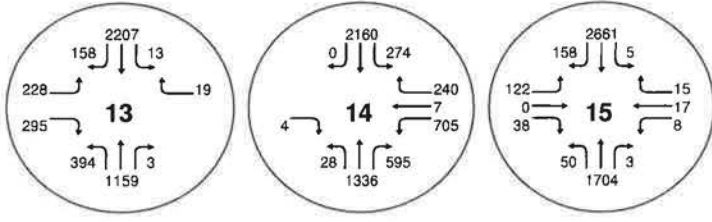
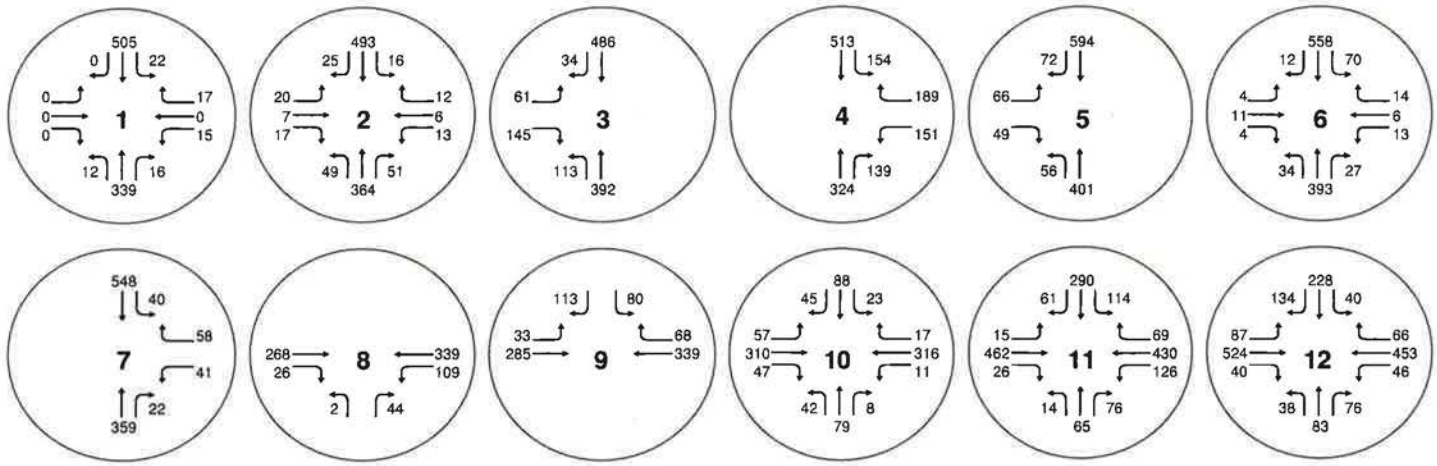


Figure 4.10
 Future With Project Traffic Volumes - Weekday – AM Peak Hour
 Pier and Strand Hotel - Traffic Study



Legend

- Study Intersection
- X Intersection Reference Number
- XX Intersection Turn Volume



Figure 4.11
Future With Project Traffic Volumes - Weekday - PM Peak Hour

Pier and Strand Hotel - Traffic Study

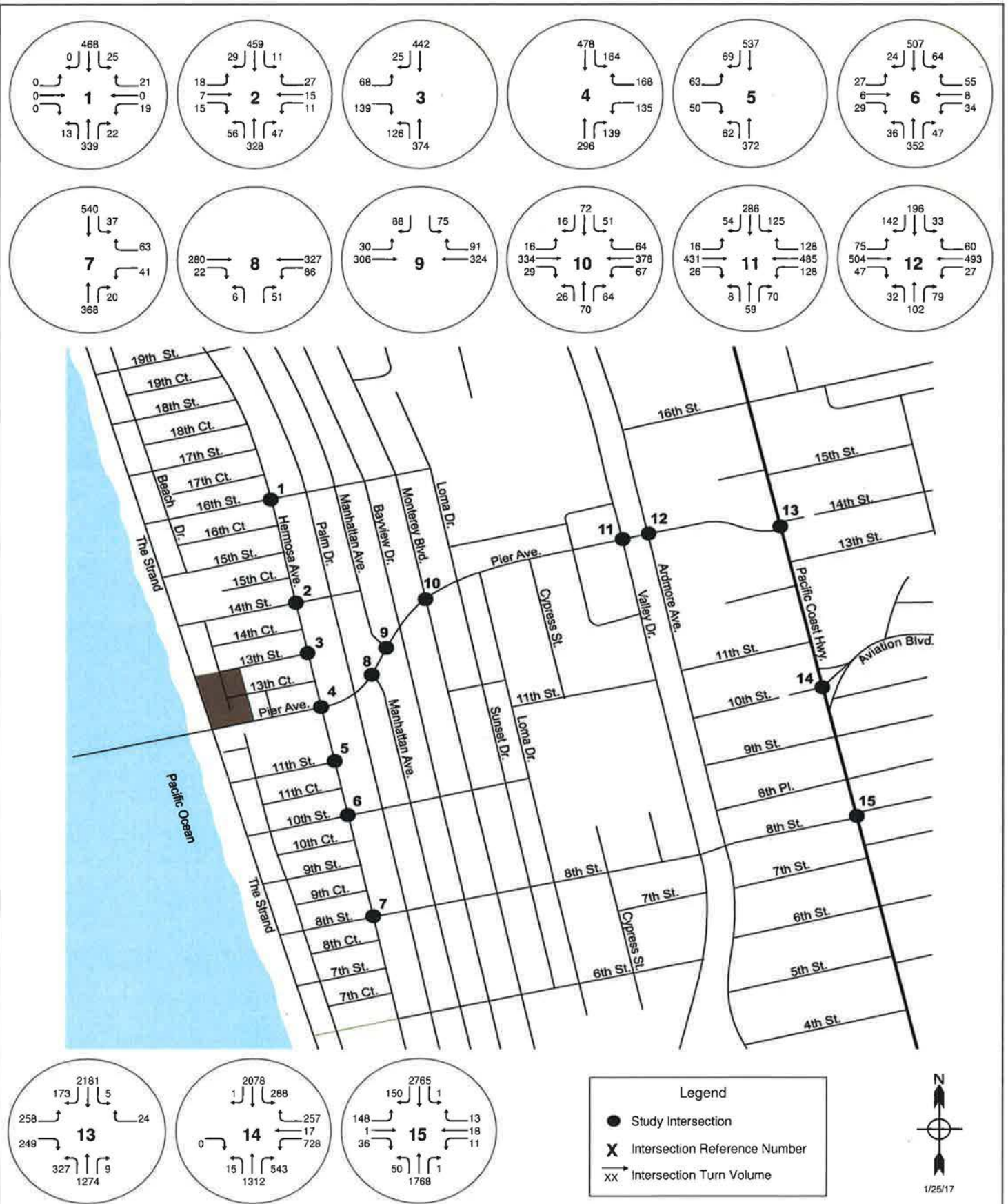


Figure 4.12
 Future With Project Traffic Volumes - Friday – PM Peak Hour

Pier and Strand Hotel - Traffic Study

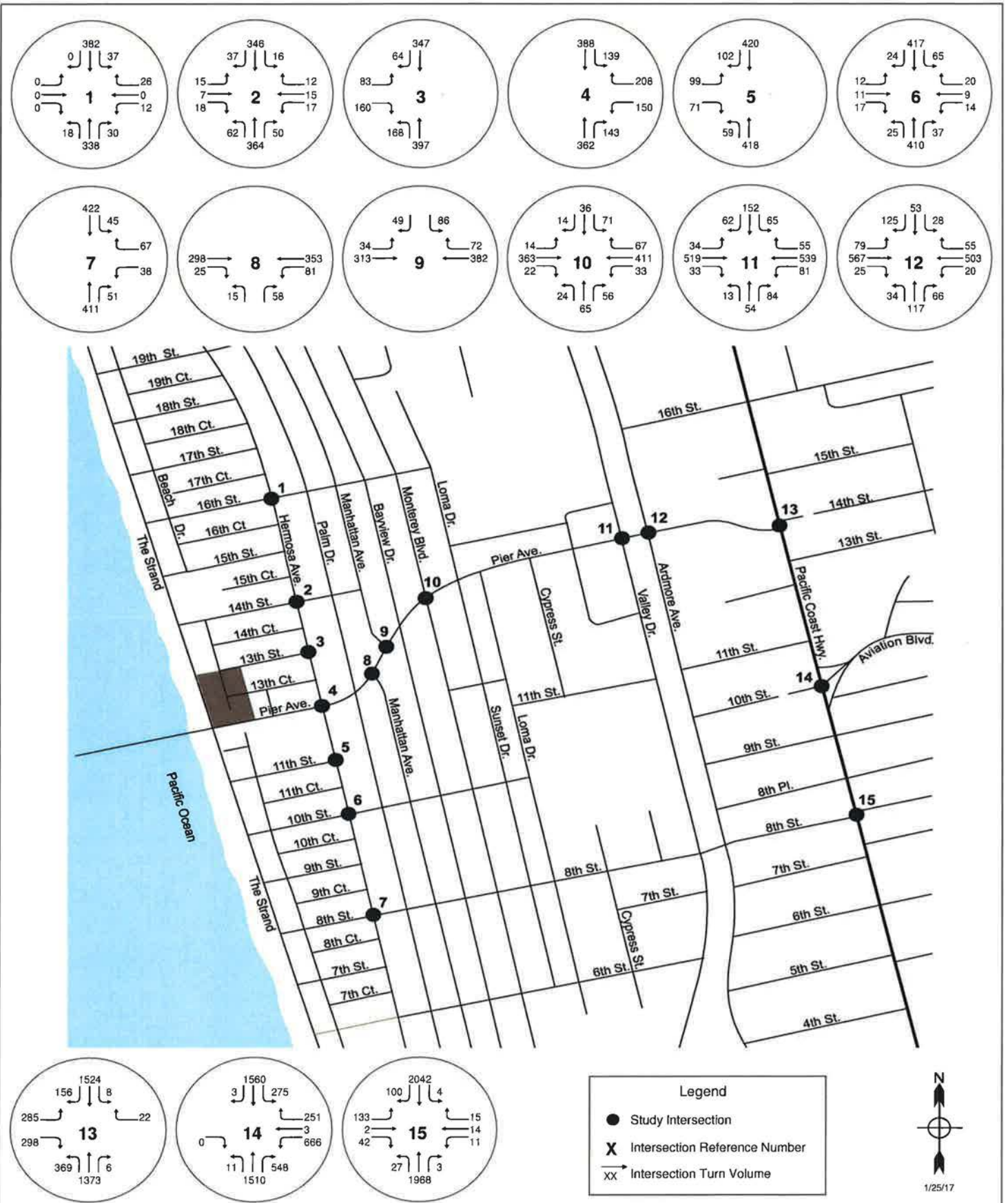
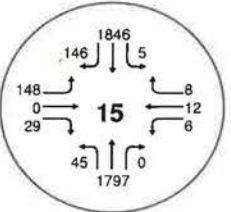
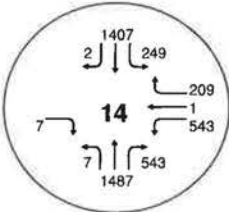
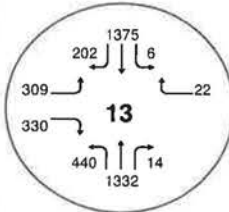
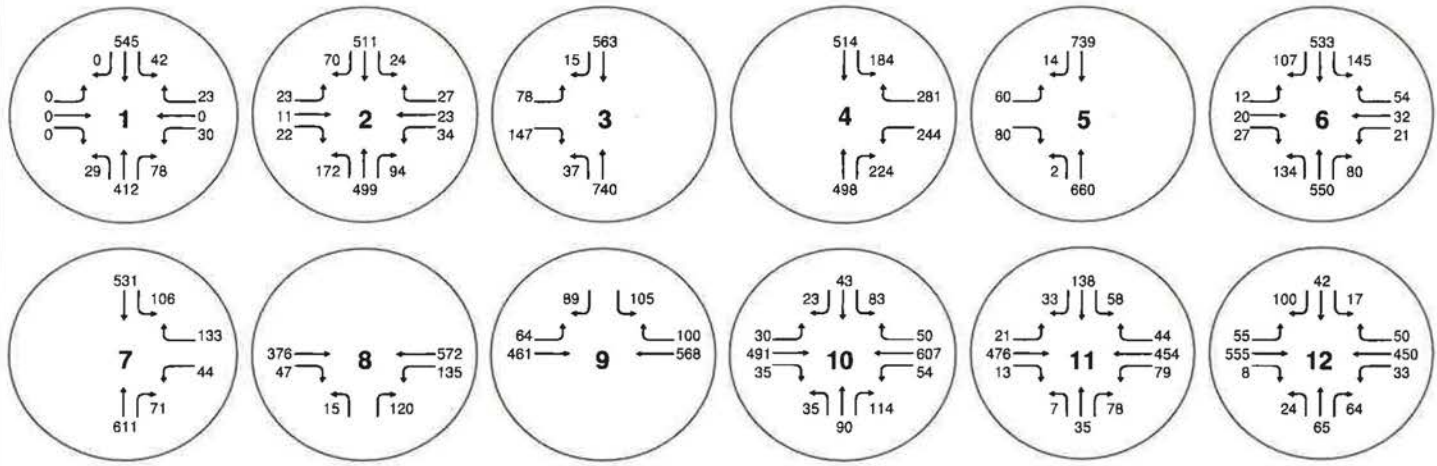


Figure 4.13
 Future With Project Traffic Volumes - Saturday - Midday Peak Hour
Pier and Strand Hotel - Traffic Study



Legend

- Study Intersection
- X Intersection Reference Number
- XX Intersection Turn Volume



Figure 4.14
Future With Project Traffic Volumes - Sunday – Mid-Afternoon Peak Hour

Pier and Strand Hotel - Traffic Study

Intersection Impact Threshold Criteria

<i>Intersection Type</i>	<i>ICU</i>	<i>Level of Service</i>	<i>Project Related Increase in ICU Or Change in LOS</i>
Signalized	0.000 – 0.800	A/B/C	Degrades to D/E/F
Signalized	>0.801 – 0.900	D	Equal to or greater then 0.02 Or Degrades to E/F
Signalized	>0.901 or greater	E/F	Equal to or greater than 0.05 Or Degrades from E to F
Unsignalized		A/B/C	Degrades to D/E/F
Unsignalized		D/E/F	Increase in traffic by 10% or more.

For signalized intersections a significant impact is determined by the increase in ICU value caused by the Project or by the degradation of LOS. At LOS A, LOS B or LOS C, the threshold of significance is a degradation to LOS D, LOS E or LOS F. At LOS D, the threshold of significance is an increase in ICU value of 0.02 or greater or a degradation to LOS E or LOS F. At LOS E and LOS F, the threshold of significance is an increase in ICU value of 0.05 or greater or a degradation from LOS E to LOS F.

For unsignalized intersections a significant impact is determined by the increase in traffic caused by the Project or by the degradation of LOS. At LOS A, LOS B, or LOS C, the threshold of significance is a degradation to LOS D, LOS E or LOS F. At LOS D, LOS E or LOS F, a significant impact is determined by an increase in traffic of 10% or more.

Project Impact Analysis - Future With Project Intersection Level of Service – With Proposed Two-Way 13th Street

The Project proposes to convert 13th Street to a two-way street. Figure 4.3 shows the proposed configuration which was considered to be feasible. It was prepared by the Project's Civil Engineer, and the layout has been verified by the City Department of Public Works and determined to be acceptable.

The conversion to two-way operation will not appreciably change existing circulation patterns. Traffic from the land uses on the Project site will no longer occur due to the removal of those uses. Traffic to/from the public parking garage will continue to ingress/egress on the existing portion of two-way 13th Street at Hermosa Avenue and will be unaffected. Traffic

to/from the Beach House Hotel will continue its current pattern of ingress via 14th Street and egress via 13th Street eastbound and so will be unaffected. Some traffic to/from the Lot B parking lot may use 13th Street to access the lot instead of using 13th Court, but as the lot is small any changes in traffic circulation are expected to be negligible.

For the purposes of a conservative analysis, all Project traffic was assumed to use 13th Street for both ingress and egress. This route will actually be beneficial to the Beach House Hotel, as it will avoid Project traffic using 14th Street and passing by the Beach House Hotel.

The intersection level of service analysis for the Future with Project conditions is summarized in Tables 4.6 to 4.10 for each of the time periods analyzed. These tables also compare the level of service for without Project and with Project conditions, show the increase in V/C ratios at each intersection due to the Project, and identify if the increase constitutes a significant impact.

AM Peak Hour

The ICU results in Table 4.6 show that with the Project, all study intersections would continue to operate at LOS D or better except for the intersection of PCH & Aviation Blvd. which would operate at LOS F (also LOS F without the Project), and the intersection of PCH & 8th St. which would operate at LOS E (also LOS E without the Project). The Project would not cause a change in LOS at any intersection. Many intersections would continue to operate at LOS A or LOS B. The change in ICU value would not exceed the thresholds for significant impact at any location.

It is therefore concluded that the Project would not cause any significant impacts in the AM peak hour.

PM Peak Hour

The ICU results in Table 4.7 show that with the Project, all study intersections would continue to operate at LOS D or better. The Project would not cause a change in LOS at any intersection. Many intersections would continue to operate at LOS A or LOS B. The change in ICU value would not exceed the thresholds for significant impact at any location.

It is therefore concluded that the Project would not cause any significant impacts in the PM peak hour.

Friday PM Peak Hour

The ICU results in Table 4.8 show that with the Project, all study intersections would continue to operate at LOS D or better. The Project would not cause a change in LOS at any intersection except at Hermosa Avenue & Pier Avenue where the LOS would change from

LOS B to LOS C. Many intersections would continue to operate at LOS A or LOS B. The change in ICU value would not exceed the thresholds for significant impact at any location.

It is therefore concluded that the Project would not cause any significant impacts in the Friday PM peak hour.

Saturday Midday Peak Hour

The ICU results in Table 4.9 show that with the Project, all study intersections would continue to operate at LOS D or better except the intersection of PCH & Aviation Blvd. which would operate at LOS E (also LOS E without the Project). Many intersections would continue to operate at LOS A or LOS B. The change in ICU value would not exceed the thresholds for significant impact at any location.

It is therefore concluded that the Project would not cause any significant impacts in the Saturday Midday peak hour.

Sunday Afternoon Peak Hour

The ICU results in Table 4.10 show that with the Project, all study intersections would continue to operate at LOS D or better. Many intersections would continue to operate at LOS A or LOS B. The change in ICU value (increase of 0.021) caused by the Project at the intersection of Hermosa Avenue & Pier Avenue would slightly exceed the threshold for significant impact (0.020), although the level of service would remain at LOS D. The change in ICU value would not exceed the thresholds for significant impact at any other location.

It is therefore concluded that the Project would cause one significant impact in the Sunday Afternoon peak hour.

Project Impact Analysis - Future With Project Intersection Level of Service – With One-Way 13th Street Option

A traffic impact analysis was also conducted for the one-way 13th Street option. The overall distribution of Project trips would remain the same under this option. However, traffic ingress to the Project would be via 14th Street and traffic egress via 13th Street. The only change in Project traffic volumes would be at the two local adjacent intersections – at Hermosa Avenue & 14th Street and Hermosa Avenue & 13th Street, as traffic would use a different access route to the Project from Hermosa Avenue. These are the only two intersections where traffic volumes and intersection operations would be different. The results of this analysis are shown in Tables 4.11 to 4.15.

**Table 4.6 Future With Project Conditions - Intersection Level of Service
Weekday - AM Peak Hour - 13th Street Two-Way**

6/29/2017

Intersection		Intersection Type	Future Without Project Conditions (Year 2021)		Future With Project Conditions (Year 2021)		Change in V/C or (Delay) & % Volume	Significant Impact
			V/C or (Delay) & Volume	LOS	V/C or (Delay) & Volume	LOS		
1.	Hermosa Ave & 16th St	3-Way Stop	(9.0) 680	A	(9.1) 714	A	(0.1) 5.0%	No
2.	Hermosa Ave & 14th St	Signalized	0.269	A	0.271	A	0.002	No
3.	Hermosa Ave & 13th St	Signalized	0.259	A	0.308	A	0.049	No
4.	Hermosa Ave & Pier Ave	Signalized	0.643	B	0.678	B	0.035	No
5.	Hermosa Ave & 11th St	Signalized	0.297	A	0.307	A	0.010	No
6.	Hermosa Ave & 10th St	4-Way Stop	(10.1) 856	B	(10.4) 896	B	(0.3) 4.7%	No
7.	Hermosa Ave & 8th St	3-Way Stop	(10.4) 931	B	(10.7) 970	B	(0.3) 4.2%	No
8.	Manhattan Ave West & Pier Ave	1-Way Stop	(9.6) 501	A	(9.7) 540	A	(0.1) 7.8%	No
9.	Manhattan Ave East & Pier Ave	1-Way Stop	(11.8) 621	B	(12.2) 660	B	(0.4) 6.3%	No
10.	Monterey Blvd & Pier Ave	4-Way Stop	(9.6) 796	A	(9.8) 835	A	(0.2) 4.9%	No
11.	Valley Dr. & Pier Ave	4-Way Stop	(14.6) 1,452	B	(15.0) 1,491	C	(0.4) 2.7%	No
12.	Ardmore Ave. & Pier Ave	4-Way Stop	(15.5) 1,525	C	(15.8) 1,564	C	(0.3) 2.6%	No
13.	PCH & Pier Ave	Signalized	0.717	C	0.718	C	0.001	No
14.	PCH & Aviation Blvd	Signalized	1.031	F	1.043	F	0.012	No
15.	PCH & 8th St	Signalized	0.915	E	0.916	E	0.001	No

**Table 4.7 Future With Project Conditions - Intersection Level of Service
Weekday - PM Peak Hour - 13th Street Two-Way**

6/29/2017

<i>Intersection</i>		<i>Intersection Type</i>	<i>Future Without Project Conditions (Year 2021)</i>		<i>Future With Project Conditions (Year 2021)</i>		<i>Change in V/C or (Delay) & % Volume</i>	<i>Significant Impact</i>
			<i>V/C or (Delay) & Volume</i>	<i>LOS</i>	<i>V/C or (Delay) & Volume</i>	<i>LOS</i>		
1.	Hermosa Ave & 16th St	3-Way Stop	(9.8) 898	A	(9.9) 926	A	(0.1) 3.1%	No
2.	Hermosa Ave & 14th St	Signalized	0.331	A	0.333	A	0.002	No
3.	Hermosa Ave & 13th St	Signalized	0.404	A	0.462	A	0.058	No
4.	Hermosa Ave & Pier Ave	Signalized	0.708	C	0.731	C	0.023	No
5.	Hermosa Ave & 11th St	Signalized	0.496	A	0.506	A	0.010	No
6.	Hermosa Ave & 10th St	4-Way Stop	(10.5) 1,113	B	(10.6) 1,146	B	(0.1) 3.0%	No
7.	Hermosa Ave & 8th St	3-Way Stop	(10.7) 1,041	B	(10.9) 1,074	B	(0.2) 3.2%	No
8.	Manhattan Ave West & Pier Ave	1-Way Stop	(10.0) 754	B	(10.2) 788	B	(0.2) 4.5%	No
9.	Manhattan Ave East & Pier Ave	1-Way Stop	(13.6) 884	B	(13.8) 918	B	(0.2) 3.8%	No
10.	Monterey Blvd & Pier Ave	4-Way Stop	(10.7) 1,009	B	(10.9) 1,043	B	(0.2) 3.4%	No
11.	Valley Dr. & Pier Ave	4-Way Stop	(22.0) 1,714	C	(22.8) 1,748	C	(0.8) 2.0%	No
12.	Ardmore Ave. & Pier Ave	4-Way Stop	(21.2) 1,781	C	(22.2) 1,815	C	(1.0) 1.9%	No
13.	PCH & Pier Ave	Signalized	0.782	C	0.787	C	0.005	No
14.	PCH & Aviation Blvd	Signalized	0.888	D	0.896	D	0.008	No
15.	PCH & 8th St	Signalized	0.839	D	0.840	D	0.001	No

**Table 4.8 Future With Project Conditions - Intersection Level of Service
Friday - PM Peak Hour - 13th Street Two-Way**

6/29/2017

Intersection		Intersection Type	Future Without Project Conditions (Year 2021)		Future With Project Conditions (Year 2021)		Change in V/C or (Delay) & % Volume	Significant Impact
			V/C or (Delay) & Volume	LOS	V/C or (Delay) & Volume	LOS		
1.	Hermosa Ave & 16th St	3-Way Stop	(9.7) 879	A	(9.8) 907	A	(0.1) 3.2%	No
2.	Hermosa Ave & 14th St	Signalized	0.333	A	0.335	A	0.002	No
3.	Hermosa Ave & 13th St	Signalized	0.396	A	0.454	A	0.058	No
4.	Hermosa Ave & Pier Ave	Signalized	0.693	B	0.715	C	0.022	No
5.	Hermosa Ave & 11th St	Signalized	0.391	A	0.399	A	0.008	No
6.	Hermosa Ave & 10th St	4-Way Stop	(10.8) 1,156	B	(11.1) 1,189	B	(0.3) 2.9%	No
7.	Hermosa Ave & 8th St	3-Way Stop	(10.6) 1,036	B	(10.8) 1,069	B	(0.2) 3.2%	No
8.	Manhattan Ave West & Pier Ave	1-Way Stop	(10.4) 738	B	(10.7) 772	B	(0.3) 4.6%	No
9.	Manhattan Ave East & Pier Ave	1-Way Stop	(13.3) 880	B	(13.6) 914	B	(0.3) 3.9%	No
10.	Monterey Blvd & Pier Ave	4-Way Stop	(11.7) 1,153	B	(11.9) 1,187	B	(0.2) 2.9%	No
11.	Valley Dr. & Pier Ave	4-Way Stop	(22.3) 1,782	C	(23.1) 1,816	C	(0.8) 1.9%	No
12.	Ardmore Ave. & Pier Ave	4-Way Stop	(19.2) 1,756	C	(19.9) 1,790	C	(0.7) 1.9%	No
13.	PCH & Pier Ave	Signalized	0.781	C	0.786	C	0.005	No
14.	PCH & Aviation Blvd	Signalized	0.891	D	0.899	D	0.008	No
15.	PCH & 8th St	Signalized	0.875	D	0.876	D	0.001	No

**Table 4.9 Future With Project Conditions - Intersection Level of Service
Saturday - Midday Peak Hour - 13th Street Two-Way**

6/29/2017

Intersection		Intersection Type	Future Without Project Conditions (Year 2021)		Future With Project Conditions (Year 2021)		Change in V/C or (Delay) & % Volume	Significant Impact
			V/C or (Delay) & Volume	LOS	V/C or (Delay) & Volume	LOS		
1.	Hermosa Ave & 16th St	3-Way Stop	(9.3) 810	A	(9.5) 843	A	(0.2) 4.1%	No
2.	Hermosa Ave & 14th St	Signalized	0.293	A	0.299	A	0.006	No
3.	Hermosa Ave & 13th St	Signalized	0.423	A	0.486	A	0.063	No
4.	Hermosa Ave & Pier Ave	Signalized	0.716	C	0.746	C	0.030	No
5.	Hermosa Ave & 11th St	Signalized	0.489	A	0.501	A	0.012	No
6.	Hermosa Ave & 10th St	4-Way Stop	(10.0) 1,022	A	(10.2) 1,061	B	(0.2) 3.8%	No
7.	Hermosa Ave & 8th St	3-Way Stop	(10.4) 1,016	B	(10.6) 1,054	B	(0.2) 3.7%	No
8.	Manhattan Ave West & Pier Ave	1-Way Stop	(11.2) 792	B	(11.4) 830	B	(0.2) 4.8%	No
9.	Manhattan Ave East & Pier Ave	1-Way Stop	(14.7) 898	B	(15.2) 936	C	(0.5) 4.2%	No
10.	Monterey Blvd & Pier Ave	4-Way Stop	(11.4) 1,138	B	(11.7) 1,176	B	(0.3) 3.3%	No
11.	Valley Dr. & Pier Ave	4-Way Stop	(19.1) 1,653	C	(20.1) 1,691	C	(1.0) 2.3%	No
12.	Ardmore Ave. & Pier Ave	4-Way Stop	(15.7) 1,634	C	(16.2) 1,672	C	(0.5) 2.3%	No
13.	PCH & Pier Ave	Signalized	0.655	B	0.663	B	0.008	No
14.	PCH & Aviation Blvd	Signalized	0.904	E	0.909	E	0.005	No
15.	PCH & 8th St	Signalized	0.695	B	0.695	B	0.000	No

**Table 4.10 Future With Project Conditions - Intersection Level of Service
Sunday - Mid-Afternoon Peak Hour - 13th Street Two-Way**

6/29/2017

Intersection	Intersection Type	Future Without Project Conditions (Year 2021)		Future With Project Conditions (Year 2021)		Change in V/C or (Delay) & % Volume	Significant Impact	
		V/C or (Delay) & Volume	LOS	V/C or (Delay) & Volume	LOS			
1.	Hermosa Ave & 16th St	3-Way Stop	(11.0) 1,136	B	(11.2) 1,159	B	(0.2) 2.0%	No
2.	Hermosa Ave & 14th St	Signalized	0.459	A	0.464	A	0.005	No
3.	Hermosa Ave & 13th St	Signalized	0.451	A	0.472	A	0.021	No
4.	Hermosa Ave & Pier Ave	Signalized	0.867	D	0.888	D	0.021	Yes
5.	Hermosa Ave & 11th St	Signalized	0.420	A	0.424	A	0.004	No
6.	Hermosa Ave & 10th St	4-Way Stop	(15.4) 1,687	C	(15.9) 1,715	C	(0.5) 1.7%	No
7.	Hermosa Ave & 8th St	3-Way Stop	(14.5) 1,491	B	(14.9) 1,518	B	(0.4) 1.8%	No
8.	Manhattan Ave West & Pier Ave	1-Way Stop	(13.2) 1,238	B	(13.4) 1,265	B	(0.2) 2.2%	No
9.	Manhattan Ave East & Pier Ave	1-Way Stop	(27.7) 1,360	D	(29.1) 1,387	D	(1.4) 2.0%	No
10.	Monterey Blvd & Pier Ave	4-Way Stop	(17.8) 1,628	C	(18.4) 1,655	C	(0.6) 1.7%	No
11.	Valley Dr. & Pier Ave	4-Way Stop	(14.8) 1,409	B	(15.2) 1,436	C	(0.4) 1.9%	No
12.	Ardmore Ave. & Pier Ave	4-Way Stop	(13.2) 1,436	B	(13.4) 1,463	B	(0.2) 1.9%	No
13.	PCH & Pier Ave	Signalized	0.667	B	0.672	B	0.005	No
14.	PCH & Aviation Blvd	Signalized	0.851	D	0.854	D	0.003	No
15.	PCH & 8th St	Signalized	0.667	B	0.667	B	0.000	No

**Table 4.11 Future With Project Conditions - Intersection Level of Service
Weekday - AM Peak Hour - 13th Street One-Way**

6/29/2017

Intersection		Intersection Type	Future Without Project Conditions (Year 2021)		Future With Project Conditions (Year 2021)		Change in V/C or (Delay) & % Volume	Significant Impact
			V/C or (Delay) & Volume	LOS	V/C or (Delay) & Volume	LOS		
1.	Hermosa Ave & 16th St	3-Way Stop	(9.0) 680	A	(9.1) 714	A	(0.1) 5.0%	No
2.	Hermosa Ave & 14th St	Signalized	0.269	A	0.266	A	-0.003	No
3.	Hermosa Ave & 13th St	Signalized	0.259	A	0.292	A	0.033	No
4.	Hermosa Ave & Pier Ave	Signalized	0.643	B	0.678	B	0.035	No
5.	Hermosa Ave & 11th St	Signalized	0.297	A	0.307	A	0.010	No
6.	Hermosa Ave & 10th St	4-Way Stop	(10.1) 856	B	(10.4) 896	B	(0.3) 4.7%	No
7.	Hermosa Ave & 8th St	3-Way Stop	(10.4) 931	B	(10.7) 970	B	(0.3) 4.2%	No
8.	Manhattan Ave West & Pier Ave	1-Way Stop	(9.6) 501	A	(9.7) 540	A	(0.1) 7.8%	No
9.	Manhattan Ave East & Pier Ave	1-Way Stop	(11.8) 621	B	(12.2) 660	B	(0.4) 6.3%	No
10.	Monterey Blvd & Pier Ave	4-Way Stop	(9.6) 796	A	(9.8) 835	A	(0.2) 4.9%	No
11.	Valley Dr. & Pier Ave	4-Way Stop	(14.6) 1,452	B	(15.0) 1,491	C	(0.4) 2.7%	No
12.	Ardmore Ave. & Pier Ave	4-Way Stop	(15.5) 1,525	C	(15.8) 1,564	C	(0.3) 2.6%	No
13.	PCH & Pier Ave	Signalized	0.717	C	0.718	C	0.001	No
14.	PCH & Aviation Blvd	Signalized	1.031	F	1.043	F	0.012	No
15.	PCH & 8th St	Signalized	0.915	E	0.916	E	0.001	No

