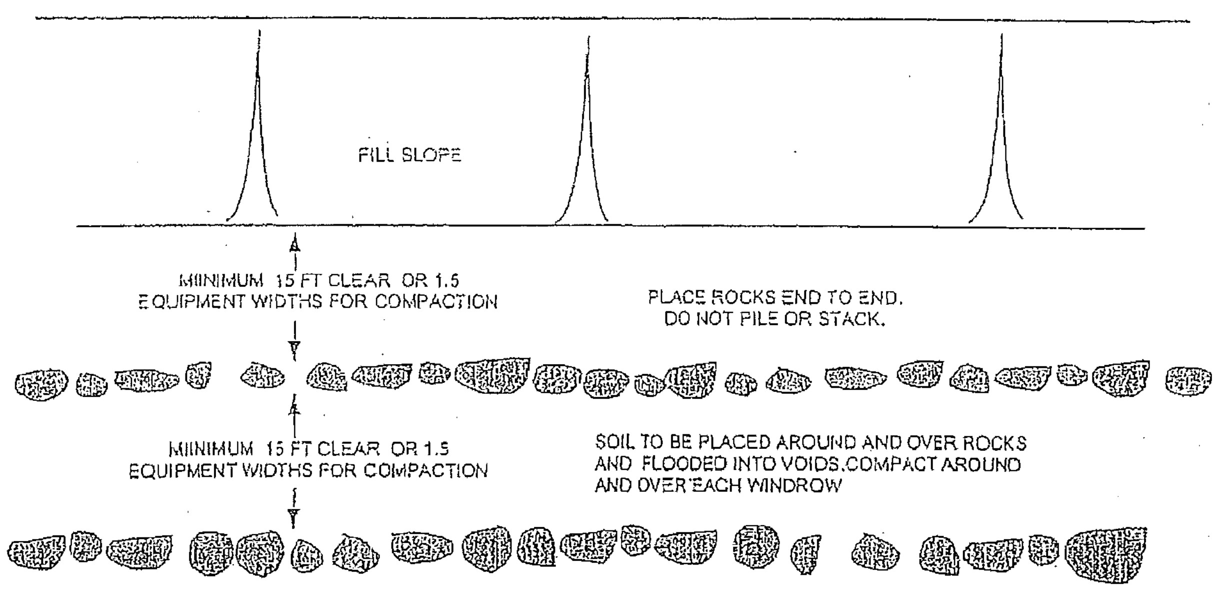
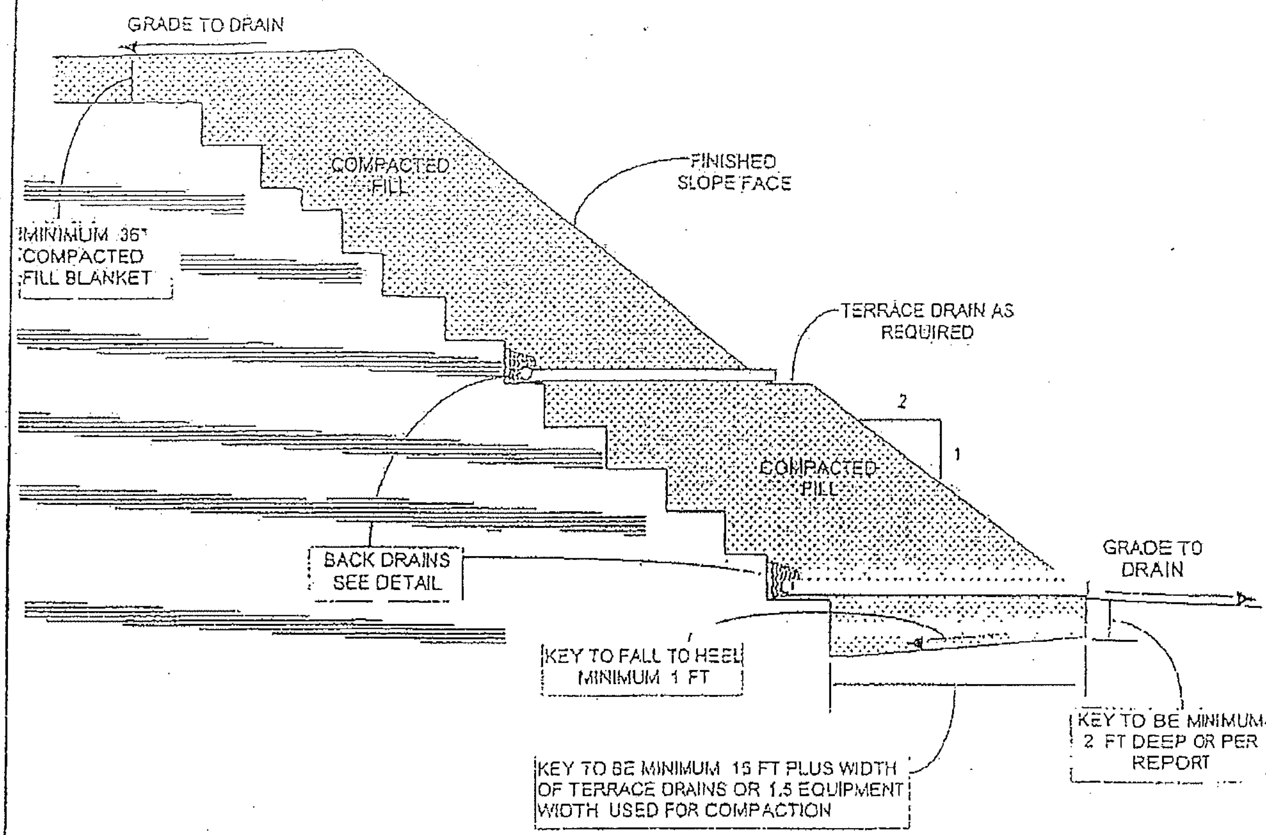
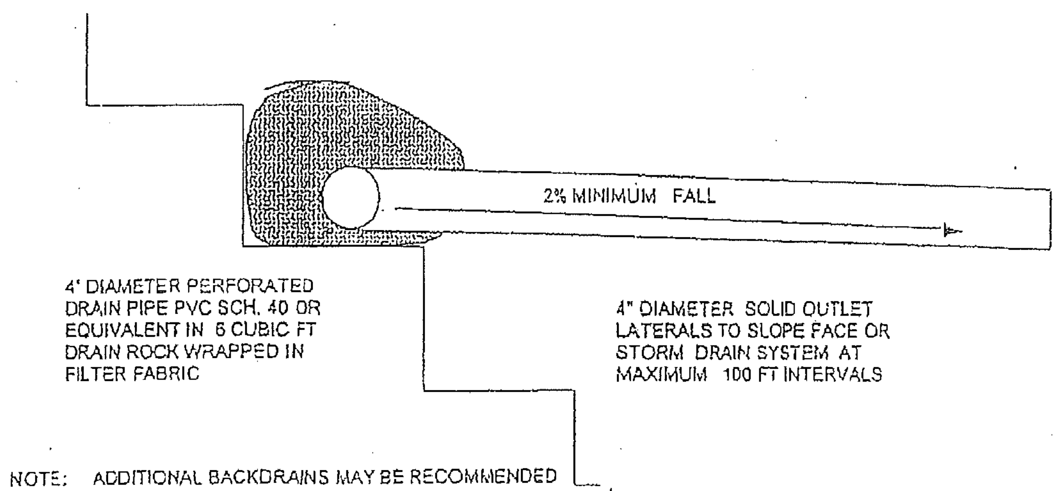


NOTES:
1) MININUM SOIL FILL OVER WINDROWS SHOULD BE 7 FEET AND SUFFICIENT FOR FUTURE EXCAVATIONS (e.g. SWIMMING POOLS) TO AVOID ROCKS.
2) MAXIMUM ROCK SIZE IN WINDROWS IS 4 FEET MINIMUM DIAMETER.
3) SOIL AROUND WINDROWS TO BE SANDY MATERIAL SUBJECT TO ACCEPTANCE BY SOIL ENGINEER
4) ALL SPACING AND CLEARANCES MUST BE SUFFICIENT TO ALLOW FOR PROPER COMPACTION.