**Table 4.12 Future With Project Conditions - Intersection Level of Service
Weekday - PM Peak Hour - 13th Street One-Way**

6/29/2017

<i>Intersection</i>		<i>Intersection Type</i>	<i>Future Without Project Conditions (Year 2021)</i>		<i>Future With Project Conditions (Year 2021)</i>		<i>Change in V/C or (Delay) & % Volume</i>	<i>Significant Impact</i>
			<i>V/C or (Delay) & Volume</i>	<i>LOS</i>	<i>V/C or (Delay) & Volume</i>	<i>LOS</i>		
1.	Hermosa Ave & 16th St	3-Way Stop	(9.8) 898	A	(9.9) 926	A	(0.1) 3.1%	No
2.	Hermosa Ave & 14th St	Signalized	0.331	A	0.341	A	0.010	No
3.	Hermosa Ave & 13th St	Signalized	0.404	A	0.452	A	0.048	No
4.	Hermosa Ave & Pier Ave	Signalized	0.708	C	0.731	C	0.023	No
5.	Hermosa Ave & 11th St	Signalized	0.496	A	0.506	A	0.010	No
6.	Hermosa Ave & 10th St	4-Way Stop	(10.5) 1,113	B	(10.6) 1,146	B	(0.1) 3.0%	No
7.	Hermosa Ave & 8th St	3-Way Stop	(10.7) 1,041	B	(10.9) 1,074	B	(0.2) 3.2%	No
8.	Manhattan Ave West & Pier Ave	1-Way Stop	(10.0) 754	B	(10.2) 788	B	(0.2) 4.5%	No
9.	Manhattan Ave East & Pier Ave	1-Way Stop	(13.6) 884	B	(13.8) 918	B	(0.2) 3.8%	No
10.	Monterey Blvd & Pier Ave	4-Way Stop	(10.7) 1,009	B	(10.9) 1,043	B	(0.2) 3.4%	No
11.	Valley Dr. & Pier Ave	4-Way Stop	(22.0) 1,714	C	(22.8) 1,748	C	(0.8) 2.0%	No
12.	Ardmore Ave. & Pier Ave	4-Way Stop	(21.2) 1,781	C	(22.2) 1,815	C	(1.0) 1.9%	No
13.	PCH & Pier Ave	Signalized	0.782	C	0.787	C	0.005	No
14.	PCH & Aviation Blvd	Signalized	0.888	D	0.896	D	0.008	No
15.	PCH & 8th St	Signalized	0.839	D	0.840	D	0.001	No

**Table 4.13 Future With Project Conditions - Intersection Level of Service
Friday - PM Peak Hour - 13th Street One-Way**

6/29/2017

Intersection		Intersection Type	Future Without Project Conditions (Year 2021)		Future With Project Conditions (Year 2021)		Change in V/C or (Delay) & % Volume	Significant Impact
			V/C or (Delay) & Volume	LOS	V/C or (Delay) & Volume	LOS		
1.	Hermosa Ave & 16th St	3-Way Stop	(9.7) 879	A	(9.8) 907	A	(0.1) 3.2%	No
2.	Hermosa Ave & 14th St	Signalized	0.333	A	0.342	A	0.009	No
3.	Hermosa Ave & 13th St	Signalized	0.396	A	0.445	A	0.049	No
4.	Hermosa Ave & Pier Ave	Signalized	0.693	B	0.715	C	0.022	No
5.	Hermosa Ave & 11th St	Signalized	0.391	A	0.399	A	0.008	No
6.	Hermosa Ave & 10th St	4-Way Stop	(10.8) 1,156	B	(11.1) 1,189	B	(0.3) 2.9%	No
7.	Hermosa Ave & 8th St	3-Way Stop	(10.6) 1,036	B	(10.8) 1,069	B	(0.2) 3.2%	No
8.	Manhattan Ave West & Pier Ave	1-Way Stop	(10.4) 738	B	(10.7) 772	B	(0.3) 4.6%	No
9.	Manhattan Ave East & Pier Ave	1-Way Stop	(13.3) 880	B	(13.6) 914	B	(0.3) 3.9%	No
10.	Monterey Blvd & Pier Ave	4-Way Stop	(11.7) 1,153	B	(11.9) 1,187	B	(0.2) 2.9%	No
11.	Valley Dr. & Pier Ave	4-Way Stop	(22.3) 1,782	C	(23.1) 1,816	C	(0.8) 1.9%	No
12.	Ardmore Ave. & Pier Ave	4-Way Stop	(19.2) 1,756	C	(19.9) 1,790	C	(0.7) 1.9%	No
13.	PCH & Pier Ave	Signalized	0.781	C	0.786	C	0.005	No
14.	PCH & Aviation Blvd	Signalized	0.891	D	0.899	D	0.008	No
15.	PCH & 8th St	Signalized	0.875	D	0.876	D	0.001	No

**Table 4.14 Future With Project Conditions - Intersection Level of Service
Saturday - Midday Peak Hour - 13th Street One-Way**

6/29/2017

Intersection		Intersection Type	Future Without Project Conditions (Year 2021)		Future With Project Conditions (Year 2021)		Change in V/C or (Delay) & % Volume	Significant Impact
			V/C or (Delay) & Volume	LOS	V/C or (Delay) & Volume	LOS		
1.	Hermosa Ave & 16th St	3-Way Stop	(9.3) 810	A	(9.5) 843	A	(0.2) 4.1%	No
2.	Hermosa Ave & 14th St	Signalized	0.293	A	0.327	A	0.034	No
3.	Hermosa Ave & 13th St	Signalized	0.423	A	0.452	A	0.029	No
4.	Hermosa Ave & Pier Ave	Signalized	0.716	C	0.746	C	0.030	No
5.	Hermosa Ave & 11th St	Signalized	0.489	A	0.501	A	0.012	No
6.	Hermosa Ave & 10th St	4-Way Stop	(10.0) 1,022	A	(10.2) 1,061	B	(0.2) 3.8%	No
7.	Hermosa Ave & 8th St	3-Way Stop	(10.4) 1,016	B	(10.6) 1,054	B	(0.2) 3.7%	No
8.	Manhattan Ave West & Pier Ave	1-Way Stop	(11.2) 792	B	(11.4) 830	B	(0.2) 4.8%	No
9.	Manhattan Ave East & Pier Ave	1-Way Stop	(14.7) 898	B	(15.2) 936	C	(0.5) 4.2%	No
10.	Monterey Blvd & Pier Ave	4-Way Stop	(11.4) 1,138	B	(11.7) 1,176	B	(0.3) 3.3%	No
11.	Valley Dr. & Pier Ave	4-Way Stop	(19.1) 1,653	C	(20.1) 1,691	C	(1.0) 2.3%	No
12.	Ardmore Ave. & Pier Ave	4-Way Stop	(15.7) 1,634	C	(16.2) 1,672	C	(0.5) 2.3%	No
13.	PCH & Pier Ave	Signalized	0.655	B	0.663	B	0.008	No
14.	PCH & Aviation Blvd	Signalized	0.904	E	0.909	E	0.005	No
15.	PCH & 8th St	Signalized	0.695	B	0.695	B	0.000	No

**Table 4.15 Future With Project Conditions - Intersection Level of Service
Sunday - Mid-Afternoon Peak Hour - 13th Street One-Way**

6/29/2017

Intersection		Intersection Type	Future Without Project Conditions (Year 2021)		Future With Project Conditions (Year 2021)		Change in V/C or (Delay) & % Volume	Significant Impact
			V/C or (Delay) & Volume	LOS	V/C or (Delay) & Volume	LOS		
1.	Hermosa Ave & 16th St	3-Way Stop	(11.0) 1,136	B	(11.2) 1,159	B	(0.2) 2.0%	No
2.	Hermosa Ave & 14th St	Signalized	0.459	A	0.484	A	0.025	No
3.	Hermosa Ave & 13th St	Signalized	0.451	A	0.482	A	0.031	No
4.	Hermosa Ave & Pier Ave	Signalized	0.867	D	0.888	D	0.021	Yes
5.	Hermosa Ave & 11th St	Signalized	0.420	A	0.424	A	0.004	No
6.	Hermosa Ave & 10th St	4-Way Stop	(15.4) 1,687	C	(15.9) 1,715	C	(0.5) 1.7%	No
7.	Hermosa Ave & 8th St	3-Way Stop	(14.5) 1,491	B	(14.9) 1,518	B	(0.4) 1.8%	No
8.	Manhattan Ave West & Pier Ave	1-Way Stop	(13.2) 1,238	B	(13.4) 1,265	B	(0.2) 2.2%	No
9.	Manhattan Ave East & Pier Ave	1-Way Stop	(27.7) 1,360	D	(29.1) 1,387	D	(1.4) 2.0%	No
10.	Monterey Blvd & Pier Ave	4-Way Stop	(17.8) 1,628	C	(18.4) 1,655	C	(0.6) 1.7%	No
11.	Valley Dr. & Pier Ave	4-Way Stop	(14.8) 1,409	B	(15.2) 1,436	C	(0.4) 1.9%	No
12.	Ardmore Ave. & Pier Ave	4-Way Stop	(13.2) 1,436	B	(13.4) 1,463	B	(0.2) 1.9%	No
13.	PCH & Pier Ave	Signalized	0.667	B	0.672	B	0.005	No
14.	PCH & Aviation Blvd	Signalized	0.851	D	0.854	D	0.003	No
15.	PCH & 8th St	Signalized	0.667	B	0.667	B	0.000	No

The results are the same for all intersections except for the intersections of Hermosa Avenue & 14th Street – which generally has a slightly higher V/C ratio (additional turning traffic), and Hermosa Avenue & 13th Street – which generally has a slightly lower V/C ratio (less turning traffic). However the level of service would be the same as for the two-way 13th Street option at both intersections.

With the one-way 13th Street Option the traffic impacts of the Project would be identical to those with the two-way 13th Street option. There would be one significant impact, in the Sunday Mid Afternoon Peak Hour, at Hermosa Avenue & Pier Avenue.

4.3 Project Access

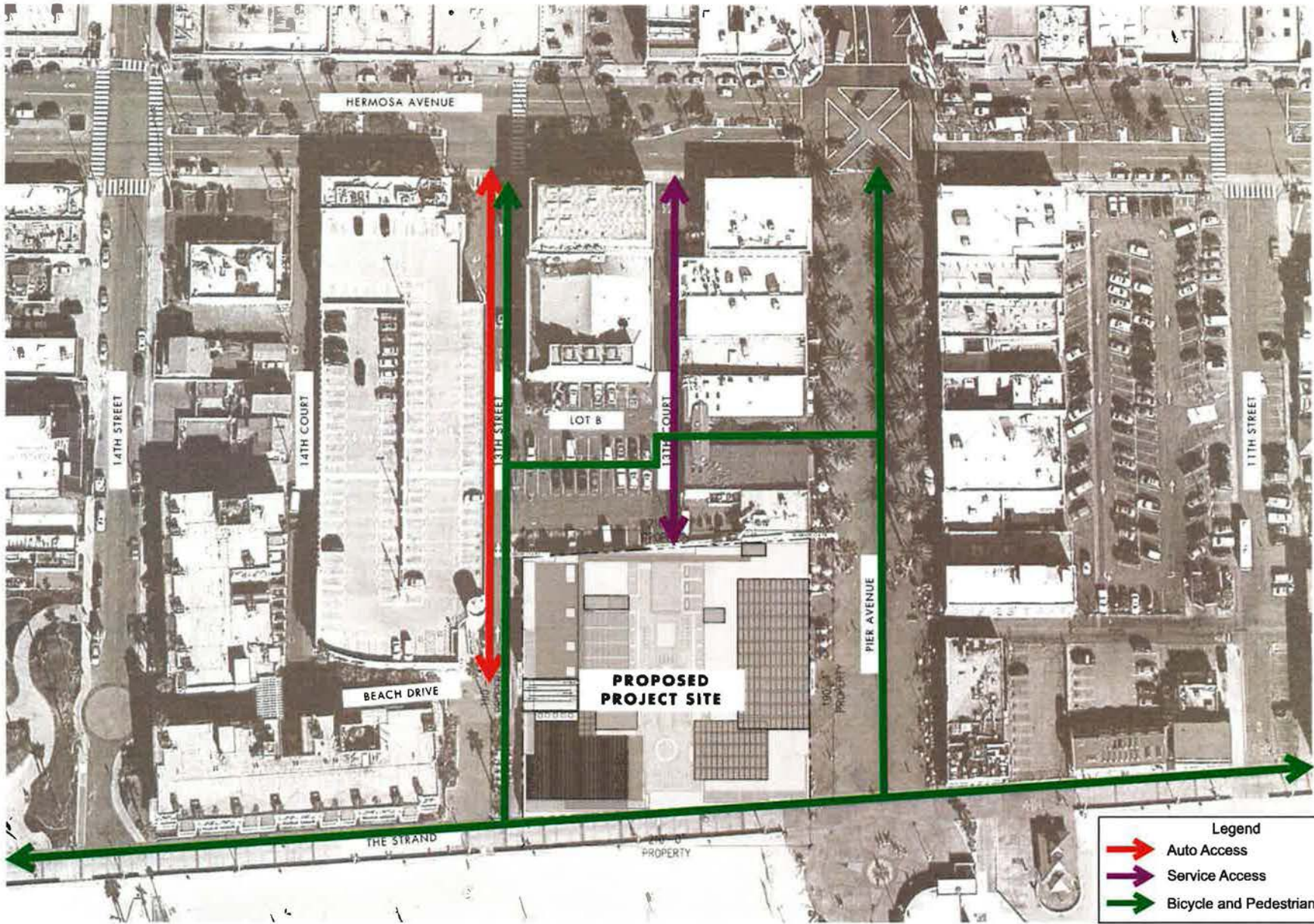
Proposed Project access and circulation is shown in Figure 4.15. Convenient and comprehensive access will be provided for all transportation modes from all directions.

Vehicular Access

The principal vehicular access will be provided by 13th Street. 13th Street runs between Beach Drive and Hermosa Avenue. It is a two-way street from the intersection with Hermosa Avenue for approximately 110 feet to the entrance/exit for the City parking garage – providing ingress and egress to the public parking facility. From that point west to Beach Drive it is a one-way eastbound street, with one lane and a six to eight foot sidewalk on the south side of the street and no sidewalk on the north side of the street.

The Project proposes to convert 13th Street from one-way eastbound to two-way operation to facilitate direct access/egress, as previously shown in Figure 4.3. 13th Street will comprise one travel lane in each direction, with a sidewalk on the south side of the street. No on-street parking will be allowed. The existing access and egress to/from the public parking garage at 13th Street and Hermosa Avenue will be maintained, and controlled by stop signs. The existing traffic signal at 13th Street & Hermosa Avenue provides for all movements into and out of 13th Street, thus making 13th Street an efficient direct access route to the Proposed Project, and avoiding the need for Project traffic to use other streets. 13th Street will also provide access to Parking Lot B on 13th Street immediately east of the Project Site, as it does today. At the west end of 13th Street, at Beach Drive, a porte-cochere will provide access to the Proposed Project, as shown in Figure 4.15. This proposal was analyzed in the preceding traffic analysis.

An alternate option would retain 13th Street in its current one-way configuration. In this instance, Project traffic would access the site from Hermosa Avenue via 14th Street and Beach Drive, and leave the site via 13th Street. This option was also analyzed in the preceding traffic analysis.



7/8/16

Figure 4.15
Project Access

Pier and Strand Hotel - Traffic Study

Service vehicle access will be via 13th Court which will provide direct access to the Project loading docks on the east side of the Project adjacent to Lot B. Service vehicles will be able to turn around using 13th Court and Lot B. 13th Court is a two-way alley with right-in/right-out access at Hermosa Avenue.

Pedestrian and Bicycle Access

Pedestrian and bicycle access will be provided on all sides of the Project, connecting directly into existing pedestrian and bicycle facilities in the area. The Project has been designed to facilitate pedestrian and bicycle access and to maintain and enhance a cohesive pedestrian and bicycle circulation system in the area, as shown in Figure 4.15. The Project will be directly accessible by pedestrians and bicycles from The Strand, from Pier Avenue, and via 13th Street, as well as via a pedestrian path through the existing arcade on Pier Avenue at the east end of the Project and through Lot B via a newly created pedestrian pathway. These routes will also provide convenient access to the on-site Bike Shop that will be part of the Project.

Vacation of Beach Drive

The Project will vacate the portion of Beach Drive between 13th Street and Pier Avenue. Beach Drive is a local street between 14th Street and Pier Avenue one block east of the Strand. It does not however provide a connection to Pier Avenue for vehicles because Pier Avenue west of Hermosa Avenue is closed to traffic. Between 13th Street and Pier Avenue, Beach Drive is effectively an alley, and, carries negligible vehicular traffic on this section except for providing local access from the north to adjacent land uses (which will be demolished by the Proposed Project). It therefore does not serve as a link in the overall traffic circulation in the area, although it does provide an alternate pedestrian route and bicycle route parallel to The Strand located one block to the west.

Review of Potential Impacts

The vacation of Beach Drive between 13th Street and Pier Avenue is not expected to create significant traffic impacts, as it currently does not provide a direct link in the area circulation system, carries very little traffic, and the traffic currently using this section of Beach Drive is limited to accessing land uses that will be removed with the Proposed Project. The associated traffic will also therefore be removed, and there will be a negligible effect on overall traffic circulation. The section of Beach Drive between 14th Street and 13th Street will remain unchanged, so existing traffic circulation and volumes will not be affected along that section.

While this section of Beach Drive is used by bicycles and pedestrians, more so on weekends than on weekdays, the vacation is not expected to create significant impacts to these users. One reason bicyclists use the street is to access the bike rental shop at Beach Drive & 13th Street. They will continue to be able to access the replacement on-site bike shop in the Project using the routes identified above from The Strand, 13th Street, and Pier Avenue, which

routes will also continue to provide for overall bike circulation in the area. Similarly, there are currently adequate nearby pedestrian routes on The Strand and Pier Avenue serving pedestrian circulation in the area. The improvements to 13th Street by the Project will enhance pedestrian circulation by adding a sidewalk.

It is therefore concluded that the Proposed Project would not create any impacts to access and circulation for vehicles, bicycles or pedestrians.

4.4 Project Impacts – CMP Analysis

The Los Angeles County Congestion Management Program (CMP) requires that new development projects analyze potential project impacts on CMP monitoring locations, if an EIR is prepared for the Project. When a CMP analysis is needed, the CMP methodology requires that the Traffic Study analyze traffic conditions at all CMP arterial monitoring intersections where the Project will add 50 or more trips during either the AM or PM weekday peak hours of adjacent street traffic. The CMP also requires that traffic studies analyze mainline freeway monitoring stations where the Project will add 150 or more trips in either direction during either AM or PM weekday peak hours. If, based on these criteria, the Traffic Study identifies no facilities for study, then no further traffic analysis is required.

CMP Arterial Monitoring Locations

As shown earlier, the Project would generate 113 AM peak hour trips and 96 PM peak hour trips. A review of the 2010 CMP indicated the following arterial monitoring stations that are closest to the Project Site:

- Pacific Coast Hwy & Artesia Boulevard
- Pacific Coast Hwy & Torrance Blvd.
- Inglewood Avenue & Artesia Boulevard
- Sepulveda Boulevard & Rosecrans Avenue
- Hawthorne Boulevard & 190th Street
- Sepulveda Boulevard & El Segundo Boulevard

The intersection of Pacific Coast Hwy & Artesia Blvd. is located approximately 1.2 miles from the Project Site. The intersections of Pacific Coast Hwy & Torrance Blvd., and Inglewood Ave. & Artesia Blvd. are located approximately 2.2 and 2.9 miles from the Project Site respectively. The intersections of Sepulveda Blvd. & Rosecrans Ave., and Hawthorne Blvd. & 190th St. are located approximately 3.2 miles from the Project Site, and the intersection of Sepulveda Blvd. & El Segundo Blvd. is located 4.2 miles from the Project Site.

Based on the trip generation and trip distribution characteristics of the Project as described earlier, the additional trips added by the Project at these intersections are shown in Table 4.16. It is estimated that the maximum number of trips that the Project would add in the AM peak hour would range from 17 to 28 trips, and in the PM peak hour would range from 14 to 24 trips. It is therefore concluded that the Project would not exceed the threshold to require further analysis and would not create any significant traffic impacts at any CMP arterial monitoring locations.

Table 4.16 CMP Arterial Analysis – Number of Trips added by Project

<i>Location</i>	<i>No. of Trips Added by Project</i>	
	<i>AM</i>	<i>PM</i>
Pacific Coast Hwy & Artesia Blvd.	28	24
Pacific Coast Hwy & Torrance Blvd.	28	24
Inglewood Ave. & Artesia Blvd.	17	14
Sepulveda Blvd. & Rosecrans Ave.	28	24
Hawthorne Blvd. & 190th St.	17	14
Sepulveda Blvd. & El Segundo Blvd.	28	24

CMP Freeway Monitoring Stations

A review of the 2010 CMP also indicated the following freeway monitoring stations that are closest to the Project Site.

- I-405 North of La Tijera Boulevard
- I-405 South of Route 110 at Carson Scales

Neither of these locations are located close to the Project Site. The closest (I-405 South of Route 110 at Carson Scales) is located approximately 10.3 miles from the site and the second closest (I-405 North of La Tijera Boulevard) is located about 10.4 miles from the Project Site. The number of Project vehicle trips expected to pass through these stations was estimated based on the trip generation and trip distribution characteristics of the Project as described earlier. The additional trips added by Project at these locations are shown in Table 4.17.

The maximum number of one-way Project trips that would be added to these freeway segments would be 14 AM trips at I-405 North of La Tijera Blvd. and 12 PM peak hour trips at the same location. These low incremental volumes are well below the CMP threshold of 150 trips. It is therefore concluded that the Project would not exceed the threshold to require further analysis and would not create any significant traffic impacts at CMP freeway monitoring locations.

Table 4.17 CMP Freeway Analysis – Number of Trips added by Project

<i>Location</i>	<i>Direction</i>	<i>No. of Trips Added by Project</i>	
		<i>AM</i>	<i>PM</i>
I-405 North of La Tijera Blvd.	NB	3	12
	SB	14	3
I-405 South of SR-110 at Carson Scales	NB	9	3
	SB	2	8

CMP Transit Impact Analysis

An analysis of potential Project impacts on the transit system was also performed, per the CMP requirements and guidelines.

Significant Impact Thresholds

Neither the CMP or the City of Hermosa Beach has significant impact thresholds for transit service. For the purposes of this analysis, the following criterion was established to determine if there would be any significant transit impacts due to the Project:

- The capacity of the transit system serving the Project area would be substantially exceeded.

Transit Analysis

The number of transit trips that would be generated by the Project was estimated based on the trip generation information described earlier in this Chapter, and the procedures outlined in the CMP.

The estimate of base vehicle trips (unadjusted external trips) for each Project land use (from Table 4.1) was converted to person trips by applying a conversion factor of 1.4, as per CMP guidelines.

The person trip numbers were then multiplied by the estimated percent taking transit of 3.5% per CMP guidelines¹.

The estimated number of transit trips for the CMP analysis is shown in Table 4.18. In the AM peak hour, there would be approximately 7 transit trips generated by the Project with no transit trips removed from existing land use to be demolished for a net change of 7 new transit trips. In the PM peak hour, there would be approximately 11 transit trips generated by the Project with 6 transit trips also removed from existing land use to be demolished for a net change of 5 new transit trips. The peak capacity of the transit system serving the Project Site is approximately 356 persons in the AM peak hour and 440 persons in the PM peak hour. Additional Project trips would comprise approximately 1% or less of capacity in the AM and PM peak hours. It is therefore concluded that the Project would not cause the capacity of the transit system to be substantially exceeded and that the Project would not create any significant impacts on the transit systems serving the Project Area.

4.5 Construction Traffic Impacts

This analysis identifies and addresses four types of traffic construction impacts, as follows:

- Temporary Traffic Impacts – potential impacts on vehicular travel;
- Temporary Loss of Access – potential impacts to vehicles and pedestrians;
- Temporary Loss of Bus Stops or Rerouting of Bus Lines – potential impacts on bus patrons; and
- Temporary Loss of Parking – potential impacts on parking users.

The potential for construction traffic impacts was evaluated by considering the following aspects of the Pier and Strand Hotel Project (the Project) construction:

- Construction Truck Traffic;
- Construction Worker Traffic;
- Construction Worker Parking.

¹ The trip generation section of this chapter discussed the trip generation characteristics of the Project in detail. That discussion identified that a large proportion of trips would be expected to be non-auto because of the type of use and location of the Project. For the same reasons the large majority of the non-auto trips would be expected to be bike and walk trips (from people already parked in downtown). It was estimated that approximately 1% to 5% of trips (average of 3%) might be made by transit depending on the land uses. The average of 3% is very close to the 3.5% proscribed in the CMP guidelines, so the 3.5% factor was used in the analysis.

Table 4.18 Transit Trips Generated by The Project

Land Use	Base (Unadjusted) ¹ Vehicle Trips		Person Trips ²		% By Transit ³		Transit Trips								
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour		PM Peak Hour						
							Total	In ⁴	Total	In ⁴	Out ⁴	Out ⁴			
<u>Existing Uses</u>															
Restaurants	0	-95	0	-133	3.5%	3.5%	0	0	-5	-3	0	-2			
Retail	0	-16	0	-22	3.5%	3.5%	0	0	-1	0	0	-1			
Residential	-4	-5	-6	-7	3.5%	3.5%	0	0	0	0	0	0			
<u>Proposed Uses</u>															
<u>Hotel</u>															
Hotel Rooms	17	18	24	25	3.5%	3.5%	1	1	1	1	0	0			0
Hotel Restaurant/Lobby Bar	30	35	42	49	3.5%	3.5%	1	1	2	1	0	1			1
Hotel Meeting Rooms	64	64	90	90	3.5%	3.5%	3	3	3	0	0	3			3
Hotel Terrace/Rooftop Lounge	0	49	0	69	3.5%	3.5%	0	0	2	1	0	1			1
Spa/Wellness Salon	1	1	1	1	3.5%	3.5%	0	0	0	0	0	0			0
Beach Quick Serve Food	5	3	7	4	3.5%	3.5%	0	0	0	0	0	0			0
<u>Other</u>															
Retail	31	13	43	18	3.5%	3.5%	2	1	1	0	1	1			1
Restaurant	5	39	7	55	3.5%	3.5%	0	0	2	1	0	2			1
Total	149	106	208	149			7	6	5	1	1	4			4

1. From Table 4.1 - Trip Generation Estimates. Excludes internal trips
 2. Conversion factor of 1.4 from vehicle trips to person trips, per CMP guidelines.
 3. Transit percentage per CMP guidelines.
 4. In/out distribution from Table 4.1 and 4.2 - Trip Generation Estimates.

- Sidewalk and/or Traffic Lane Closures;
- Bus Stops/Routes Relocation; and

Construction Work Hours, Phases and Durations

Construction work hours are anticipated to be 6am to 7pm Monday thru Friday with the vast majority of work occurring between 6am and 3pm; 6am to 2pm Saturday; and 6am to 2pm Sunday.

Construction of the Project is expected to last slightly less than two and a half years (29 months) and is currently anticipated to begin in 2018 and be completed in 2021. Construction activities would fall into five principal phases: (1) Site Clearing and Demolition; (2) Shoring, Excavation and Dewatering; (3) Foundations Tie Down and Mat Foundation; (4) Concrete Superstructure; and (5) Exterior Skin, Interior Buildout, and Site Work. The construction phases are expected to be sequential in duration.

Phase 1 - the Site Clearing and Demolition phase would occur for approximately three months with 20 – 25 truckloads per day to the Project site over a six-week period, and 30 employees on site.

Phase 2 - the Shoring and Excavation phase would occur for approximately six months with 80 truckloads per day to the Project site over a ten-week period, and 40 employees on site.

Phase 3 - the Foundation phase would occur for approximately five months, with 80 employees on site. During the daytime there would be 10 delivery/trash truckloads to the site. For the mat foundation there would be three separate foundation pours within a two-week period, with all concrete pours occurring between 7pm and 8am, with approximately 25 employees on site.

Phase 4 - the Concrete Superstructure phase would occur for approximately five months and is expected to generate approximately 10 daytime truckloads per day to the Project site, with 95 employees on site. This phase would also include 15 concrete pours which would all occur between 7pm and 3am with approximately 30 employees on site.

Phase 5 - the Exterior Skin, Interior Build-Out, Site Work phase would occur for approximately ten months and is expected to generate approximately 12 truckloads per day to the Project site, with 120 employees on site. There would also be occasional small concrete pours that would occur between 6:30am and 12pm.

The construction workers would travel before the AM and PM peak hours, so would not generate vehicle trips during those hours. Construction trucks could travel during the AM peak hour but their activity would be completed by 3pm, so would not generate trips in the

PM peak hour. The concrete pours would occur at night, so would not affect either the AM or PM peak hours (except the occasional pours in Phase 5 which occur during the AM peak hour).

Construction Access

The primary construction haul route to the Project site would travel from the I-405 Freeway southbound and exit at either Rosecrans Avenue west to Aviation Blvd. south, or at Inglewood Avenue south to Manhattan Beach Blvd. west and Aviation Blvd. south, or at Hawthorne Blvd. south to Artesia Blvd. west: from where all routes would combine to Gould Avenue west and Hermosa Avenue south to the Project site. From the site, the haul route would travel south on Hermosa Avenue, east on Herondo Street, north on Pacific Coast Highway and Aviation Boulevard and east on Artesia Blvd. to I-405, or north on Hawthorne Blvd. to I-405.

The following access plan will be in place for the duration of the construction period.

13th Street will be closed between Beach Drive and the City parking garage driveway. Access to/from the City garage will be maintained at all times.

At the Project site, all construction trucks and deliveries will occur on 13th Street, with only right-in and right-out turns at Hermosa Avenue. 13th Court will remain open at all times for deliveries to existing adjacent uses.

Beach access for pedestrians and bicyclists will be maintained at Pier Avenue and 14th Street, and at 13th Street west of Beach Drive from the City parking structure. A temporary crosswalk will be provided across Beach Drive from the garage to maintain pedestrian access to The Strand.

Parking Lot B will be closed, as it will be used as a construction staging and material loading area.

Emergency vehicle access will be maintained via Pier Avenue and 14th Street. Emergency knox boxes will be kept at construction gate at 13th Street, if emergency access into site is required during after-hours.

There will be minor encroachments on Pier Avenue and The Strand adjacent to the Project, but pedestrian access will be maintained at all times. A temporary widening of The Strand by 12 feet will be implemented adjacent to the Project Site to maintain the existing width of 25 feet.

A limited amount of truck staging will occur on the west side of Hermosa Avenue between 14th Street and 16th Street adjacent to the median, which will require the temporary removal of

approximately 18 on-street parking spaces. Additional truck staging areas will be provided off-site and outside of the city limits.

Project Design Features

A number of project design features are proposed by the Project during the construction period to minimize potential construction impacts with respect to construction trucks, worker trips, and any possible sidewalks and lane closures, including the following:

- Maintain access for land uses in the vicinity of the Project site during construction;
- Schedule construction material deliveries to off-peak periods to the extent practical ;
- Minimize obstruction of traffic lanes on streets adjacent to the Project site;
- Organize site deliveries and the staging of all equipment and materials in the most efficient manner possible, and on-site where possible, to avoid an impact to the surrounding roadways;
- Coordinate truck activity and deliveries to ensure trucks do not wait to unload or load at the site and impact roadway traffic unless in designated staging zones, and if needed, utilize an off-site staging area;
- Control truck and vehicle access to the Project site with flagmen;
- Designate travel routes for trucks on arterial roadways, to prevent trucks from using residential streets;
- Limit temporary sidewalk and lane closures to the maximum extent possible, and avoid peak hours to the extent possible. Where such closures are necessary, a Worksite Traffic Control Plan will be prepared for approval by the City, to facilitate traffic and pedestrian movement, in order to minimize any potential impacts;
- Parking for construction workers will be provided in off-site off-street locations. Parking will not be allowed on residential streets in the vicinity of the Project; and
- A Construction Traffic Management Plan will be prepared for approval by the City prior to the issuance of any construction permits, to incorporate the measures identified above, as well as a Worksite Traffic Control Plan specifying the details of any sidewalk or lane closures. The Worksite Traffic Control Plan will be developed by the Applicant, and will identify all traffic control measures, signs, delineators, and work instructions to be implemented by the construction contractor through the duration of demolition and construction activity. The Work Area Traffic Control Plan would minimize the potential conflicts between construction activities, street traffic, bicyclists and pedestrians. The plan will be reviewed and approved by the City of Hermosa Beach prior to commencement of construction.

Construction Truck Traffic

Truck trips would be generated during all phases of construction. Truck trips would generally occur between 6:30am and 3:00pm on weekdays. An eight hour period was assumed for conservative purposes. One truck load represents two truck trips (one trip to the site and one trip from the site). Because trucks are larger and heavier than typical vehicles, a factor of 2.5 is applied to represent a passenger car equivalency (PCE). Truck trips could occur during the AM peak hour but would generally not occur in the PM peak hour which occurs after 3:00pm.

The highest hourly volume of truck trips would occur during the ten weeks of Phase 2 – the Shoring and Excavation phase. The average number of daily truckloads expected during this phase is 80 truckloads. This represents a total of 160 daily truck trips or an average of 20 truck trips per hour, which would represent 50 PCE trips (total to and from the site). Daily truck activity would typically be completed prior to the PM peak hour. However, truck trips could occur during the AM peak hour. The peak estimate of 50 trips per hour would be less than the 113 trips per hour estimated to be generated by the Project when it is completed, and for which the traffic analysis found there would be no significant traffic impacts. Based on the above information, and with implementation of the Project Design Features identified earlier, construction truck trips would not be expected to cause significant traffic impacts.

During other phases of construction, there would typically be fewer truck trips – typically 25 truckloads per day during Phase 1 – Site Cleaning & Demolition, and 10- 12 truckloads a day during each of the final three phases. These would represent 15 PCE trips per hour for Phase 1 and 6 to 8 PCE trips per hour for the last three phases. The occasional concrete pours in Phase 5 could add approximately 20 PCE trips per hour at certain times. These lower amounts of trips would therefore not be expected to cause significant traffic impacts.

In addition to the daytime construction activity there would be several nighttime concrete pours that would occur between 7pm and 7am. The highest activity would occur on three separate dates within a two-week period during Phase 3 for the mat foundation, when there would be approximately 18 truckloads per hour which would represent 105 PCE trips per hour. During Phase 4 there would also be about fifteen pours of 10 trucks per hour, which would represent 50 PCE trips per hour. As these would occur during off-peak nighttime hours they would not add trips during the AM and PM peak hours and would not cause significant traffic impacts. During the evening and nighttime, traffic volumes are much lower. However, movements of trucks from the staging areas on Hermosa Avenue into and out of the Project Site, even though controlled by flagmen, could potentially cause temporary impacts to traffic flow on Hermosa Avenue. Because they would be temporary in nature, and would not require long-term complete closures of adjacent roadway lanes, these construction

activities would not have long-term adverse impacts, and as such, would not cause significant traffic impacts.

Construction Worker Traffic & Parking

Construction is expected to occur between the hours of 6:00 a.m. and 3:00 p.m. on Monday through Friday, with the vast majority of work concluding by 3:00pm before the PM peak hour; and on Saturdays between 6:00 am and 2:00 pm when construction workers traffic could coincide with the the Saturday Midday Peak Hour (1:45pm to 2:45pm). No loading, deliveries or hauling would occur on Saturdays. No construction would occur on Sundays or federal holidays.

The number of construction workers and amount of construction equipment located on-site at one time would vary throughout the construction process in order to maintain an effective schedule of completion. It is estimated that during the construction period, the number of workers that would be on-site would range from approximately 30 to 120 workers, with a peak of 120 workers during Phase 5 – Exterior Skins & Interior Build out.

Construction workers would generally be on-site before 7:00 AM and the vast majority would leave the Project site around 3:00 PM and would therefore travel before the morning and evening peak commute hours. Traffic from construction worker trips on the surrounding roadways and intersections during the AM and PM peak hours is therefore not expected to cause significant traffic impacts.

Parking for construction workers would be provided off-site. It is conservatively assumed that all workers would arrive by car, with an average vehicle occupancy of 1.135 persons per vehicle¹. There are several off-site locations that are within walking distance of the Project Site in existing public commercial parking lots or garages. The Project intends to split all employee parking for Phases 1 to 3 (a need for between 26 and 71 spaces) between two city parking lots (Public Lot A and Public Lot C). The Project also plans to negotiate for the use of private parking lots in the vicinity of the Project for approximately 50% of worker parking in Phases 4-5 (a total need for 84 to 106 spaces). For the nighttime activities of concrete pouring, up to 35 parking spaces will be needed and the Project intends to park workers in either the City lots or private parking accommodations.

Roadway Lane and Sidewalk Closures

It is expected that construction activities will not necessitate the closure of sidewalks, traffic lanes, or parking lanes during construction, with the exception of the following:

- 13th Street from Beach Drive to Parking Garage Driveway (for the construction period).

¹ South Coast Air Quality Management District, CEQA Air Quality Handbook.

- Median parking on west side of Hermosa Avenue from 14th Street to 18th Court (during Phase 1, Phase 2 and Phase 3 of construction).
- A 15-foot encroachment closure on Pier Avenue adjacent to the Project.
- A 12-foot encroachment closure on The Strand adjacent to the Project. (The current width of The Strand adjacent to the Project Site will be maintained by implementing a 12-foot temporary widening of The Strand).

No traffic lanes will be closed on Hermosa Avenue or on any other streets during construction. No significant traffic impacts are expected due to lane closures.

Access to/from the City garage will be maintained at all times.

13th Court will remain open at all times for deliveries to existing adjacent uses.

With the exception of 13 Street, all sidewalks will be maintained during construction. Beach access for pedestrians and bicyclists will be maintained at Pier Avenue and 14th Street, and at 13th Street west of Beach Drive from the City parking structure. A temporary crosswalk will be provided across Beach Drive from the garage to maintain pedestrian access to The Strand.

Utility work could require a temporary short closure of some traffic lanes on Hermosa Avenue at 13th Court, and on the east sidewalk on Hermosa Avenue between 13th Court and Pier Avenue, for the purpose of trenching across Hermosa Avenue and in the sidewalk. Any such temporary short term closure would be at night for a few hours at a time and on a lane by lane basis to maintain traffic flows, and trenches would be covered with steel plates at all other times.

There would therefore be no significant impacts to traffic or pedestrian flow and circulation due to planned roadway lane and/or sidewalk closures.

Certain day-to-day construction activities could also result in partial lane closures on Hermosa Boulevard adjacent to the Project Site on a temporary and/or intermittent basis for utility relocations/hook-ups, delivery of materials, and other construction activities, as may be required. Such activities might occur only during off-peak hours and only on certain days, and would not be a regular event. In these instances, flagmen would be used to control traffic movement during the ingress and egress of trucks and heavy equipment. Any such closures would need to be coordinated with and approved by the City of Hermosa Beach prior to being implemented. Because partial lane closures would be temporary in nature, and would not require long-term complete closures of adjacent roadway lanes, these construction activities would not have long-term adverse impacts, and as such, would not cause significant traffic impacts.

Construction would temporarily remove a total of 18 on-street parking spaces in the median of Hermosa Avenue for truck staging during Phase 1, Phase 2, and Phase 3, and 35 spaces in Parking Lot B which will be closed for the duration of the construction period, as it will be used as a construction area. This would occur on weekdays but not at weekends.

Project construction would not modify, close, or block access to any properties in the vicinity of the Project site. There would therefore be no significant impacts on property access during construction.

The Project construction would not cause the closure or relocation of any bus stops, so Project construction would not cause any significant impacts to bus routes.

4.6 Existing With Project Impacts

This section addresses an analysis of potential project impacts for the Existing Conditions with Project Scenario. Project traffic was added to existing conditions traffic and the potential for impacts evaluated.

Project Impact Analysis - Existing With Project Intersection Level of Service – With Proposed Two-Way 13th Street

Existing With Project conditions peak hour traffic volumes are illustrated in Figures 4.16 to 4.20 for all time periods analyzed.

The intersection level of service analysis for the Existing with Project conditions is summarized in Tables 4.19 to 4.23 for each of the time periods analyzed. These tables also compare the level of service for Existing conditions and Existing With Project Conditions, show the increase in V/C ratios at each intersection due to the Project, and identify if the increase constitutes a significant impact.

AM Peak Hour

The ICU results in Table 4.19 show that with the Project, all study intersections would continue to operate at LOS D or better except for the intersection of Pacific Coast Highway & Aviation Boulevard, which would operate at LOS E (also LOS E for existing conditions). The Project would not cause a change in LOS at any intersection except at Hermosa Avenue & 8th Street where the LOS would change from LOS A to LOS B. Many intersections would continue to operate at LOS A or LOS B. The change in ICU value would not exceed the thresholds for significant impact at any location.

It is therefore concluded that the Project would not cause any significant impacts in the AM peak hour.

PM Peak Hour

The ICU results in Table 4.20 show that with the Project, all study intersections would continue to operate at LOS D or better. The Project would not cause a change in LOS at any intersection except at Hermosa Avenue & Pier Avenue where the LOS would change from LOS B to LOS C, Hermosa Avenue & 10th Street where the LOS would change from LOS A to LOS B, Manhattan Avenue West & Pier Avenue where the LOS would change from LOS A to LOS B and Pacific Coast Highway & Pier Avenue where the LOS would change from LOS B to LOS C. Many intersections would continue to operate at LOS A or LOS B. The change in ICU value would not exceed the thresholds for significant impact at any location.

It is therefore concluded that the Project would not cause any significant impacts in the PM peak hour.

Friday PM Peak Hour

The ICU results in Table 4.21 show that with the Project, all study intersections would continue to operate at LOS D or better. The Project would not cause a change in LOS at any intersection except at Pacific Coast Highway & Pier Avenue where the LOS would change from LOS B to LOS C. Many intersections would continue to operate at LOS A or LOS B. The change in ICU value would not exceed the thresholds for significant impact at any location.

It is therefore concluded that the Project would not cause any significant impacts in the Friday PM peak hour.

Saturday Midday Peak Hour

The ICU results in Table 4.22 show that with the Project, all study intersections would continue to operate at LOS D or better. The Project would not cause a change in LOS at any intersection except at Hermosa Avenue & Pier Avenue where the LOS would change from LOS B to LOS C and Hermosa Avenue & 8th Street where the LOS would change from LOS A to LOS B. Many intersections would continue to operate at LOS A or LOS B. The change in ICU value would not exceed the thresholds for significant impact at any location.

It is therefore concluded that the Project would not cause any significant impacts in the Saturday Midday peak hour.

Sunday Afternoon Peak Hour

The ICU results in Table 4.23 show that with the Project, all study intersections would continue to operate at LOS D or better. The Project would not cause a change in LOS at any intersection. Many intersections would continue to operate at LOS A or LOS B. The change in ICU value (increase of 0.022) caused by the Project at the intersection of Hermosa Avenue & Pier Avenue would slightly exceed the threshold for significant impact (0.020), although the level of service would remain at LOS D. The change in ICU value would not exceed the thresholds for significant impact at any other location.

It is therefore concluded that the Project would cause one significant impact in the Sunday Afternoon peak hour.

Project Impact Analysis - Future With Project Intersection Level of Service – With One-Way 13th Street Option

A traffic impact analysis was also conducted for the one-way 13th Street option. The overall distribution of Project trips would remain the same under this option. The only change in Project traffic volumes would be at the two local adjacent intersections – at Hermosa Avenue & 14th Street and Hermosa Avenue & 13th Street, as traffic would use a different access route to the Project from Hermosa Avenue. These are the only two intersections where traffic volumes and intersection operations would be different. The results of this analysis are shown in Tables 4.24 to 4.28.

The results are the same for all intersections except for the intersections of Hermosa Avenue & 14th Street – which generally has a slightly higher V/C ratio (additional turning traffic), and Hermosa Avenue & 13th Street – which generally has a slightly lower V/C ratio (less turning traffic). However the level of service would be the same as for the two-way 13th Street option at both intersections.

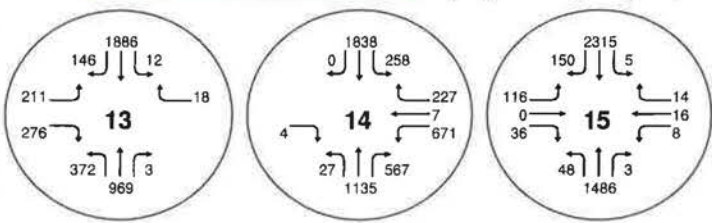
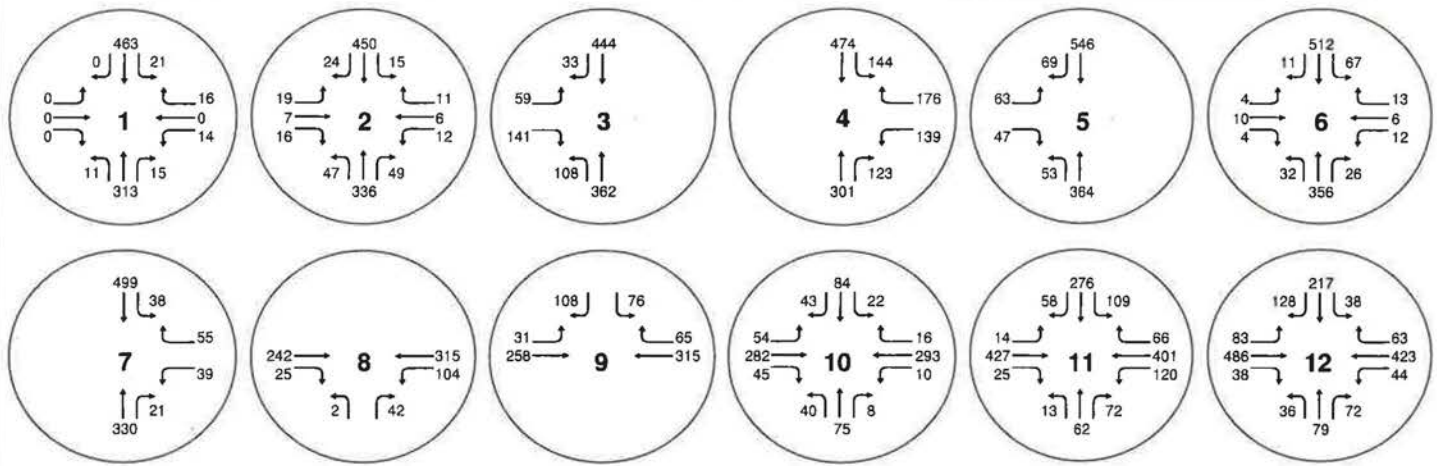
With the one-way 13th Street Option the traffic impacts of the Project would be identical to those with the two-way 13th Street option. There would be one significant impact, in the Sunday Mid Afternoon Peak Hour, at Hermosa Avenue & Pier Avenue.

Other Potential Impacts

The impact analysis for the Existing With Project Conditions for Project Access, CMP Impacts, and Construction Traffic Impacts, would be no different to that identified for the Future With Project Conditions earlier in Sections 4.3, 4.4 and 4.5 of this Chapter.



Figure 4.16
 Existing With Project Traffic Volumes - Weekday – AM Peak Hour
Pier and Strand Hotel - Traffic Study



Legend

- Study Intersection
- X Intersection Reference Number
- XX Intersection Turn Volume



5/1/17

Figure 4.17
Existing With Project Traffic Volumes - Weekday – PM Peak Hour
Pier and Strand Hotel - Traffic Study

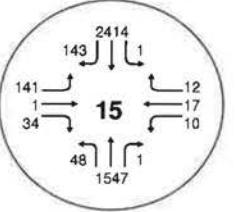
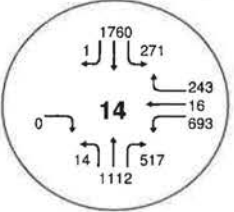
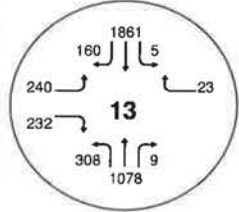
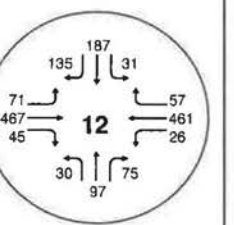
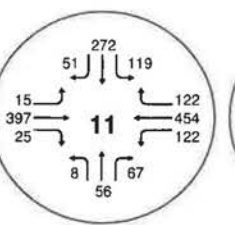
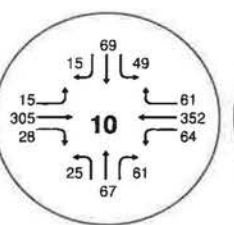
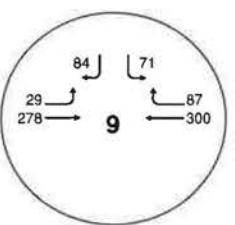
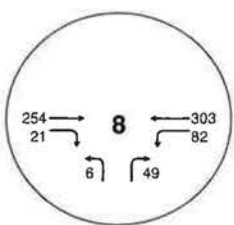
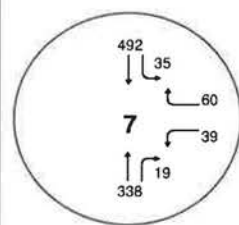
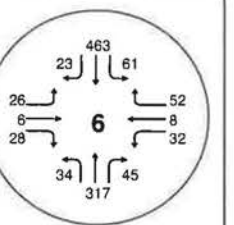
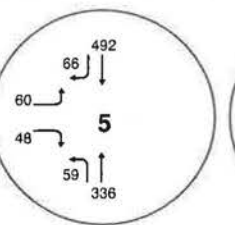
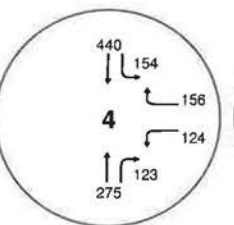
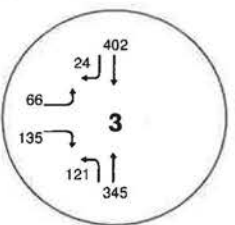
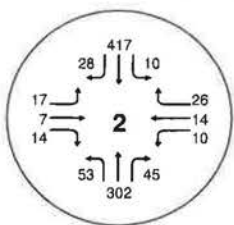
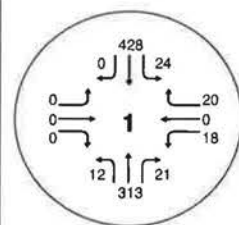
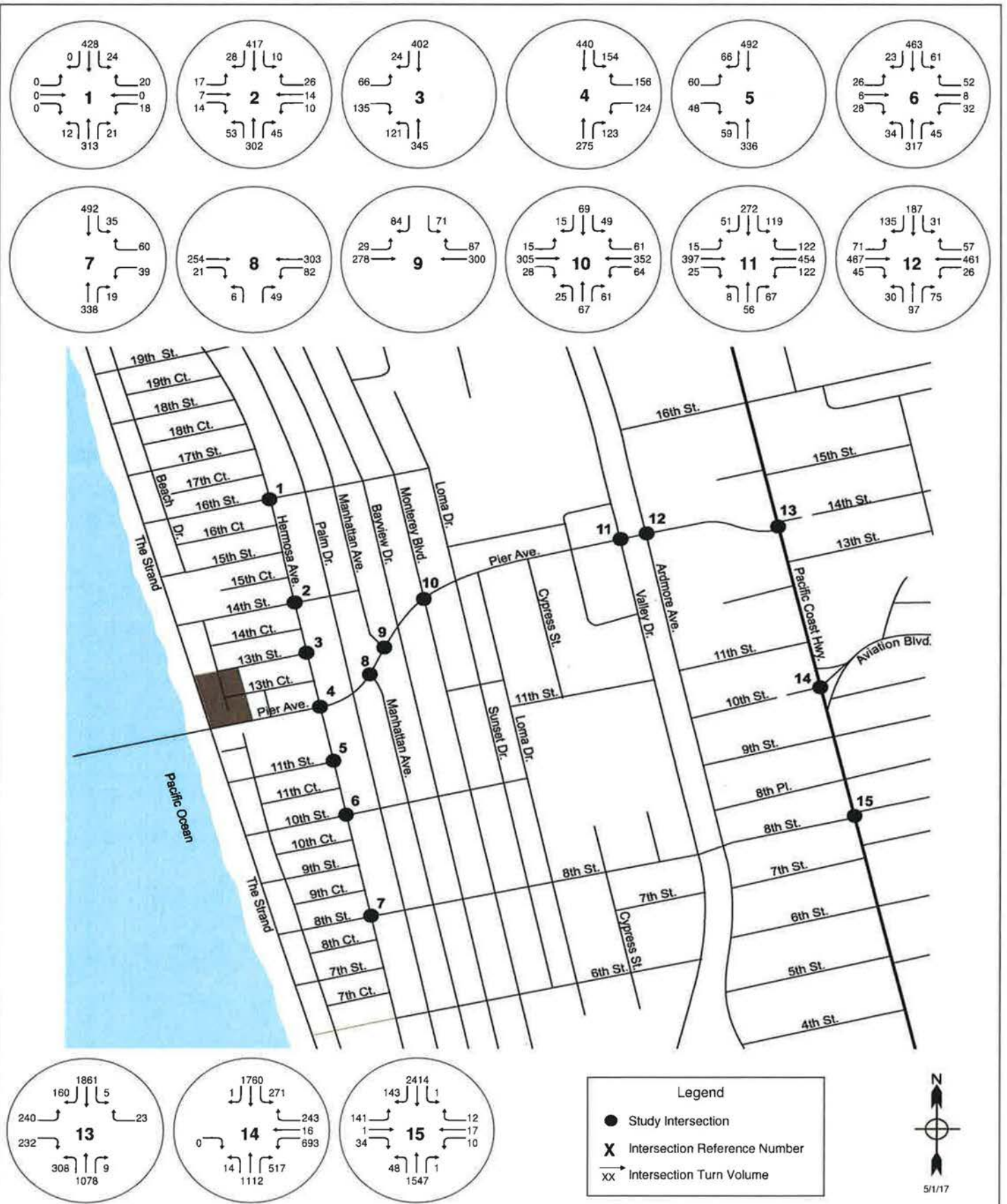




Figure 4.19
Existing With Project Traffic Volumes - Saturday – Midday Peak Hour
Pier and Strand Hotel - Traffic Study

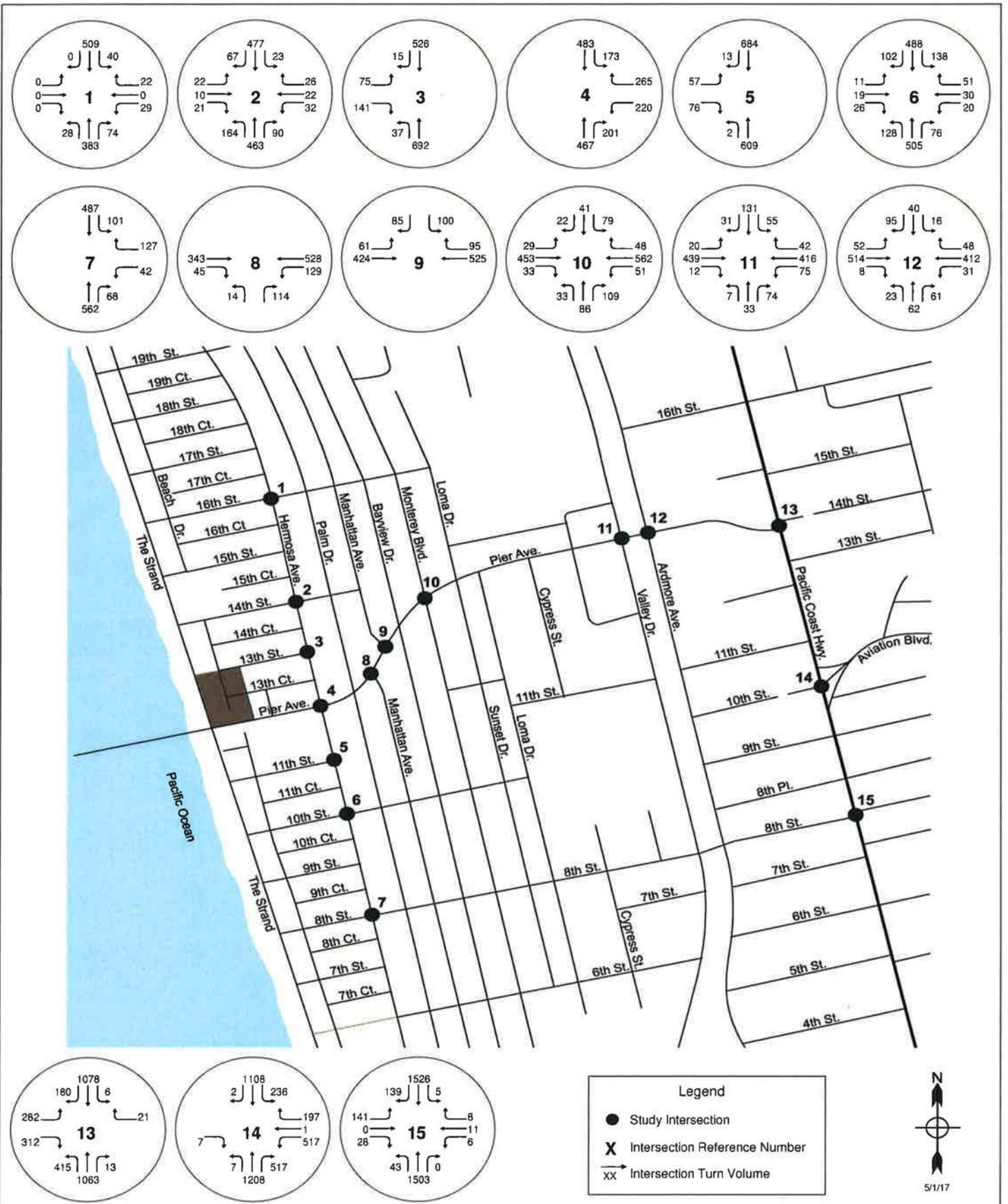


Figure 4.20
Existing With Project Traffic Volumes - Sunday – Mid-Afternoon Peak Hour
Pier and Strand Hotel - Traffic Study

**Table 4.19 Existing With Project Conditions - Intersection Level of Service
Weekday - AM Peak Hour - 13th Street Two-Way**

6/29/2017

Intersection		Intersection Type	Existing Conditions (Year 2016)		Existing With Project Conditions (Year 2021)		Change in V/C or (Delay) & % Volume	Significant Impact
			V/C or (Delay) & Volume	LOS	V/C or (Delay) & Volume	LOS		
1.	Hermosa Ave & 16th St	3-Way Stop	(8.8) 621	A	(8.9) 655	A	(0.1) 5.5%	No
2.	Hermosa Ave & 14th St	Signalized	0.255	A	0.257	A	0.002	No
3.	Hermosa Ave & 13th St	Signalized	0.237	A	0.299	A	0.062	No
4.	Hermosa Ave & Pier Ave	Signalized	0.621	B	0.656	B	0.035	No
5.	Hermosa Ave & 11th St	Signalized	0.282	A	0.292	A	0.010	No
6.	Hermosa Ave & 10th St	4-Way Stop	(9.7) 787	A	(10.0) 827	A	(0.3) 5.1%	No
7.	Hermosa Ave & 8th St	3-Way Stop	(10.0) 860	A	(10.2) 900	B	(0.2) 4.7%	No
8.	Manhattan Ave West & Pier Ave	1-Way Stop	(9.5) 462	A	(9.6) 502	A	(0.1) 8.7%	No
9.	Manhattan Ave East & Pier Ave	1-Way Stop	(11.5) 577	B	(11.8) 617	B	(0.3) 6.9%	No
10.	Monterey Blvd & Pier Ave	4-Way Stop	(9.4) 743	A	(9.5) 783	A	(0.1) 5.4%	No
11.	Valley Dr. & Pier Ave	4-Way Stop	(13.7) 1,369	B	(14.1) 1,409	B	(0.4) 2.9%	No
12.	Ardmore Ave. & Pier Ave	4-Way Stop	(14.3) 1,437	B	(14.6) 1,477	B	(0.3) 2.8%	No
13.	PCH & Pier Ave	Signalized	0.657	B	0.658	B	0.001	No
14.	PCH & Aviation Blvd	Signalized	0.952	E	0.963	E	0.011	No
15.	PCH & 8th St	Signalized	0.845	D	0.846	D	0.001	No

**Table 4.20 Existing With Project Conditions - Intersection Level of Service
Weekday - PM Peak Hour - 13th Street Two-Way**

6/29/2017

Intersection		Intersection Type	Existing Conditions (Year 2016)		Existing With Project Conditions (Year 2021)		Change in V/C or (Delay) & % Volume	Significant Impact
			V/C or (Delay) & Volume	LOS	V/C or (Delay) & Volume	LOS		
1.	Hermosa Ave & 16th St	3-Way Stop	(9.5) 825	A	(9.6) 853	A	(0.1) 3.4%	No
2.	Hermosa Ave & 14th St	Signalized	0.314	A	0.316	A	0.002	No
3.	Hermosa Ave & 13th St	Signalized	0.383	A	0.442	A	0.059	No
4.	Hermosa Ave & Pier Ave	Signalized	0.682	B	0.704	C	0.022	No
5.	Hermosa Ave & 11th St	Signalized	0.465	A	0.475	A	0.010	No
6.	Hermosa Ave & 10th St	4-Way Stop	(10.0) 1,020	A	(10.2) 1,053	B	(0.2) 3.2%	No
7.	Hermosa Ave & 8th St	3-Way Stop	(10.2) 955	B	(10.4) 988	B	(0.2) 3.5%	No
8.	Manhattan Ave West & Pier Ave	1-Way Stop	(9.8) 697	A	(10.0) 730	B	(0.2) 4.7%	No
9.	Manhattan Ave East & Pier Ave	1-Way Stop	(12.9) 820	B	(13.1) 853	B	(0.2) 4.0%	No
10.	Monterey Blvd & Pier Ave	4-Way Stop	(10.3) 939	B	(10.5) 972	B	(0.2) 3.5%	No
11.	Valley Dr. & Pier Ave	4-Way Stop	(19.2) 1,610	C	(19.9) 1,643	C	(0.7) 2.0%	No
12.	Ardmore Ave. & Pier Ave	4-Way Stop	(18.5) 1,674	C	(19.1) 1,707	C	(0.6) 2.0%	No
13.	PCH & Pier Ave	Signalized	0.700	B	0.706	C	0.006	No
14.	PCH & Aviation Blvd	Signalized	0.820	D	0.828	D	0.008	No
15.	PCH & 8th St	Signalized	0.758	C	0.759	C	0.001	No

**Table 4.21 Existing With Project Conditions - Intersection Level of Service
Friday - PM Peak Hour - 13th Street Two-Way**

6/29/2017

Intersection	Intersection Type	Existing Conditions (Year 2016)		Existing With Project Conditions (Year 2021)		Change in V/C or (Delay) & % Volume	Significant Impact	
		V/C or (Delay) & Volume	LOS	V/C or (Delay) & Volume	LOS			
1.	Hermosa Ave & 16th St	3-Way Stop	(9.4) 808	A	(9.5) 836	A	(0.1) 3.5%	No
2.	Hermosa Ave & 14th St	Signalized	0.316	A	0.317	A	0.001	No
3.	Hermosa Ave & 13th St	Signalized	0.376	A	0.434	A	0.058	No
4.	Hermosa Ave & Pier Ave	Signalized	0.668	B	0.690	B	0.022	No
5.	Hermosa Ave & 11th St	Signalized	0.370	A	0.379	A	0.009	No
6.	Hermosa Ave & 10th St	4-Way Stop	(10.3) 1,062	B	(10.5) 1,095	B	(0.2) 3.1%	No
7.	Hermosa Ave & 8th St	3-Way Stop	(10.1) 950	B	(10.3) 983	B	(0.2) 3.5%	No
8.	Manhattan Ave West & Pier Ave	1-Way Stop	(10.2) 682	B	(10.4) 715	B	(0.2) 4.8%	No
9.	Manhattan Ave East & Pier Ave	1-Way Stop	(12.7) 816	B	(12.9) 849	B	(0.2) 4.0%	No
10.	Monterey Blvd & Pier Ave	4-Way Stop	(11.1) 1,078	B	(11.3) 1,111	B	(0.2) 3.1%	No
11.	Valley Dr. & Pier Ave	4-Way Stop	(19.5) 1,675	C	(20.1) 1,708	C	(0.6) 2.0%	No
12.	Ardmore Ave. & Pier Ave	4-Way Stop	(17.0) 1,649	C	(17.6) 1,682	C	(0.6) 2.0%	No
13.	PCH & Pier Ave	Signalized	0.699	B	0.704	C	0.005	No
14.	PCH & Aviation Blvd	Signalized	0.823	D	0.830	D	0.007	No
15.	PCH & 8th St	Signalized	0.793	C	0.794	C	0.001	No