STANDARD GRADING GUIDELINES	ROCK BURIAL DETAILS
GeoTek, Inc.	PLATE G - 4





STANDARD GRADING GUIDELINES	BUTTRESS AND STABILIZATION SLOPES
GeoTek, Inc.	PLATE G-5

APPENDIX E

GENERAL EARTHWORK AND GRADING GUIDELINES

Dana Point Hotel Project
City of Dana Point, Orange County, California
Project No. 0480-CR3

GEOTEK

GENERAL GRADING GUIDELINES

Guidelines presented herein are intended to address general construction procedures for earthwork construction. Specific situations and conditions often arise which cannot reasonably be discussed in general guidelines, when anticipated these are discussed in the text of the report. Often unanticipated conditions are encountered which may necessitate modification or changes to these guidelines. It is our hope that these will assist the contractor to more efficiently complete the project by providing a reasonable understanding of the procedures that would be expected during earthwork and the testing and observation used to evaluate those procedures.

General

Grading should be performed to at least the minimum requirements of governing agencies, Chapters 18 and 33 of the Uniform Building Code, CBC (2007) and the guidelines presented below.

Preconstruction Meeting

A preconstruction meeting should be held prior to site earthwork. Any questions the contractor has regarding our recommendations, general site conditions, apparent discrepancies between reported and actual conditions and/or differences in procedures the contractor intends to use should be brought up at that meeting. The contractor (including the main onsite representative) should review our report and these guidelines in advance of the meeting. Any comments the contractor may have regarding these guidelines should be brought up at that meeting.

Grading Observation and Testing

1. Observation of the fill placement should be provided by our representative during grading. Verbal communication during the course of each day will be used to inform the contractor of test results. The contractor should receive a copy of the "Daily Field Report" indicating results of field density tests that day. If our representative does not provide the contractor with these reports, our office should be notified.
2. Testing and observation procedures are, by their nature, specific to the work or area observed and location of the tests taken, variability may occur in other locations. The contractor is responsible for the uniformity of the grading operations; our observations and test results are intended to evaluate the contractor's overall level of efforts during grading. The contractor's personnel are the only individuals participating in all aspect of site work. Compaction testing and observation should not be considered as relieving the contractor's responsibility to properly compact the fill.
3. Cleanouts, processed ground to receive fill, key excavations, and subdrains should be observed by our representative prior to placing any fill. It will be the contractor's responsibility to notify our representative or office when such areas are ready for observation.
4. Density tests may be made on the surface material to receive fill, as considered warranted by this firm.

5. In general, density tests would be made at maximum intervals of two feet of fill height or every 1,000 cubic yards of fill placed. Criteria will vary depending on soil conditions and size of the fill. More frequent testing may be performed. In any case, an adequate number of field density tests should be made to evaluate the required compaction and moisture content is generally being obtained.

6. Laboratory testing to support field test procedures will be performed, as considered warranted, based on conditions encountered (e.g. change of material sources, types, etc.) Every effort will be made to process samples in the laboratory as quickly as possible and in progress construction projects are our first priority. However, laboratory workloads may cause in delays and some soils may require a **minimum of 48 to 72 hours to complete test procedures.** Whenever possible, our representative(s) should be informed in advance of operational changes that might result in different source areas for materials.

7. Procedures for testing of fill slopes are as follows:

   a) Density tests should be taken periodically during grading on the flat surface of the fill, three to five feet horizontally from the face of the slope.

   b) If a method other than over building and cutting back to the compacted core is to be employed, slope compaction testing during construction should include testing the outer six inches to three feet in the slope face to determine if the required compaction is being achieved.

8. Finish grade testing of slopes and pad surfaces should be performed after construction is complete.

Site Clearing

1. All vegetation, and other deleterious materials, should be removed from the site. If material is not immediately removed from the site it should be stockpiled in a designated area(s) well outside of all current work areas and delineated with flagging or other means. Site clearing should be performed in advance of any grading in a specific area.

2. Efforts should be made by the contractor to remove all organic or other deleterious material from the fill, as even the most diligent efforts may result in the incorporation of some materials. This is especially important when grading is occurring near the natural grade. All equipment operators should be aware of these efforts. Laborers may be required as root pickers.

3. Nonorganic debris or concrete may be placed in deeper fill areas provided the procedures used are observed and found acceptable by our representative. Typical procedures are similar to those indicated on Plate G-4.

Treatment of Existing Ground

1. Following site clearing, all surficial deposits of alluvium and colluvium as well as weathered or creep effected bedrock, should be removed (see Plates G-1, G-2 and G-3) unless otherwise specifically indicated in the text of this report.

2. In some cases, removal may be recommended to a specified depth (e.g. flat sites where partial alluvial removals may be sufficient). The contractor should not exceed these depths unless directed otherwise by our representative.
3. Groundwater existing in alluvial areas may make excavation difficult. Deeper removals than indicated in the text of the report may be necessary due to saturation during winter months.
4. Subsequent to removals, the natural ground should be processed to a depth of six inches, moistened to near optimum moisture conditions and compacted to fill standards.
5. Exploratory back hoe or dozer trenches still remaining after site removal should be excavated and filled with compacted fill if they can be located.

Subdrainage

1. Subdrainage systems should be provided in canyon bottoms prior to placing fill, and behind buttress and stabilization fills and in other areas indicated in the report. Subdrains should conform to schematic diagrams G-1 and G-5, and be acceptable to our representative.
2. For canyon subdrains, runs less than 500 feet may use six-inch pipe. Typically, runs in excess of 500 feet should have the lower end as eight-inch minimum.
3. Filter material should be clean, 1/2 to 1-inch gravel wrapped in a suitable filter fabric. Class 2 permeable filter material per California Department of Transportation Standards tested by this office to verify its suitability, may be used without filter fabric. A sample of the material should be provided to the Soils Engineer by the contractor at least two working days before it is delivered to the site. The filter should be clean with a wide range of sizes.
4. Approximate delineation of anticipated subdrain locations may be offered at 40-scale plan review stage. During grading, this office would evaluate the necessity of placing additional drains.
5. All subdrainage systems should be observed by our representative during construction and prior to covering with compacted fill.
6. Subdrains should outlet into storm drains where possible. Outlets should be located and protected. The need for backflow preventers should be assessed during construction.
7. Consideration should be given to having subdrains located by the project surveyors.

Fill Placement

1. Unless otherwise indicated, all site soil and bedrock may be reused for compacted fill; however, some special processing or handling may be required (see text of report).
2. Material used in the compacting process should be evenly spread, moisture conditioned, processed, and compacted in thin lifts six (6) to eight (8) inches in compacted thickness to obtain a uniformly dense layer. The fill should be placed and compacted on a nearly horizontal plane, unless otherwise found acceptable by our representative.
3. If the moisture content or relative density varies from that recommended by this firm, the contractor should rework the fill until it is in accordance with the following:

a) Moisture content of the fill should be at or above optimum moisture. Moisture should be evenly distributed without wet and dry pockets. Pre-watering of cut or removal areas should be considered in addition to watering during fill placement, particularly in clay or dry surficial soils. The ability of the contractor to obtain the proper moisture content will control production rates.

b) Each six-inch layer should be compacted to at least 90 percent of the maximum dry density in compliance with the testing method specified by the controlling governmental agency. In most cases, the testing method is ASTM Test Designation D-1557.