**Table 4.22 Existing With Project Conditions - Intersection Level of Service
Saturday Midday Peak Hour - 13th Street Two-Way**

6/29/2017

Intersection		Intersection Type	Existing Conditions (Year 2016)		Existing With Project Conditions (Year 2021)		Change in V/C or (Delay) & % Volume	Significant Impact
			V/C or (Delay) & Volume	LOS	V/C or (Delay) & Volume	LOS		
1.	Hermosa Ave & 16th St	3-Way Stop	(9.1) 752	A	(9.2) 785	A	(0.1) 4.4%	No
2.	Hermosa Ave & 14th St	Signalized	0.281	A	0.287	A	0.006	No
3.	Hermosa Ave & 13th St	Signalized	0.405	A	0.467	A	0.062	No
4.	Hermosa Ave & Pier Ave	Signalized	0.689	B	0.720	C	0.031	No
5.	Hermosa Ave & 11th St	Signalized	0.461	A	0.473	A	0.012	No
6.	Hermosa Ave & 10th St	4-Way Stop	(9.6) 954	A	(9.8) 982	A	(0.2) 4.0%	No
7.	Hermosa Ave & 8th St	3-Way Stop	(10.0) 940	A	(10.2) 978	B	(0.2) 4.0%	No
8.	Manhattan Ave West & Pier Ave	1-Way Stop	(10.9) 730	B	(11.1) 768	B	(0.2) 5.2%	No
9.	Manhattan Ave East & Pier Ave	1-Way Stop	(13.8) 831	B	(14.2) 869	B	(0.4) 4.6%	No
10.	Monterey Blvd & Pier Ave	4-Way Stop	(10.9) 1,059	B	(11.1) 1,097	B	(0.2) 3.6%	No
11.	Valley Dr. & Pier Ave	4-Way Stop	(17.0) 1,549	C	(17.8) 1,587	C	(0.8) 2.5%	No
12.	Ardmore Ave. & Pier Ave	4-Way Stop	(14.4) 1,531	B	(14.8) 1,569	B	(0.4) 2.5%	No
13.	PCH & Pier Ave	Signalized	0.574	A	0.582	A	0.008	No
14.	PCH & Aviation Blvd	Signalized	0.821	D	0.826	D	0.005	No
15.	PCH & 8th St	Signalized	0.617	B	0.617	B	0.000	No

**Table 4.23 Existing With Project Conditions - Intersection Level of Service
Sunday Mid-Afternoon Peak Hour - 13th Street Two-Way**

6/29/2017

Intersection	Intersection Type	Existing Conditions (Year 2016)		Existing With Project Conditions (Year 2021)		Change in V/C or (Delay) & % Volume	Significant Impact	
		V/C or (Delay) & Volume	LOS	V/C or (Delay) & Volume	LOS			
1.	Hermosa Ave & 16th St	3-Way Stop	(10.5) 1,061	B	(10.7) 1,085	B	(0.2) 2.3%	No
2.	Hermosa Ave & 14th St	Signalized	0.439	A	0.443	A	0.004	No
3.	Hermosa Ave & 13th St	Signalized	0.431	A	0.451	A	0.020	No
4.	Hermosa Ave & Pier Ave	Signalized	0.832	D	0.854	D	0.022	Yes
5.	Hermosa Ave & 11th St	Signalized	0.398	A	0.402	A	0.004	No
6.	Hermosa Ave & 10th St	4-Way Stop	(13.9) 1,566	B	(14.2) 1,594	B	(0.3) 1.8%	No
7.	Hermosa Ave & 8th St	3-Way Stop	(13.2) 1,380	B	(13.5) 1,408	B	(0.3) 2.0%	No
8.	Manhattan Ave West & Pier Ave	1-Way Stop	(12.5) 1,145	B	(12.7) 1,173	B	(0.2) 2.4%	No
9.	Manhattan Ave East & Pier Ave	1-Way Stop	(23.1) 1,262	C	(24.0) 1,290	C	(0.9) 2.2%	No
10.	Monterey Blvd & Pier Ave	4-Way Stop	(15.8) 1,518	C	(16.2) 1,546	C	(0.4) 1.8%	No
11.	Valley Dr. & Pier Ave	4-Way Stop	(13.6) 1,308	B	(13.9) 1,335	B	(0.3) 2.1%	No
12.	Ardmore Ave. & Pier Ave	4-Way Stop	(12.3) 1,334	B	(12.5) 1,362	B	(0.2) 2.1%	No
13.	PCH & Pier Ave	Signalized	0.583	A	0.589	A	0.006	No
14.	PCH & Aviation Blvd	Signalized	0.765	C	0.769	C	0.004	No
15.	PCH & 8th St	Signalized	0.591	A	0.591	A	0.000	No

**Table 4.14 Existing With Project Conditions - Intersection Level of Service
Weekday - AM Peak Hour - 13th Street Two-Way**

6/29/2017

<i>Intersection</i>		<i>Intersection Type</i>	<i>Existing Conditions (Year 2016)</i>		<i>Existing With Project Conditions (Year 2021)</i>		<i>Change in V/C or (Delay) & % Volume</i>	<i>Significant Impact</i>
			<i>V/C or (Delay) & Volume</i>	<i>LOS</i>	<i>V/C or (Delay) & Volume</i>	<i>LOS</i>		
1.	Hermosa Ave & 16th St	3-Way Stop	(8.8) 621	A	(8.9) 655	A	(0.1) 5.5%	No
2.	Hermosa Ave & 14th St	Signalized	0.255	A	0.258	A	0.003	No
3.	Hermosa Ave & 13th St	Signalized	0.237	A	0.278	A	0.041	No
4.	Hermosa Ave & Pier Ave	Signalized	0.621	B	0.656	B	0.035	No
5.	Hermosa Ave & 11th St	Signalized	0.282	A	0.292	A	0.010	No
6.	Hermosa Ave & 10th St	4-Way Stop	(9.7) 787	A	(10.0) 827	A	(0.3) 5.1%	No
7.	Hermosa Ave & 8th St	3-Way Stop	(10.0) 860	A	(10.2) 900	B	(0.2) 4.7%	No
8.	Manhattan Ave West & Pier Ave	1-Way Stop	(9.5) 462	A	(9.6) 502	A	(0.1) 8.7%	No
9.	Manhattan Ave East & Pier Ave	1-Way Stop	(11.5) 577	B	(11.8) 617	B	(0.3) 6.9%	No
10.	Monterey Blvd & Pier Ave	4-Way Stop	(9.4) 743	A	(9.5) 783	A	(0.1) 5.4%	No
11.	Valley Dr. & Pier Ave	4-Way Stop	(13.7) 1,369	B	(14.1) 1,409	B	(0.4) 2.9%	No
12.	Ardmore Ave. & Pier Ave	4-Way Stop	(14.3) 1,437	B	(14.6) 1,477	B	(0.3) 2.8%	No
13.	PCH & Pier Ave	Signalized	0.657	B	0.658	B	0.001	No
14.	PCH & Aviation Blvd	Signalized	0.952	E	0.963	E	0.011	No
15.	PCH & 8th St	Signalized	0.845	D	0.846	D	0.001	No

**Table 4.25 Existing With Project Conditions - Intersection Level of Service
Weekday - PM Peak Hour - 13th Street Two-Way**

6/29/2017

Intersection	Intersection Type	Existing Conditions (Year 2016)		Existing With Project Conditions (Year 2021)		Change in V/C or (Delay) & % Volume	Significant Impact	
		V/C or (Delay) & Volume	LOS	V/C or (Delay) & Volume	LOS			
1.	Hermosa Ave & 16th St	3-Way Stop	(9.5) 825	A	(9.6) 853	A	(0.1) 3.4%	No
2.	Hermosa Ave & 14th St	Signalized	0.314	A	0.324	A	0.010	No
3.	Hermosa Ave & 13th St	Signalized	0.383	A	0.432	A	0.049	No
4.	Hermosa Ave & Pier Ave	Signalized	0.682	B	0.704	C	0.022	No
5.	Hermosa Ave & 11th St	Signalized	0.465	A	0.475	A	0.010	No
6.	Hermosa Ave & 10th St	4-Way Stop	(10.0) 1,020	A	(10.2) 1,053	B	(0.2) 3.2%	No
7.	Hermosa Ave & 8th St	3-Way Stop	(10.2) 955	B	(10.4) 988	B	(0.2) 3.5%	No
8.	Manhattan Ave West & Pier Ave	1-Way Stop	(9.8) 697	A	(10.0) 730	B	(0.2) 4.7%	No
9.	Manhattan Ave East & Pier Ave	1-Way Stop	(12.9) 820	B	(13.1) 853	B	(0.2) 4.0%	No
10.	Monterey Blvd & Pier Ave	4-Way Stop	(10.3) 939	B	(10.5) 972	B	(0.2) 3.5%	No
11.	Valley Dr. & Pier Ave	4-Way Stop	(19.2) 1,610	C	(19.9) 1,643	C	(0.7) 2.0%	No
12.	Ardmore Ave. & Pier Ave	4-Way Stop	(18.5) 1,674	C	(19.1) 1,707	C	(0.6) 2.0%	No
13.	PCH & Pier Ave	Signalized	0.700	B	0.706	C	0.006	No
14.	PCH & Aviation Blvd	Signalized	0.820	D	0.828	D	0.008	No
15.	PCH & 8th St	Signalized	0.758	C	0.759	C	0.001	No

**Table 4.26 Existing With Project Conditions - Intersection Level of Service
Friday - PM Peak Hour - 13th Street Two-Way**

6/29/2017

Intersection		Intersection Type	Existing Conditions (Year 2016)		Existing With Project Conditions (Year 2021)		Change in V/C or (Delay) & % Volume	Significant Impact
			V/C or (Delay) & Volume	LOS	V/C or (Delay) & Volume	LOS		
1.	Hermosa Ave & 16th St	3-Way Stop	(9.4) 808	A	(9.5) 836	A	(0.1) 3.5%	No
2.	Hermosa Ave & 14th St	Signalized	0.316	A	0.325	A	0.009	No
3.	Hermosa Ave & 13th St	Signalized	0.376	A	0.425	A	0.049	No
4.	Hermosa Ave & Pier Ave	Signalized	0.668	B	0.690	B	0.022	No
5.	Hermosa Ave & 11th St	Signalized	0.370	A	0.379	A	0.009	No
6.	Hermosa Ave & 10th St	4-Way Stop	(10.3) 1,062	B	(10.5) 1,095	B	(0.2) 3.1%	No
7.	Hermosa Ave & 8th St	3-Way Stop	(10.1) 950	B	(10.3) 983	B	(0.2) 3.5%	No
8.	Manhattan Ave West & Pier Ave	1-Way Stop	(10.2) 682	B	(10.4) 715	B	(0.2) 4.8%	No
9.	Manhattan Ave East & Pier Ave	1-Way Stop	(12.7) 816	B	(12.9) 849	B	(0.2) 4.0%	No
10.	Monterey Blvd & Pier Ave	4-Way Stop	(11.1) 1,078	B	(11.3) 1,111	B	(0.2) 3.1%	No
11.	Valley Dr. & Pier Ave	4-Way Stop	(19.5) 1,675	C	(20.1) 1,708	C	(0.6) 2.0%	No
12.	Ardmore Ave. & Pier Ave	4-Way Stop	(17.0) 1,649	C	(17.6) 1,682	C	(0.6) 2.0%	No
13.	PCH & Pier Ave	Signalized	0.699	B	0.704	C	0.005	No
14.	PCH & Aviation Blvd	Signalized	0.823	D	0.830	D	0.007	No
15.	PCH & 8th St	Signalized	0.793	C	0.794	C	0.001	No

**Table 4.27 Existing With Project Conditions - Intersection Level of Service
Saturday Midday Peak Hour - 13th Street Two-Way**

6/29/2017

<i>Intersection</i>		<i>Intersection Type</i>	<i>Existing Conditions (Year 2016)</i>		<i>Existing With Project Conditions (Year 2021)</i>		<i>Change in V/C or (Delay) & % Volume</i>	<i>Significant Impact</i>
			<i>V/C or (Delay) & Volume</i>	<i>LOS</i>	<i>V/C or (Delay) & Volume</i>	<i>LOS</i>		
1.	Hermosa Ave & 16th St	3-Way Stop	(9.1) 752	A	(9.2) 785	A	(0.1) 4.4%	No
2.	Hermosa Ave & 14th St	Signalized	0.281	A	0.314	A	0.033	No
3.	Hermosa Ave & 13th St	Signalized	0.405	A	0.433	A	0.028	No
4.	Hermosa Ave & Pier Ave	Signalized	0.689	B	0.720	C	0.031	No
5.	Hermosa Ave & 11th St	Signalized	0.461	A	0.473	A	0.012	No
6.	Hermosa Ave & 10th St	4-Way Stop	(9.6) 954	A	(9.8) 982	A	(0.2) 4.0%	No
7.	Hermosa Ave & 8th St	3-Way Stop	(10.0) 940	A	(10.2) 978	B	(0.2) 4.0%	No
8.	Manhattan Ave West & Pier Ave	1-Way Stop	(10.9) 730	B	(11.1) 768	B	(0.2) 5.2%	No
9.	Manhattan Ave East & Pier Ave	1-Way Stop	(13.8) 831	B	(14.2) 869	B	(0.4) 4.6%	No
10.	Monterey Blvd & Pier Ave	4-Way Stop	(10.9) 1,059	B	(11.1) 1,097	B	(0.2) 3.6%	No
11.	Valley Dr. & Pier Ave	4-Way Stop	(17.0) 1,549	C	(17.8) 1,587	C	(0.8) 2.5%	No
12.	Ardmore Ave. & Pier Ave	4-Way Stop	(14.4) 1,531	B	(14.8) 1,569	B	(0.4) 2.5%	No
13.	PCH & Pier Ave	Signalized	0.574	A	0.582	A	0.008	No
14.	PCH & Aviation Blvd	Signalized	0.821	D	0.826	D	0.005	No
15.	PCH & 8th St	Signalized	0.617	B	0.617	B	0.000	No

**Table 4.28 Existing With Project Conditions - Intersection Level of Service
Sunday Mid-Afternoon Peak Hour - 13th Street Two-Way**

6/29/2017

Intersection		Intersection Type	Existing Conditions (Year 2016)		Existing With Project Conditions (Year 2021)		Change in V/C or (Delay) & % Volume	Significant Impact
			V/C or (Delay) & Volume	LOS	V/C or (Delay) & Volume	LOS		
1.	Hermosa Ave & 16th St	3-Way Stop	(10.5) 1,061	B	(10.7) 1,085	B	(0.2) 2.3%	No
2.	Hermosa Ave & 14th St	Signalized	0.439	A	0.463	A	0.024	No
3.	Hermosa Ave & 13th St	Signalized	0.431	A	0.461	A	0.030	No
4.	Hermosa Ave & Pier Ave	Signalized	0.832	D	0.854	D	0.022	Yes
5.	Hermosa Ave & 11th St	Signalized	0.398	A	0.402	A	0.004	No
6.	Hermosa Ave & 10th St	4-Way Stop	(13.9) 1,566	B	(14.2) 1,594	B	(0.3) 1.8%	No
7.	Hermosa Ave & 8th St	3-Way Stop	(13.2) 1,380	B	(13.5) 1,408	B	(0.3) 2.0%	No
8.	Manhattan Ave West & Pier Ave	1-Way Stop	(12.5) 1,145	B	(12.7) 1,173	B	(0.2) 2.4%	No
9.	Manhattan Ave East & Pier Ave	1-Way Stop	(23.1) 1,262	C	(24.0) 1,290	C	(0.9) 2.2%	No
10.	Monterey Blvd & Pier Ave	4-Way Stop	(15.8) 1,518	C	(16.2) 1,546	C	(0.4) 1.8%	No
11.	Valley Dr. & Pier Ave	4-Way Stop	(13.6) 1,308	B	(13.9) 1,335	B	(0.3) 2.1%	No
12.	Ardmore Ave. & Pier Ave	4-Way Stop	(12.3) 1,334	B	(12.5) 1,362	B	(0.2) 2.1%	No
13.	PCH & Pier Ave	Signalized	0.583	A	0.589	A	0.006	No
14.	PCH & Aviation Blvd	Signalized	0.765	C	0.769	C	0.004	No
15.	PCH & 8th St	Signalized	0.591	A	0.591	A	0.000	No

5. Mitigation Measures

This report section addresses the need for mitigation measures to address any potential significant impacts from the Project.

The preceding analysis has determined that the Proposed Project would cause one significant traffic impact in the Sunday Afternoon peak hour. The significant impact would occur at the intersection of Hermosa Avenue & Pier Avenue. The Project would increase the V/C ratio at the intersection from 0.867 to 0.891. The increase in V/C ratio of 0.024 would be above the threshold for significant impact of 0.020. The level of service would however remain at LOS D,

The feasibility of mitigation measures was explored at this intersection. The intersection is currently designed not only for traffic flow, but also to facilitate the high pedestrian volumes by providing a scramble pedestrian phase where pedestrians can cross the streets on diagonal crosswalks as well as the usual crosswalks. Hermosa Avenue has a landscaped median, and is also a bike route with sharrows markings on the roadway. On-street parking is provided on all four legs of the intersection. All of these features reflect the City's multimodal policies of serving and providing for all modes of transportation rather than exclusively prioritizing the car. An evaluation indicated that any physical improvements to enhance traffic capacity at the intersection could only be achieved by removing on-street parking or the landscaped median, or by removing the scramble pedestrian phase and reverting to the normal pedestrian crosswalks. As these actions would contradict City policies for multimodal circulation in the downtown, and have corresponding negative impacts on pedestrian and bicycle circulation, and parking availability, they are considered to be not feasible.

There would therefore be one remaining significant unavoidable traffic impact with the Proposed Project. It should however be noted that the level of service with the Project would not change from the condition without the Project and would remain at LOS D.

The Project would not cause any other significant traffic impacts at street system intersections, would not cause any transportation access impacts, and would not cause any CMP intersection, freeway or transit impacts. No further mitigation measures are therefore necessary.

Appendix A
Traffic Counts

ITM Peak Hour Summary

Prepared by:



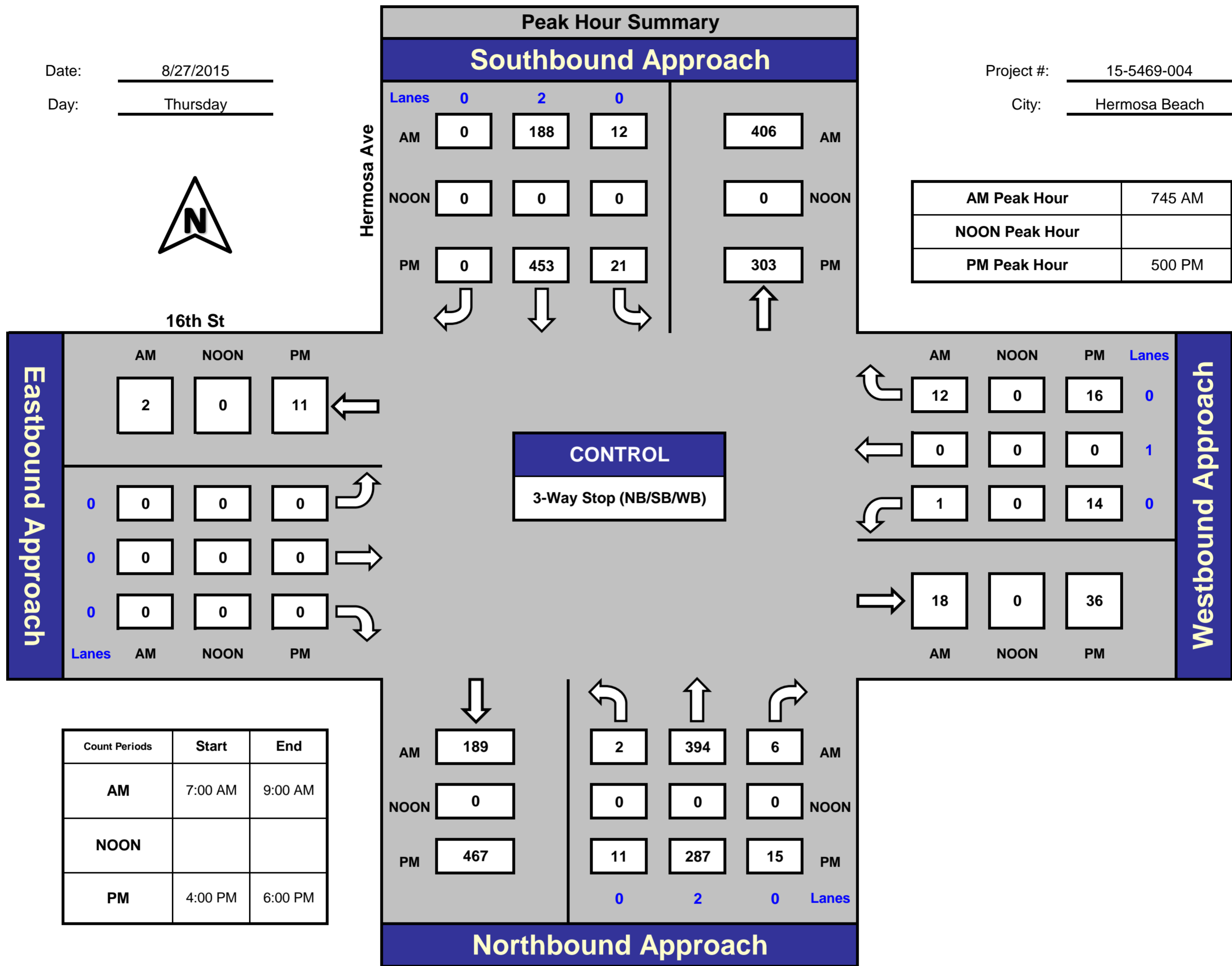
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Date: 8/27/2015

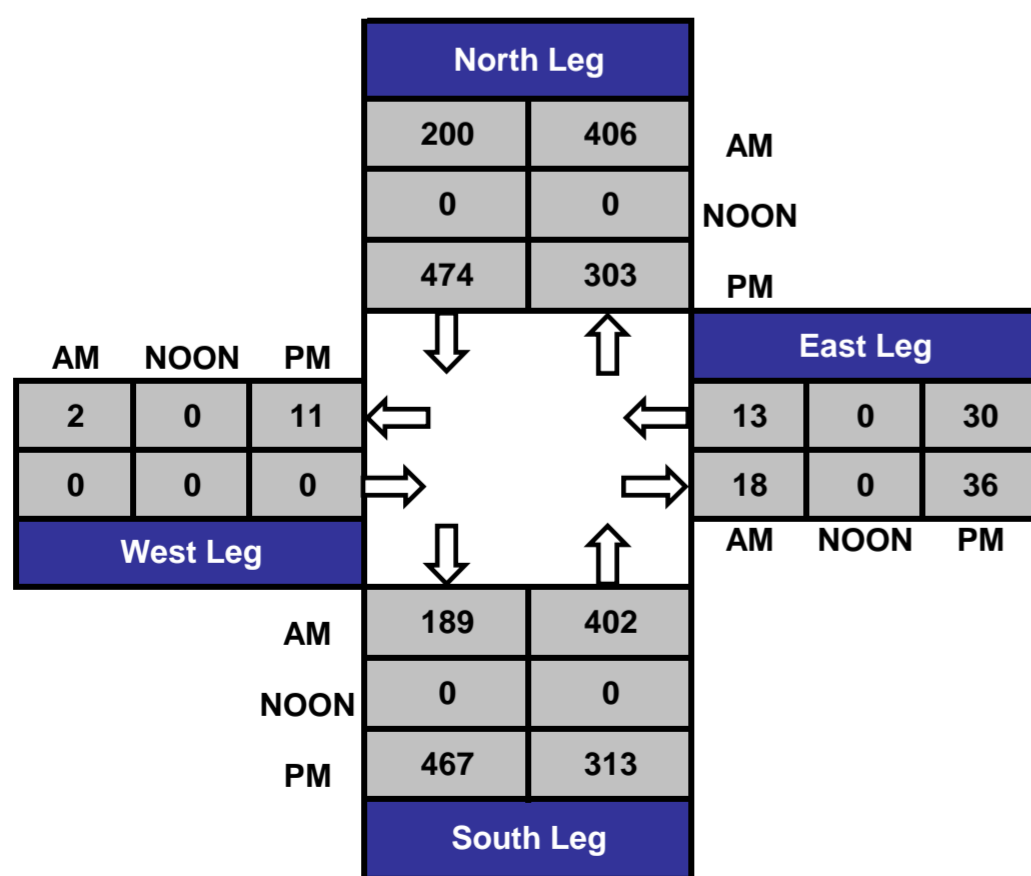
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Project #: 15-5469-004

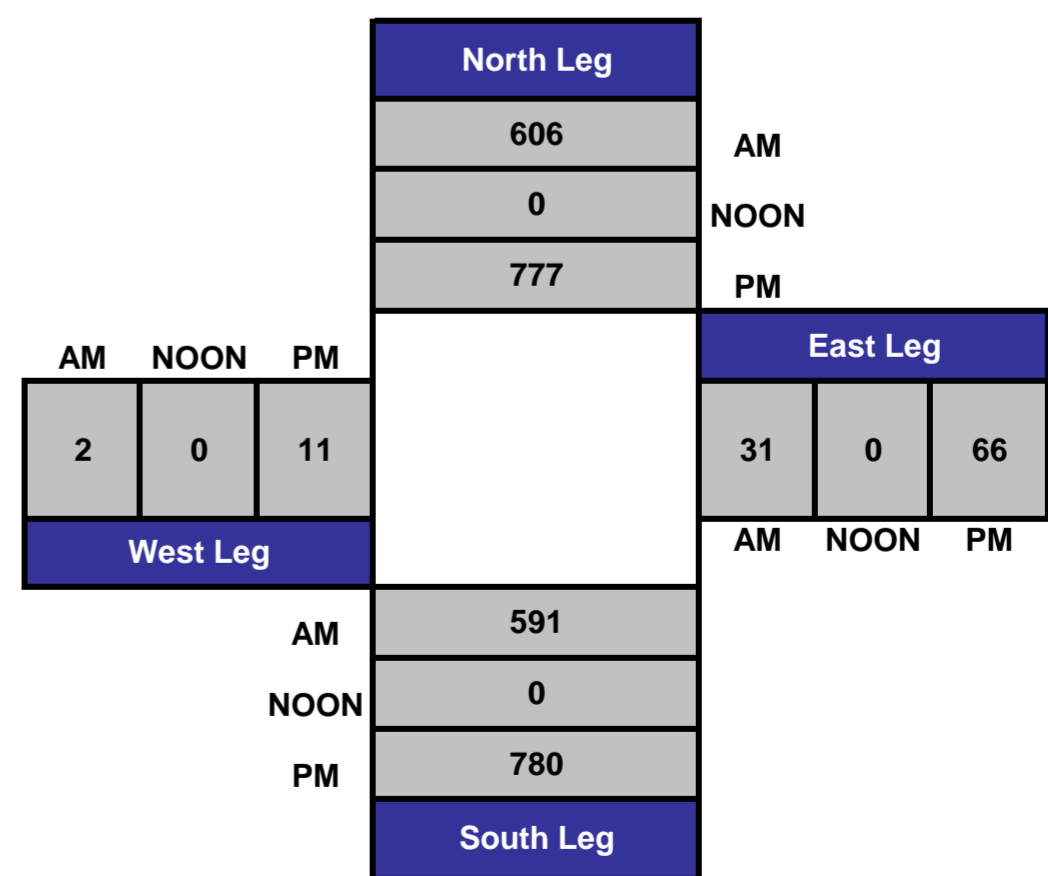
City: Hermosa Beach



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



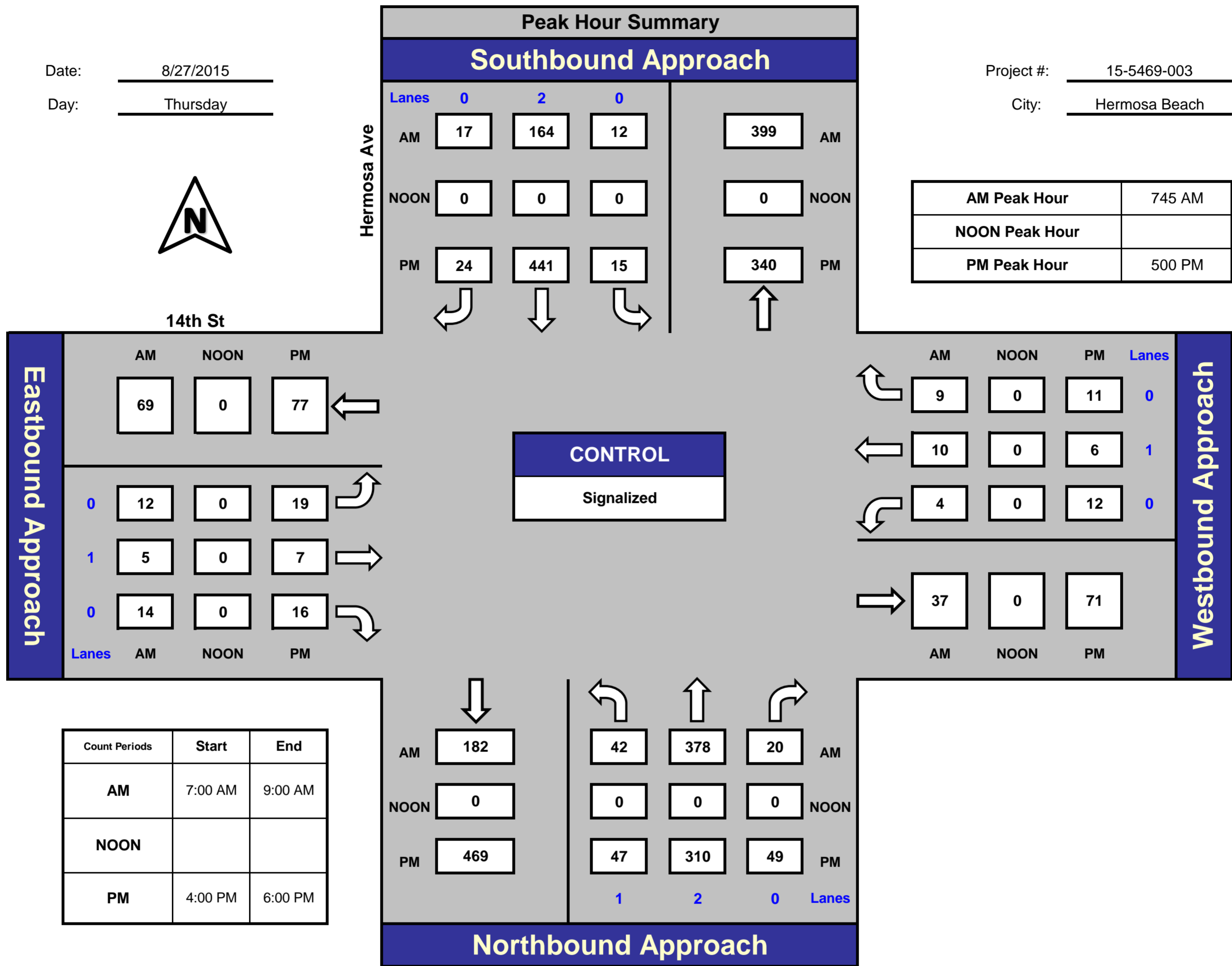
Hermosa Ave and 14th St, Hermosa Beach

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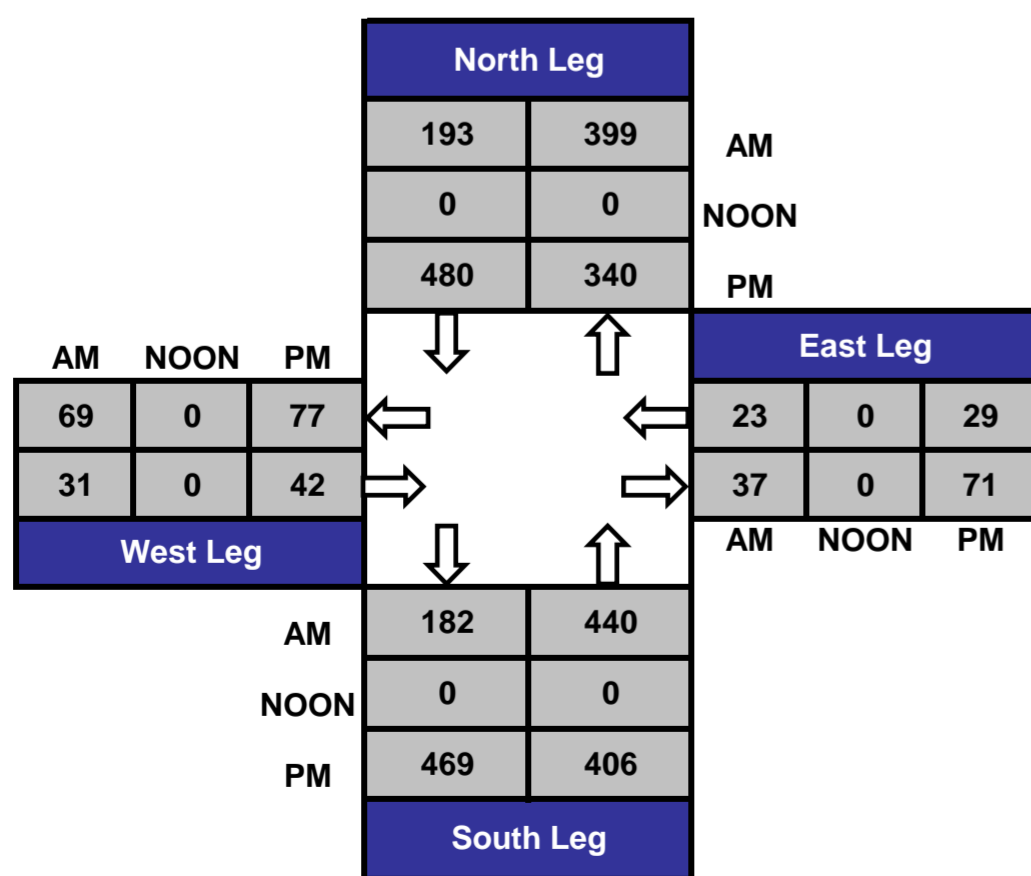
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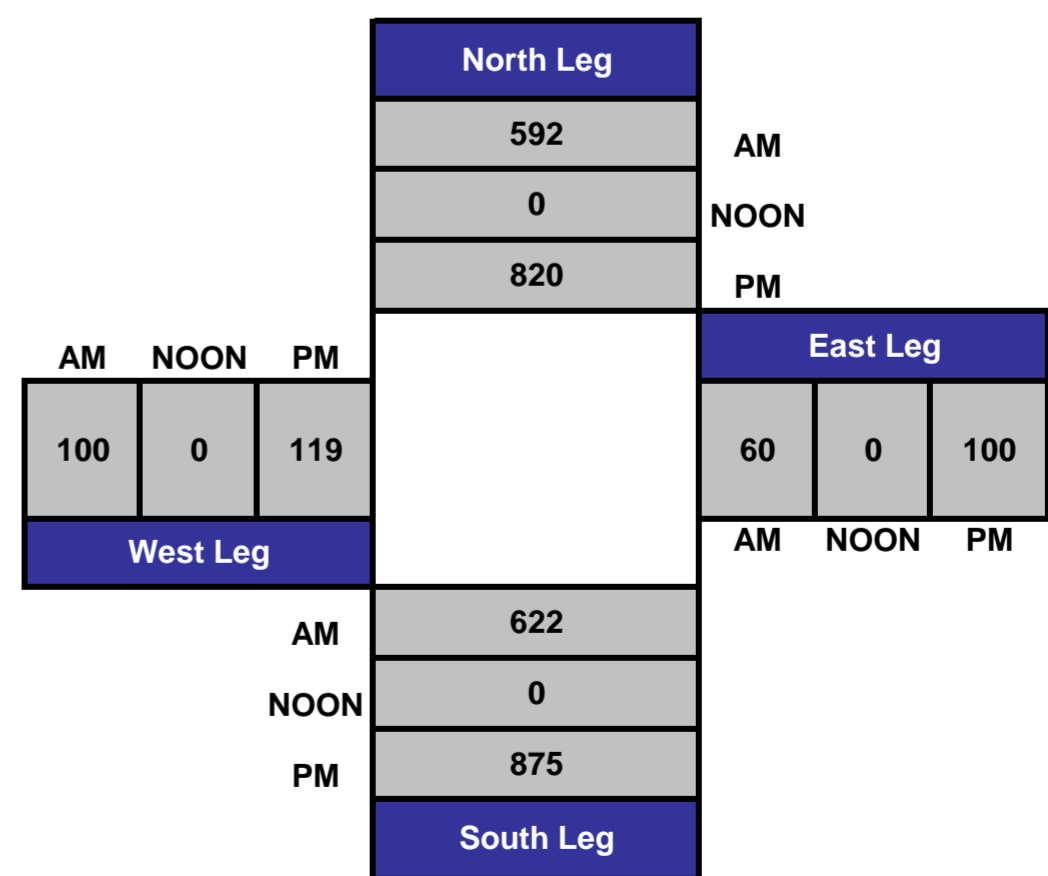
City: Hermosa Beach



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

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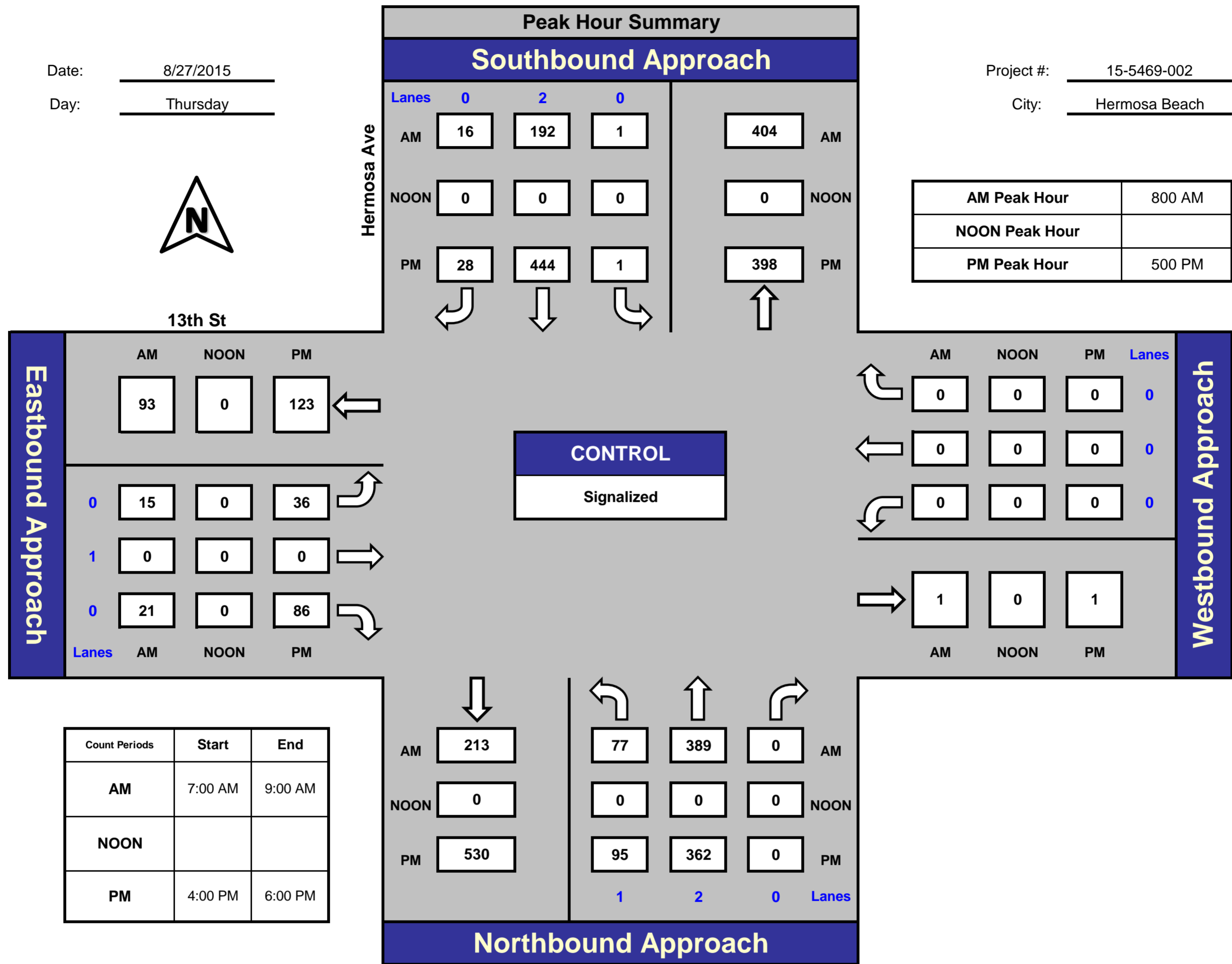
Hermosa Ave and 13th St, Hermosa Beach

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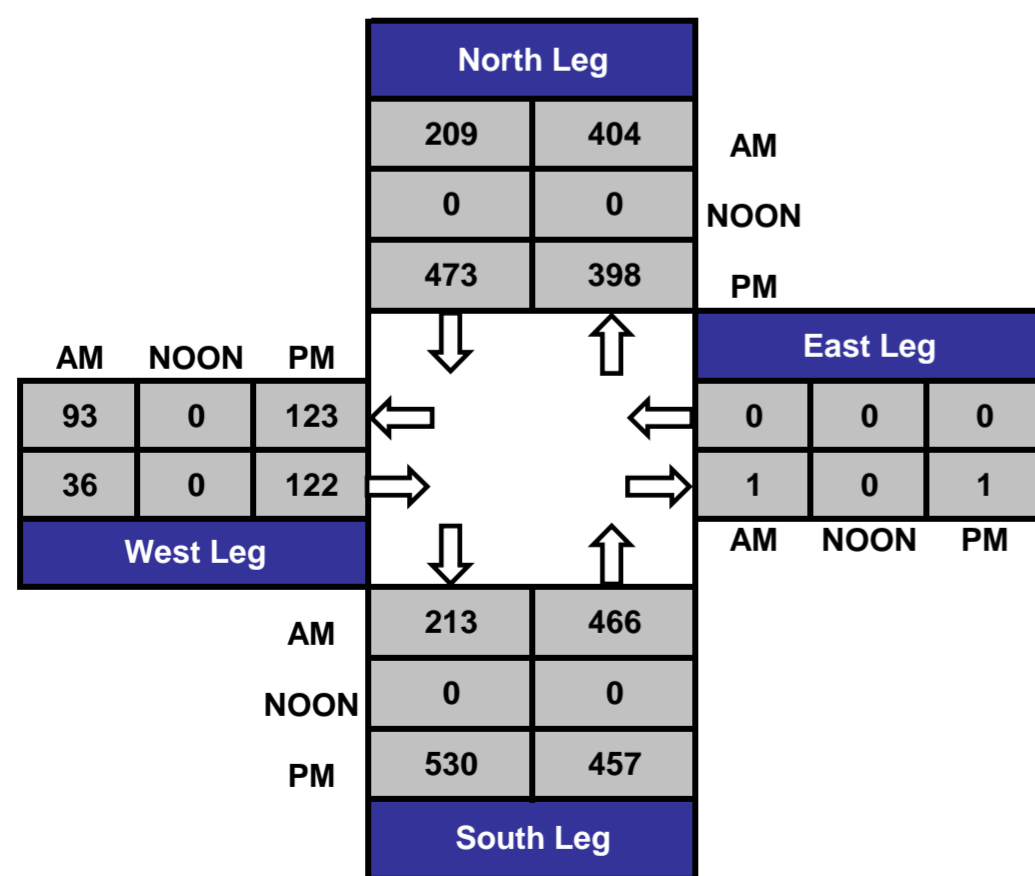
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Project #: 15-5469-002

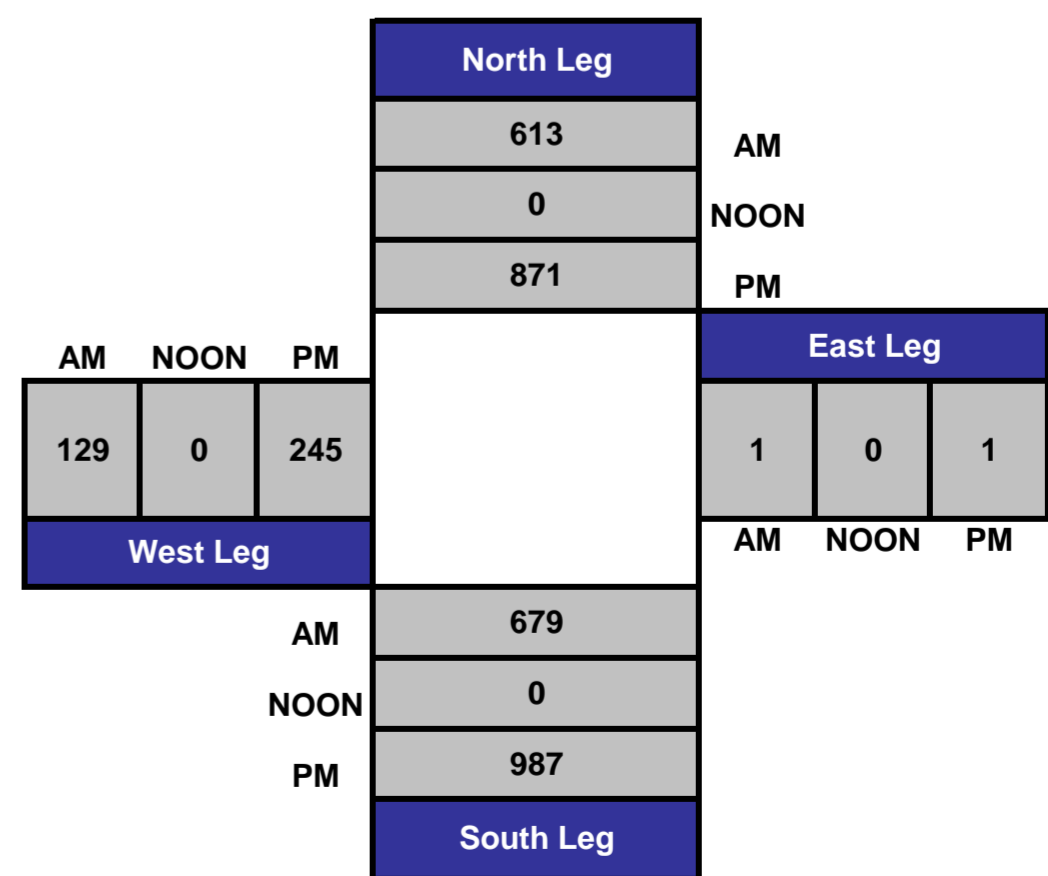
City: Hermosa Beach



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



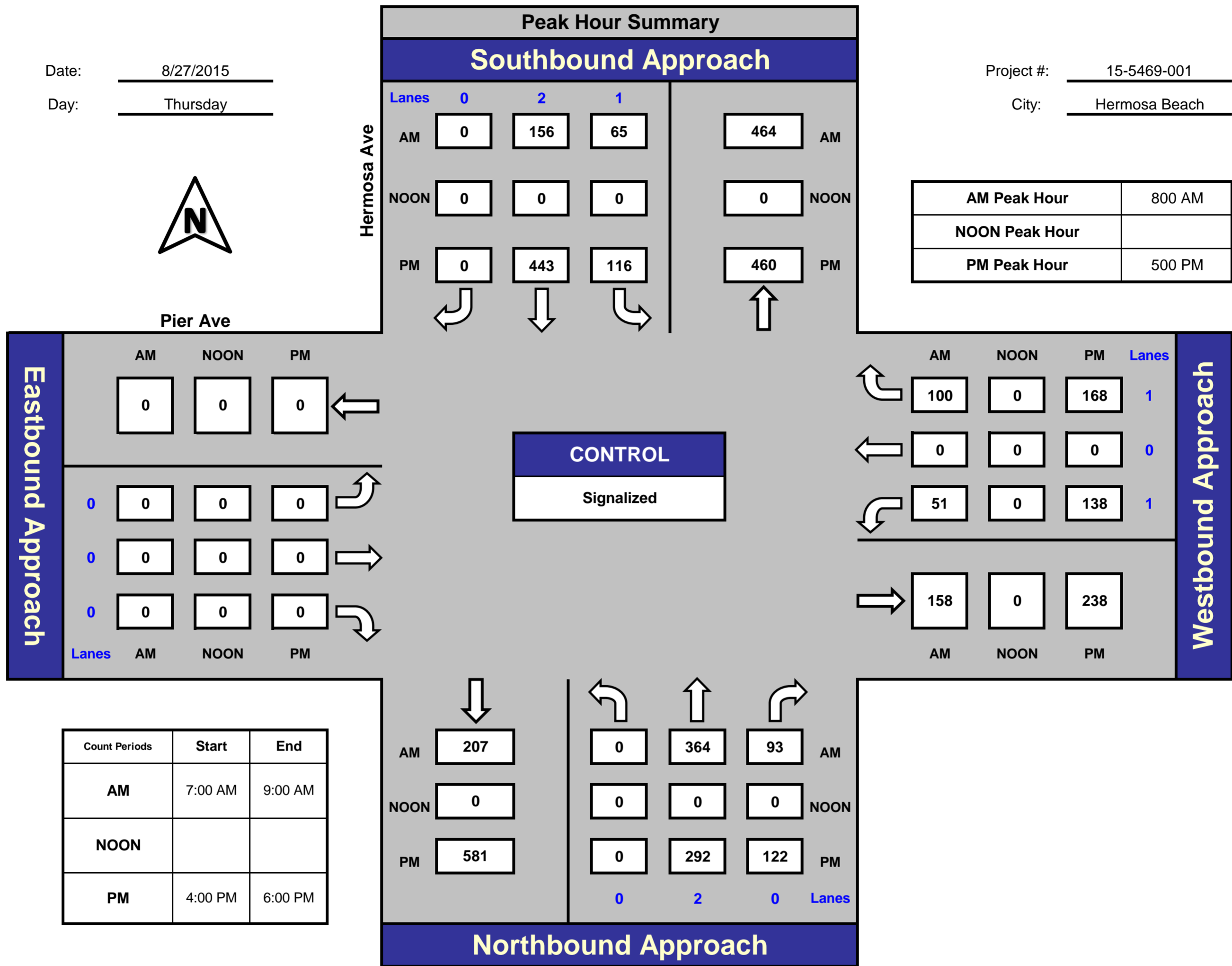
Hermosa Ave and Pier Ave, Hermosa Beach

Date: 8/27/2015

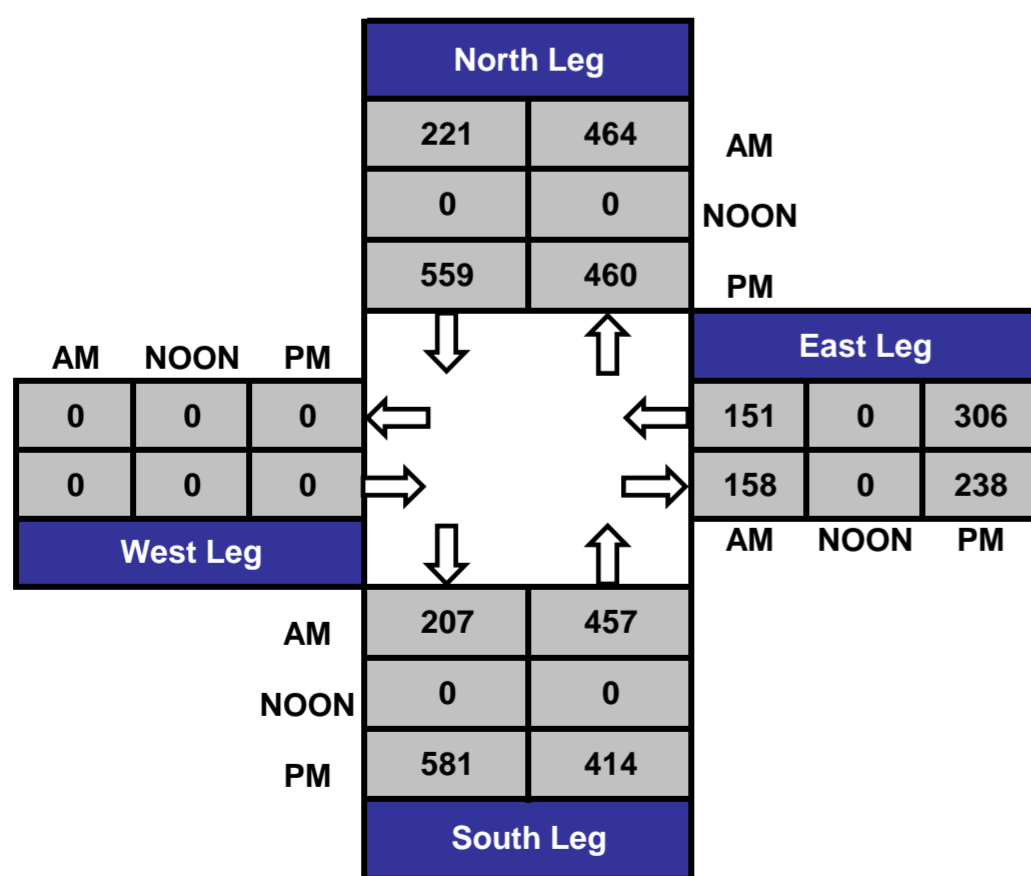
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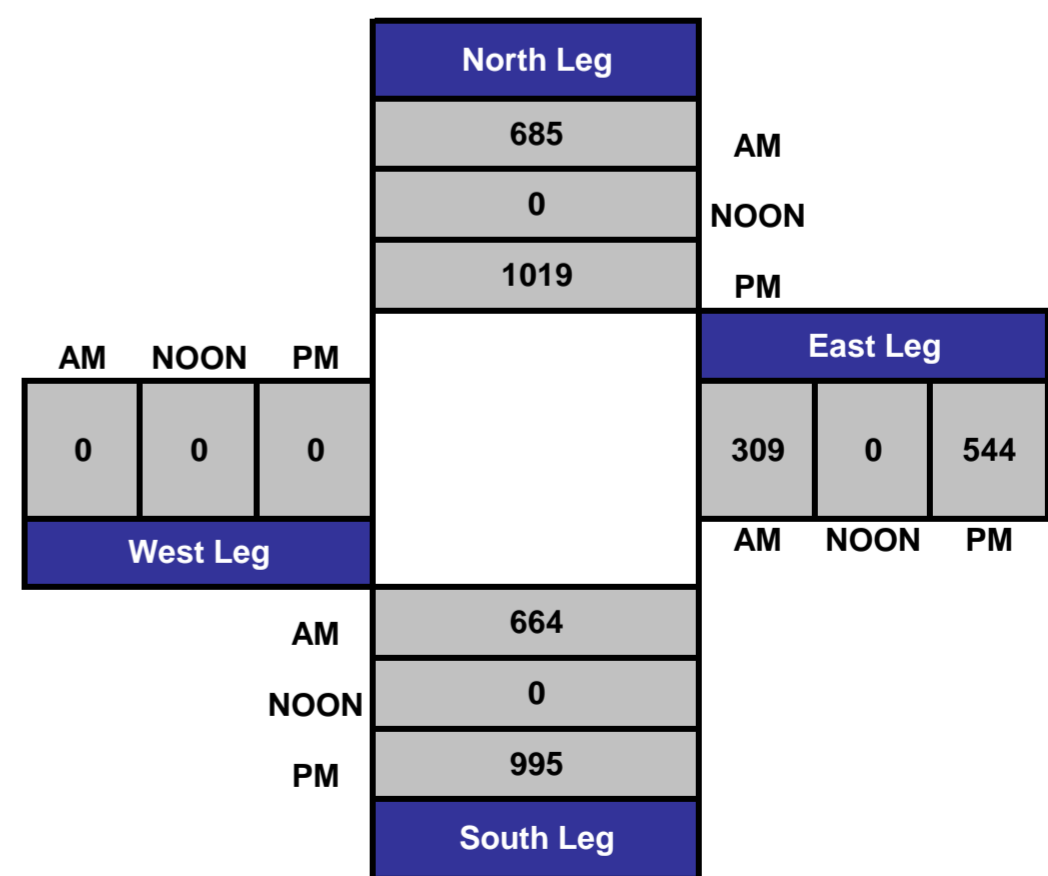
City: Hermosa Beach



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

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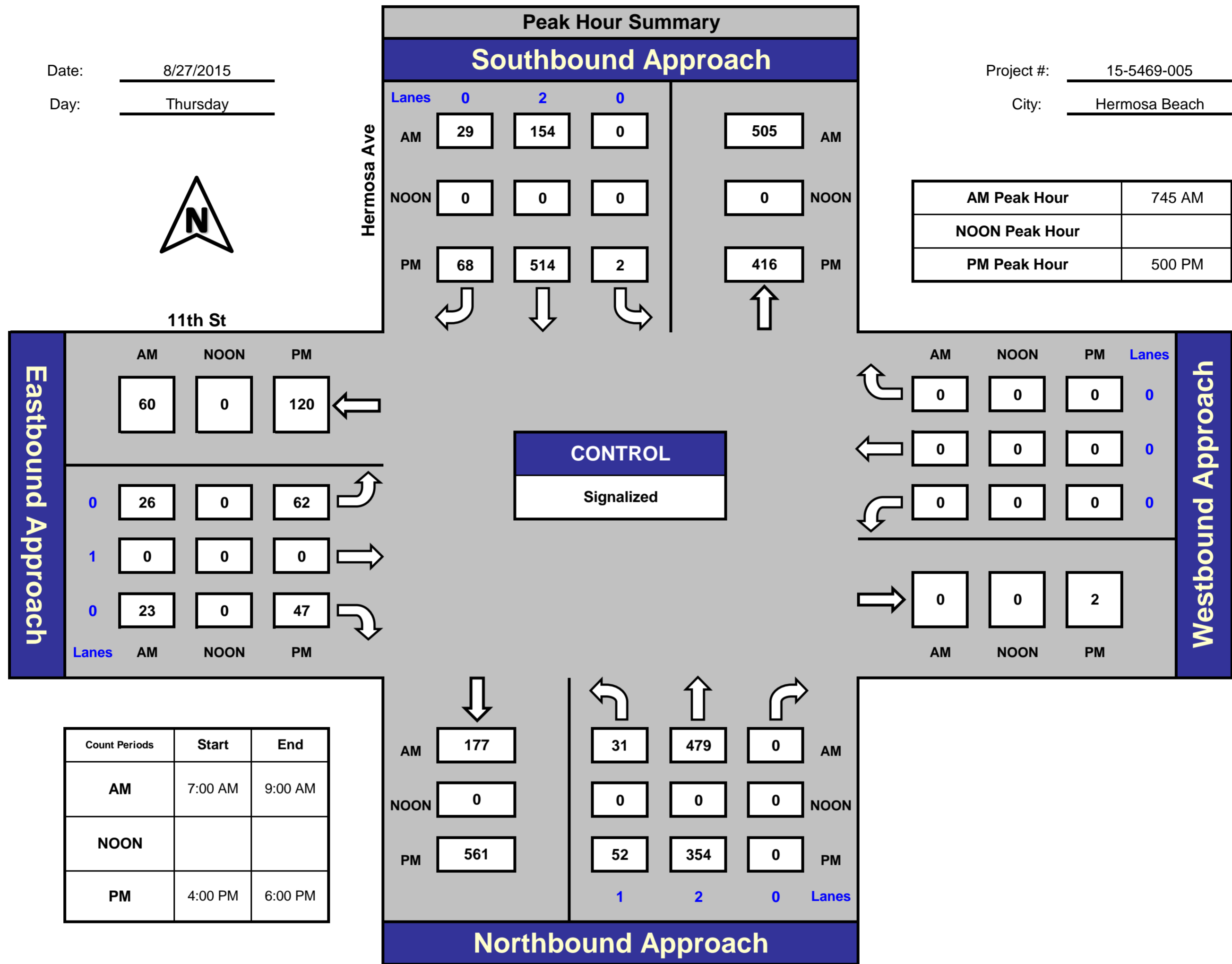
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Date: 8/27/2015

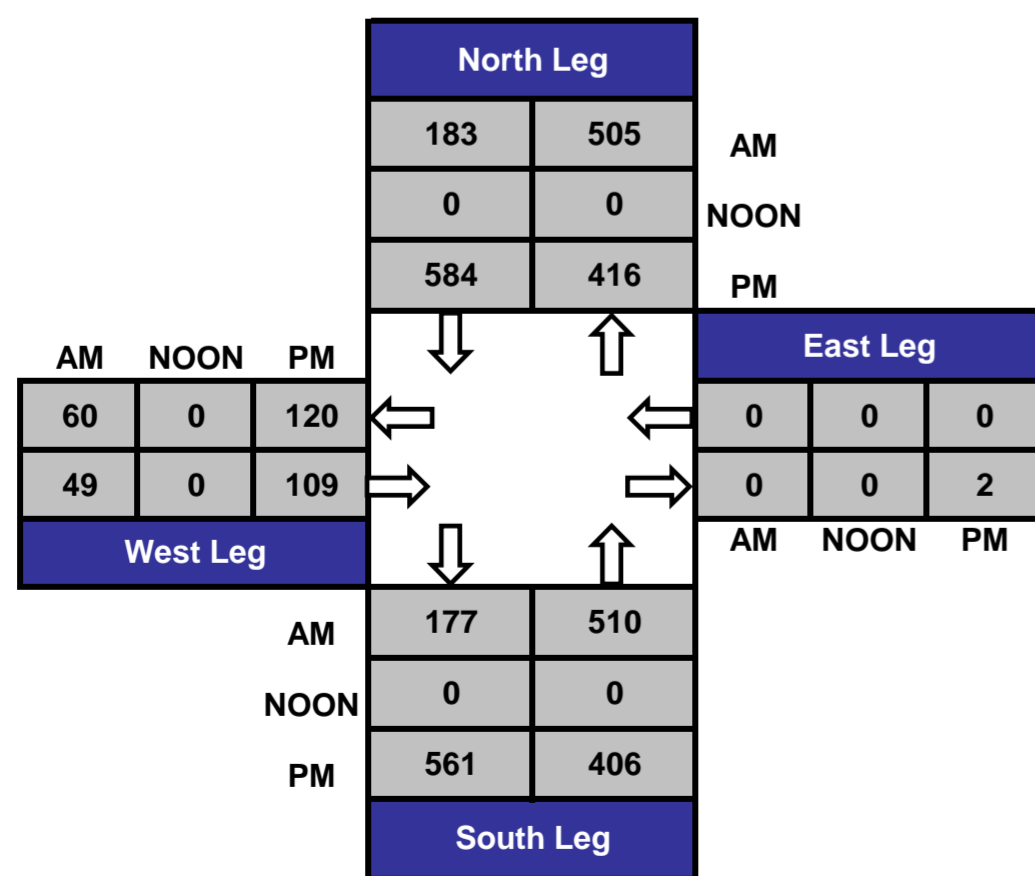
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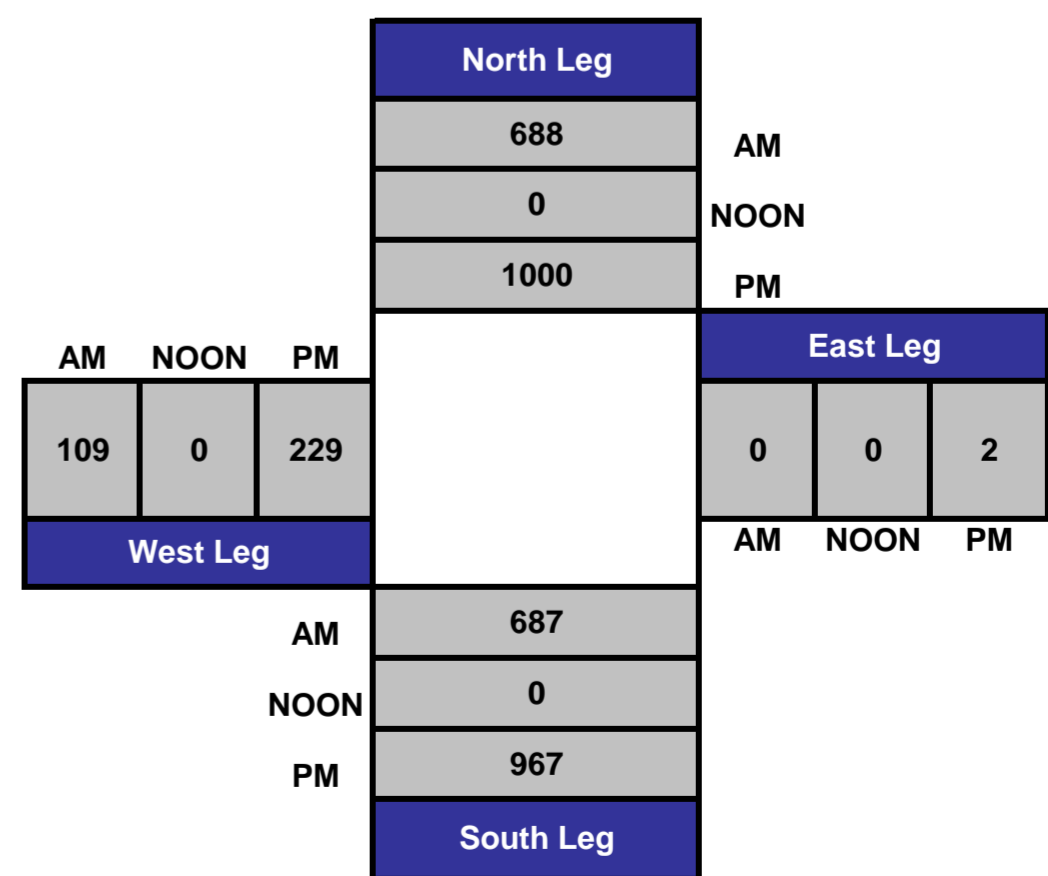
City: Hermosa Beach