4. Rock fragments less than eight inches in diameter may be utilized in the fill, provided:

   a) They are not placed in concentrated pockets;

   b) There is a sufficient percentage of fine-grained material to surround the rocks;

   c) The distribution of the rocks is observed by, and acceptable to, our representative.

5. Rocks exceeding eight (8) inches in diameter should be taken off site, broken into smaller fragments, or placed in accordance with recommendations of this firm in areas designated suitable for rock disposal (see Plate G-4). On projects where significant large quantities of oversized materials are anticipated, alternate guidelines for placement may be included. If significant oversize materials are encountered during construction, these guidelines should be requested.

6. In clay soil, dry or large chunks or blocks are common. If in excess of eight (8) inches minimum dimension, then they are considered as oversized. Sheepsfoot compactors or other suitable methods should be used to break up blocks. When dry, they should be moisture conditioned to provide a uniform condition with the surrounding fill.

Slope Construction

1. The contractor should obtain a minimum relative compaction of 90 percent out to the finished slope face of fill slopes. This may be achieved by either overbuilding the slope and cutting back to the compacted core, or by direct compaction of the slope face with suitable equipment.

2. Slopes trimmed to the compacted core should be overbuilt by at least three (3) feet with compaction efforts out to the edge of the false slope. Failure to properly compact the outer edge results in trimming not exposing the compacted core and additional compaction after trimming may be necessary.

3. If fill slopes are built "at grade" using direct compaction methods, then the slope construction should be performed so that a constant gradient is maintained throughout construction. Soil should not be "spilled" over the slope face nor should slopes be "pushed out" to obtain grades. Compaction equipment should compact each lift along the immediate top of slope. Slopes should be back rolled or otherwise compacted at approximately every 4 feet vertically as the slope is built.

4. Corners and bends in slopes should have special attention during construction as these are the most difficult areas to obtain proper compaction.

5. Cut slopes should be cut to the finished surface. Excessive undercutting and smoothing of the face with fill may necessitate stabilization.

Keyways, Buttress and Stabilization Fills

Keyways are needed to provide support for fill slope and various corrective procedures.

1. Side-hill fills should have an equipment-width key at their toe excavated through all surficial soil and into competent material and tilted back into the hill (Plates G-2, G-3). As the fill is elevated, it should be benched through surficial soil and slopewash, and into competent bedrock or other material deemed suitable by our representatives (See Plates G-1, G-2, and G-3).
2. Fill over cut slopes should be constructed in the following manner:
   a) All surficial soils and weathered rock materials should be removed at the cut-fill interface.
   b) A key at least one and one-half (1.5) equipment width wide (or as needed for compaction), and tipped at least one (1) foot into slope, should be excavated into competent materials and observed by our representative.
   c) The cut portion of the slope should be excavated prior to fill placement to evaluate if stabilization is necessary. The contractor should be responsible for any additional earthwork created by placing fill prior to cut excavation. (see Plate G-3 for schematic details.)
3. Daylight cut lots above descending natural slopes may require removal and replacement of the outer portion of the lot. A schematic diagram for this condition is presented on Plate G-2.
4. A basal key is needed for fill slopes extending over natural slopes. A schematic diagram for this condition is presented on Plate G-2.
5. All fill slopes should be provided with a key unless within the body of a larger overall fill mass. Please refer to Plate G-3 for specific guidelines.

Anticipated buttress and stabilization fills are discussed in the text of the report. The need to stabilize other proposed cut slopes will be evaluated during construction. Plate G-5 shows a schematic of buttress construction.

1. All backcuts should be excavated at gradients of 1:1 or flatter. The backcut configuration should be determined based on the design, exposed conditions, and need to maintain a minimum fill width and provide working room for the equipment.
2. On longer slopes, backcuts and keyways should be excavated in maximum 250 feet long segments. The specific configurations will be determined during construction.
3. All keys should be a minimum of two (2) feet deep at the toe and slope toward the heel at least one foot or two (2%) percent, whichever is greater.
4. Subdrains are to be placed for all stabilization slopes exceeding 10 feet in height. Lower slopes are subject to review. Drains may be required. Guidelines for subdrains are presented on Plate G-5.

5. Benching of backcuts during fill placement is required.

Lot Capping

1. When practical, the upper three (3) feet of material placed below finish grade should be comprised of the least expansive material available. Preferably, highly and very highly expansive materials should not be used. We will attempt to offer advise based on visual evaluations of the materials during grading, but it must be realized that laboratory testing is needed to evaluate the expansive potential of soil. Minimally, this testing takes two (2) to four (4) days to complete.
2. Transition lots (cut and fill) both per plan and those created by remedial grading (e.g. lots above stabilization fills, along daylight lines, above natural slopes, etc.) should be capped with a minimum three foot thick compacted fill blanket.
3. Cut pads should be observed by our representative(s) to evaluate the need for overexcavation and replacement with fill. This may be necessary to reduce water infiltration into highly fractured bedrock or other permeable zones, and/or due to differing expansive potential of materials beneath a structure. The overexcavation should be at least three feet. Deeper overexcavation may be recommended in some cases.

ROCK PLACEMENT AND ROCK FILL GUIDELINES

It is anticipated that large quantities of oversize material would be generated during grading. It's likely that such materials may require special handling for burial. Although alternatives may be developed in the field, the following methods of rock disposal are recommended on a preliminary basis.

Limited Larger Rock

When materials encountered are principally soil with limited quantities of larger rock fragments or boulders, placement in windrows is recommended. The following procedures should be applied:

1. Oversize rock (greater than 8 inches) should be placed in windrows.
    a) Windrows are rows of single file rocks placed to avoid nesting or clusters of rock.
    b) Each adjacent rock should be approximately the same size (within ~one foot in diameter).
    c) The maximum rock size allowed in windrows is four feet
2. A minimum vertical distance of three feet between lifts should be maintained. Also, the windrows should be offset from lift to lift. Rock windrows should not be closer than 15 feet to the face of fill slopes and sufficient space must be maintained for proper slope construction (see Plate G-4).
3. Rocks greater than eight inches in diameter should not be placed within seven feet of the finished subgrade for a roadway or pads and should be held below the depth of the lowest utility. This will allow easier trenching for utility lines.

4. Rocks greater than four feet in diameter should be broken down, if possible, or they may be placed in a dozer trench. Each trench should be excavated into the compacted fill a minimum of one foot deeper than the largest diameter of rock.

   a) The rock should be placed in the trench and granular fill materials (SE>30) should be flooded into the trench to fill voids around the rock.

   b) The over size rock trenches should be no closer together than 15 feet from any slope face.

   c) Trenches at higher elevation should be staggered and there should be a minimum of four feet of compacted fill between the top of the one trench and the bottom of the next higher trench.

   d) It would be necessary to verify 90 percent relative compaction in these pits. A 24 to 72 hour delay to allow for water dissipation should be anticipated prior to additional fill placement.

Structural Rock Fills

If the materials generated for placement in structural fills contains a significant percentage of material more than six (6) inches in one dimension, then placement using conventional soil fill methods with isolated windrows would not be feasible. In such cases the following could be considered:

1. Mixes of large rock or boulders may be placed as rock fill. They should be below the depth of all utilities both on pads and in roadways and below any proposed swimming pools or other excavations. If these fills are placed within seven (7) feet of finished grade, they may effect foundation design.