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



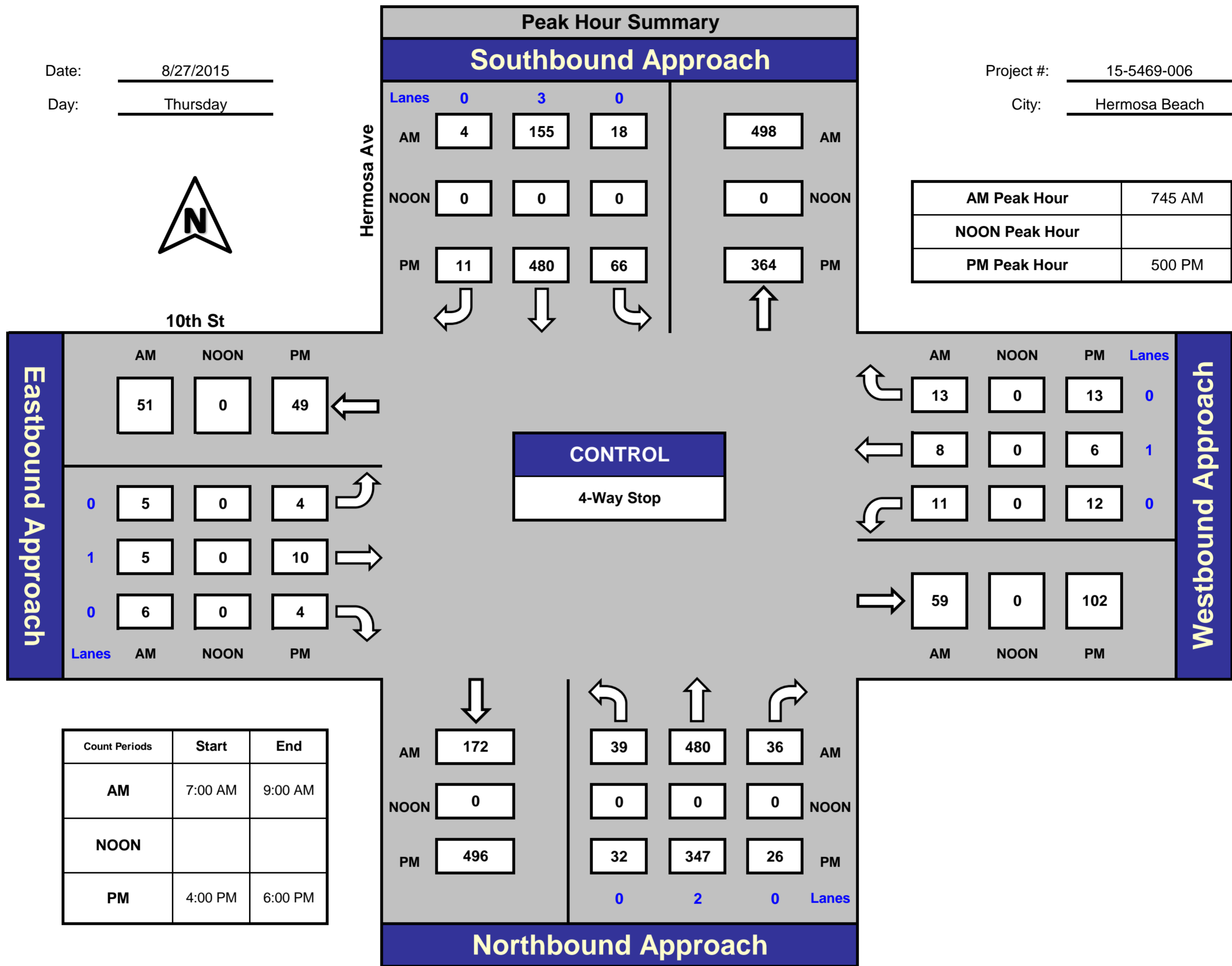
Hermosa Ave and 10th St, Hermosa Beach

Date: 8/27/2015

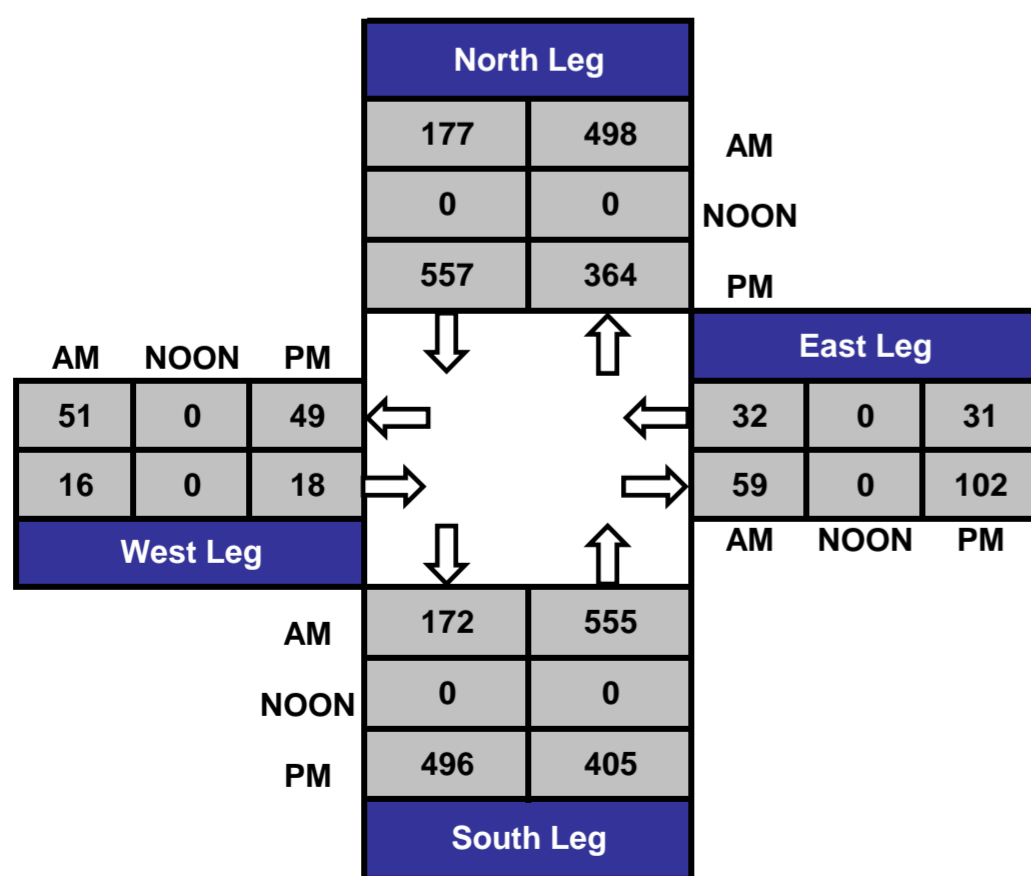
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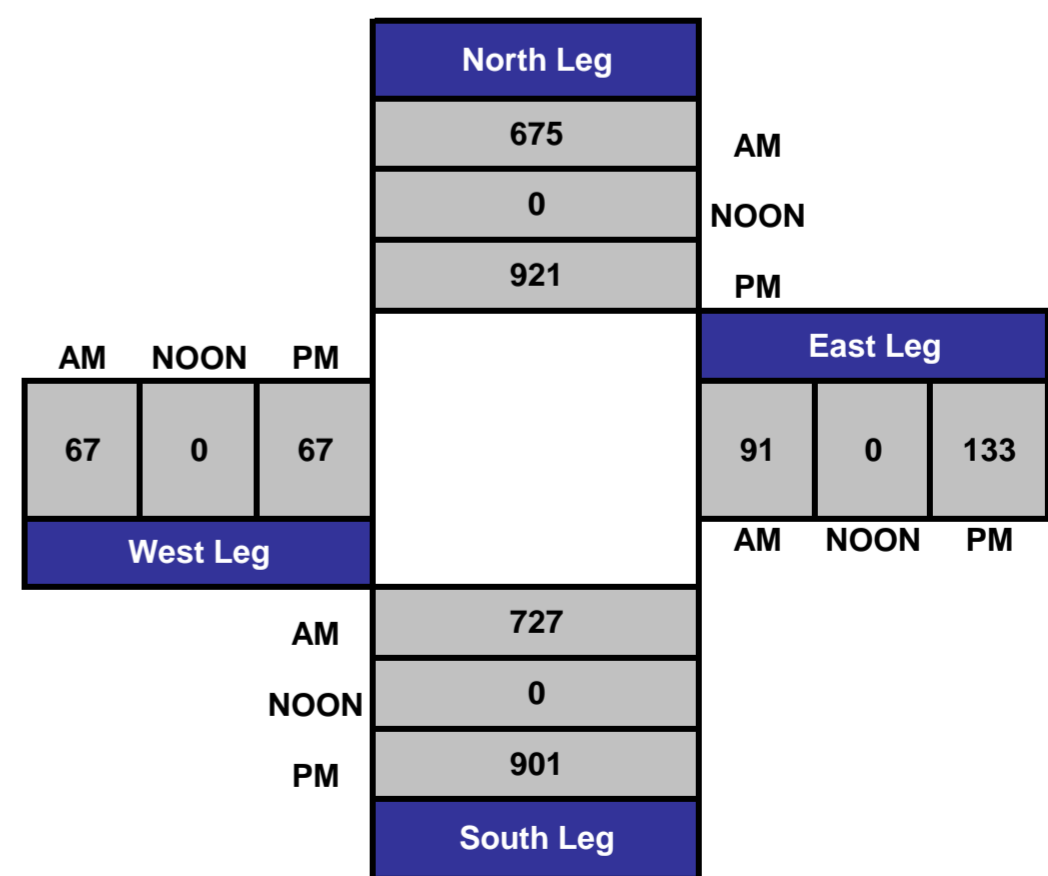
City: Hermosa Beach



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



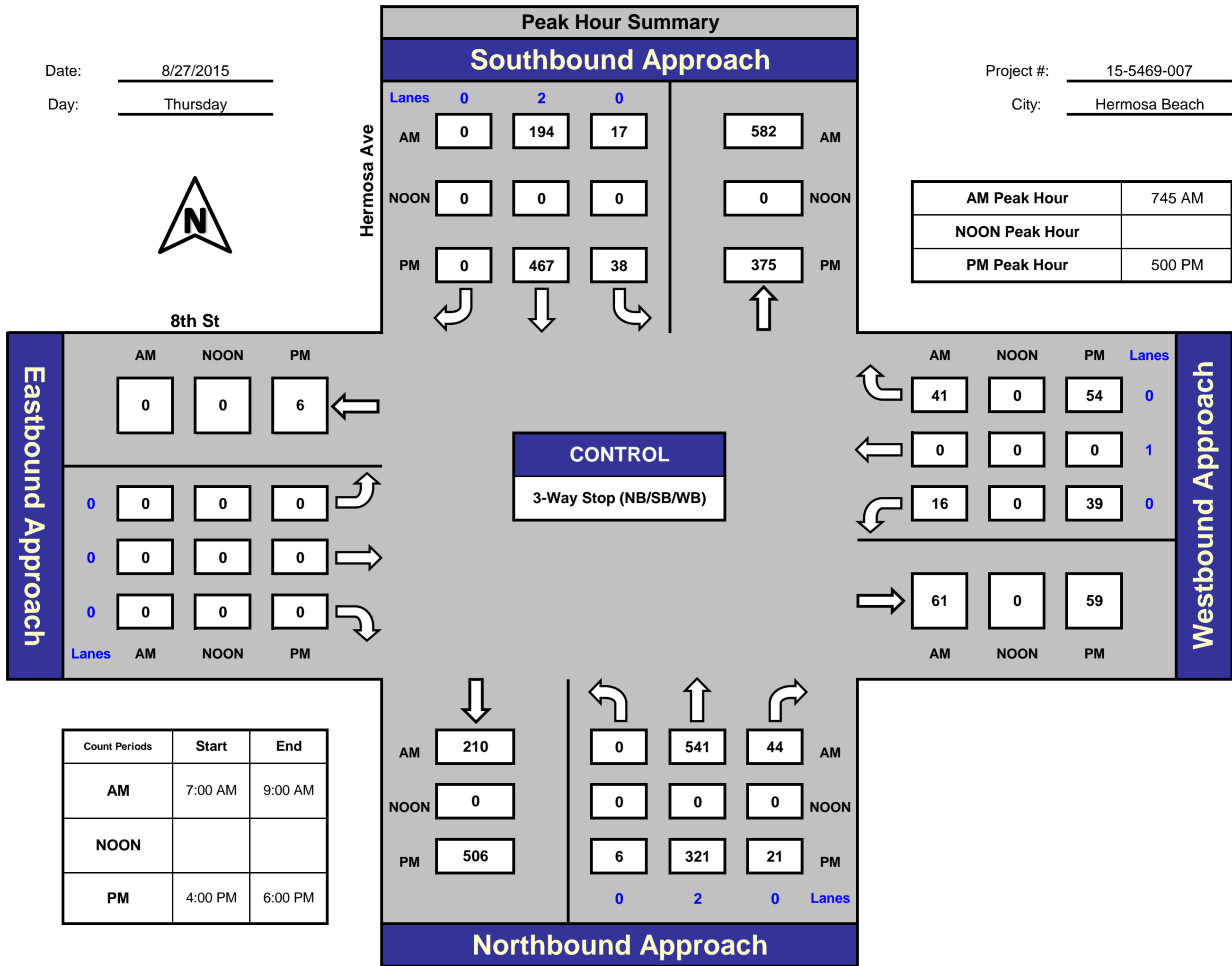
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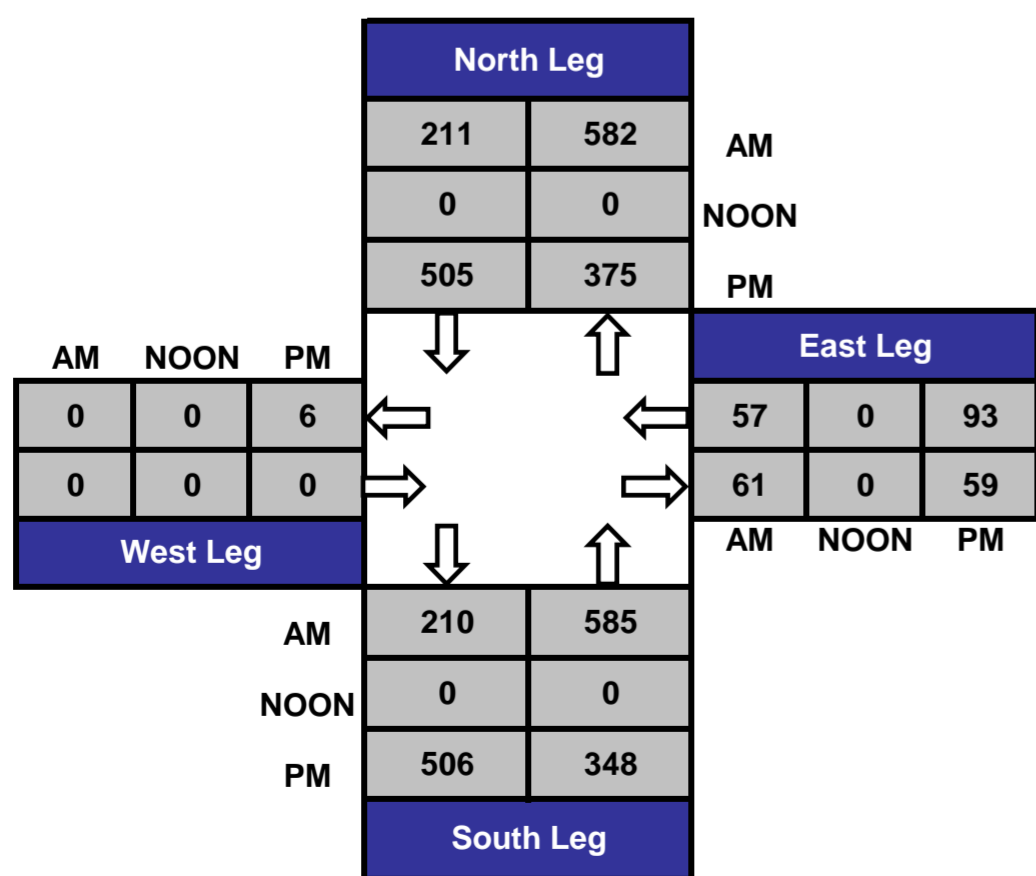
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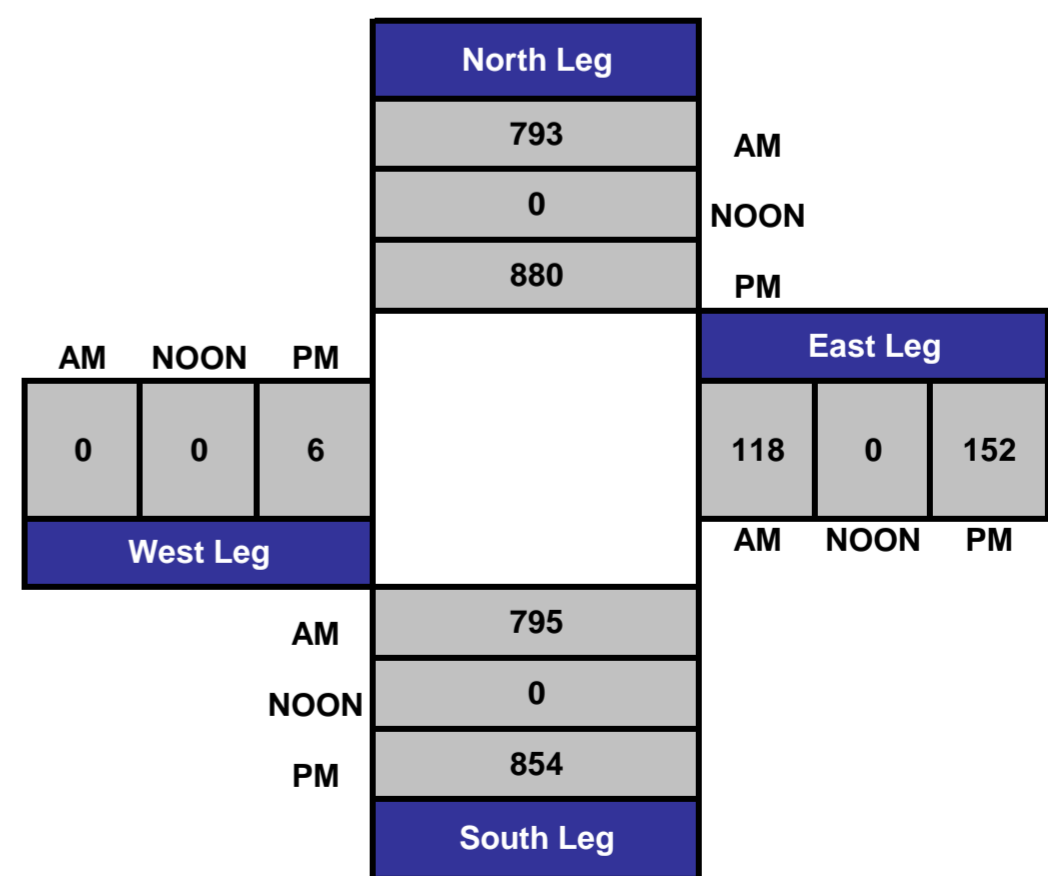
City: Hermosa Beach



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

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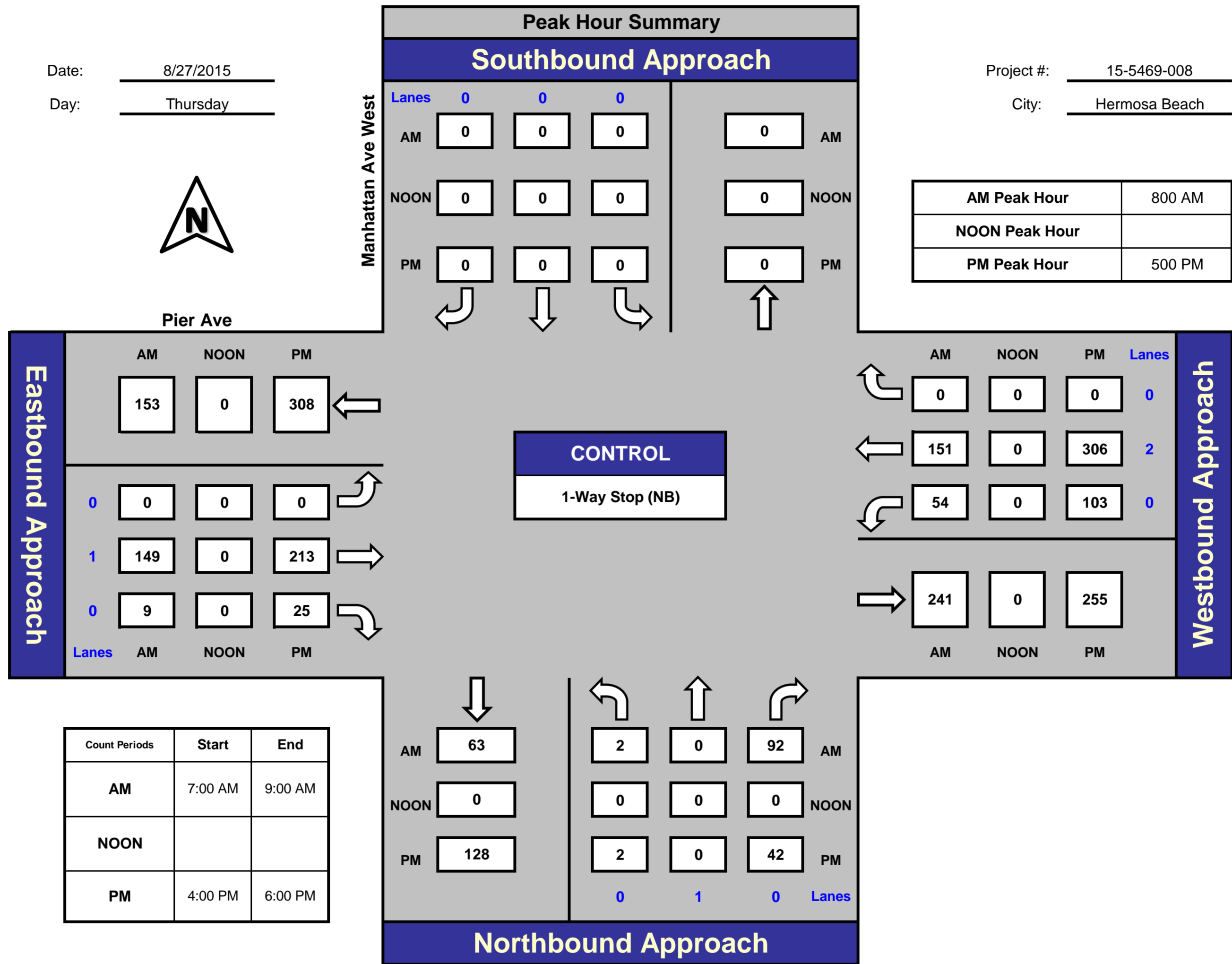
Manhattan Ave West and Pier Ave, Hermosa Beach

Date: 8/27/2015

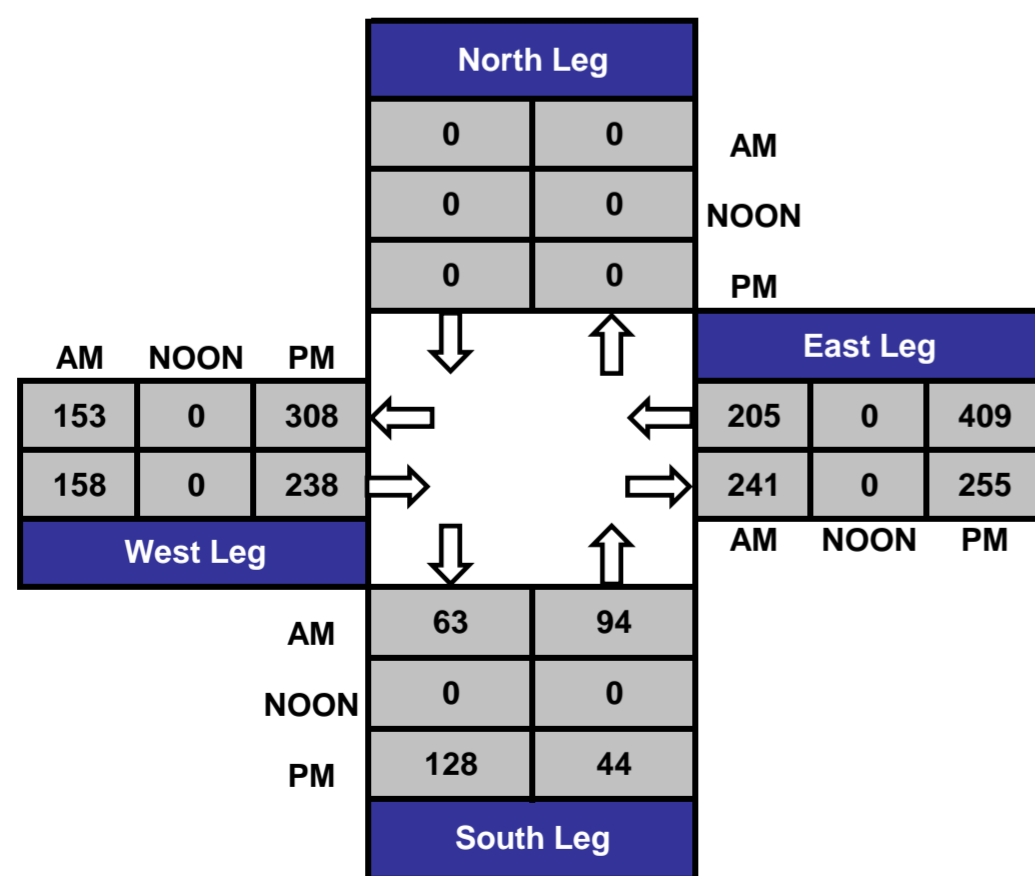
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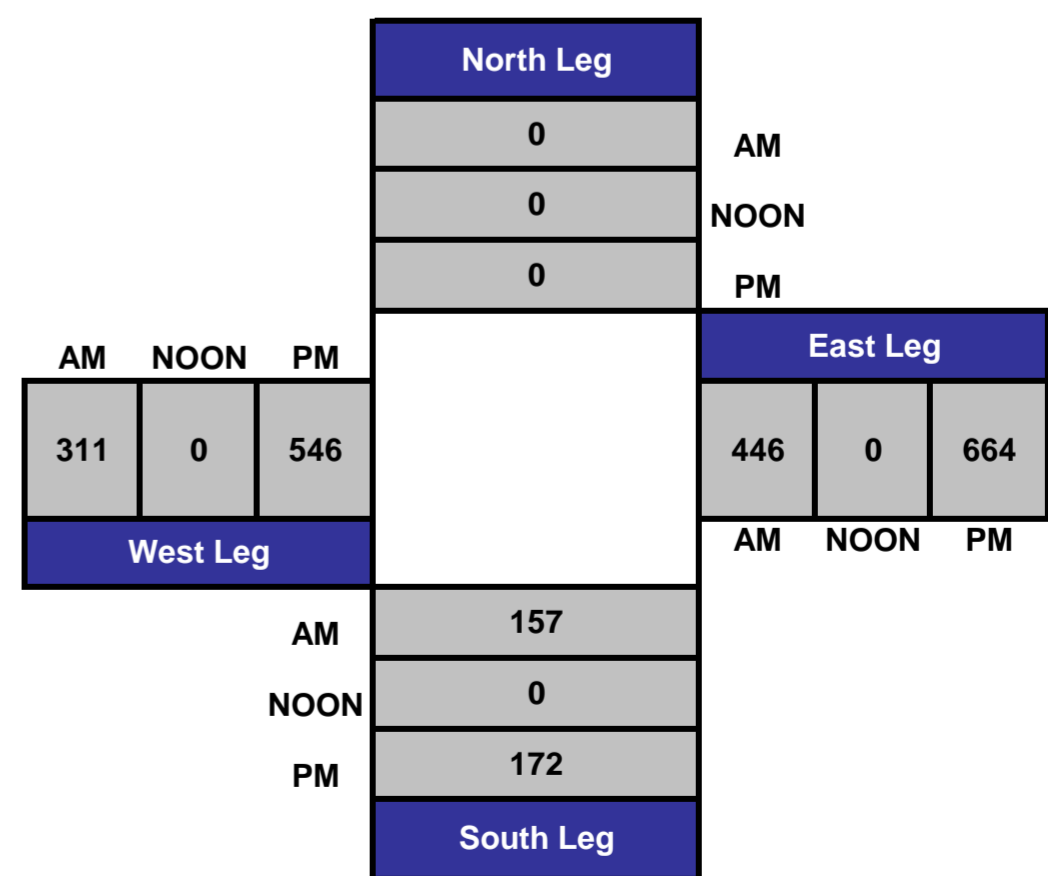
City: Hermosa Beach



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

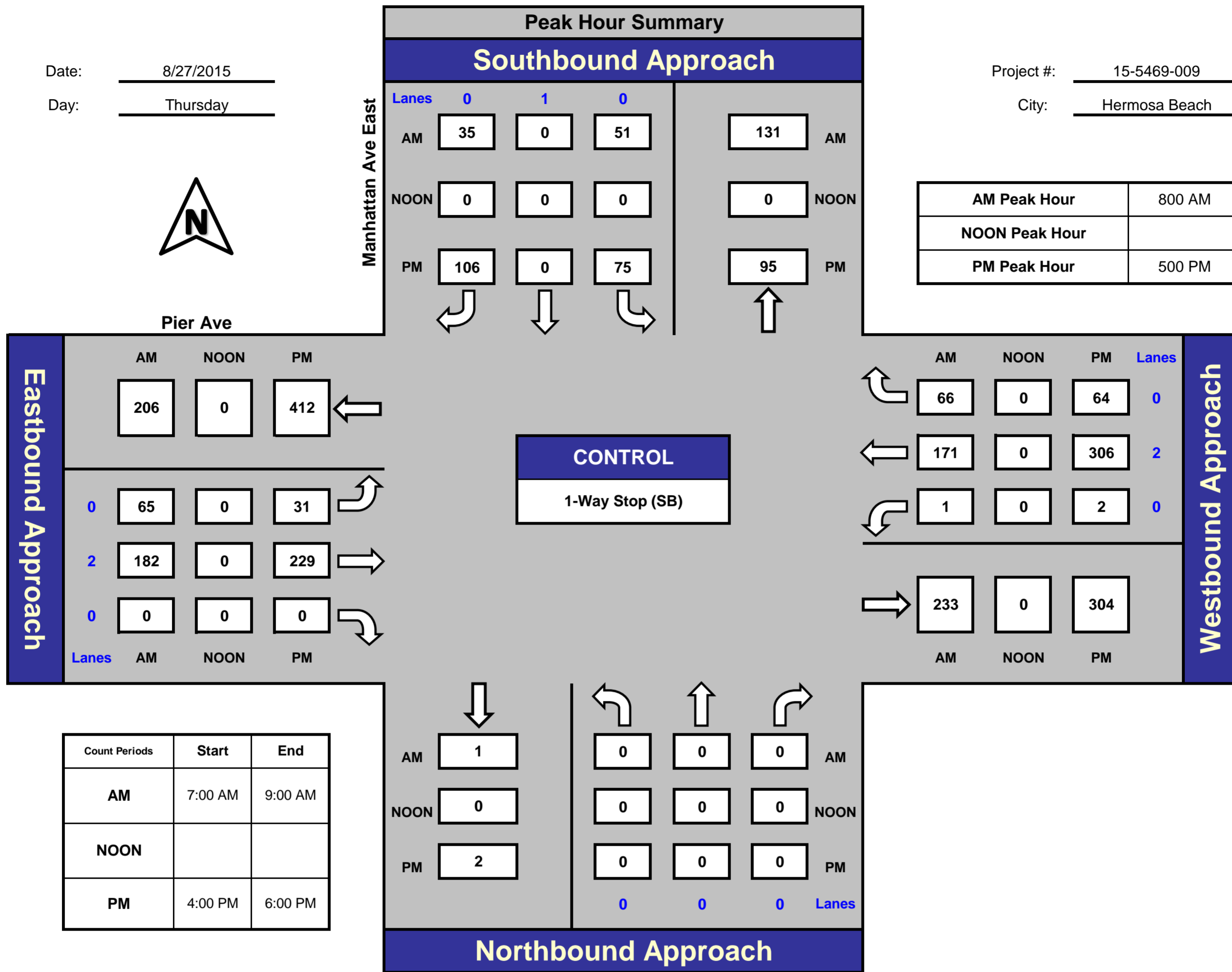
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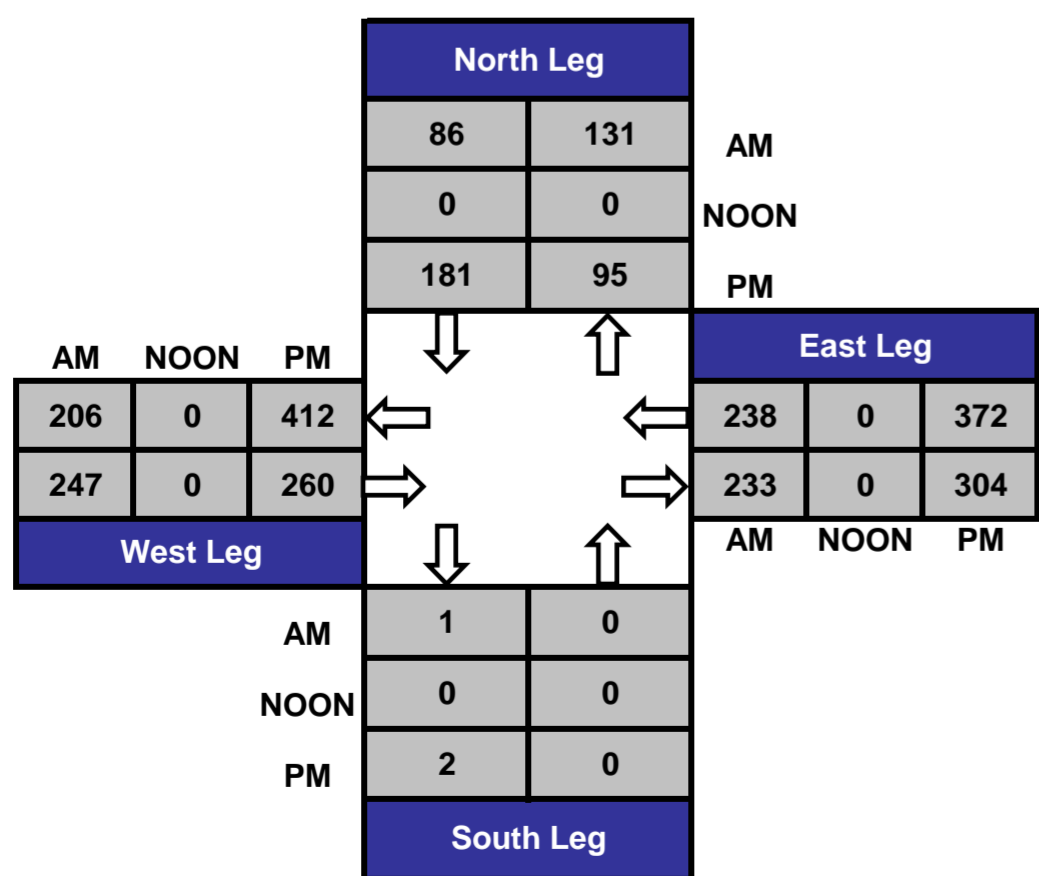
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Day: Thursday

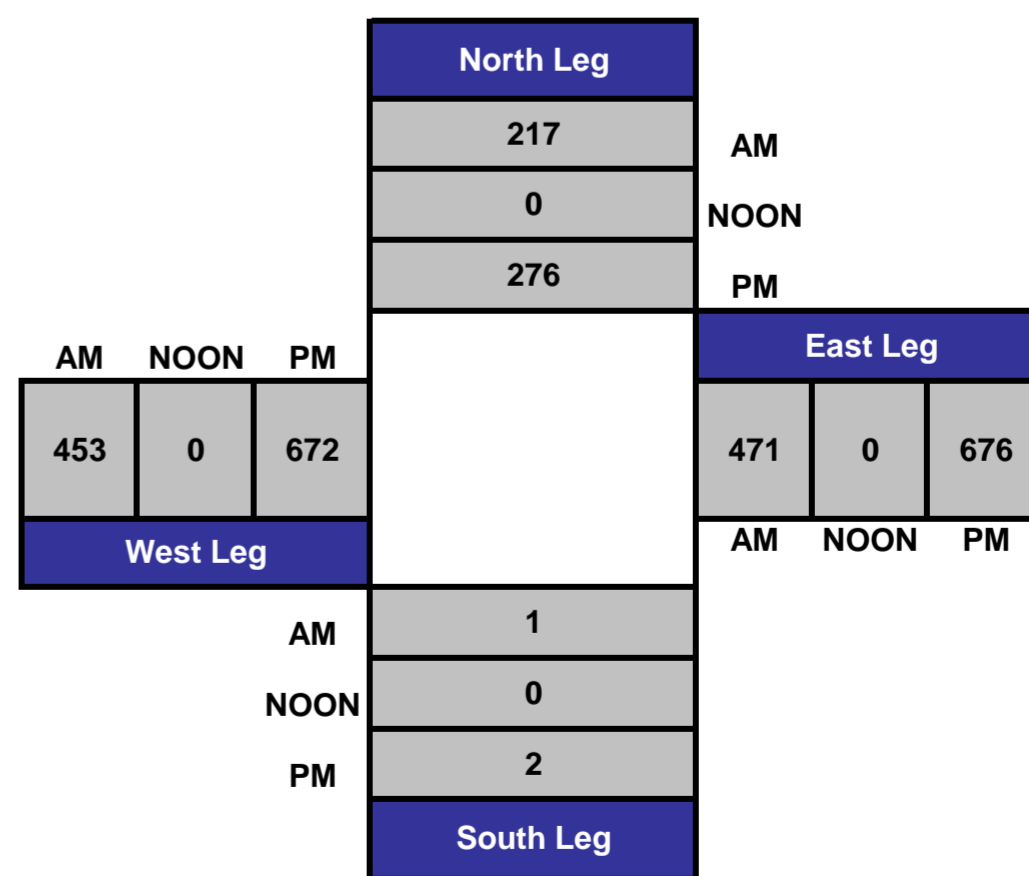
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City: Hermosa Beach



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

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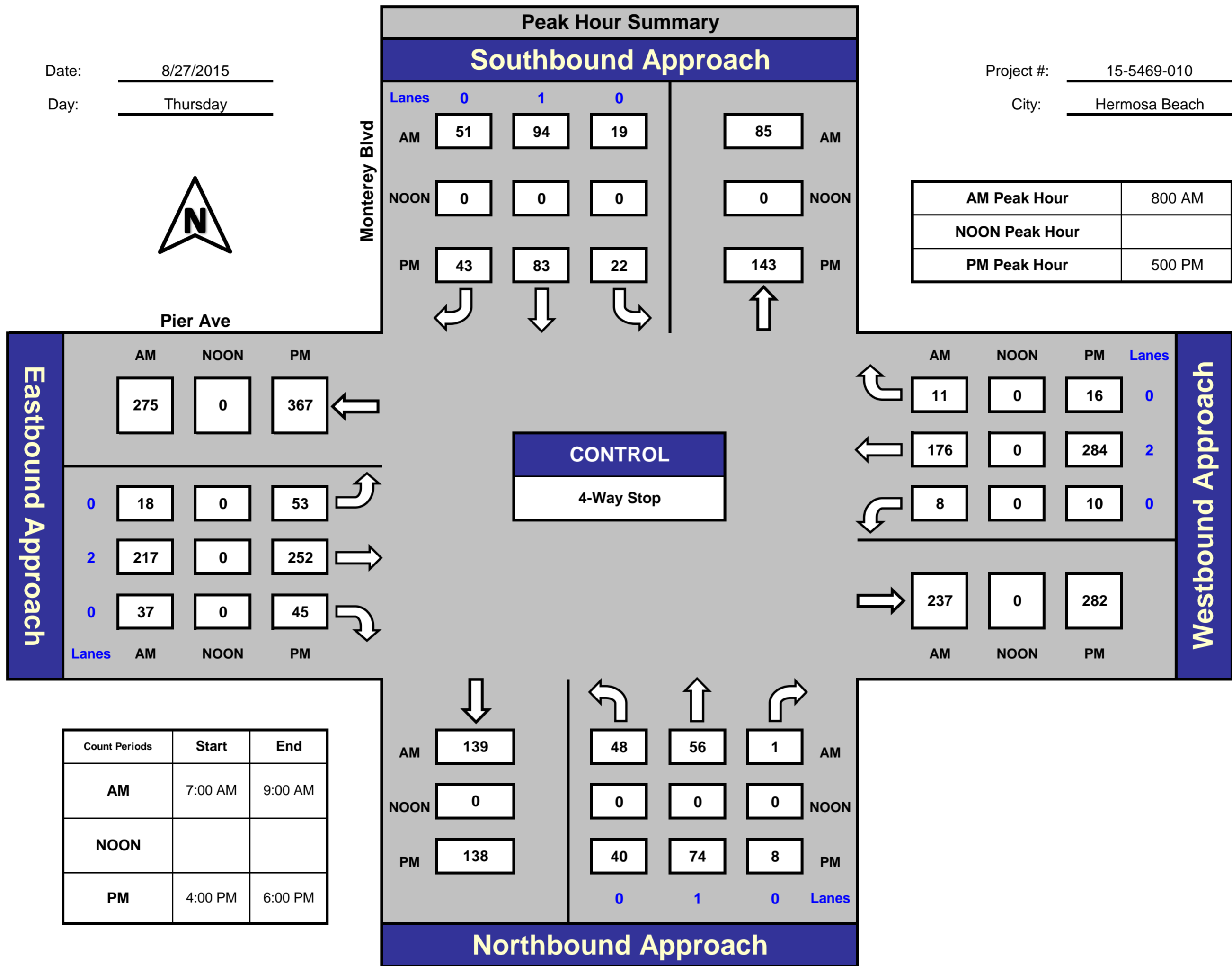
Monterey Blvd and Pier Ave, Hermosa Beach

Date: 8/27/2015

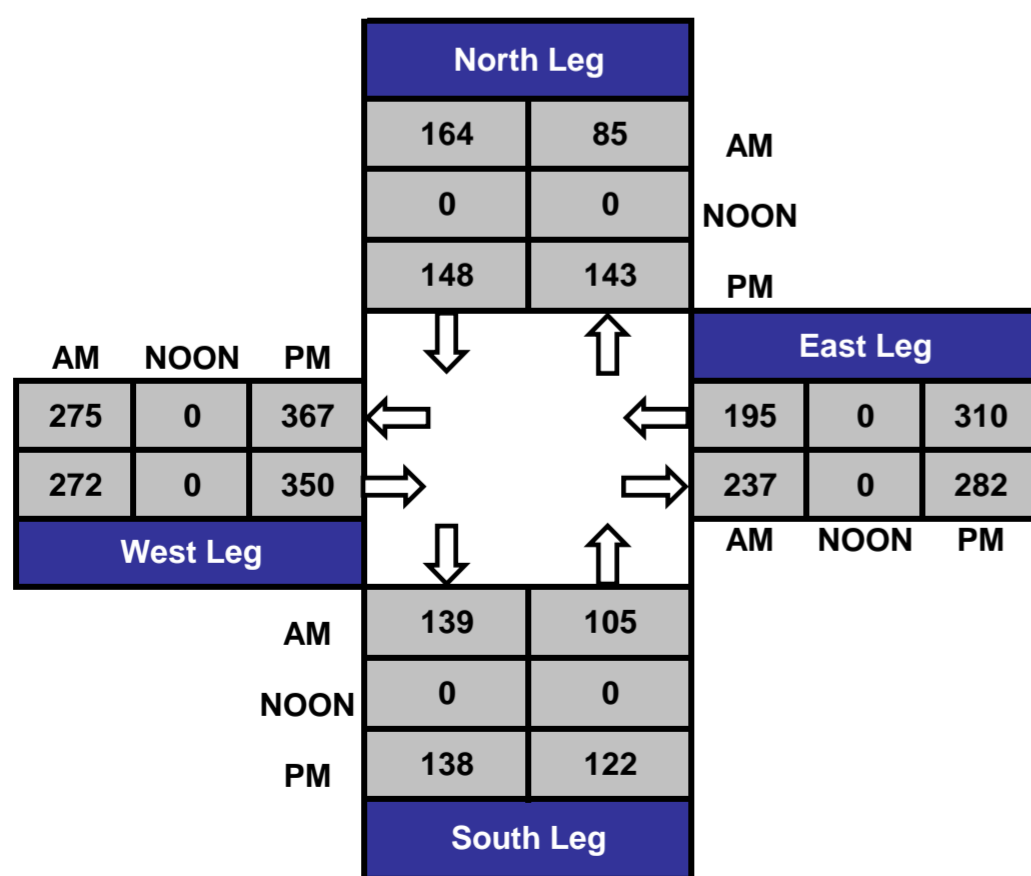
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Project #: 15-5469-010

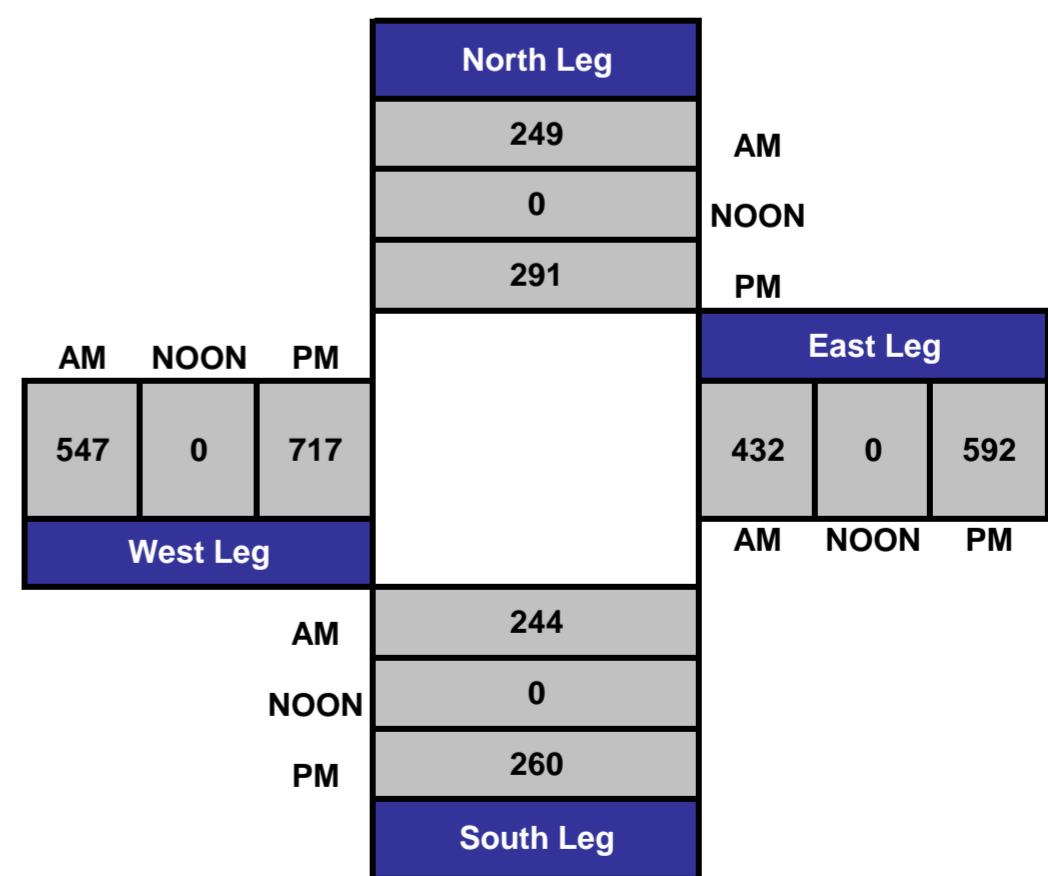
City: Hermosa Beach



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

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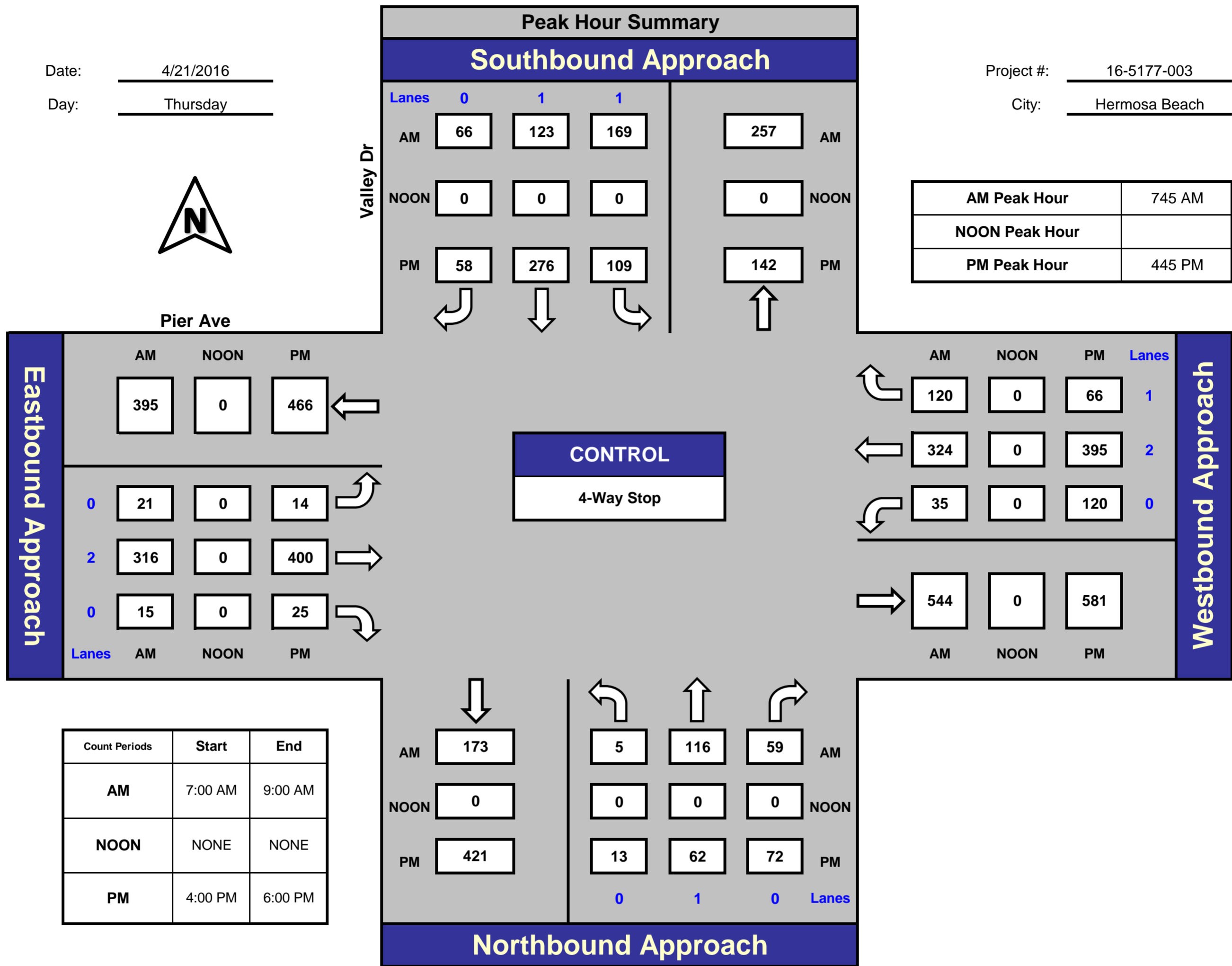
Valley Dr and Pier Ave, Hermosa Beach

Date: 4/21/2016

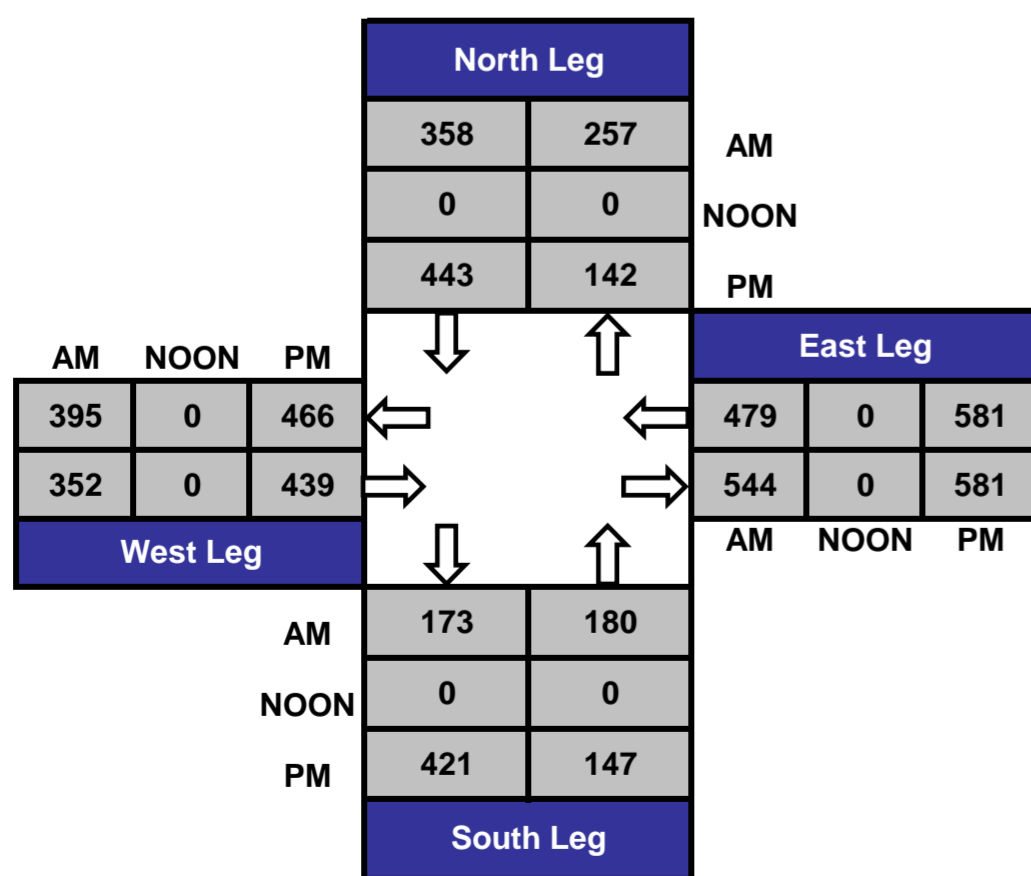
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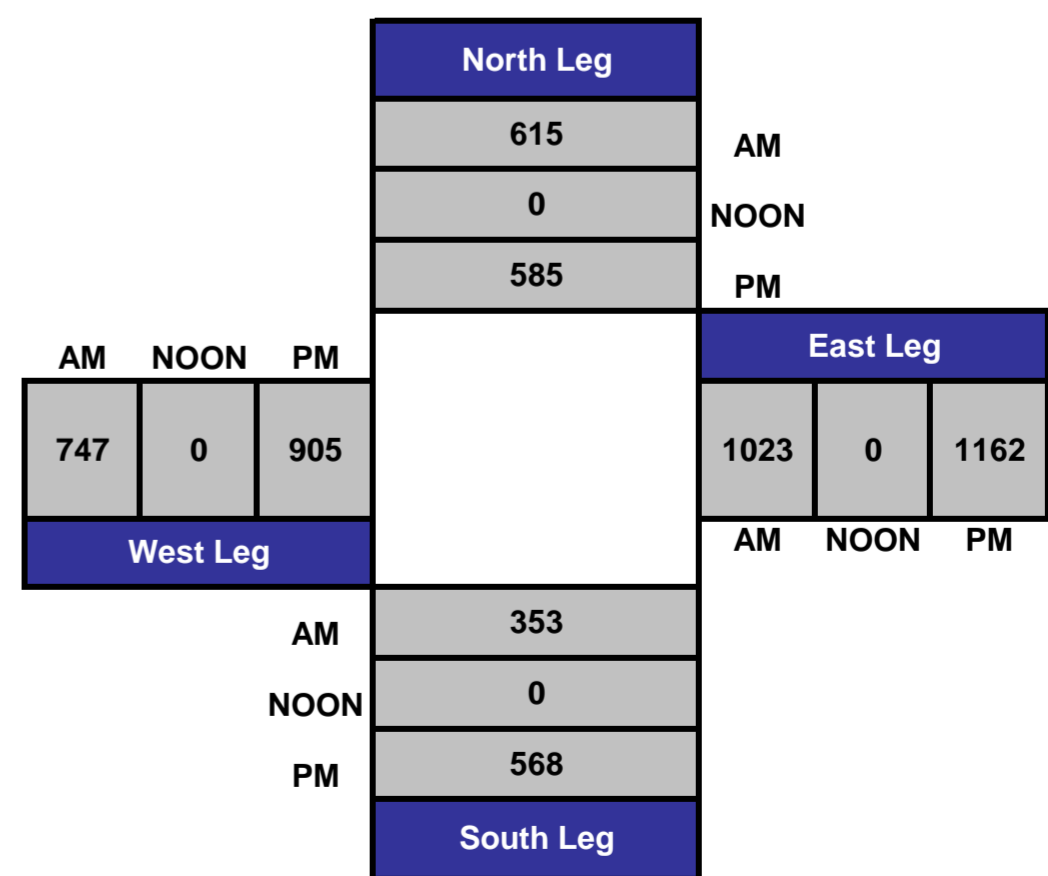
City: Hermosa Beach



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

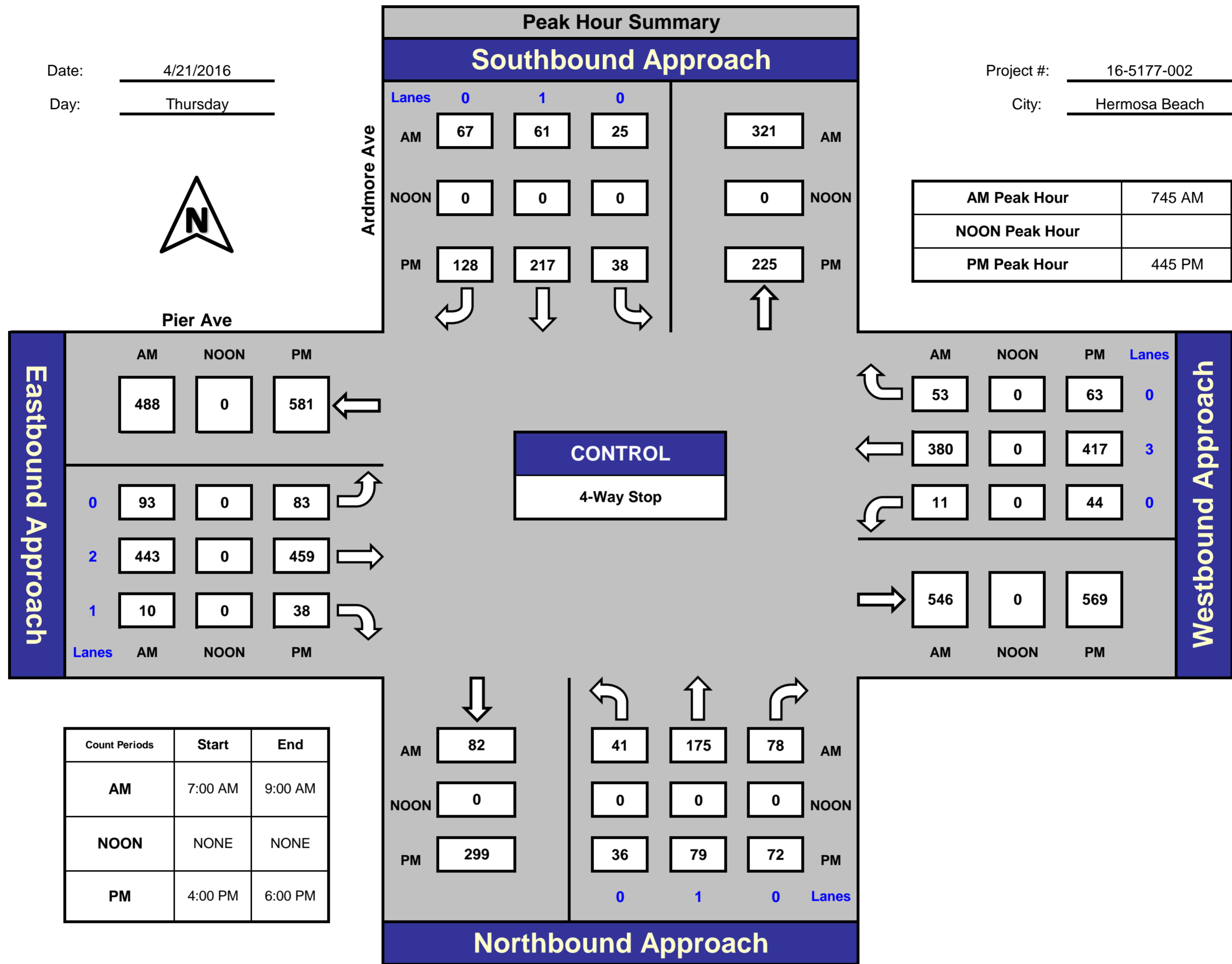
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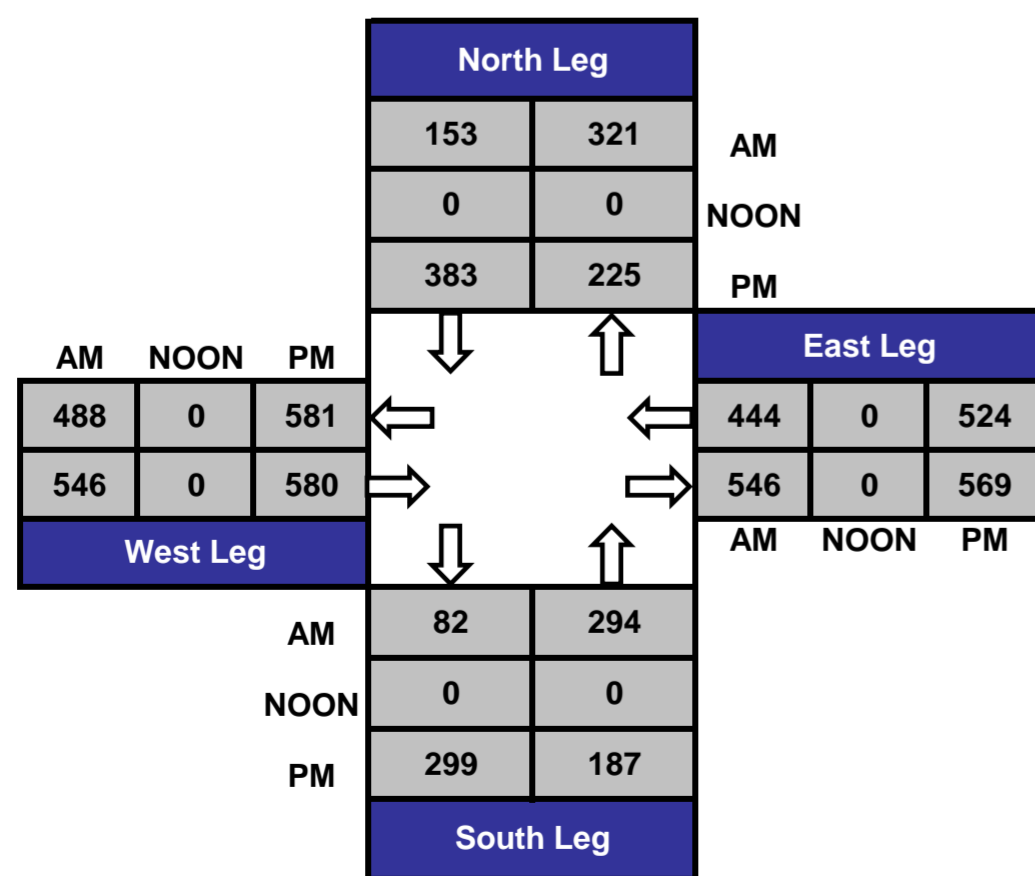
Ardmore Ave and Pier Ave, Hermosa Beach