2. Rock fills are required to be placed in horizontal layers that should **not exceed two feet in thickness, or the maximum rock size present, which ever is less.** All rocks exceeding two feet should be broken down to a smaller size, windrowed (see above), or disposed of in non-structural fill areas. Localized larger rock up to 3 feet in largest dimension may be placed in rock fill as follows:

   a) individual rocks are placed in a given lift so as to be roughly 50% exposed above the typical surface of the fill ,

   b) loaded rock trucks or alternate compactors are worked around the rock on all sides to the satisfaction of the soil engineer,

   c) the portion of the rock above grade is covered with a second lift.

3. Material placed in each lift should be well graded. No unfilled spaces (voids) should be permitted in the rock fill.

Compaction Procedures

Compaction of rock fills is largely procedural. The following procedures have been found to generally produce satisfactory compaction.

1. Provisions for routing of construction traffic over the fill should be implemented.

a) Placement should be by rock trucks crossing the lift being placed and dumping at its edge.

b) The trucks should be routed so that each pass across the fill is via a different path and that all areas are uniformly traversed.

c) The dumped piles should be knocked down and spread by a large dozer (D-8 or larger suggested). (Water should be applied before and during spreading.)

2. Rock fill should be generously watered (sluiced)

a) Water should be applied by water trucks to the:

i) dump piles,

ii) front face of the lift being placed and,

iii) surface of the fill prior to compaction.

b) No material should be placed without adequate water.

c) The number of water trucks and water supply should be sufficient to provide constant water.

d) Rock fill placement should be suspended when water trucks are unavailable:

i) for more than 5 minutes straight, or,

ii) for more than 10 minutes/hour.

3. In addition to the truck pattern and at the discretion of the soil engineer, large, rubber tired compactors may be required.

a) The need for this equipment will depend largely on the ability of the operators to provide complete and uniform coverage by wheel rolling with the trucks.

b) Other large compactors will also be considered by the soil engineer provided that required compaction is achieved.

4. Placement and compaction of the rock fill is largely procedural. Observation by trenching should be made to check:

a) the general segregation of rock size,

b) for any unfilled spaces between the large blocks, and

c) the matrix compaction and moisture content.

5. Test fills may be required to evaluate relative compaction of finer grained zones or as deemed appropriate by the soil engineer.

a) A lift should be constructed by the methods proposed, as proposed

6. Frequency of the test trenching is to be at the discretion of the soil engineer. Control areas may be used to evaluate the contractors procedures.

7. A minimum horizontal distance of 15 feet should be maintained from the face of the rock fill and any finish slope face. At least the outer 15 feet should be built of conventional fill materials.

Piping Potential and Filter Blankets

Where conventional fill is placed over rock fill, the potential for piping (migration) of the fine grained material from the conventional fill into rock fills will need to be addressed.

The potential for particle migration is related to the grain size comparisons of the materials present and in contact with each other. Provided that 15 percent of the finer soil is larger than the effective pore size of the coarse soil, then particle migration is substantially mitigated. This can be accomplished with a well-graded matrix material for the rock fill and a zone of fill similar to the matrix above it. The specific gradation of the fill materials placed during grading must be known to evaluate the need for any type of filter that may be necessary to cap the rock fills. This, unfortunately, can only be accurately determined during construction.

In the event that poorly graded matrix is used in the rock fills, properly graded filter blankets 2 to 3 feet thick separating rock fills and conventional fill may be needed. As an alternative, use of two layers of filter fabric (Mirafi 700 x or equivalent) could be employed on top of the rock fill. In order to mitigate excess puncturing, the surface of the rock fill should be well broken down and smoothed prior to placing the filter fabric. The first layer of the fabric may then be placed and covered with relatively permeable fill material (with respect to overlying material) 1 to 2 feet thick. The relative permeable material should be compacted to fill standards. The second layer of fabric should be placed and conventional fill placement continued.

Subdrainage

Rock fill areas should be tied to a subdrainage system. If conventional fill is placed that separates the rock from the main canyon subdrain, then a secondary system should be installed. A system consisting of an adequately graded base (3 to 4 percent to the lower side) with a collector system and outlets may suffice.

Additionally, at approximately every 25 foot vertical interval, a collector system with outlets should be placed at the interface of the rock fill and the conventional fill blanketing a fill slope

Monitoring

Depending upon the depth of the rock fill and other factors, monitoring for settlement of the fill areas may be needed following completion of grading. Typically, if rock fill depths exceed 40 feet, monitoring would be recommend prior to construction of any settlement sensitive improvements. Delays of 3 to 6 months or longer can be expected prior to the start of construction.

UTILITY TRENCH CONSTRUCTION AND BACKFILL

Utility trench excavation and backfill is the contractors responsibility. The geotechnical consultant typically provides periodic observation and testing of these operations. While efforts are made to make sufficient observations and tests to verify that the contractors' methods and procedures are adequate to achieve proper compaction, it is typically impractical to observe all backfill procedures. As such, it is critical that the contractor use consistent backfill procedures.

Compaction methods vary for trench compaction and experience indicates many methods can be successful. However, procedures that "worked" on previous projects may or may not prove effective on a given site. The contractor(s) should outline the procedures proposed, so that we may discuss them prior to construction. We will offer comments based on our knowledge of site conditions and experience.

1. Utility trench backfill in slopes, structural areas, in streets and beneath flat work or hardscape should be brought to at least optimum moisture and compacted to at least 90 percent of the laboratory standard. Soil should be moisture conditioned prior to placing in the trench.

2. Flooding and jetting are not typically recommended or acceptable for native soils. Flooding or jetting may be used with select sand having a Sand Equivalent (SE) of 30 or higher. This is typically limited to the following uses:

   a) shallow (12 + inches) under slab interior trenches and,

   b) as bedding in pipe zone.

   The water should be allowed to dissipate prior to pouring slabs or completing trench compaction.

3. Care should be taken not to place soils at high moisture content within the upper three feet of the trench backfill in street areas, as overly wet soils may impact subgrade preparation. Moisture may be reduced to 2% below optimum moisture in areas to be paved within the upper three feet below sub grade.

4. Sand backfill should not be allowed in exterior trenches adjacent to and within an area extending below a 1:1 projection from the outside bottom edge of a footing, unless it is similar to the surrounding soil.

5. Trench compaction testing is generally at the discretion of the geotechnical consultant. Testing frequency will be based on trench depth and the contractors procedures. A probing rod would be used to assess the consistency of compaction between tested areas and untested areas. If zones are found that are considered less compact than other areas, this would be brought to the contractors attention.

JOB SAFETY

General

Personnel safety is a primary concern on all job sites. The following summaries are safety considerations for use by all our employees on multi-employer construction sites. On ground personnel are at highest risk of injury and possible fatality on grading construction projects. The company recognizes that construction activities will vary on each site and that job site safety is the contractor's responsibility. However, it is, imperative that all personnel be safety conscious to avoid accidents and potential injury.

In an effort to minimize risks associated with geotechnical testing and observation, the following precautions are to be implemented for the safety of our field personnel on grading and construction projects.

1. Safety Meetings: Our field personnel are directed to attend the contractor's regularly scheduled safety meetings.
2. Safety Vests: Safety vests are provided for and are to be worn by our personnel while on the job site.
3. Safety Flags: Safety flags are provided to our field technicians; one is to be affixed to the vehicle when on site, the other is to be placed atop the spoil pile on all test pits.

In the event that the contractor's representative observes any of our personnel not following the above, we request that it be brought to the attention of our office.

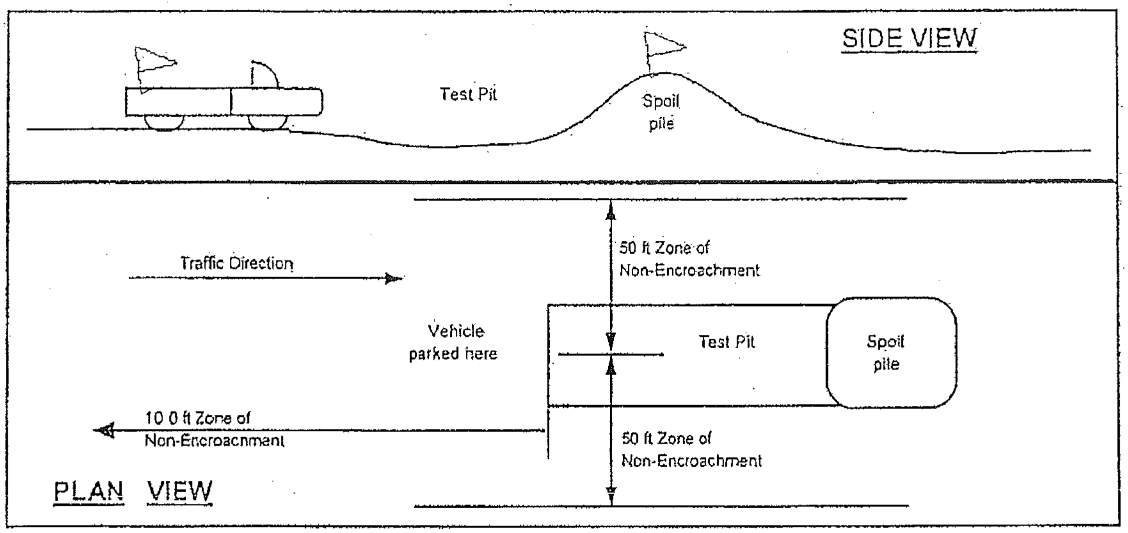
Test Pits Location, Orientation and Clearance

The technician is responsible for selecting test pit locations. The primary concern is the technician's safety. However, it is necessary to take sufficient tests at various locations to obtain a representative sampling of the fill. As such, efforts will be made to coordinate locations with the grading contractors authorized representatives (e.g. dump man, operator, supervisor, grade checker, etc.), and to select locations following or behind the established traffic pattern, preferably outside of current traffic. The contractors authorized representative should direct excavation of the pit and safety during the test period. Again, safety is the paramount concern.

Test pits should be excavated so that the spoil pile is placed away from oncoming traffic. The technician's vehicle is to be placed next to the test pit, opposite the spoil pile. This necessitates that the fill be maintained in a drivable condition. Alternatively, the contractor may opt to park a piece of equipment in front of test pits, particularly in small fill areas or those with limited access.

A zone of non-encroachment should be established for all test pits (see diagram below). No grading equipment should enter this zone during the test procedure. The zone should extend outward to the sides approximately 50 feet from the center of the test pit and 100 feet in the direction of traffic flow. This zone is established both for safety and to avoid excessive ground vibration, which typically decreases test results.

TEST PIT SAFETY PLAN



Slope Tests

When taking slope tests, the technician should park their vehicle directly above or below the test location on the slope. The contractor's representative should effectively keep all equipment at a safe operation distance (e.g. 50 feet) away from the slope during testing.

The technician is directed to withdraw from the active portion of the fill as soon as possible following testing. The technician's vehicle should be parked at the perimeter of the fill in a highly visible location.

Trench Safety

It is the contractor's responsibility to provide safe access into trenches where compaction testing is needed. Trenches for all utilities should be excavated in accordance with CAL-OSHA and any other applicable safety standards. Safe conditions will be required to enable compaction testing of the trench backfill.

All utility trench excavations in excess of 5 feet deep, which a person enters, are to be shored or laid back. Trench access should be provided in accordance with OSHA standards. Our personnel are directed not to enter any trench by being lowered or "riding down" on the equipment.

Our personnel are directed not to enter any excavation which;

1. is 5 feet or deeper unless shored or laid back,
2. exit points or ladders are not provided,
3. displays any evidence of instability, has any loose rock or other debris which could fall into the trench, or
4. displays any other evidence of any unsafe conditions regardless of depth.

If the contractor fails to provide safe access to trenches for compaction testing, our company policy requires that the soil technician withdraws and notifies their supervisor. The contractors representative will then be contacted in an effort to effect a solution. All backfill not tested due to safety concerns or other reasons is subject to reprocessing and/or removal.

Procedures

In the event that the technician's safety is jeopardized or compromised as a result of the contractor's failure to comply with any of the above, the technician is directed to inform both the developer's and contractor's representatives. If the condition is not rectified, the technician is required, by company policy, to immediately withdraw and notify their supervisor. The contractor's representative will then be contacted in an effort to effect a solution. No further testing will be performed until the situation is rectified. Any fill placed in the interim can be considered unacceptable and subject to reprocessing, recompaction or removal.

In the event that the soil technician does not comply with the above or other established safety guidelines, we request that the contractor bring this to technicians attention and notify our project manager or office. Effective communication and coordination between the contractors' representative and the field technician(s) is strongly encouraged in order to implement the above safety program and safety in general.

The safety procedures outlined above should be discussed at the contractor's safety meetings. This will serve to inform and remind equipment operators of these safety procedures particularly the zone of non-encroachment.

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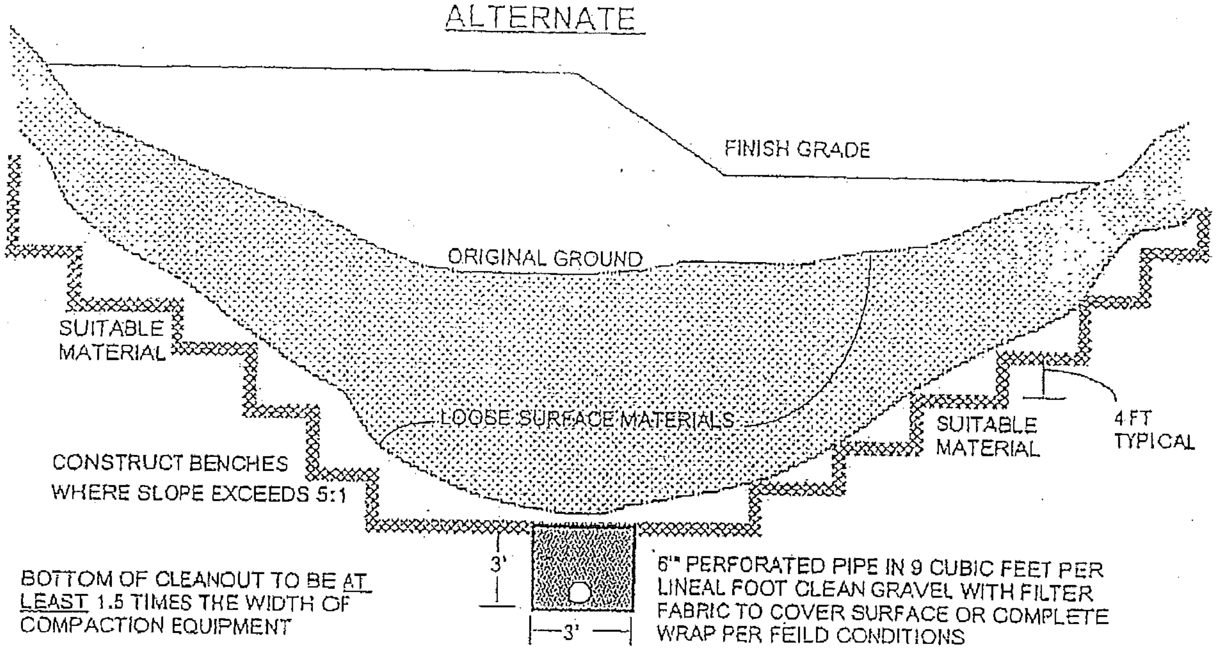