Date: 4/21/2016
Day: Thursday

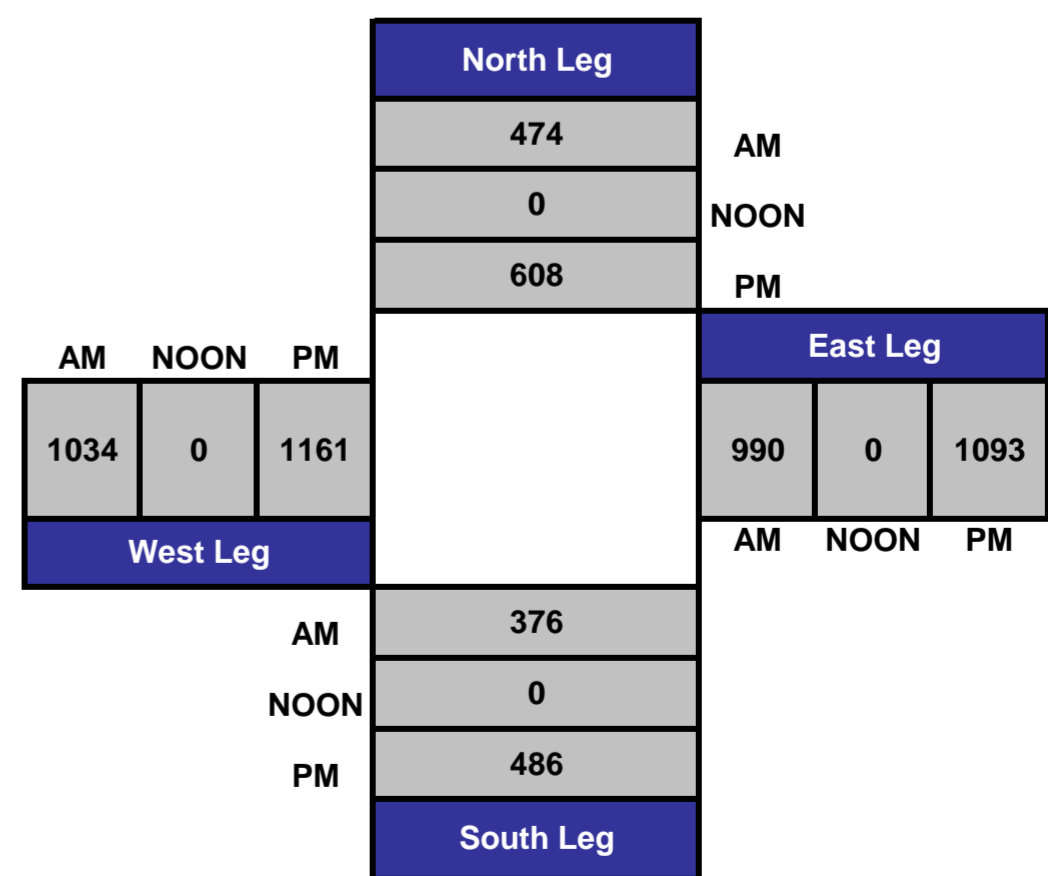
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City: Hermosa Beach



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



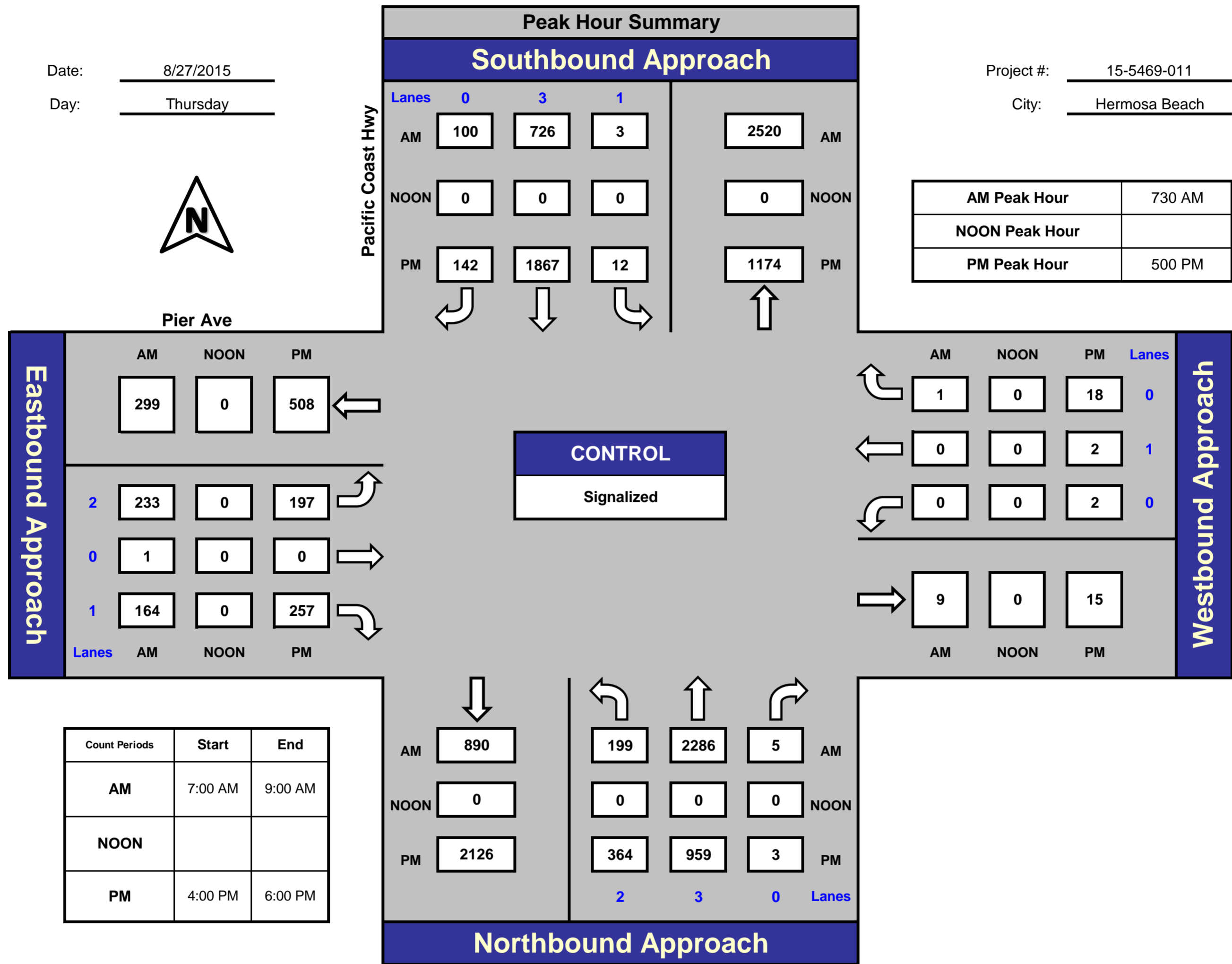
Pacific Coast Hwy and Pier Ave, Hermosa Beach

Date: 8/27/2015

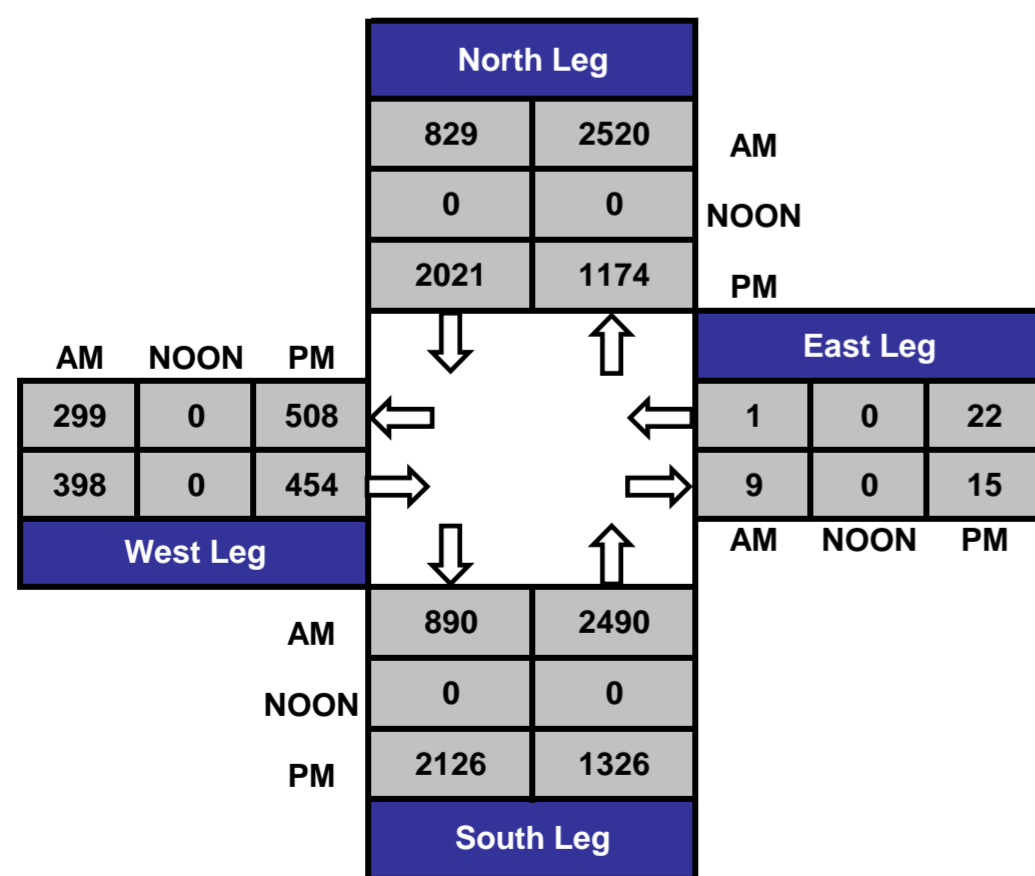
Day: Thursday

Project #: 15-5469-011

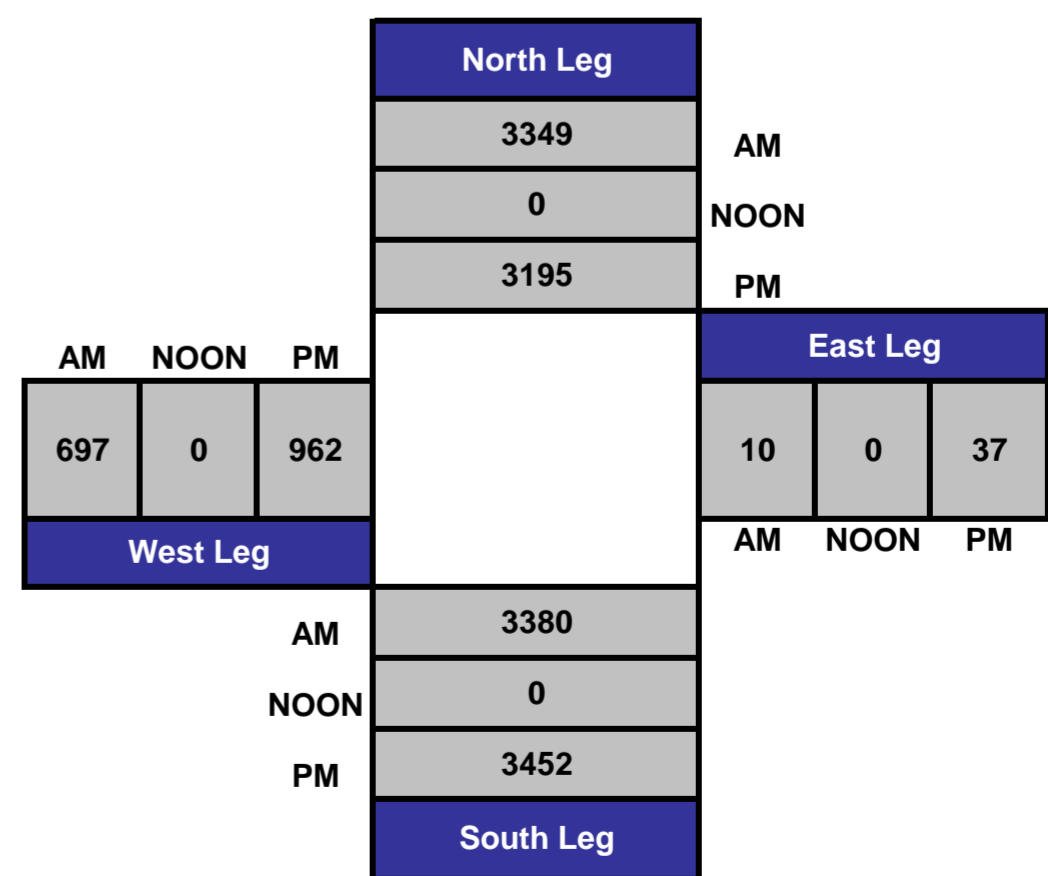
City: Hermosa Beach



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

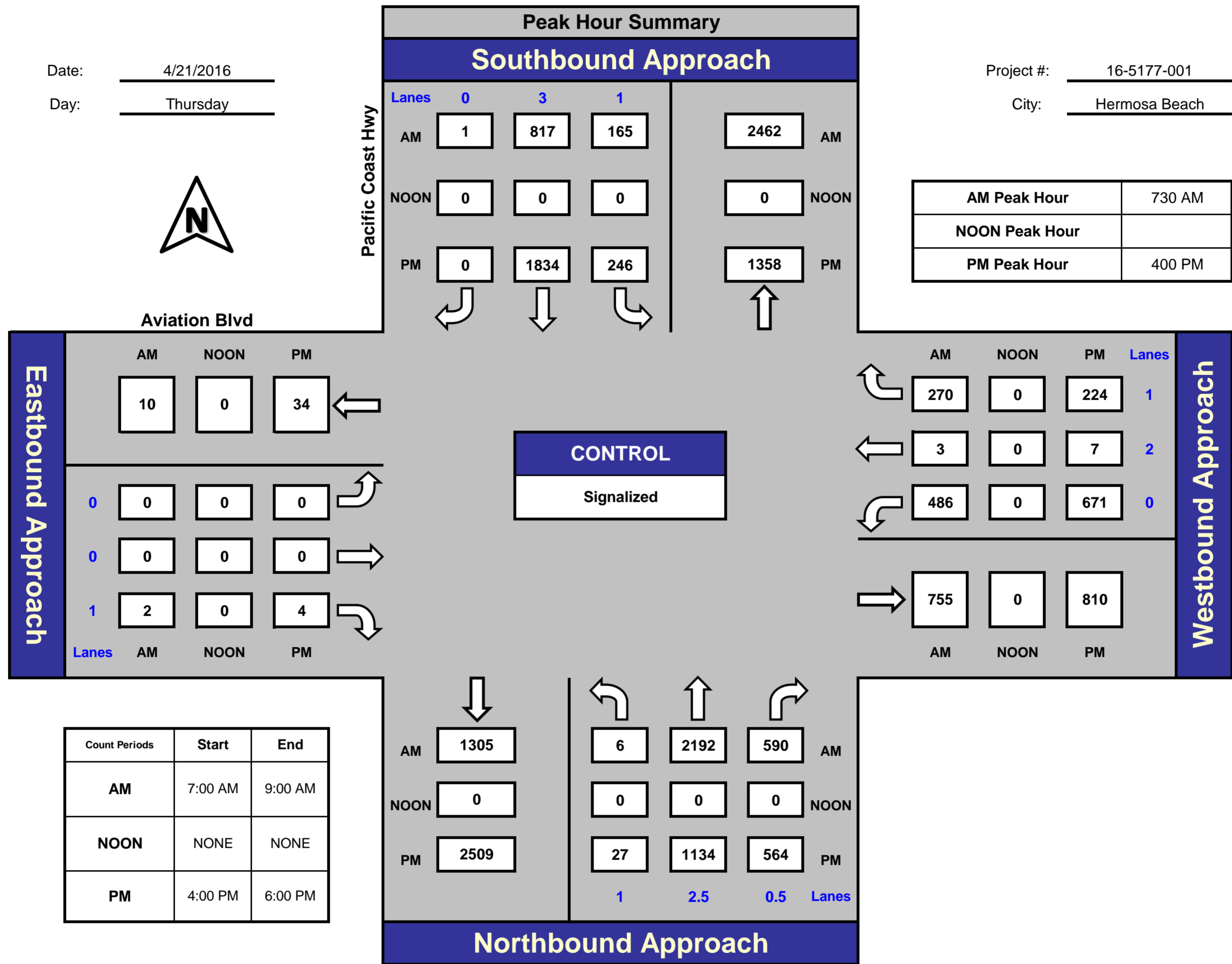
Prepared by:



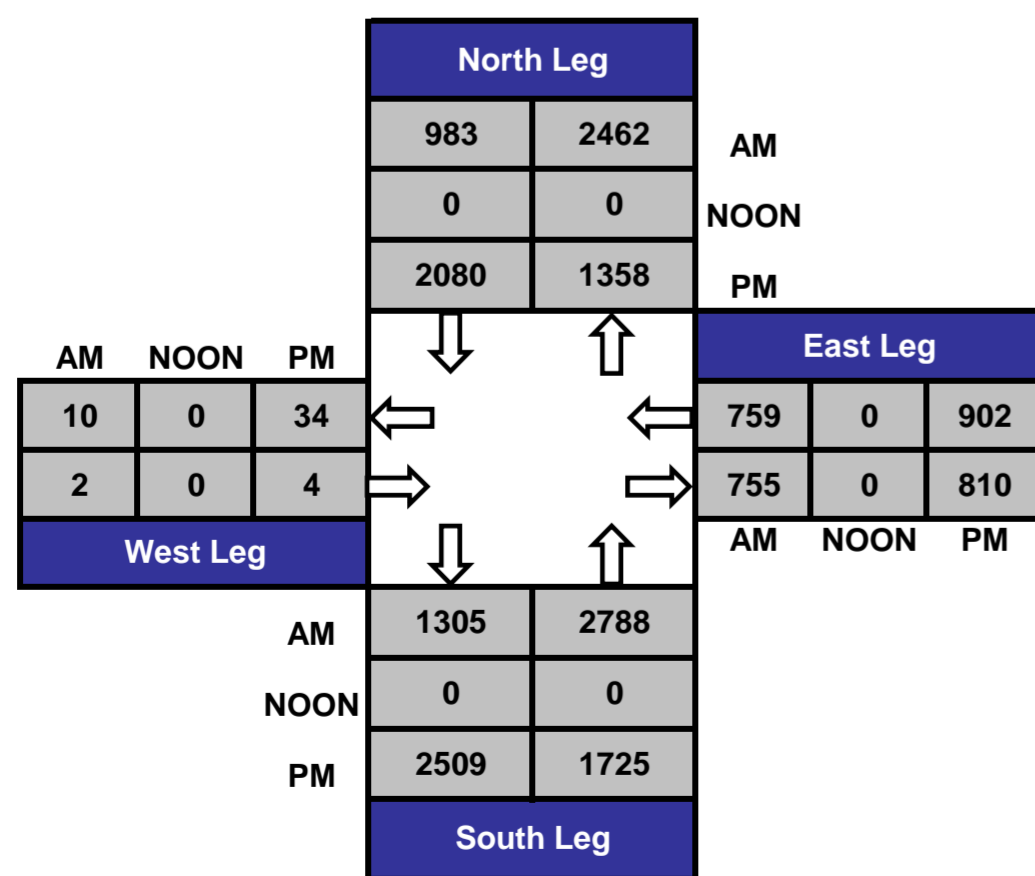
Pacific Coast Hwy and Aviation Blvd, Hermosa Beach

Date: 4/21/2016
Day: Thursday

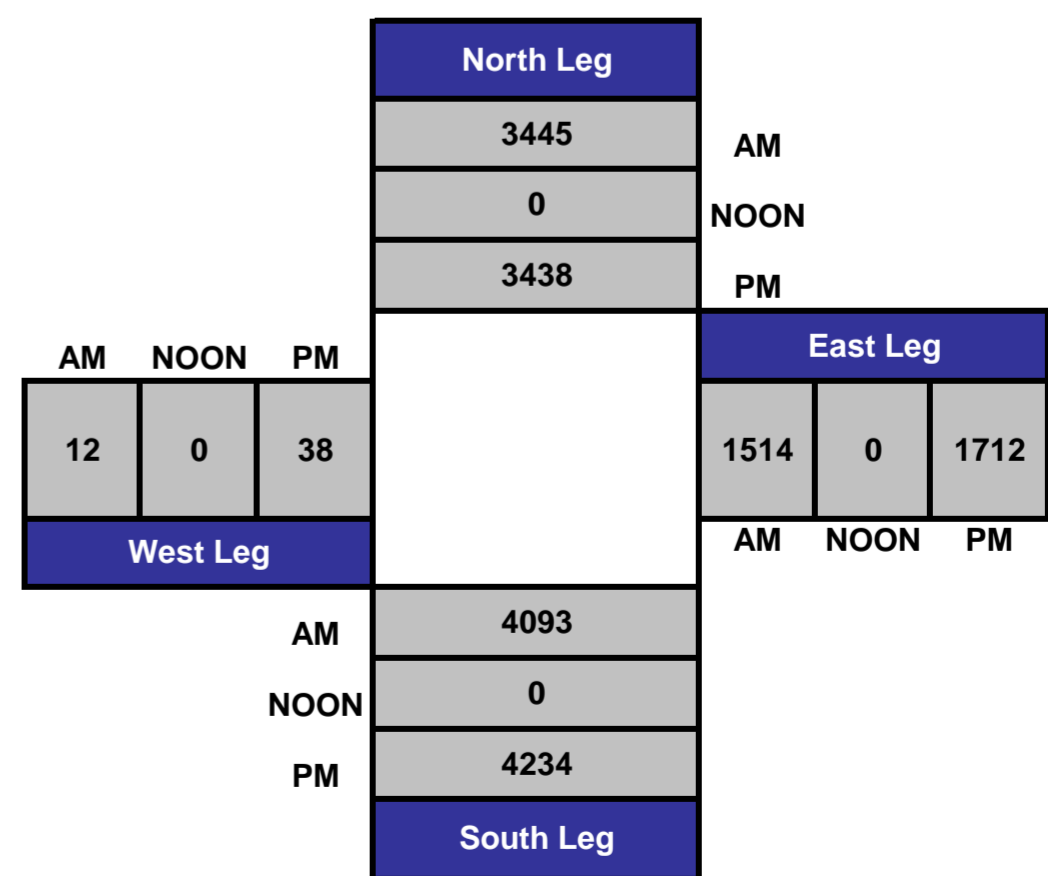
Project #: 16-5177-001
City: Hermosa Beach



Total Ins & Outs



Total Volume Per Leg



ITM Peak Hour Summary

Prepared by:



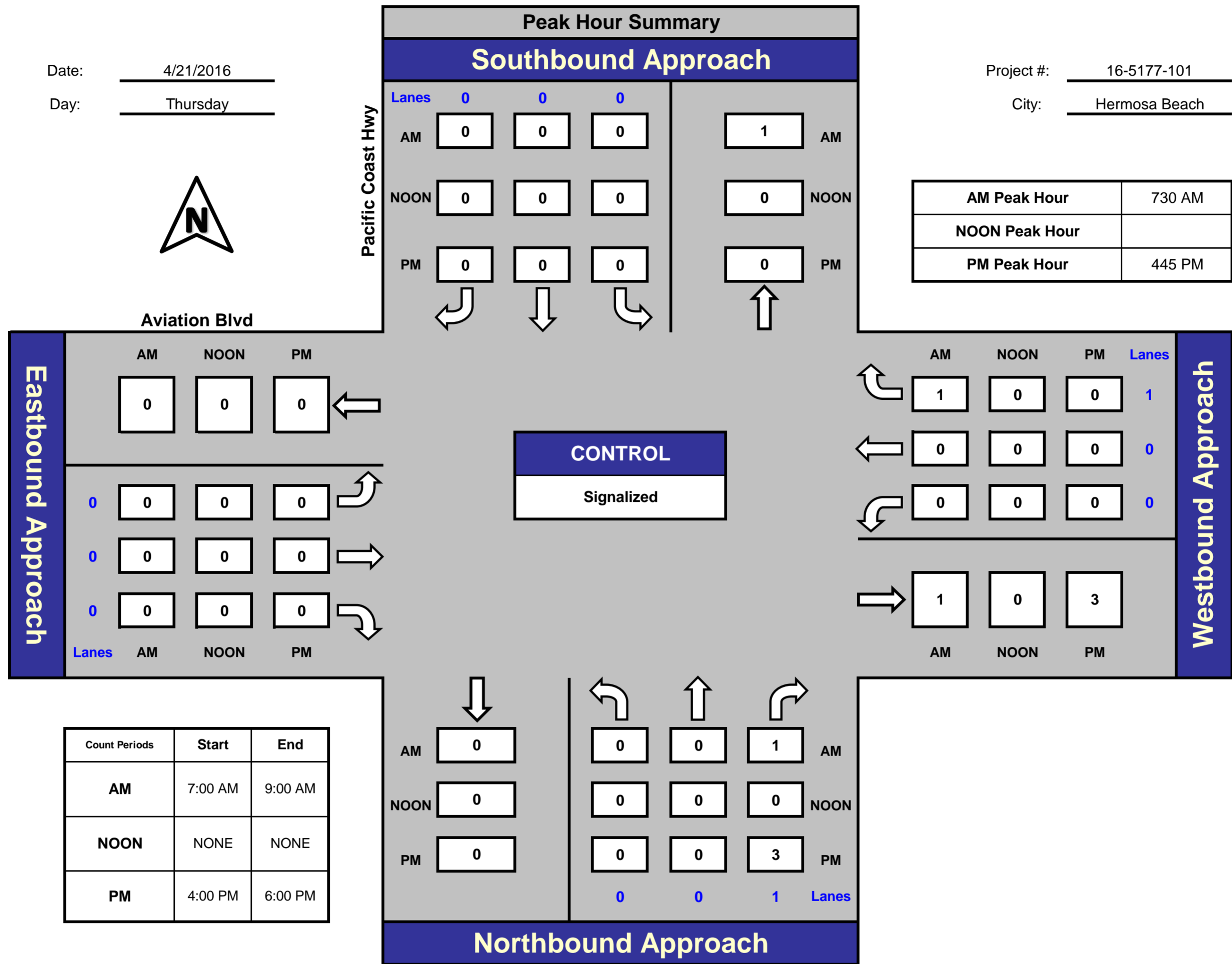
Pacific Coast Hwy and Aviation Blvd, Hermosa Beach

Date: 4/21/2016

Day: Thursday

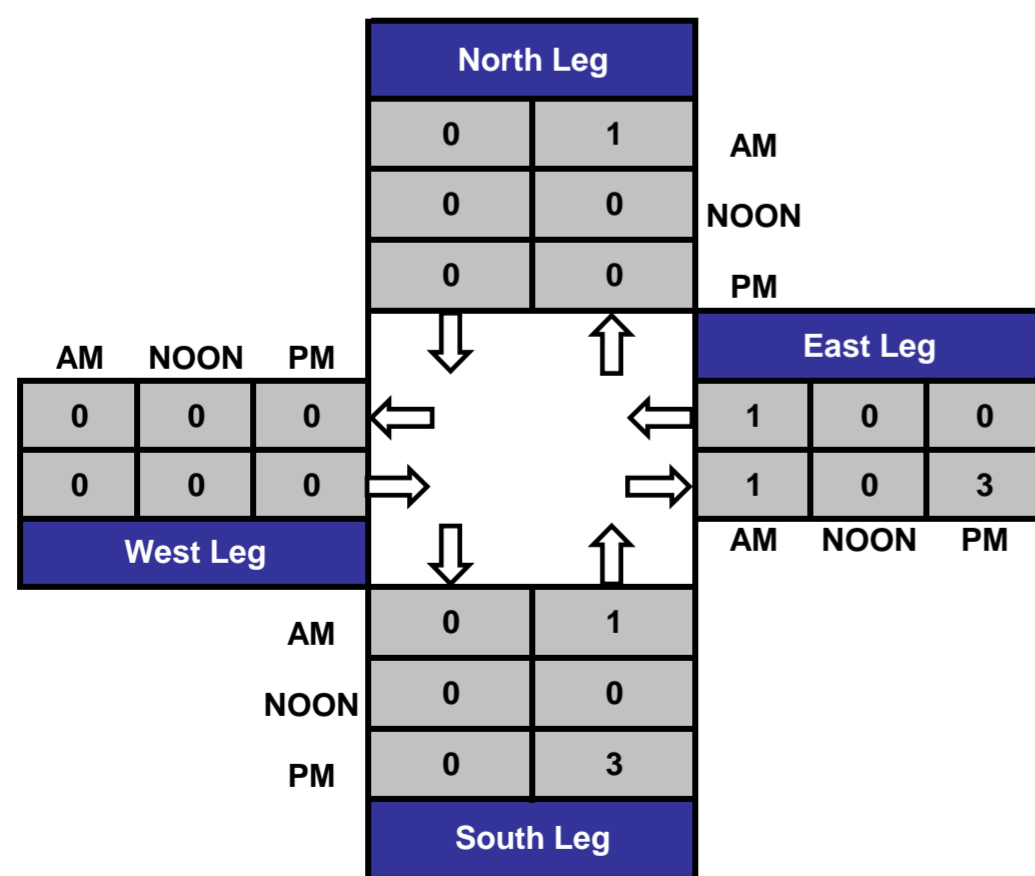
Project #: 16-5177-101

City: Hermosa Beach

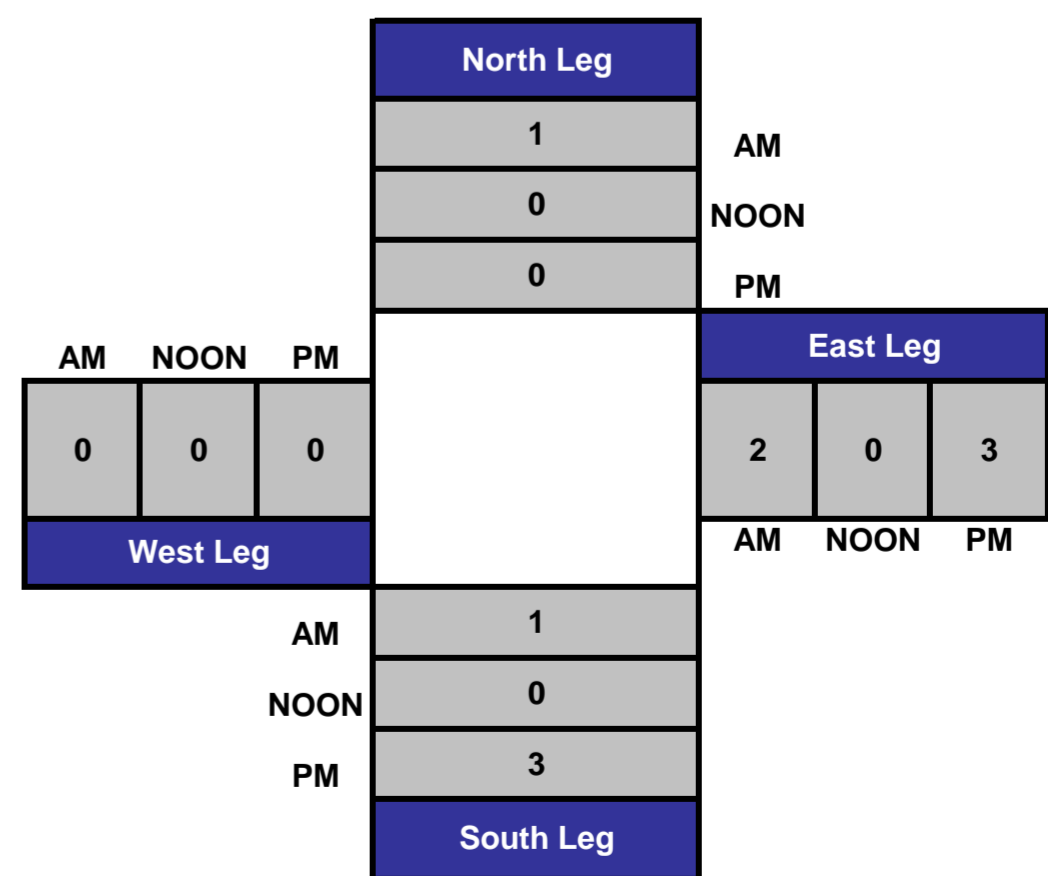


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON	NONE	NONE
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Note: Volumes are for the intersection of Pacific Coast Highway & 10th Street East.