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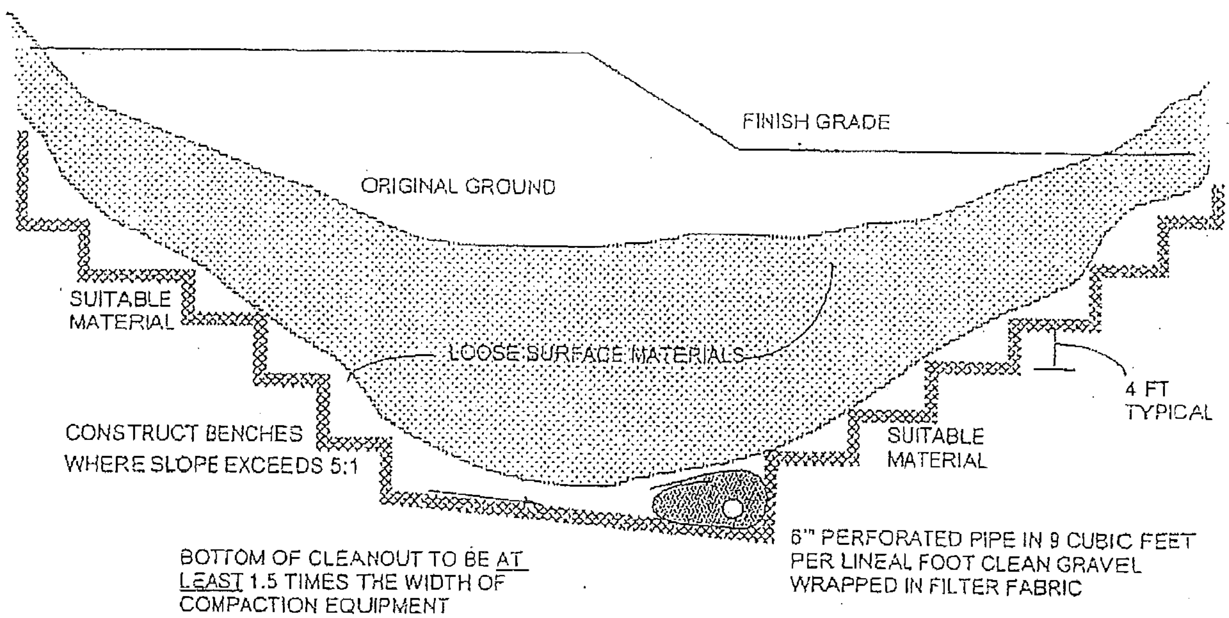
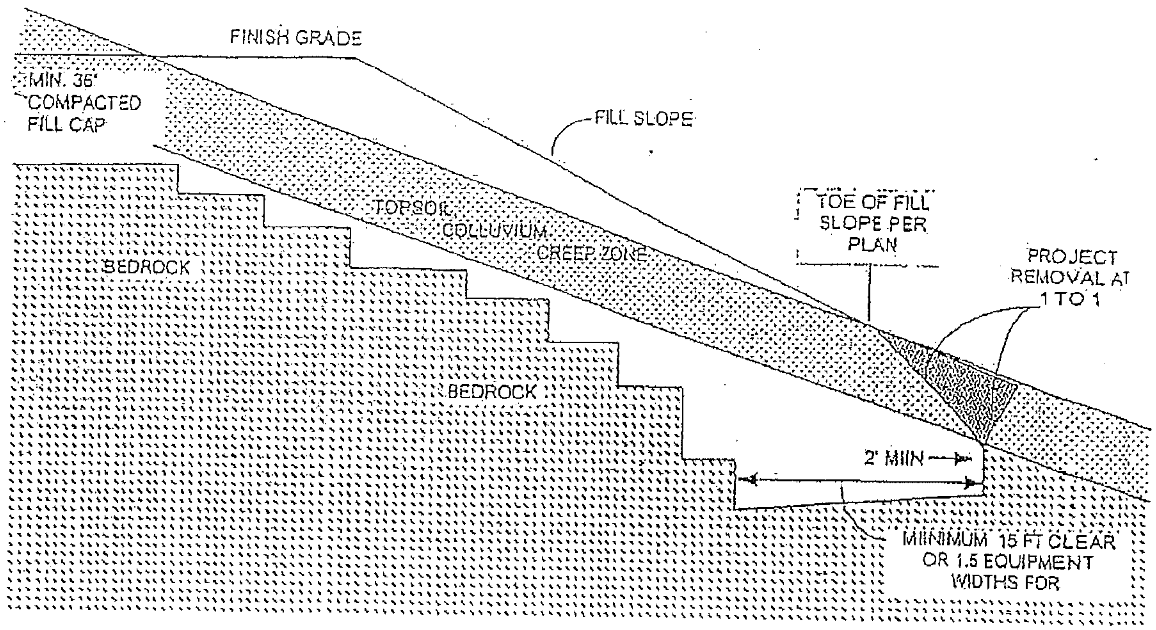
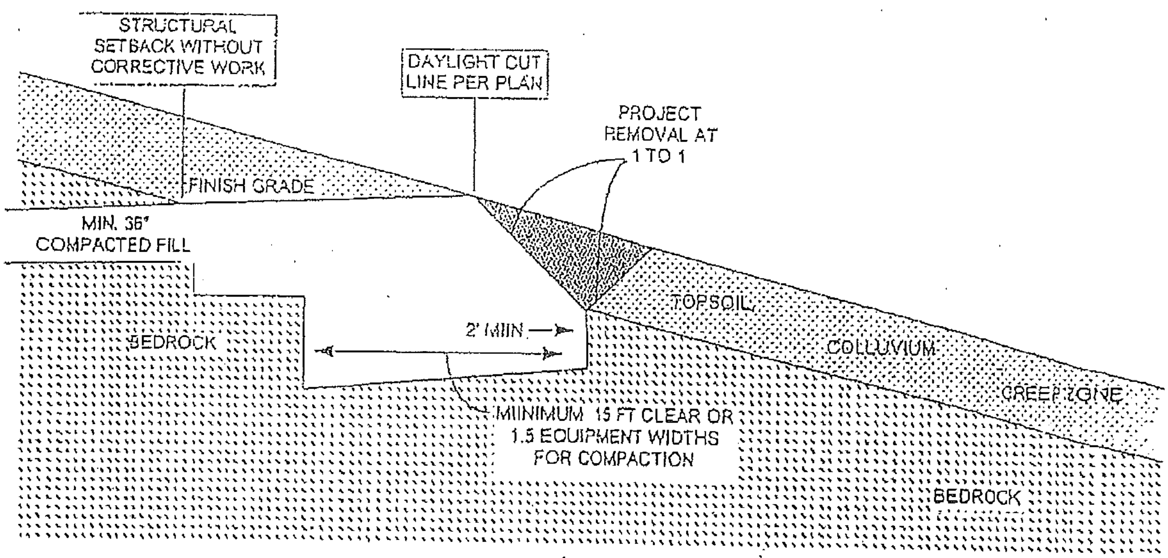


STANDARD GRADING GUIDELINES	TYPICAL CANYON CLEANOUT
GeoTek, Inc.	PLATE G - 1

TYPICAL FILL SLOPE OVER NATURAL DESCENDING SLOPE

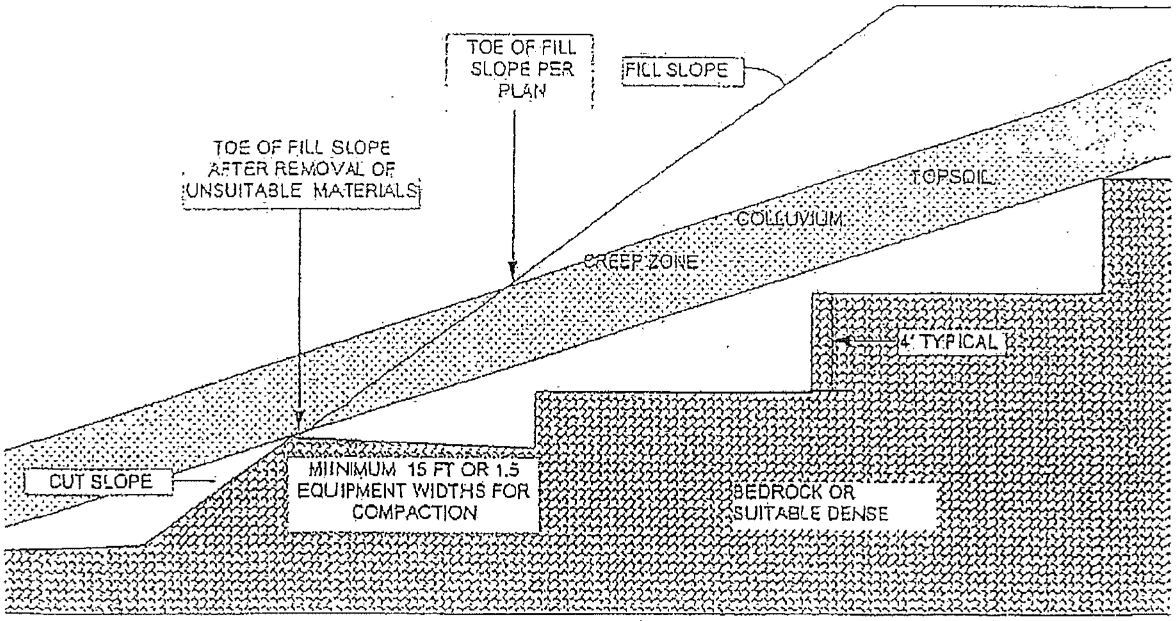


DAYLIGHT CUT AREA OVER NATURAL DESCENDING SLOPE

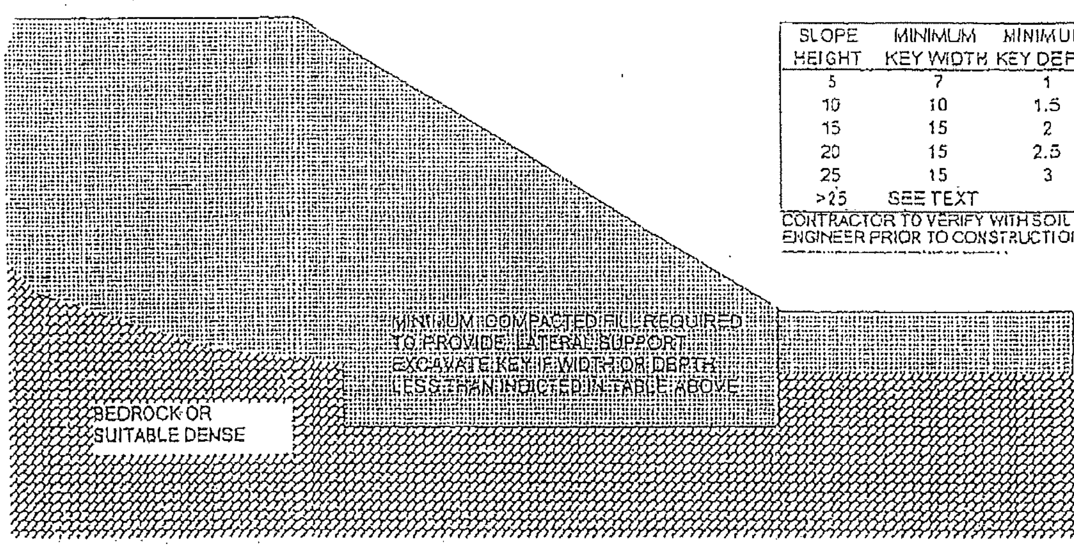


STANDARD GRADING GUIDELINES	TREATMENT ABOVE NATURAL SLOPES
GeoTek, Inc.	PLATE G - 2

TYPICAL FILL SLOPE OVER PROPOSED CUT SLOPE



TYPICAL FILL SLOPE

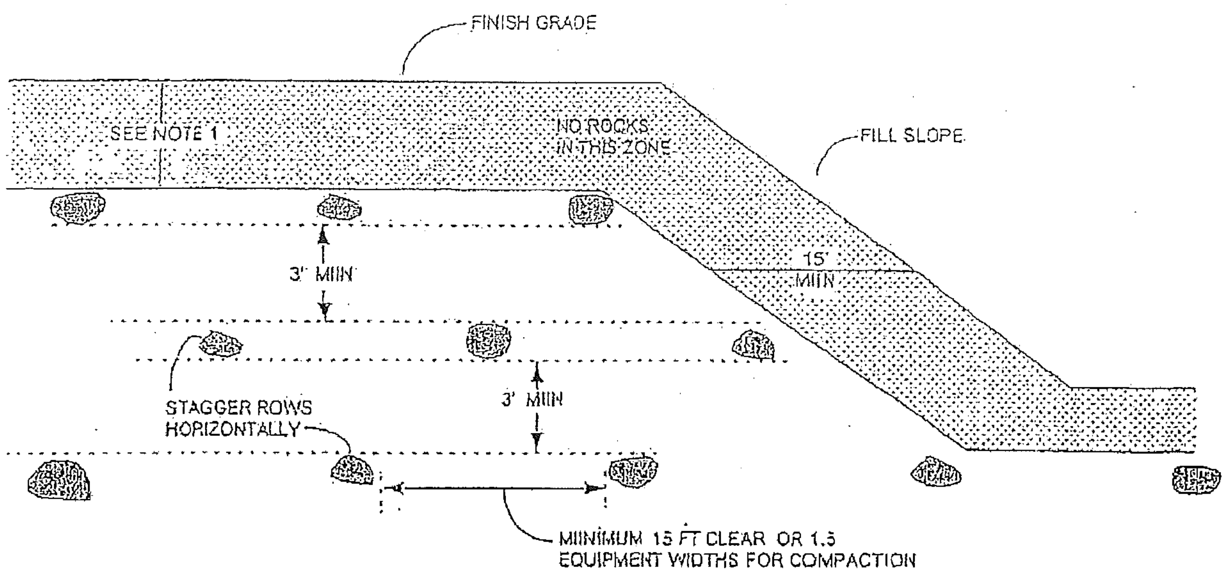


SLOPE HEIGHT	MINIMUM KEY WIDTH	MINIMUM KEY DEPTH
5	7	1
10	10	1.5
15	15	2
20	15	2.5
25	15	3
>25	SEE TEXT	

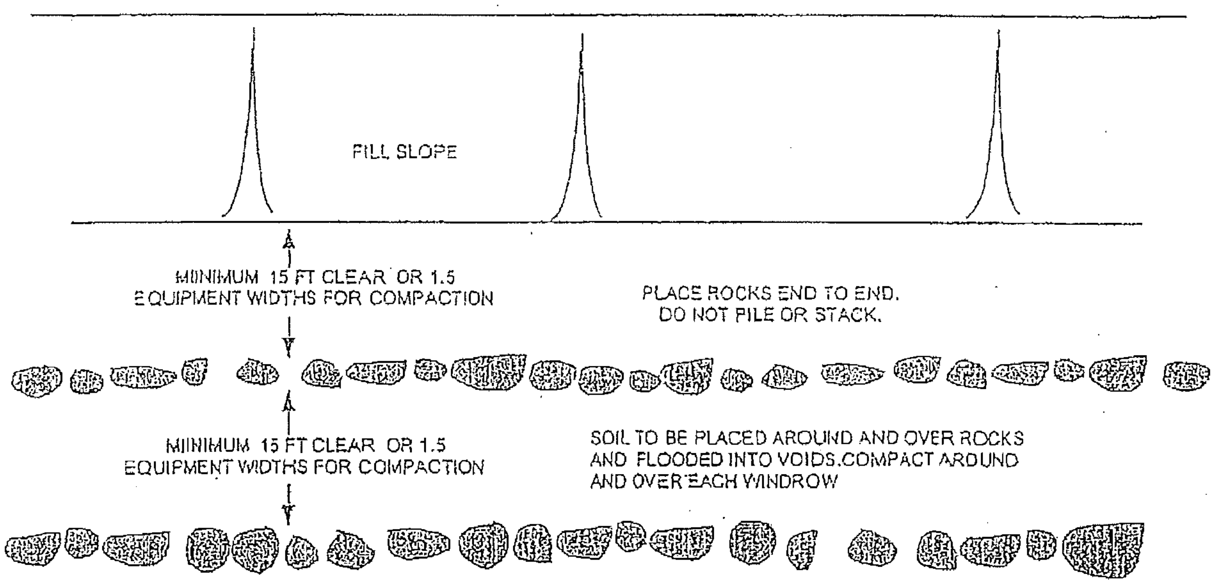
CONTRACTOR TO VERIFY WITH SOIL ENGINEER PRIOR TO CONSTRUCTION

STANDARD GRADING GUIDELINES	COMMON FILL SLOPE KEYS
GeoTek, Inc.	PLATE G-3

CROSS SECTIONAL VIEW



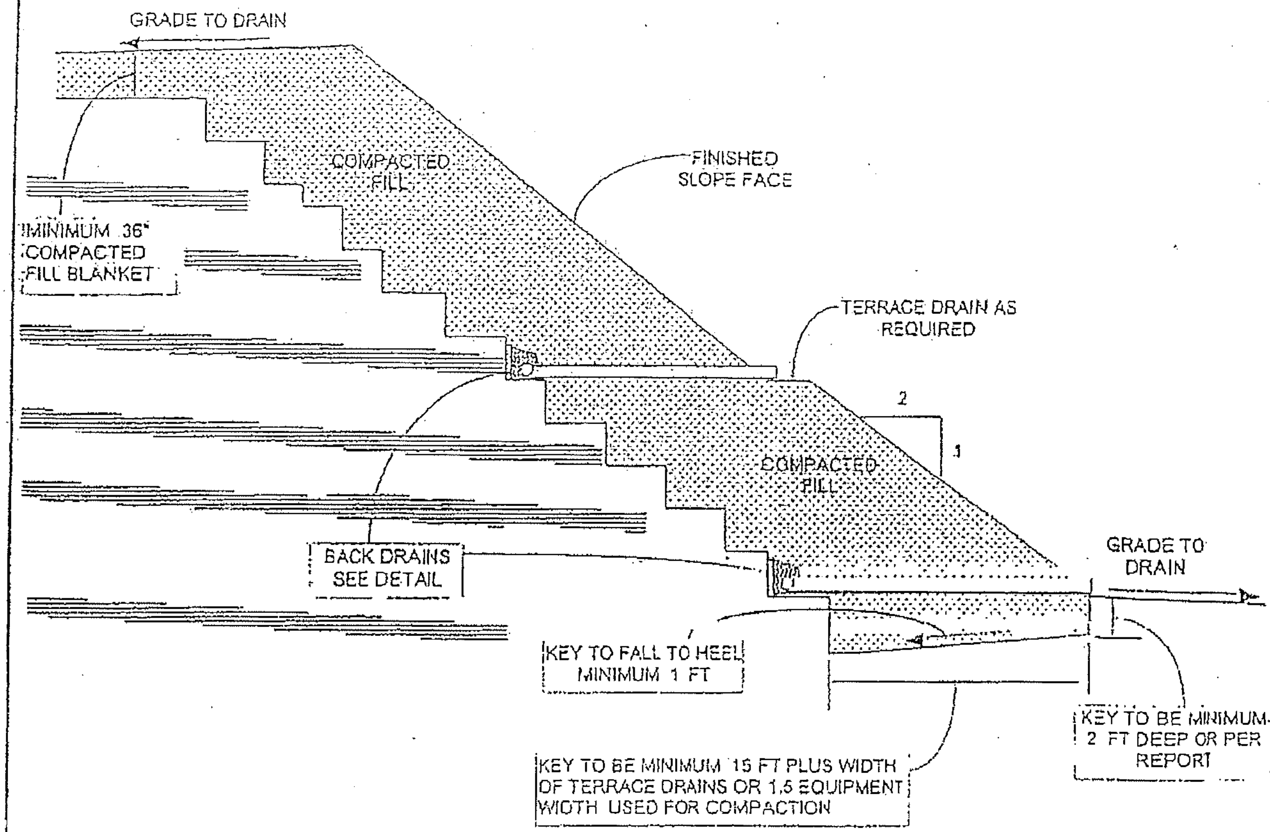
PLAN VEIW

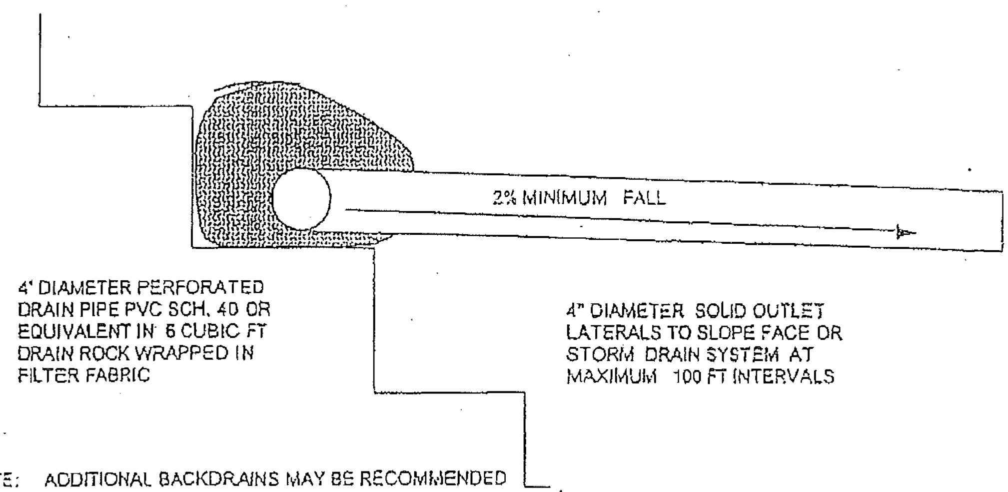


NOTES:

1) MININUM SOIL FILL OVER WINDROWS SHOULD BE 7 FEET AND SUFFICIENT FOR FUTURE EXCAVATIONS (e.g. SWIMMING POOLS) TO AVOID ROCKS.
2) MAXIMUM ROCK SIZE IN WINDROWS IS 4 FEET MINIMUM DIAMETER.
3) SOIL AROUND WINDROWS TO BE SANDY MATERIAL SUBJECT TO ACCEPTANCE BY SOIL ENGINEER
4) ALL SPACING AND CLEARANCES MUST BE SUFFICIENT TO ALLOW FOR PROPER COMPACTION.

STANDARD GRADING GUIDELINES	ROCK BURIAL DETAILS
GeoTek, Inc.	PLATE G-4





NOTE: ADDITIONAL BACKDRAINS MAY BE RECOMMENDED

STANDARD GRADING GUIDELINES	BUTTRESS AND STABILIZATION SLOPES
GeoTek, Inc.	PLATE G-5